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Synopsis of the cyclocephaline scarab beetles (Coleoptera, Scarabaeidae, Dynastinae)

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Abstract

The cyclocephaline scarabs (Scarabaeidae: Dynastinae: Cyclocephalini) are a speciose tribe of beetles that include species that are ecologically and economically important as pollinators and pests of agriculture and turf. We provide an overview and synopsis of the 14 genera of Cyclocephalini that includes information on: 1) the taxonomic and nomenclatural history of the group; 2) diagnosis and identification of immature life-stages; 3) economic importance in agroecosystems; 4) natural enemies of these beetles; 5) use as food by humans; 6) the importance of adults as pollination mutualists; 7) fossil cyclocephalines and the evolution of the group; 8) generic-level identification of adults. We provide an expanded identification key to genera of world Cyclocephalini and diagnoses for each genus. Character illustrations and generic-level distribution maps are provided along with discussions on the relationships of the tribe's genera.

Keywords

masked chafers, rhinoceros beetles, identification key

Introduction

The cyclocephaline scarabs (Coleoptera: Scarabaeidae: Dynastinae) are remarkable among rhinoceros beetles for the group's immense species richness and ecological importance. Cyclocephalini is a pan-tropical tribe with several genera considered to be keystone pollinators in New and Old World tropical ecosystems. By one estimate, pollination mutualisms between cyclocephalines and early-diverging angiosperms suggest that nearly 900 species of Neotropical plants rely upon these scarab beetles for sexual reproduction (Schatz 1990). Beyond tropical forests, cyclocephaline scarab beetle species are important to human industry as pests in tropical and temperate agroecosystems and turfgrass in North America. Due to these factors, the group has received considerable alpha-taxonomic attention as species identity (and identification) is crucial for understanding the fascinating biology of these scarabs. However, almost nothing is known about the evolution of the group into their incredible ecological roles.

This paper synthesizes all available information on cyclocephaline scarab beetles into these broad categories: 1) taxonomic and nomenclatural history of the group organized by major worker, including an exegesis of Endrődi's German-language revision of the tribe; 2) state of knowledge surrounding diagnosis and identification of immature life-stages; 3) economic importance in agroecosystems; 4) natural enemies of these beetles; 5) use as food by humans; 6) importance of adults as pollination mutualists; 7) knowledge of the fossil record and evolution; and 8) an overview of each genus, including expanded diagnoses and a key to world genera of Cyclocephalini.

Nomenclatural and taxonomic history of the cyclocephaline scarabs (Scarabaeidae, Dynastinae, Cyclocephalini)

Carl Linnaeus and his students

The taxonomic and nomenclatural history of Cyclocephalini traces to the works of Carl Linnaeus and several of his students. The 12th edition of *Systema Naturae* included the description of *Scarabaeus amazonus* Linnaeus, 1767, which was later designated as the type species of *Cyclocephala* Dejean (Linnaeus 1767, Casey 1915, Endrődi 1966). This was the only cyclocephaline species described by Linnaeus. The short Latin description of *S. amazonus* indicated that this beetle was from "Suriname," was smaller than many dung beetles (with a relatively shorter pronotum), and was testaceous with longitudinal, black stripes (Linnaeus 1767). Unfortunately, the type specimen of *S. amazonus* is apparently lost. A serious effort to find this Linnaean type was undertaken by Sebő Endrődi and fellow Coleopterist Bengt-Oloft Landin.

Landin, an expert in Linnaean scarabaeoid types (e.g., see Landin 1956), was in correspondence with Endrődi during the early phases of the latter's revisionary works (Endrődi 1966). They determined that the type specimen of *S. amazonus* was not present in any of the museums that housed parts of the Linnaeus beetle collection: The De Geer collection at Naturhistoriska Riksmuseet (Stockholm, Sweden), Uppsala University, Museum of Evolution, Zoology Section (Uppsala, Sweden), and The Natural History Museum (London, United Kingdom). In a personal correspondence with Endrődi, Landin speculated that the specimen that became the type of *S. amazonus* was passed from Daniel Rolander (an apostle of Linnaeus sent to Suriname), then to Baron Charles De Geer, and eventually to Linnaeus (Endrődi 1966).

Two female specimens identified as *Melolontha amazona* (Linnaeus) from "Jamaic" and "Columbia" were found in the Schönherr collection at Naturhistoriska Riksmuseet (Endrődi 1966). The specimen from "Jamaic" was determined to be consistent with the description of *Melolontha signata* Fabricius, 1781, also from Jamaica (Endrődi 1966). The specimen from "Columbia" was determined to be conspecific with the mainland species *Cyclocephala detecta* Bates, 1888 (a synonym of *C. amazona*) (Endrődi 1966). This convinced Endrődi that the names *S. amazonus* and *M. signata* referred to the same species with continental and West Indian populations, respectively. Endrődi designated a neotype for *S. amazonus* from Paramaribo, Suriname in his collection (now deposited at Magyar Természettudományi Múzeum Allatatara [Hungarian Natural History Museum], Budapest, Hungary).

Johan Christian Fabricius described 11 species of cyclocephaline scarabs that were ultimately classified in the genera *Cyclocephala*, *Chalepides* Casey, *Dyscinetus* Harold, *Stenocrates* Burmeister, and *Ruteloryctes* Arrow (Fabricius 1775, 1781, 1787, 1798, 1801). Fabricius (1798) reported the earliest floral association record for Cyclocephalini when he noted that *Melolontha morio* Fabricius (=*Ruteloryctes morio*) was found in "*Nympheae floribus*" in "*India orientalis*." This early floral association record was later validated, and *R. morio* is indeed a pollinator of the water lily, *Nymphaea lotus* L., in Benin, Côte d'Ivoire, Nigeria, and Senegal (Ervik and Knudsen 2003, Hirthe and Porembski 2003, Krell et al. 2003). Linnaeus' students Leonard Gyllenhal and Carl Peter Thunberg combined to describe four cyclocephaline species later classified in *Cyclocephala* and *Stenocrates* (Thunberg 1814, Gyllenhal 1817a, b).

Pierre François Marie Auguste Dejean and Pierre André Latreille

Dejean (1821) authored the genus *Cyclocephala* in the first edition of the catalog of his collection. There was longstanding confusion in the literature surrounding the proper authorship of the genus *Cyclocephala*, with most historical workers crediting the genus to Latreille (1829) (e.g., Arrow [1937b], Blackwelder [1944], and Endrődi [1966, 1985a]). This confusion stemmed from Dejean's practice of proposing new genera without describing them in the catalogs of his collection (Bousquet and Bouchard 2013a, b). Dejean (1821) also attributed authorship to other workers who had applied names to species in their own collections, but before the names were formally described in the literature. Thus, subsequent authors treated Dejean's new genera and species as invalid *nomina nuda*. However, because Dejean (1821) included one or more available species-group names in *Cyclocephala*, the genus-group name became available from that work (ICZN Article 12.2.5; see Bousquet and Bouchard 2013a for further discussion).

The following originally included available names were placed in *Cyclocephala* by Dejean (1821): *Melolontha geminata* Fabricius, 1801 (=*Dyscinetus dubius* [Olivier, 1789]), *Melolontha dubia* Olivier, 1789 (=*Dyscinetus dubius* [Olivier]), *Scarabaeus barbatus* Fabricius, 1787 (=*Chalepides barbatus* [Fabricius]), *Melolontha signata* Fabricius, 1781 (=*Cyclocephala amazona amazona* [Linnaeus, 1767]), and *Melolontha biliturata* Gyllenhal, 1817 (=*Cyclocephala tridentata* [Fabricius, 1801]).

Dejean (1821) included five *species inquirenda* (indicated by a "?") in *Cyclocephala*: *Melolontha pallens* Fabricius, 1798 (=*Cyclocephala amazona amazona* [Linnaeus, 1767]), *Melolontha ferruginea* Fabricius, 1801 (=*Cyclocephala immaculata ferruginea* (Fabricius, 1801), *Melolontha valida* Schönherr, 1817 (=*Cyclocephala castanea* [Olivier, 1789]), *Melolontha immaculata* Olivier, 1789 (=*Cyclocephala immaculata immaculata* [Olivier, 1789]), and *Melolontha castanea* Olivier, 1789 (=*Cyclocephala castanea* [Olivier, 1789]). These five *species inquirenda* were not originally included in *Cyclocephala* and are ineligible for type species fixation (ICZN Article 67.2.5).

The second and third editions of Dejean's (1833, 1836b) catalog followed Latreille (1829) and recognized the genus *Chalepus* MacLeay. Three species previously included in *Cyclocephala sensu* Dejean (1821) were transferred into *Chalepus* in the second edition (Dejean 1833). Additional *nomina nuda* were included in these two genera: 19 *nomina nuda* in *Cyclocephala* and eight in *Chalepus* (Dejean 1833). Twenty-three *nomina nuda* were placed in *Cyclocephala* in the third edition of the catalog (Dejean 1836b). Many of Dejean's (1821, 1833, 1836) *nomina nuda* were later validly described by subsequent authors (e.g., *Ancognatha scarabaeoides* Erichson and *Ancognatha ustulata* [Burmeister]).

Cyclocephala was first described and illustrated by Latreille (1829, 1837). Latreille's (1829) short description of *Cyclocephala* utilized characters of the protarsal claws (unequal in size and cleft at the apex), labrum (visible anteriorly), body shape (ovoid with the head uncovered), elytra (weakly edged without significant lateral dilation), and mandibles (narrow, not strongly produced beyond clypeus, without a lateral sinus, and variably toothed). The genus was also considered variable enough to warrant subgeneric division into *Chalepus* and *Cyclocephala* (Latreille 1829). Figure plates illustrated a dorsal habitus of *Cyclocephala frontalis* Chevrolat, 1844 and the anatomy of the head, labrum, maxilla, and protarsus of *Cyclocephala geminata* (Fabricius) (=*Dyscinetus dubius* [Olivier]) (Latreille 1837). These illustrations are some of the earliest scientific depictions of the group.

Francis de Laporte de Castelnau

Laporte (1840) was the first author to propose a tribal-level taxon for the cyclocephaline scarab beetles. This group, Cyclocephalites, was included along with Dynastites and Rutélites in the family Xylophiles (Laporte 1840). Cyclocephalites was not originally proposed in a Latinized form (see Smith 2006, Bouchard et al. 2011). However, because the name was subsequently Latinized by several authors (e.g., Cyclocephalidae by Burmeister [1847] and Imhoff [1856], and Cyclocephalinae by Bates [1888]) and was generally accepted, the family-group name is available from this work per ICZN Article 11.7.2. Cyclocephalites *sensu* Laporte (1840) was diagnosed by having the mandibles mostly covered by the clypeus and the labrum not extending anteriorly beyond the apex of the clypeus. Laporte included two divisions in Cyclocephalites. The first division, diagnosed by arched and hooked mandibles, included only *Cyclocephala geminata* (Fabricius, 1801) (=*Dyscinetus dubius* [Olivier, 1789]). The second division of *Cyclocephala* was diagnosed by having straight, truncate, or obtuse mandibular apices (Laporte 1840). This second division contained six species, and these are still classified in *Cyclocephala*.

Hermann Burmeister

The German naturalist and entomologist Karl Hermann Konrad Burmeister made major contributions to dynastine scarab research in the mid-19th century (Berg 1894). Burmeister's (1844, 1847, 1855) *Handbuch der Entomologie* volumes systematically organized a large portion of Scarabaeoidea. Burmeister (1847) was one of the first authors to unite members of the subfamily Dynastinae, nearly as currently circumscribed, into a single family and recognizable tribes in the modern sense. This family, Xylophila, was subdivided into Cyclocephalidae, Phileuridae, Dynastidae, Agaocephalidae, Strategidae, Oryctidae, and Xylophila *amphibola* (=Scarabaeidae: Cetoniinae: Trichiini, in part) (Burmeister 1847). Seven of the genera included in Burmeister's Cyclocephalidae are still part of Cyclocephalini (Table 1). Additionally, Burmeister described five new genera and 71 species-group taxa (56 of which are valid species or subspecies) that are still included in Cyclocephalini.

Cyclocephalidae *sensu* Burmeister included 13 genera placed in four divisions. Two of these divisions, Cyclocephalidae *spurii* and Oryctomorphidae, included genera that are all currently classified in Rutelinae and various other dynastine tribes (Table 1)

Table 1. Burmeister's (1847) classification of genera of Cyclocephalidae.

Division	Genera	Current Tribal Classification
Cyclocephalidae *spurii*	*Pachylus* Burmeister, 1847 (=*Alvarengius* Frey, 1975)	Rutelinae: Alvarengiini
	Hexodon Olivier, 1789	Dynastinae: Hexodontini
Oryctomorphidae	*Democrates* Burmeister, 1847	Dynastinae: Agaocephalini
	Oryctomorphus Guérin-Méneville, 1831	Rutelinae: Rutelini
	Homoeomorphus Burmeister, 1847	Dynastinae: Pentodontini
Cyclocephalidae *genuini*	*Augoderia* Burmeister, 1847	Dynastinae: Cyclocephalini
	Cyclocephala Dejean, 1821	Dynastinae: Cyclocephalini
	Harposceles Burmeister, 1847	Dynastinae: Cyclocephalini
Chalepidae	*Erioscelis* Burmeister, 1847	Dynastinae: Cyclocephalini
	Bradyscelis Burmeister, 1847 (=*Oryctoderus* Boisduval, 1835)	Dynastinae: Oryctoderini
	Peltonotus Burmeister, 1847	Dynastinae: Cyclocephalini
	Chalepus MacLeay, 1819 (=*Dyscinetus* Harold 1869 in part, *Chalepus* also contained species currently classified in *Chalepides* Casey, 1915)	Dynastinae: Cyclocephalini
	Stenocrates Burmeister, 1847	Dynastinae: Cyclocephalini

(Burmeister 1847, Ohaus 1929, Endrődi 1966, 1985a, Frey 1975). Cyclocephalidae *genuini* was the most species-rich of Burmeister's divisions. This group contained three genera: *Augoderia*, *Cyclocephala*, and *Harposceles*. Burmeister (1847) described more than 50 new taxa in *Cyclocephala* and treated 70 species in the genus. *Cyclocephala* was further organized into eight species groups based largely on head morphology: *Cyclocephalae anomalinae*, *Cyclocephalae acutae*, *Cyclocephalae parabolicae*, *Cyclocephalae heterocerae*, *Cyclocephalae reflexae*, *Cyclocephalae microcephalae*, *Cyclocephalae sinuatae*, and *Cyclocephalae eurycephalae*. These *Cyclocephala* species-groups were never formalized, but they were discussed by Lacordaire (1856) and Endrődi (1966).

Henry Walter Bates

Famous English naturalist Henry Walter Bates treated cyclocephalines in his contributions to the scientific opus *Biologia Centrali-Americana* and Edward Whymper's *Travels Amongst the Great Andes of the Equator* (Bates 1888, 1891). Between these two works, Bates covered over 50 cyclocephaline species-level taxa, described nearly 30 new species (20 of which are still accepted as valid), and contributed to the generic-level classification of the group. For example, he recognized the distinctiveness of *Ancognatha* Erichson 1847 and revalidated the genus, which had been synonymized with *Cyclocephala* (Erichson 1847, Lacordaire 1856, Bates 1888). He described two new cyclocephaline genera: *Aspidolea* Bates 1888 and the eventual junior synonym *Barotheus* Bates, 1891 (=*Ancognatha* Erichson).

Following Lacordaire's (1856) system, Bates classified the cyclocephaline scarab beetles as a subfamily (Cyclocephalinae) within Dynastidae. He only provided diagnoses for two higher groups (what he called "subtribes" within Lamellicornia) based upon labial morphology. Thus, Bates did not propose a character-based circumscription of the cyclocephaline scarabs or dynastines more broadly. However, some of the earliest detailed discussion and comparison of generic-level diagnostic characters among cyclocephalines can be found in *Biologia Centrali-Americana* (Bates 1888). For example, the toothless (or nearly toothless) maxillary galeae of *Aspidolea* and *Ancognatha* were recognized as providing partial justification for accepting these genera as being distinct from *Cyclocephala* (Bates 1888).

Bates (1888) divided *Cyclocephala* into a series of informal species-groups. For example, group I, which contained *C. signata* Fabricius (=*C. amazona*) was diagnosed by: 1) an elongated or protracted clypeus; 2) the clypeal apex sometimes bent at the margin; and, 3) the apex of the ligula deeply divided and widely splayed (Bates 1888). Similar diagnoses that relied upon a combination of clypeal and labial morphology were provided for five major *Cyclocephala* species-groups. Sexual dimorphism of the antennal club (elongated in males) was used to further subdivide one of these species-groups (Bates 1888). Bates also covered the cyclocephaline genera *Dyscinetus* and *Stenocrates*. With less available material, he was unable to make many meaningful character comparisons for these genera. However, he did mention that the dorsoventrally flattened tibiae of *Stenocrates* serve to diagnose that genus (Bates 1888).

Thomas Lincoln Casey, Jr.

Lieutenant Colonel Thomas Casey's major contribution to scarabaeology was the sixth volume of *Memoirs on the Coleoptera* (Casey 1915). This volume covered Cetoniinae, Rutelinae, and Dynastinae of Central and North America. It provided keys to tribes, genera, and species, reported distributional data, and served as an outlet for the description of many new taxa. Casey (1909, 1915) treated Cyclocephalini as a tribe of Dynastinae, and he was the first Coleopterist to propose extensive generic-level reorganization of the tribe and the genus *Cyclocephala*. Most of Casey's new taxa (genera, species, and subspecies) in Cyclocephalini were not accepted as valid by subsequent workers. For example, Casey described over 60 new species and subspecies of cyclocephaline scarabs. Only seven of these taxa are currently accepted as valid. Casey (1915) proposed 16 new genera and subgenera in Cyclocephalini, among which only *Chalepides* Casey is currently in use (Table 2). Casey (1915) was the first author to definitively place *Anoplocephalus* Schaeffer, 1906 (=*Coscincocephalus* Prell, 1936) in Cyclocephalini.

Table 2. Casey's (1915) new cyclocephaline genera and subgenera.

Genus or subgenus	Type species	Status of genus or subgenus
Mononidia Casey, 1915	*Cyclocephala carbonaria* Arrow, 1911, by monotypy	Synonym of *Cyclocephala* Dejean
Stigmalia Casey, 1915	*Cyclocephala mafaffa* Burmeister, 1847, by original designation	Synonym of *Cyclocephala* Dejean
Mimeoma Casey, 1915	*Cyclocephala maculata* Burmeister, 1847, by monotypy	Synonym of *Cyclocephala* Dejean
Diaptalia Casey, 1915	*Cyclocephala discicollis* Arrow, 1902, by monotypy	Synonym of *Cyclocephala* Dejean
Spilosota Casey, 1915	*Spilosota nubeculina* Casey, 1915, by original designation	Synonym of *Cyclocephala* Dejean
Ochrosidia (*Ochrosidia*) Casey, 1915	*Melolontha immaculata* Olivier, 1789, by original designation	Synonym of *Cyclocephala* Dejean
Ochrosidia (*Graphalia*) Casey, 1915	not yet designated	Synonym of *Cyclocephala* Dejean
Dichromina Casey, 1915	*Cyclocephala dimidiata* Burmeister, 1847, by original designation	Synonym of *Cyclocephala* Dejean
Homochromina Casey, 1915	*Homochromina divisa* Casey, 1915, by original designation	Synonym of *Cyclocephala* Dejean
Halotosia Casey, 1915	*Cyclocephala fasciolata* Bates, 1888, by monotypy	Synonym of *Cyclocephala* Dejean
Aclinidia Casey, 1915	*Melolontha castanea* Olivier, 1789, by monotypy	Synonym of *Cyclocephala* Dejean
Cyclocephala (*Plagiosalia*) Casey, 1915	*Cyclocephala complanata* Burmeister, 1847, by original designation	Synonym of *Cyclocephala* Dejean
Cyclocephala (*Isocoryna*) Casey, 1915	*Cyclocephala* (*Iscoryna*) *jalapensis* Casey, 1915, by monotypy	Synonym of *Cyclocephala* Dejean
Dyscinetus (*Palechus*) Casey, 1915	*Dyscinetus* (*Palechus*) *histrio* Casey, 1915, by original designation	Synonym of *Dyscinetus* Harold
Parachalepus (*Parachalepus*) Casey, 1915	*Scarabaeus barbatus* Fabricius, 1787, by original designation	Synonym of *Chalepides* Casey
Parachalepus (*Chalepides*) Casey, 1915	*Parachalepus* (*Chalepides*) *eucephalus* Casey, 1915, by original designation	Valid

Gilbert John Arrow

English entomologist Gilbert Arrow was notable among early 20th century workers for his global knowledge of Dynastinae and Rutelinae. Arrow's work in The Natural History Museum allowed him to meaningfully compare characters between diverse New and Old World taxa. For example, the genus *Peltonotus* (considered by most authors to be a cyclocephaline since Burmeister) was transferred into Rutelinae based on the form of the labrum (chitinized apically and projected anteriorly beyond the apex of the clypeus), which it shares with several Asian, parastasiine-like genera (Arrow 1908, 1910). Arrow (1908) described the Afrotropical cyclocephaline genus *Ruteloryctes*, which he compared to the New World genus *Dyscinetus*.

Cyclocephalines, as currently circumscribed, were covered in 11 of Arrow's publications (Arrow 1900, 1902, 1903, 1908, 1910, 1911, 1913, 1914, 1931, 1937a, b). Arrow described over 40 new species or subspecies of cyclocephalines, and most of these were in the genus *Cyclocephala*. An early critic of Casey's (1915) genus and species concepts, Arrow (1937a) argued that many of Casey's new dynastine taxa created unnecessary "disorder" in Cyclocephalini and the subfamily more broadly. Arrow attributed this upheaval to Casey's ignorance of species that invalidated his generic diagnoses. For example, Arrow criticized Casey's overreliance on geographic separation of taxa and his intolerance for intraspecific variation, specimen wear, and recognition of teratological forms as distinct taxa.

Arrow (1937b) published the first comprehensive catalog of Dynastinae since Gemminger and Harold's *Catalogus Coleopterorum* (see Harold 1869b). By Arrow's admission, incorporating Casey's cyclocephaline taxa into this catalog was challenging. Arrow struggled to place most species within Casey's (1915) generic and subgeneric framework or assign synonymy to many species. He generally listed Casey's higher taxa as subgeneric-level synonyms within *Cyclocephala* (Arrow 1937a, b). *Mimeoma* was accepted by Arrow (1937b), and he included a second species in the genus. *Chalepides* was also accepted as valid, and he elevated the subgenus to genus status (Arrow 1937a, b). Arrow expanded the composition of Cyclocephalini (Table 3) to include several Australasian genera that were later transferred to Oryctoderini (Scarabaeidae: Dynastinae) (Endrődi 1966, 1971a). Some of these Australasian genera had been placed into Cyclocephalini at the time of their description (e.g., *Chalcocrates* Heller, 1903).

Lawrence Saylor

American entomologist Lawrence Saylor authored five publications (Saylor 1936, 1937, 1945, 1946, 1948) that included cyclocephaline scarab beetles, especially focusing on North American species. Saylor's publications were very important for the time because they offered high-quality diagnoses, keys, and illustrations for species of *Ancognatha*, *Cyclocephala*, *Dyscinetus*, and *Erioscelis*. Saylor's approach and implied species concept arguably influenced Endrődi's revision of the tribe (see Ratcliffe 2016 for further

Table 3. The generic composition of Cyclocephalini *sensu* Arrow (1937b).

Genera	Biogeographic Realm	Current Tribal Classification
Ancognatha Erichson, 1847	Neotropical and Nearctic	Dynastinae: Cyclocephalini
Aspidolea Bates, 1888	Neotropical and Nearctic	Dynastinae: Cyclocephalini
Augoderia Burmeister, 1847	Neotropical	Dynastinae: Cyclocephalini
Barotheus Bates, 1891 (=*Ancognatha* Erichson)	Neotropical	Dynastinae: Cyclocephalini
Chalcocrates Heller, 1903	Australasia	Dynastinae: Oryctoderini
Chalcosthenes Arrow, 1937	Australasia	Dynastinae: Oryctoderini
Chalepides Casey, 1915	Neotropical	Dynastinae: Cyclocephalini
Coenoryctoderus Prell, 1933	Australasia	Dynastinae: Oryctoderini
Coscinocephalus Prell, 1936	Nearctic	Dynastinae: Pentodontini
Cyclocephala Dejean, 1821	Neotropical and Nearctic (established in Australia)	Dynastinae: Cyclocephalini
Dyscinetus Harold, 1869	Neotropical and Nearctic	Dynastinae: Cyclocephalini
Erioscelis Burmeister, 1847	Neotropical	Dynastinae: Cyclocephalini
Harposceles Burmeister, 1847	Neotropical	Dynastinae: Cyclocephalini
Melanhyphus Fairmaire, 1881	Australasia	Dynastinae: Oryctoderini
Mimeoma Casey, 1915	Neotropical	Dynastinae: Cyclocephalini
Neohyphus Heller, 1896	Australasia	Dynastinae: Oryctoderini
Onychionyx Arrow, 1914	Australasia	Dynastinae: Oryctoderini
Oryctoderus Boisduval, 1835	Australasia	Dynastinae: Oryctoderini
Ruteloryctes Arrow, 1908	Afrotropical	Dynastinae: Cyclocephalini
Stenocrates Burmeister, 1847	Neotropical	Dynastinae: Cyclocephalini

discussion). Saylor's role was not as a describer of new species in the group, but rather as a primary reviser of many North American dynastine taxa that had been neglected since the works of John Lawrence LeConte (1854, 1861, 1862, 1863, 1866) and George Henry Horn (1871, 1875, 1894) and further obfuscated by Casey (1915). The problem of Casey's numerous cyclocephaline synonyms also fell firmly on Saylor. Saylor (1937, 1945) synonymized over 30 of Casey's taxa in *Cyclocephala* and *Dyscinetus*, which created more reliable and precise diagnoses of North American species in these genera.

Antonio Martínez

Antonio Martínez was the most productive South American dynastine worker of the middle and late 20th century. Martínez was the principal author or coauthor of 22 publications that covered Cyclocephalini (Martínez 1954, 1955, 1957, 1960a, b, 1964, 1965a, b, 1966, 1967, 1968a–c, 1969, 1975a, b, 1978a, b, D'Andretta and Martínez 1956, Bolívar y Pieltan et al. 1963, Martínez and Martínez 1981, Martínez and Morón 1984). These publications were outlets for the description of new taxa and distribution data from under-sampled areas of South America, especially from localities in Argentina, Bolivia, Brazil, Ecuador, Paraguay, Peru, and Venezuela. Martínez was an author of 25 cyclocephaline species and subspecies (23 of which are still valid) and four genera and subgenera. The genera *Arriguttia* Martínez, 1960 and *Surutu* Martínez, 1955 were accepted by subsequent authors. *Albridarollia* Bolívar y Pieltan, Jiménez-Asúa, and Martínez, 1963, which included two South American species, was synonymized with *Cyclocephala* (Endrődi 1964, 1966). The monotypic subgenus *Paraclinidia* Martínez, 1965 was also synonymized with *Cyclocephala* (Endrődi 1966).

Sebő Endrődi

The Hungarian Sebő Endrődi, a lawyer by formal training, was the most prolific and important dynastine worker of the 20th century (Kaszab and Papp 1986). Endrődi, a scarabaeoid beetle specialist, was the principal author of over 200 scientific articles and books on beetle systematics (Kaszab and Papp 1986). In the post-World War II period, Endrődi vigorously undertook a world revision of the subfamily Dynastinae. These revisionary studies, the "Monographie der Dynastinae", were published from 1966 through 1978 as a 22-part series. The series was later translated into English, synthesized, and published as a single volume, *The Dynastinae of the World* (Endrődi 1985a). Endrődi's revisions (both the more detailed German-language series and the English-language book) are the basis of modern dynastine systematics research and identification.

Endrődi authored or coauthored 27 works that covered cyclocephaline scarabs from 1960 to 1985 (Endrődi 1960, 1963, 1964, 1966, 1967a–c, 1969a, b, 1970, 1971b, 1973a, b, 1975a–c, 1977a, b, 1979, 1980, 1981, 1985a, b, Howden and Endrődi 1966, Endrődi and Dechambre 1976, Dechambre and Endrődi 1983, 1984). In total, Endrődi named over 110 species and subspecies (>90 of these taxa are still valid) in cyclocephaline genera. The majority (~50% of valid taxa) of these new taxa were described in the speciose genus *Cyclocephala*. Generally, Endrődi did not describe new genera in this group (the junior synonym *Surutoides* Endrődi 1981 is the lone exception) and instead favored lumping species into relatively large genera (e.g., *Cyclocephala sensu* Endrődi 1966 included over 180 taxa). The tribe Cyclocephalini was covered in the first installment of the "Monographie der Dynastinae" series (Endrődi 1966). One of the earliest modern discussions on the phylogenetic position of Cyclocephalini, and Dynastinae more broadly, was included in this first installment (Endrődi 1966). Many of the most detailed portions in the German-language monograph of Cyclocephalini (Endrődi 1966) were not included in *The Dynastinae of the World* and these details warrant further discussion.

Cyclocephalini was considered by Endrődi to be the most primitive tribe of Dynastinae, with many species sharing characters with Rutelinae (Endrődi 1960, 1966; Fig. 1). Endrődi's (1966) methodology for assessing the relationships of dynastine tribes defies precise categorization within modern approaches. He attempted, with poor justification, to polarize a suite of characters into primitive and derived states within Dynastinae. Nine characters were scored as three states, which ranged from 1 (most derived) to 3 (ancestral). Character states scored as "2" indicated that both derived and ancestral states, or "partially differentiated" states, were present in each tribe

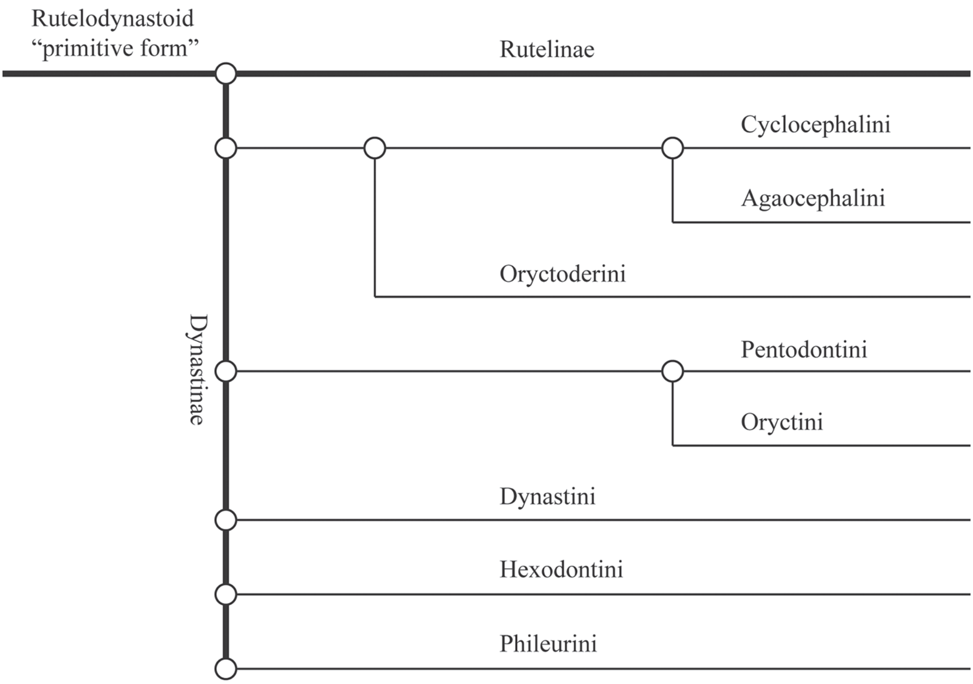


Figure 1. Reproduction of figure 57 from Endrődi (1966). Hypothetical relationships among the tribes of Dynastinae. "Primitive form" is translated from the German "Urform."

(Endrődi 1966). Tribes with the highest total numerical value (numbers were summed across the matrix) were considered the most primitive overall.

This analysis suggests that Endrődi was attempting a very rudimentary cladistic approach to understanding dynastine tribal relationships. However, he did not define clear synapomorphic characters nor did he discuss homoplasy. This rudimentary approach was used only to hypothesize how "evolved" each of the eight dynastine tribes were compared to the outgroup Rutelinae. His results indicated the Cyclocephalini (score of 25) was the earliest diverging dynastine tribe, while Dynastini (score of 16) was the most derived tribe. Endrődi (1966) utilized the following characters in this analysis: 1) "body form" differentiated from Rutelinae or not; 2) presence or absence of "striking" sexual dimorphism; 3) relative length of the legs; 4) relative thickness of the protarsomeres and protarsal claws in males; 5) form of the anterior margin of the meso- and metatibia ("Hinterschienenspitze"); 6) presence or absence of stridulatory structures on the abdomen; 7) relative degree of expansion of the female elytral epipleuron; 8) presence or absence of hindwings; and 9) global distribution.

Endrődi also considered relationships among genera. A similar character polarization method was applied to cyclocephaline genera that were considered by Endrődi as valid (Endrődi 1966). Nine characters were used in this analysis: 1) clypeus short and simple to strongly differentiated; 2) lamellate club of the antennae elongated in males or not; 3) male protarsomeres thickened or not; 4) body shape vaulted, oval, or differentiated; 5) male parameres simple or differentiated; 6) prosternal peg short or elongated; 7) clypeus with or without bumps ("Höckern"); 8) elytral punctation disorganized, unistriate, or in paired striae; and 9) female elytral epipleuron strongly thickened or not. *Augoderia*, *Arriguttia*, and *Ruteloryctes* were thought to be the most "primitive" cyclocephaline genera, though Endrődi's analysis provided only weak justification. By Endrődi's (1966) own admission, this exercise did not yield clear results ("Aus diesen Wertzahlen ist deutlich zu erkennen, daß schon bei den Gattungen die Auswertung der primitiven und fortgeschritten Formen nur schwer vorgenommen werden kann").

Endrődi's (1966) diagnosis of Cyclocephalini is the most detailed published for the group, and it offers further discussion on the distribution of some character states among the tribe's genera. Members of Cyclocephalini were diagnosed as being small- to medium-sized, primitive dynastines that share the oval and convex body shape of Rutelinae. The body shapes of the genera *Arriguttia* (anteroposteriorly compressed) and *Surutu* (dorsoventrally flattened) were considered exceptional in the tribe. Cyclocephaline mandibles were considered small (varying in width or broadness) for the subfamily and lacking teeth on the lateral, outer margin. Cephalic morphology in the tribe was notable for its lack of horns, tubercles, carinae, or sulci. The slightly raised frontoclypeal suture present in some *Ancognatha* species was a possible exception to this lack of armature on the head. These "tubercles", however, were not considered homologous with tubercles of the head present in other dynastines (Endrődi 1966).

Cyclocephaline antennae are comprised of 8–10 antennomeres with the lamellate club always three-segmented and occasionally elongated in males (Endrődi 1966). The pronotum is convex and only dorsoventrally flattened in *Surutu*, while the scutellum is triangular. The elytra are usually 1.5 times longer than wide and are rarely shorter (e.g., *Arriguttia*). Elytral punctation is regularly spaced and paired when punctures form striae (except for *Augoderia* and *Surutu*). The females of many species have pronounced expansions of the elytral epipleural margin with or without produced lateral flanges (Endrődi 1966).

The propygidium of cyclocephalines lacks a stridulatory apparatus (Endrődi 1966). Pygidial morphology varies between the group's genera. The pygidium is reduced in *Chalepides*, while it is a large segment in all other cyclocephaline genera. The prosternal process is relatively long and generally rounded at the apex, but has a variably present or absent button-like folding of the cuticle (Endrődi 1966). Protibial morphology in the tribe is also highly variable. The outer lateral margins of the protibia in males have 1–3 produced teeth, while most genera have no teeth on the inner lateral margin of the protibia. *Harposceles* is the lone exception for the tribe, having a small tooth on the inner margin of the protibia (Endrődi 1966).

Three genera included in Cyclocephalini *sensu* Endrődi (1966) lack thickened, foreshortened protarsomeres and enlarged (and sometimes cleft) protarsal claws in males: *Erioscelis*, *Stenocrates*, and *Coscinocephalus*. The meso- and metatarsomeres are not thickened and foreshortened in any cyclocephaline genera (though metatarsomeres are reduced in females of some *Cyclocephala* species). The apical margins of the meso- and metatibia are simple in cyclocephalines, lacking crenulated extensions ("Hinterschienenspitze fast immer gefingert") (Endrődi 1966). Cyclocephalini *sensu* Endrődi (1966, 1985a) included 14 genera and was a strictly New World tribe, except for the Afrotropical genus *Ruteloryctes* (Table 4).

Table 4. The generic composition of Cyclocephalini *sensu* Endrődi (1966, 1985a).

Genera	Biogeographic Realm	Current Tribal Classification
Ancognatha Erichson, 1847	Neotropical and Nearctic	Dynastinae: Cyclocephalini
Arriguttia Martínez, 1960	Neotropical	Dynastinae: Cyclocephalini
Aspidolea Bates, 1888	Neotropical and Nearctic	Dynastinae: Cyclocephalini
Augoderia Burmeister, 1847	Neotropical	Dynastinae: Cyclocephalini
Chalepides Casey, 1915	Neotropical	Dynastinae: Cyclocephalini
Coscinocephalus Prell, 1936	Nearctic	Dynastinae: Pentodontini
Cyclocephala Dejean, 1821	Neotropical and Nearctic (established in Australia and Hawaii)	Dynastinae: Cyclocephalini
Dyscinetus Harold, 1869	Neotropical and Nearctic	Dynastinae: Cyclocephalini
Erioscelis Burmeister, 1847	Neotropical	Dynastinae: Cyclocephalini
Harposceles Burmeister, 1847	Neotropical	Dynastinae: Cyclocephalini
Mimeoma Casey, 1915	Neotropical	Dynastinae: Cyclocephalini
Ruteloryctes Arrow, 1908	Afrotropical	Dynastinae: Cyclocephalini
Stenocrates Burmeister, 1847	Neotropical	Dynastinae: Cyclocephalini
Surutu Martínez, 1955	Neotropical	Dynastinae: Cyclocephalini

Endrődi (1966) considered the criteria for defining genera like those used to define families. Within this concept, genera were phylogenetic units that needed to show several characteristics in a "constant state" to be valid (Endrődi 1966). This line of argumentation was extended into a criticism of several genera and subgenera proposed within Cyclocephalini. Casey's generic-level hypotheses in Cyclocephalini were especially in violation of this guiding principle. Endrődi considered most of Casey's genera as based upon only a single character and were thus invalid within his paradigm. It was also argued that Casey's subgenera were based upon species-level characters and not applicable to higher-level classification schemes (Endrődi 1966). This led to the synonymy of nearly all of Casey's higher-level cyclocephaline groups, some of which were tentatively adopted by other authors in the intervening period (e.g., Arrow 1937a, b, Saylor 1937, 1945, and Buchanan 1927) (Casey 1915, Endrődi 1966). The subgenus *Cyclocephala* (*Paraclinidia*) was ambiguously synonymized within *Cyclocephala*, and Endrődi (1966) commented that the group could "at most be considered a subgenus."

An explanation of some aspects of Endrődi's (1966) morphological approach to his revision of Cyclocephalini was provided in a section entitled "Morphologie der Tribus." Three types of coloration schemes are found in the tribe: 1) species that are all black or dark brown, except in teneral specimens (e.g., *Surutu*, *Harposceles*, *Coscinocephalus*, *Erioscelis*, *Ruteloryctes*, *Stenocrates*, *Dyscinetus*, *Chalepides*, and occasionally other genera); 2) species that are monotoned and light in color, sometimes with darkened legs and head, and lacking dorsal maculae (e.g., *Cyclocephala* and *Aspidolea*); and 3) species with red or black dorsal maculae (e.g., *Augoderia*, *Ancognatha*, and *Cyclocephala*) (Endrődi 1966). Among species with dorsal maculae, Endrődi considered these characteristics to be highly variable within a "system" of patterning that displayed some species-level specificity. Some species vary from having elaborate dorsal maculae to being nearly free of patterning, and these species were the most challenging for precise identification (Endrődi 1966).

Short or long setae on the head and thorax were useful characters for diagnosing species. Endrődi thought that setae on the frons and anterolateral margins of the pronotum were particularly easy to observe (even when eroded) because they were erect and in obvious punctures. The shape of the clypeus, important since Burmeister (1847), was considered diagnostic in *Mimeoma*, *Ancognatha*, *Stenocrates*, and *Aspidolea* (Endrődi 1966). However, clypeal shape was considered too variable among species for diagnosing groups in other genera such as *Cyclocephala* (Endrődi 1966). Sculpturing and rugosity of the frons, interocular distance, and shape of the frontoclypeal suture were considered stable characters within species (Endrődi 1966). He noted that there is significant variation of the mouthparts (labrum, ligula, maxillae, and mandibles) among cyclocephalines and observed this variation mostly from dissected Burmeister type specimens. Due to the number of species and specimens he needed to examine, Endrődi eschewed characters that required dissection (except for male genitalia) to observe. Thus, he generally did not use mouthpart or hindwing characters in his diagnoses for genera or species. The usefulness of mouthpart and hindwing characters for circumscribing groups remains largely unevaluated in Cyclocephalini and Dynastinae.

Late 20th and early 21st century French workers: Roger-Paul Dechambre, Fabien Dupuis, and Fortuné Chalumeau

Dynastine scarab enthusiast Roger-Paul Dechambre, a former curator of Coleoptera at Museum National d'Histoire Naturelle in Paris, published 21 papers or book chapters on Cyclocephalini (Dechambre 1979a–c, 1980, 1982, 1985, 1991a, b, 1992, 1995, 1997, 1999, 2000, 2006a, b, Dechambre and Duranton 2005, Dechambre and Endrődi 1983, 1984, Dechambre and Hardy 2004, Dupuis and Dechambre 1995, Ponchel and Dechambre 2003). Dechambre was a prolific describer of cyclocephaline taxa, having authored or coauthored over 80 species and subspecies in the group (only five of which are currently junior synonyms). Most of these taxa were described in *Cyclocephala* (65 species and subspecies) and *Stenocrates* Burmeister (15 species). Beyond his *Cyclocephala* expertise, he described the second species of the African genus *Ruteloryctes* (Dechambre 2006b), a species of *Chalepides* (Ponchel and Dechambre 2003), a species of *Ancognatha* (Dechambre 2000), and three species of *Aspidolea* (Dechambre 1992). Nearly all of Dechambre's new cyclocephaline taxa are South American, which highlights the need for continued work on that fauna.

Dechambre's treatment of cyclocephaline genera was conservative. Dechambre did not describe any new cyclocephaline genera, and he synonymized *Surutoides* with *Cyclocephala* (Dechambre 1991a). Dechambre seems to have favored treating "species groups" in lieu of upsetting the classification of *Cyclocephala*. For example, Dechambre (1997) revised the "*Cyclocephala cribrata* species group" which included the relatively large, black species of *Cyclocephala* previously included in *Mononidia* and *Surutoides*.

Fortuné Chalumeau worked on revising the West Indian scarabaeoids, especially on islands under French sovereignty. Chalumeau's articles provided identification keys and diagnoses for *Cyclocephala*, *Chalepides*, and *Dyscinetus* species found across the Lesser Antilles (Chalumeau and Gruner 1977, Cartwright and Chalumeau 1978, Chalumeau 1982, 1983, Dutrillaux et al. 2013). Fabien Dupuis described 16 cyclocephaline species in *Aspidolea*, *Cyclocephala*, *Dyscinetus*, and *Stenocrates* (Dupuis and Dechambre 1995, Dupuis 1996, 1999, 2006, 2008, 2009, 2014, 2017, 2018). All of Dupuis cyclocephaline taxa were described from Ecuador, French Guiana, Peru, Bolivia, Venezuela, and Colombia.

Late 20th and early 21st century North, Central, and South American workers: Brett Ratcliffe, Ronald Cave, Luis Joly, and Mary Liz Jameson

Brett Ratcliffe, Curator of Entomology at the University of Nebraska State Museum, greatly expanded upon Endrődi's dynastine research in the Nearctic and Neotropical realms. Ratcliffe has authored or coauthored 39 publications that cover cyclocephaline scarabs, and many of these are monographic in scope (Ratcliffe 1977, 1978, 1981, 1985, 1986, 1989, 1991, 1992a–d, 2002a, b, 2003, 2008, 2014, 2015, Ratcliffe and Cave 2002, 2006, 2008, 2009, 2010, 2015, 2017, Ratcliffe et al. 2013, 2015, Ratcliffe and Delgado-Castillo 1990, Ratcliffe and Hoffman 2011, Ratcliffe and Morón 1997, Ratcliffe and Paulsen 2008, Figueroa and Ratcliffe 2016, Gasca-Álvarez et al. 2014, Jameson et al. 2002, 2009, Maes and Ratcliffe 1996, Maes et al. 1997, Neita-Moreno et al. 2006, 2007, Saltin and Ratcliffe 2012).

This body of research includes the description of over 60 new cyclocephaline species, only eight of which are in synonymy. These publications are mostly focused on Central or Mesoamerican taxa, but they also enhance knowledge of the poorly known South American genera *Surutu* and *Harposceles*. Ratcliffe, with collaborators Ronald Cave and Enio Cano, have systematically treated Dynastinae north of Panama, including the West Indies (Ratcliffe 2003, Ratcliffe and Cave 2006, 2015, 2017, Ratcliffe et al. 2013). These monumental works provide the most comprehensive, authoritative taxonomic treatment (synonymy and consistent species concept), identification tools, distribution data, and synthesized biological information ever produced for the subfamily in the New World. Venezuelan scarabaeologist Luis Joly, along with collaborator Hermes Escalona, advanced understanding of the group in South America, having revised *Chalepides* and the *Dyscinetus* of Venezuela (Joly and Escalona 2002, 2010). Joly has also described several new species of *Cyclocephala* from across South America and the West Indies.

Recent publications have generally been conservative regarding the generic composition of Cyclocephalini. Morón and Ratcliffe (1996) transferred the genus *Coscinocephalus* from Cyclocephalini to Pentodontini based on characters of the head, mouthparts, and parameres shared with *Orizabus* Fairmaire, 1878. The work of Mary Liz Jameson, while focused mainly on the subfamily Rutelinae, has altered the concept of Cyclocephalini (Jameson 1998, Jameson et al. 2002, Jameson and Wada 2004, 2009, Jameson and Jákl 2010, Jameson and Drumont 2013). Two genera, *Acrobolbia* Ohaus, 1912 and *Peltonotus*, previously classified in Rutelinae were transferred into Cyclocephalini based on morphological phylogenetic analyses (Jameson 1998, Jameson et al. 2002, Jameson and Wada 2004).

Immature stages: diagnosis and identification

Research interest in cyclocephaline immature stages has recently increased, with approximately 80% of larval and pupal descriptions published after 1990 (Morelli 1991, Morelli and Alzugaray 1994, Vincini et al. 2000, Ramírez-Salinas et al. 2004, Vallejo and Morón 2008, Neita-Moreno and Morón 2008, Bran et al. 2006, Neita-Moreno et al. 2007, Vallejo and Morón 2008, Neita-Moreno and Morón 2008, Lugo-García et al. 2009, Stechauner-Rohringer and Pardo-Locarno 2010, Neita-Moreno and Yepes 2011, Albuquerque et al. 2014, Souza et al. 2014a, b, Morón et al. 2014). It is not yet possible to characterize cyclocephaline larvae or pupae at the tribal level as only 4 of 14 genera have described immatures (Table 5 and Table 6). Neita-Moreno et al. (2007) offered the most detailed tribal-level diagnosis of third-instar larvae and noted all the species known to them shared the following characters: 1) dorsal surface of last antennal segment with two sensory spots and 2) each tarsal claw with two setae. Characters

Table 5. Cyclocephaline species with larval descriptions or with larvae incorporated into identification keys.

Genera	Species and subspecies	References
Ancognatha Ericson, 1847	*A. manca* (LeConte) *A. scarabaeoides* Erichson *A. sellata* Arrow *A. ustulata* (Burmeister)	Ritcher 1966, Ramírez-Salinas et al. 2004, Vallejo and Morón 2008, Neita-Moreno and Morón 2008
Aspidolea Bates, 1888	*A. singularis* Bates	Neita-Moreno et al. 2007
Cyclocephala Dejean, 1821	*C. barrerai* Martínez *C. borealis* Arrow *C. celata* Dechambre *C. comata* Bates *C. distincta* Burmeister *C. fasciolata* Bates *C. fulgurata* Burmeister *C. gregaria* Heyne and Taschenberg *C. jalapensis* Casey *C. longula* LeConte *C. lunulata* Burmeister *C. lurida lurida* Bland *C. modesta* Burmeister (undescribed; incorporated into key by Morelli and Alzugaray [1994]) *C. paraguayensis paraguayensis* Arrow *C. parallela* (Casey) *C. pasadenae* (Casey) *C. putrida* Burmeister (undescribed; incorporated into key by Morelli and Alzugaray [1994]) *C. signaticollis* Burmeister *C. sinaloae* Howden and Endrődi *C. testacea* Burmeister	Ritcher 1944, 1966, Gordon and Anderson 1981, King 1984, Morelli 1989, 1991, Morelli and Alzugaray 1994, Bran et al. 2006, Lugo-García et al. 2009, Stechauner-Rohringer and Pardo-Locarno 2010, Albuquerque et al. 2014, Souza et al. 2014a, b, Morón et al. 2014
Dyscinetus Harold, 1869	*D. dubius* (Olivier) *D. morator* (Fabricius) *D. rugifrons* (Burmeister)	Ritcher 1944, 1966, Vincini et al. 2000, Neita-Moreno and Yepes 2011

Table 6. Cyclocephaline species with pupal descriptions.

Genera	Species and subspecies	References
Aspidolea Bates, 1888	*A. singularis* Bates	Neita-Moreno et al. 2007
Cyclocephala Dejean, 1821	*C. celata* Dechambre *C. distincta* Burmeister *C. fulgurata* Burmeister *C. gregaria* Heyne and Taschenberg *C. paraguayensis paraguayensis* Arrow *C. lunulata* Burmeister *C. signaticollis* Burmeister *C. testacea* Burmeister	Morelli 1989, 1991, Morelli and Alzugaray 1994, Bran et al. 2006, Stechauner-Rohringer and Pardo-Locarno 2010, Albuquerque et al. 2014, Souza et al. 2014a, b
Dyscinetus Harold, 1869	*D. dubius* (Olivier) *D. rugifrons* (Burmeister)	Vincini et al. 2000, Neita-Moreno and Yepes 2011

of the haptomeral process (epipharynx), plegmatia (epipharynx), ocelli (head), and raster palidia (abdomen) were consistent in many, but not all, known species at the time (Neita-Moreno et al. 2007, Morón et al. 2014).

Eleven additional species of *Ancognatha*, *Cyclocephala*, and *Dyscinetus* had their larvae described since Neita-Morena et al. (2007), and these authors' diagnosis for the tribe should be reevaluated with the data presented in Table 7. The presence of two dorsal sensory spots on the terminal antennal segment is a consistent character for the tribe, except for *C. barrerai* (Morón et al. 2014) (Table 7). *Cyclocephala barrerai* has a variably present or absent third dorsal sensory spot on the terminal antennomere (Morón et al. 2014). The tarsal claws of known cyclocephaline larvae have two setae (one basal seta and one prebasal seta). *Cyclocephala celata* is the exception in the tribe, and this species has an additional prebasal seta (Souza et al. 2014b). The haptomerum of the epipharynx has a raised bilobed or entire ridge in the subfamily Dynastinae (Ritcher 1966). Among the known *Cyclocephala* and *Aspidolea* larvae (the genera with the most similar adult morphology that are comparable), the haptomerum is a tooth-like process that is divided into two lobes (or "teeth") (Table 7). This character may prove useful for diagnosing larvae of *Cyclocephala*-like genera in the tribe if they are described in the future (e.g., *Arriguttia*, *Augoderia*, former *Mimeoma* species, and additional *Cyclocephala* species). *Ancognatha manca* has an entire haptomeral process, making it unique for the known larvae in the genus.

Several identification keys incorporating these species have been developed. For example, Lugo-García et al. (2009, 2012) proposed an identification key for all species of phytophagous scarab larvae (including *Cyclocephala*) associated with agave and maize cultivation in Jalisco and Sinaloa, Mexico. Country specific keys for *Cyclocephala* larvae were developed for Uruguay and Colombia (Morelli and Alzugaray 1994, Bran et al. 2006, Stechauner-Rohringer and Pardo-Locarno 2010). Neita-Moreno et al. (2007) proposed a generic-level key to the tribe that included *Ancognatha*, *Aspidolea*, *Cyclocephala*, and *Dyscinetus*. Neita-Moreno and Yepes (2011) provided a key to the larvae of *Dyscinetus* and several authors have proposed keys to the known larvae of *Cyclocephala* (Souza et al. 2014a, b, Albuquerque et al. 2014). The four new larval descriptions

Table 7. List of proposed diagnostic characters for cyclocephaline scarab beetle larvae. Question marks indicate character states that are unreported from the literature.

Species	Haptomeral Process	Plegmatia	Ocelli	Terminal Antennal Segment with 2 Dorsal Sensory Spots	Tarsal Claw Setae	Palidia
Ancognatha manca	Entire	Absent	Present	Present	2 setae	Absent
A. scarabaeoides	Not Entire	Absent	Present	Present	2 setae	Absent
A. sellata	Not Entire	Absent	Present	Present	2 setae	Absent
A. ustulata	Not Entire	Absent	Present	Present	2 setae	Absent
Aspidolea singularis	Not entire	Present	Present	Present	2 setae	Absent
Cyclocephala barrerai	Not entire	Absent	Present	Present (variable)	2 setae	Absent
C. borealis	Not entire	Absent	Present	Present	2 setae	Absent
C. celata	Not entire	Absent	Present	Present	3 setae	Absent
C. comata	Not entire	Absent	Present	Present	?	Absent
C. distincta	Not entire	Absent	Present	Present	2 setae	Absent
C. fasciolata	Not entire	Absent	Present	Present	2 setae	Absent
C. fulgurata	Not entire	Absent	Present	Present	2 setae	Absent
C. gregaria	Not entire	Absent	Present	Present	2 setae	Absent
C. jalapensis	Not entire	Absent	Present	Present	2 setae	Absent
C. longula	Not entire	Absent	Present	Present	2 setae	Absent
C. lunulata	Not entire	Absent	Present	Present	2 setae	Absent
C. lurida lurida	Not entire	Absent	Present	Present	2 setae	Absent
C. modesta	?	?	?	?	?	Present
C. paraguayensis paraguayensis	Not entire	Absent	Present	Present	2 setae	Absent
C. parallela	Not entire	Absent	Present	Present	2 setae	Absent
C. pasadenae	Not entire	Absent	Present	Present	2 setae	Absent
C. putrida	?	?	?	?	?	Absent
C. signaticollis	Not entire	Absent	Present	Present	?	Absent
C. sinaloae	Not entire	Absent	Present	Present	2 setae	Absent
C. testacea	Not entire	Present	Present	Present	?	Present
Dyscinetus dubius	Entire	Absent	Present	Present	2 setae	Absent
D. morator	Entire	Absent	Present	Present	2 setae	Absent
D. rugifrons	Entire	Absent	Present	Present	?	Absent

from Morón et al. (2014) have yet to be incorporated into an identification key. Neita-Moreno and Morón (2008) provided a key to the known larvae of *Ancognatha*.

Economic importance of larvae and adults

The habits of cyclocephaline larvae are poorly known, especially for species that are restricted to tropical forests. Species commonly encountered in temperate zones or agricultural areas are the source of the most detailed larval life history data. Cyclocephaline larvae go through three instars and pupate in soil (Ritcher 1966, Santos and Ávila 2007, Stechauner-Rohringer and Pardo-Locarno 2010, Rodrigues et al. 2010, Souza et al. 2015). Economic data from turfgrass researchers suggested that the larvae of temperate *Cyclocephala* species are rhizophagous (e.g., see Blanco-Montero and Ward 1995 and Crutchfield et al. 1995). Data from Central and South American agroecosystems indicated that *Cyclocephala* larvae are at least facultatively saprophagous, feeding on decaying plant matter and leaf litter. Information about immature stages in tropical forests is sparse, but the larvae and pupae of *Harposceles paradoxus* were found in the organic litter accumulated between leaf sheaths of the palm *Astrocaryum carnosum* F. Kahn & B. Millán (Arecaceae) (Couturier and Kahn 1992). *Cyclocephala cribrata* Burmeister larvae reportedly eat the roots of bromeliads in Brazil (Luederwaldt 1926). *Cyclocephala atricapilla* Mannerheim adults and larvae were found beneath litter near their *Annona* host plants, and the larvae were observed feeding on decaying material (Costa et al. 2017).

The economic importance of *Cyclocephala* larvae in agroecosystems is difficult to generalize as beneficial, negative, or neutral. The widespread species *C. lunulata* has been laboratory reared on decaying sugarcane and humus, indicating some saprophagous habits (Stechauner-Rohringer and Pardo-Locarno 2010). In agroecosystems, *C. lunulata* larvae have been collected in soils underneath the living and decaying roots of peanuts (*Arachis hypogaea* L.; Fabaceae), alfalfa (*Medicago sativa* L.; Fabaceae), statice (*Limonium sinuatum* [L.] Mill.), sugarcane (*Saccharum* sp.; Poaceae), maize (*Zea mays* L.; Poaceae), stevia (*Stevia rebaudiana* [Bertoni] Bertoni; Asteraceae), rice, and in pastures (Aragón and Morón 2000, Aragón et al. 2001, Bran et al. 2006, Stechauner-Rohringer and Pardo-Locarno 2010, Morón et al. 2014). However, this species is not thought to be a major damaging pest in crop systems (Aragón et al. 2001).

In contrast, *C. parallela* larvae are considered a pest in Florida "sand-muck" sugarcane production (Gordon and Anderson 1981). Sugarcane production may produce favorable soil conditions for cyclocephaline scarab beetle larvae as *Cyclocephala* and *Dyscinetus* species have been reported to be numerous in fields in Cuba, Puerto Rico, Nicaragua, Colombia, and Guyana (Box 1925, Stahl and Scaramuzza 1929, Squire 1932, 1933, Maes and Tellez 1988, Posada Ochoa 1989). *Cyclocephala testacea* can reach densities of 160 larvae/m^2 of soil in Uruguayan pastures (Morelli and Alzugaray 1994). At these densities, the larvae form noticeable mounds, denude soil, and possibly contribute to weediness of fields (Morelli and Alzugaray 1994).

The larvae of several *Ancognatha* species are pests in barley, (*Hordeum vulgare* L.; Poaceae), rye (*Secale cereale* L.; Poaceae), maize, oats (*Avena sativa* L; Poaceae), onions (*Allium cepa* L.; Amaryllidaceae), carnations (*Dianthus* spp.; Coryphyllaceae), strawberries (*Fragaria* spp.; Rosaceae), and tamarillo (*Solanum betaceum* Cav.; Solanaceae). (Posada Ochoa 1989, Ruíz and Pumalpa 1990). The association of *Ancognatha* larvae with cultivated commodity flowers in Colombia is a challenge for USDA APHIS inspectors. For example, *Ancognatha* adults of several species from Colombia (presumably emerged from soil) are routinely intercepted with flower imports of *Gypsophila* (Coryphyllaceae), *Dianthus*, *Alstroemeria* (Alstroemeriaceae), and *Limonium* (Coryphyllaceae) (pers. comm. with Charles Brodel, May 2017). As an occasional and sporadic pest, *C. variabilis* Burmeister can affect tea (*Camellia sinesnsis* (L.) Kuntze; Theaceae) cultivation in Brazil (Monte 1933). *Cyclocephala signaticollis* damages potato (*Solanum tuberosum* L.; Solanaceae) tubers and several garden or field crops in Argentina (Remedi de Gavotto

1964, San Martin 1968, Berón and Diaz 2005). Similar damage to potato production by larvae has been documented for other *Cyclocephala* and *Ancognatha* species in Bolivia and Colombia (Squire 1972, Posada Ochoa 1989, Montoya et al. 1994).

Adult cyclocephaline scarab beetles are relatively less important as pests of agroecosystems. However, some species have been recorded to chew on the foliage, consume pollen, seeds, and fruits. The conditions in which adults of these species become pests in these systems is not clear and well documented examples are rare. Colombian *Cyclocephala ruficollis* Burmeister were observed to chew on the foliage of sesame (*Sesamum indicum* L.; Pedaliaceae), cotton (*Gossypium* spp.; Malvaceae), maize, banana shoots (*Musa* spp.; Musaceae), and sunflowers (*Helianthus annuus* L; Asteraceae) (Posada Ochoa 1989). *Cyclocephala ovulum* Burmeister has also been reported to attack seeds of sunflower in Argentina (Hayward 1946). The foliage of common beans (*Phaseolus vulgaris* L.; Fabaceae) and African oil palm (*Elaeis guineensis* Jacq.; Arecaceae) are chewed by *C. amazona* (reported as *C. signata*) in Colombia (Posada Ochoa 1989). An unidentified *Cyclocephala* chews foliage of cassava (*Manihot esculenta* Crantz; Euphorbiaceae) (Posada Ochoa 1989). In addition to sunflowers, *C. ruficollis* and *C. amazona* reportedly feed on the flowers of *Citrus* (Rutaceae), various ornamental plants, maize, and *C. ruficollis* will feed on the pollen of sorghum (*Sorghum* sp.; Poaceae) in Colombia (Posada Ochoa 1989). Similar flower feeding on *Citrus* has also been reported for *C. melanocephala* in Brazil (Remillet 1988). At least two *Cyclocephala* species will eat fruit of cultivated rose apples (*Syzygium jambos* (L.) Alston; Myrtaceae), custard apples (*Annona* spp.; Annonaceae), and guava (*Psidium guajava* L.; Myrtaceae) (Posada Ochoa 1989). A *Stenocrates* sp. may also attack foliage of maize in Colombia and sugarcane in Brazil (Lima 1953, Posada Ochoa 1989).

The role of *Dyscinetus* species in agroecosystems is not clear. It is possible that some reports of damage to crops by *Dyscinetus* are complicated by misidentifications of the similar looking genus *Euetheola* Bates (Scarabaeidae: Dynastinae: Pentodontini) (Phillips and Fox 1924). In some cases, *Dyscinetus* species have been reported in association with crop systems but are considered non-damaging saprophages. For example, the larvae of *Dyscinetus* sp. in Puerto Rico can be found in association with rotting stumps of sugarcane but they apparently do not attack the roots of living plants (Smyth 1916). In contrast, *D. rugifrons* is considered a pest of cultivated sugar cane in Argentina where the larvae burrow into internodes and buds (Costilla 1991). Adult *D. rugifrons* attack the shoots, but this is rare (Costilla 1991). In another case of conflicting information, Phillips and Fox (1924) reported that *D. morator* would not attack maize in their experiments. However, adults of this species will attack young maize shoots in North Carolina in fields with wet, high organic matter soil (Anonymous 1980).

Dyscinetus gagates Burmeister can be a silvicultural pest in Argentina during years when populations of the beetles are high. *Dyscinetus rugifrons* adults attack the stems and roots of young cultivated *Populus* hybrids (Salicaceae) (Moore 1958) and *Eucalyptus* (Myrtaceae) (Bosq 1945), killing the plants. In Florida, *D. morator* adults attack carrots (Apiaceae), radishes (Brassicaceae) (Foster et al. 1986), and the bulbs, buds, and petioles of cultivated *Caladium* (Araceae) (Anonymous 1971, Price and Kring 1991). Larvae of this species also damage Pangola-grass pastures in Florida when at high densities (Anonymous 1956). In Maryland, *D. morator* larvae can damage the roots of azaleas (*Rhododendron* spp.; Ericaceae) (Staines 1990). *Dyscinetus morator* larvae can damage the fine root tips of cranberry (*Vaccinium* sp.; Ericaceae) in bog cropping systems, though they are considered minor pests (Scammell 1917).

Natural enemies: predation, parasites, and infections

Vertebrate predation

Several species of wetland birds, reptiles, and amphibians prey on *Chalepides*, *Cyclocephala*, and *Dyscinetus* species in mucky habitats. White-faced ibis (*Plegadis chihi* (Vieillot)), white ibis (*Eudocimus albus* (Linnaeus)), and scarlet ibis (*E. ruber* (Linnaeus)) eat adult *Dyscinetus* and *Chalepides* in Argentina and Venezuela (Aguilera et al. 1993, Soave et al. 2006.). Common terns (*Sterna hirundo* Linnaeus), white-browed blackbird (*Sturnella superciliaris* (Bonaparte)), yellow-winged blackbird (*Agelaius thilius* (Molina)), Olrog's gull (*Larus atlanticus* Olrog), and brown-hooded gull (*L. maculipennis* Lichtenstein) eat *Dyscinetus* spp. and *C. signaticollis* in Argentinian marshes, grasslands, lagoons, and riparian areas (Darrieu et al. 2001, Mauco and Favero 2004, Camperi et al. 2004, Ghys and Favero 2004, Berón and Favero 2010). Clapper rails (*Rallus crepitans* Gmelin) hunt *D. morator* in Louisiana marshes (Roth et al. 1972). Wattled Jacana (*Jacana jacana* (Linnaeus)) have been observed to catch and eat *Cyclocephala* species associated with Amazonian water lilies (Prance and Arias 1975). Lizards and birds will quickly eat *Cyclocephala* if they are knocked out of *Cyclanthus* spathes during the day (Beach 1982).

Juvenile brown caimans (*Caiman crocodilus fuscus* (Cope)) in Costa Rica feed primarily on insects, especially *Dyscinetus* (Allsteadt and Vaughan-Dickhaut 1994). The invasive cane toad (*Rhinella marina* (Linnaeus)) eats *C. barbatus* in Puerto Rico (Wolcott 1937). In the American southwest, Couch's spadefoot toad (*Scaphiopus couchii* Baird) will readily eat *A. manca* and *Cyclocephala* species (Dimmitt and Ruibal 1980). Mammal predation on cyclocephalines has rarely been documented, but it is suspected that fossorial mammals, such as armadillos, would consume larvae (Tashiro 1987). Mountain coati, *Nasuella olivacea* (Gray), dig up and eat *A. scarabaeoides* larvae in the Eastern and Central Colombian Cordilleras (Apolinar Maria 1946). Several species of bat are known to eat *Cyclocephala* seasonally or opportunistically (Goldman and Henson 1977, Johnston and Fenton 2001, Lenoble et al. 2014).

Invertebrate predators and parasitoids

Cyclocephaline scarab beetle larvae are subject to parasitism by ecto- and endoparasitoid flies and wasps. The fly *Mallophora ruficauda* Wiedemann (Diptera: Asilidae) is a koinobiont parasitoid of *C. signaticollis* (Barrantes and Castelo 2014). *Mallophora ruficauda* can also attack *C. putrida* and *C. modesta*, but the fly does not complete its development on these hosts or the adult flies are stunted and deformed (Barrantes and Castelo 2014). Two other asilid flies, *M. sylverii* Macquart and *Diogmites vulgaris* Carrera, parasitize *Dyscinetus rugifrons* in Brazil (Dennis and Knutson 1988). *Dyscinetus* species are parasitized by *Tiphia parallela* Smith (Hymenoptera: Tiphiidae) in Guyana (Box 1925). *Tiphia pygidialis* Allen parasitizes *C. borealis*, *C. lurida lurida*, and *C. pasadenae* (Rogers and Potter 2004). *Cyclocephala pasadenae* was demonstrated to be toxic to spiders of several families when eaten, though the mechanism of this toxicity remains unexplained (Cokendolpher 1993). Ants can be significant egg and larval predators of *C. lurida lurida* in turfgrass (Zenger and Gibb 2001). The parasitoid larvae of *Plega banski* Rehn (Neuroptera: Mantispidae: Symphrasinae) attack *Cyclocephala* pupae in Arizona (Werner and Butler 1965).

Cyclocephalines, like many relatively large beetles, are hosts of phoretic mites. Acarid and macrochelid mites have been reported from *Cyclocephala* (Goldwasser 1987, Crocker et al. 1992). Phoretic macrochelid mites on *Cyclocephala* are common in aroid inflorescences visited by the beetles, and the mites appear to feed on floral exudates (Goldwasser 1987). The mesostigmatid *Dyscinetonyssus hystricosus* Moss and Funk is hypothesized to be a parasite of *D. morator* (Moss and Funk 1965). This conclusion was based on morphological features of the mites consistent with parasitic habits and the observation that all life-stages and sexes of the mites are present on *D. morator* (Moss and Funk 1965).

Entomopathogenic nematodes and worms

Entomopathogenic nematodes are remarkable for their ability to attack and kill numerous insect pests. Their flexibility of use, combinability with other chemical and biological controls, and safety has led to their use in IPM strategies for control of *C. borealis*, *C. pasadenae*, *C. lurida lurida*, and *C. hirta* grubs (Kaya et al. 1995, Koppenhöffer and Kaya 1997, 1998, Converse and Grewal 1998, Koppenhöffer and Fuzy 2003, Koppenhöffer et al. 1999, 2002, 2004). Many species and strains of *Steinernema* Travassos (Nematoda: Steinernematidae) and *Heterorhabditis* Poinar (Heterorhabditidae) infect these *Cyclocephala* species, though *C. pasadenae* appears to have the most natural resistance to nematode infection among examined North American *Cyclocephala* (Koppenhöffer and Kaya 1996, Koppenhöffer et al. 2004).

Nematode infections of South American cyclocephalines have received some attention. The Argentinian pest grub *C. signaticollis* is naturally infected by two rhabditid and two thelastomatid nematodes (Reboredo and Camino 2000, Camino and Reboredo 2005, Camino and Achinelly 2012). *Cyclocephala modesta* hosts a thelastomatid parasitic nematode in its alimentary canal (Achinelly and Camino 2008). *Ancognatha scarabaeoides*, a major grub pest in Colombia, can be readily infected by *Steinernema* nematodes (Lucero Malfa et al. 2006). *Dyscinetus morator* can be an intermediate host of the swine parasite, thick stomach worm (*Ascarops strongylina* [Rudolphi]; Nematoda: Spirocercidae) (Fincher et al. 1969). Beyond nematodes, information regarding the infection of cyclocephalines by other worms is lacking. The only known example is that of *D. gagates* adults, which are suitable intermediate hosts of the rat tapeworm (*Hymenolepis diminuta* [Rudolphi]; Cestoda: Hymenolepididae) under laboratory conditions (Bacigalupo 1939).

Entomopathogenic bacteria and fungi

Bacterial and fungal pathogens have proven useful for IPM of injurious scarab grubs, especially Japanese beetle (*Popillia japonica* Newman). Several of the most important pathogens for *P. japonica* control have been explored for use on *Cyclocephala* species. The fungal parasites *Beauveria bassiana* (Bals.-Criv.) Vuill and *Metarhizium anisopliae* (Metchnikoff) Sorokin (both Sordariomycetes: Hypocreales) have been evaluated for pathogenicity and virulence in *C. signaticollis*, *C. borealis*, and *C. lurida lurida* (Berón and Diaz 2005, Redmond and Potter 2010). Experiments demonstrated that one Brazilian strain of *B. bassiana* caused significant mortality against *C. signaticollis*, while native strains of *M. anisopliae* were not pathogenic in this species (Berón and Diaz 2005). This relatively low mortality caused by *B. bassiana* and *M. anisopliae* was also observed in *C. lurida lurida*, but both fungal pathogens display synergism with entomopathogenic nematodes (Wu et al. 2014). *Cyclocephala borealis* and *C. lurida lurida* larvae surveyed from Kentucky golf courses also showed low infection rates by *M. anisopliae* (Redmond and Potter 2010). *Cyclocephala parallela* can also be naturally infected by *M. anisopliae* in sugarcane fields (Boucias et al. 1986). *Metarhizium anisopliae* – based control measures of *A. scarabaeoides* may have promise in Colombia, as at least one identified strain causes high mortality in this species (Marino et al. 2004).

Milky disease, caused by the bacterium *Paenibacillus popilliae* Dutky (Bacillales: Paenibacillaceae), is the only registered biological control specifically for *P. japonica* (Koppenhöfer et al. 2000). Infections of the disease are chronic in populations, but infection rates grow slowly (Klein 1992). Thus, milky disease is effective for inoculative, long-term treatments rather than as an emergency control measure (Klein 1992). Several *Cyclocephala* species can be infected by *P. popilliae*. *Cyclocephala parallela* larvae infected by *P. popilliae* show significantly higher mortality than healthy larvae (Boucias et al. 1986, Cherry and Boucias 1989, Cherry and Klein 1997).

Bacillus thuringiensis Berliner (Bt) is the most important bacterial biological control agent of insects, but there is a lack of information about infectivity in cyclocephalines. What is known about Bt in *Cyclocephala* suggests that infections enhance other biological control methods. Like fungal infections, bacterial infections by *B. t.* subspecies *japonensis* Buiui and *P. popilliae* cause additive or synergistic mortality with entomopathogenic nematodes in *C. hirta* and *C. pasadenae* (Thurston et al. 1993, 1994, Koppenhöfer and Kaya 1997, Koppenhöfer et al. 1999). Bt isolated from *C. signaticollis* in Argentina caused 100% mortality in inoculated larvae (Consolo et al. 2010).

Human use as food

Beetles are the most commonly consumed insects by humans (van Huis et al. 2013). Many phytophagous scarab larvae reach large sizes by the 3rd instar and can be found in abundance, making these beetles a valuable food resource. Data about the consumption of cyclocephaline scarab beetles is lacking, but there are a few well documented examples. The Lacandon people of Chiapas eat larval, pupal, and adult *C. fasciolata* (Ramos-Elorduy and Pino Moreno 2002). Additionally, *C. capitata* Höhne is eaten in southwestern Mexico and *C. guttata* Bates larvae and adults are eaten in Veracruz (Ramos-Elorduy and Pino Moreno 2004). Ecuadorians eat the larvae of *Ancognatha castanea* Erichson, *A. jamesoni* Murray, and *A. vulgaris* Arrow (Onore 1997, 2005). Similarly, the larvae of an unidentified *Ancognatha* species may be regularly fried and eaten in Cauca, Colombia (DeFoliart 2012). Among American Indians in the western US, the Mono Lake and Owens Valley Paiute would roast and eat adult *Phyllophaga* sp. (Scarabaeidae: Melolonthinae) (Sutton 1988). These groups may have also eaten common *Cyclocephala* spp., but this is unconfirmed (Sutton 1988). In Thailand, Karen-speaking people from the Tak province fry and eat adult *Peltonotus nasutus* Arrow that they collect from the inflorescences of *Amorphophallus paeoniifolius* (Araceae) (Danell 2010).

Cyclocephalines as floral visitors

Scope of the Mutualism

Based on the most specific available data, about 97 cyclocephaline scarab beetle species have been reported from the flowers of at least 58 plant genera representing 17 families and 15 orders (Moore and Jameson 2013), though new data are being published often. The preponderance of data suggests that tropical cyclocephaline species are involved in a pollination mutualism with species in the early-diverging angiosperm families Nymphaeaceae, Annonaceae, Magnoliaceae, Araceae, Cyclanthaceae, and Arecaceae (Moore and Jameson 2013). More sporadic data suggests that cyclocephaline floral visitation of more derived angiosperm groups is opportunistic and not adequately explained. However, based on the observations of Prance (1976), Cyclocephala species may be unrecognized pollinators of some Neotropical genera of the Brazil nut family (Lecythidaceae).

The mutualism between cyclocephaline scarab beetles and these early-diverging angiosperms has resulted in a cantharophilous floral syndrome in these groups. This floral syndrome is the result of the convergent evolution of several floral traits that accommodate "mess-and-spoil" beetle pollination (Faegri and van der Pijl 1979). Among the families Nymphaeaceae, Annonaceae, Magnoliaceae, Araceae, Cyclanthaceae, and Arecaceae these convergent floral traits include: 1) bisexuality of flowers or inflorescences; 2) protogyny; 3) nocturnal flower activity; 4) relatively large flowers or inflorescences that provide a "pollination chamber" and are sturdy enough to withstand beetle damage; 5) thermogenesis during anthesis; 6) production of excess pollen, floral exudates, or sterile floral parts as a food reward; 7) coordination of timing between beetle behavior, thermogenesis, and floral sexual stages; 8) large pollen grains; 9) sticky floral exudates; 10) strong floral scents and; 11) pale colored flowers or inflorescences (Bawa and Beach 1981, Bernhardt 2000, Silberbauer-Gottsberger et al. 2001, Davis et al. 2008, Thien et al. 2009, Gibernau et al. 2010). Excellent observational and experimental evidence indicates that cyclocephaline scarab beetles are primary or secondary pollinators of these plant groups (Cramer et al. 1975, Beach 1982, 1984, Young 1986, 1988a, b, Gottsberger 1989, Dieringer et al. 1999, Hirthe and Porembski 2003, Maia et al. 2012). Cyclocephalines are offered rewards for their pollination of these families. These rewards include access to aggregation and mating sites, food, and metabolic boosts associated with floral thermogenicity.

Facultative endothermy (sustained increase in thoracic muscle temperature) during rest, terrestrial activity, and preparation for flight has been documented in Coleoptera and Scarabaeidae more narrowly, including *Cyclocephala* species (Bartholomew and Casey 1977a, b). Among some examined dung beetles, changes in thermoregulation and behavior are associated with high levels of intra- and interspecific competition for rapidly depleting dung resources (Heinrich and Bartholomew 1979, Ybarrondo and Heinrich 1996). *Cyclocephala colasi* Endrődi experience sporadic bouts of endothermy during the early evening when these beetles fly between inflorescences (Seymour et al. 2009). These bouts of endothermy are more intense at lower ambient temperatures and continue throughout the night, when they may be associated with feeding, mating, or escape behaviors (Seymour et al. 2009). The host plant, *Philodendron solimoesense* A.C.Sm. (Araceae), continues thermogenesis even after floral scent compounds have been volatilized (Seymour et al. 2003). This suggests that the increased temperature of the inflorescences serves as a thermal reward to the beetles, lowering the amount of energy spent achieving sporadic endothermy (Seymour et al. 2003, 2009). Thermal rewards of this nature are predicted to be more important in montane forest habitats with much lower average ambient temperatures than lowland rainforests (Seymour et al. 2009).

Cyclocephaline scarab beetles have been observed to mate within the inflorescences or flowers of many families: 1) Nymphaeaceae (Prance and Arias 1975; Hirthe and Porembski 2003); 2) Annonaceae (Gottsberger 1990, Murray 1993, Costa et al. 2017); 3) Magnoliaceae (Gibbs et al. 1977, Dieringer and Espinosa 1994, Dieringer et al. 1999); 4) Cyclanthaceae (Beach 1982); 5) Araceae (Young 1986, 1988a, b, Maia and Schlindwein 2006, Grimm 2009, Seymour et al. 2009, Moore 2012); 5) Arecaceae (Beach 1984, Rickson et al. 1990, Voeks 2002); 6) Solanaceae (Ratcliffe and Cave 2017); and possibly 7) Cactaceae (B. Schlumpberger *in litt*. 2011). Large, chamber-like flowers also serve to protect the beetles from predation (Prance and Arias 1975, Beach 1982).

Floral food rewards for these scarab beetles are diverse and include sterile staminate or staminode tissue (Prance 1976, 1980, Young 1986, Maia et al. 2010, Maldonado et al. 2015), carpellary appendages (Prance and Arias 1975, Hirthe and Porembski 2003), stamens (Dieringer and Espinosa 1994, Hirthe and Porembski 2003, Costa et al. 2017), petal tissue (Gibbs et al. 1977, Gottsberger 1989, Dieringer and Espinosa 1994, Dieringer et al. 1999, Voeks 1992), specialized adaxial food tissue of bracts (Beach 1982), and pollen (Rickson et al. 1990). *Cyclocephala amazona* was observed consuming epidermal trichomes from the stalk of *Bactris gasipaes* Kunth (Arecaceae) inflorescences before feeding on pollen (Rickson et al. 1990). These trichomes are hypothesized to serve as non-nutritional gastroliths that aid in the piercing of pollen grains in the beetles' gut (Rickson et al. 1990). Some *Cyclocephala* species may be destructively florivorous and detrimental to the reproductive success of the plants they visit. For example, *Cyclocephala* species are known to destructively feed on flowers of some crop plants (Remillet 1988, Posada Ochoa 1989) and the cactus species *Echinopsis ancistrophora* Speg. (Schlumpberger et al. 2009) and *Opuntia monocantha* Haw (Lenzi and Orth 2011).

Attraction to flowers and inflorescences

Cyclocephaline attraction to their floral hosts is hypothesized to be driven by both long-distance chemical cues and short-distance visual stimuli. In the case of *Philodendron bipinnatifidum* Schott ex Endl. (Araceae), *Erioscelis emarginata* (Mannerheim) will not land on inflorescences covered in black cloth (obscuring visual stimuli associated with the scent releasing plant) (Gottsberger and Silberbauer-Gottsberger 1991). Furthermore, experiments demonstrated that these beetles were differentially attracted to *P. bipinnatifidum* spathes covered in yellow paper, indicating that contrasting colors play a role in close range attraction (Gottsberger and Silberbauer-Gottsberger 1991). Slight differences in spathe color and scent have also been hypothesized to influence the community of *Cyclocephala* spp. visiting *Dieffenbachia* spp. inflorescences in Costa Rica and Panama (Beath 1999). The white flowers of *Victoria amazonica* (Poepp.) J.C. Sowerby (Nymphaeaceae) have been hypothesized to aid in the attraction of cyclocephalines, along with their heavy floral scent (Prance and Arias 1975). Contrasting colors have also been suggested to play a role in the attraction of *Cyclocephala* species to *Cyclanthus* (Beach 1982).

The chemical composition of the floral scents attractive to cyclocephalines has received some research attention. These heavy scents are generally only volatile at elevated temperatures during floral thermogenesis. For example, protogynous *P. bipinnatifidum* inflorescences can reach an astonishing 46°C during the female phase of anthesis (Gottsberger and Silberbauer-Gottsberger 1991). Research on these floral scents reveals that while they are complex chemical mixtures, a single dominant scent compound is sufficient for cyclocephaline attraction. In Brazil, the nitrogen and sulfur containing compound 4-methyl-5-vinylthiazole is the dominant floral scent constituent in four *Annona* spp. (Annonaceae) and *Caladium bicolor* (Aiton) Vent. (Araceae) pollinated by *Cyclocephala* species (Maia et al. 2012). Scent trap experiments confirmed that this compound alone was sufficient to attract these beetles (Maia et al. 2012).

Dötterl et al. (2012) identified three main compounds present in the *P. bipinnatifidum* floral scent that are attractive to *E. emarginata*. The dominant compound alone, 4-vinylanisole (also called 4-methoxystyrene), was sufficient to attract *E. emarginata* and various mixtures of the three scents also served to attract the beetles (Dötterl et al. 2012). A mixture of dihydro-β-ionone and methyl jasmonate was synergistically attractive to *E. emarginata*, which pollinates *Philodendron adamantium* Mart. ex Schott

(Araceae) (Pereira et al. 2014). Among *Nymphaea* spp. (Nymphaeaceae) pollinated by *Cyclocephala*, floral scents are dominated by aromatic ethers and aliphatic esters (Maia et al. 2014). 4-vinylanisole is also present in *Nymphaea* species pollinated by *Cyclocephala*, suggesting that some *Nymphaea* spp. and *P. bipinnatifidum* may have converged on a similar floral scent for attracting these beetles. The ester methyl-2-methylbutanoate is the dominant floral scent compound in *Magnolia ovata* (A.St.-Hil.) Spreng. (Magnoliaceae) and is sufficient to attract *C. literata* Burmeister (Gottsberger et al. 2012). (*S*)-2-hydroxy-5-methyl-3-hexanone is one of the dominant compounds in the floral scent of *Taccarum ulei* Engl. & K.Krause and is sufficient to attract its *Cyclocephala* pollinators (Maia et al. 2013).

The mechanisms of attraction of cyclocephalines to other flower groups is poorly understood. The phytelephantoid palms (Arecaceae) *Phytelephas aequatorialis* Spruce, *P. macrocarpa* Ruiz & Pav., *P. seemannii* O.F. Cook, and *Aphandra natalia* (Balslev & A.J. Hend.) Barfod, all visited by *Cyclocephala*, have floral scents that are dominated by 4-methylanisole and 2-methoxy-3-sec-butyl pyrazine (Ervik et al. 1999). The presence of anisoles in the floral scents of phytelephantoid palms, Nymphaeaceae, and Araceae suggests that this class of compounds may have convergently evolved in these groups for attraction of cyclocephalines. *Cyclanthus bipartitus* Poit., visited by several *Cyclocephala* species, has a floral scent dominated by a unique compound called (*E*)-cyclanthone (Schultz et al. 1999). Heavy floral scents are likely to play a role in cyclocephaline attraction in every case. For example, *C. melanocephala* has been collected in the flowers of *Datura* and related genera (Solanaceae) from across its range (Moore and Jameson 2013). The dominant floral scent compounds found in these flowers are very different from those in early diverging angiosperms described above, and are comprised mostly of terpenes, terpenoids, and aromatic alcohols (Raguso et al. 2003).

Redundancy of pollinating cyclocephalines

Some authors have speculated that floral scent compounds are serving as surrogate sex pheromones for cyclocephalines (Schatz 1990, Dieringer et al. 1999). No specific *Cyclocephala*-derived sex pheromones have been chemically identified (Leal 1996), though some North American *Cyclocephala* species appear to use volatile pheromones. For example, *C. lurida* and *C. borealis* females use pheromones to attract males, and these pheromones are cross-attractive to males of both species (Potter 1980). Further experiments demonstrated that *C. lurida* larvae produce a similar male-attracting compound that elicits attempted mating (Haynes et al. 1992). These pheromones are present in all three instars and pupae (Haynes and Potter 1995). Cross-attractiveness of *C. lurida* pheromone extracts are limited to *C. borealis*, as *C. pasadenae* and *C. longula* are not attracted to these scents (Bauernfeind et al. 1999).

In cases of cross-attractive pheromones, it can be predicted that some other mechanism (temporal or behavioral) maintains species boundaries. For sympatric *C. lurida* and *C. borealis* in Kentucky, differences in peak flight time and mating periods throughout the night serve to temporally isolate these species (Potter 1980). If attractive floral scents are serving as sex pheromones for tropical cyclocephalines, then the mechanisms isolating species remain unexplained. Only one case of interspecific copulation has been documented for cyclocephalines. The South American species *C. putrida* was observed mating at light traps, and several male *C. putrida* copulated with females of a *Tomarus* sp. (Dynastinae: Pentodontini) (Bosq 1936). Because these tropical cyclocephalines often mate within their host inflorescences, it is unclear how sexual isolation is maintained when congenerics are present. Diagnostic secondary sexual characters of the elytral epipleuron in females and protarsal and paramere morphology in males may be involved in the sexual isolation of cyclocephaline species (Moore 2012).

Many different cyclocephaline species can be found associated with a floral host at a specific time or throughout a season. There is little evidence for monophagy in the group, and available data indicate that tropical cyclocephalines are predominantly oligophagous or polyphagous floral feeders (Moore and Jameson 2013). For example, *C. bipartitus* inflorescences can contain up to three *Cyclocephala* species at one time (Beach 1982). Parsing out how redundant cyclocephalines are in their pollinator functions has been assessed in a few cases. Detailed studies on *Dieffenbachia* Schott (Araceae) indicate that among a group of cyclocephaline floral visitors, some species are relatively more effective pollinators (Young 1988a). Seasonal abundance of cyclocephalines at a specific locality, along with floral phenology, may also determine which species are primary or secondary pollinators (Maia et al. 2010, Costa et al. 2017).

Evolution and fossil record

Fossil cyclocephalines

The only known cyclocephaline fossil is from the extant South American species *C. signaticollis*. A fossilized elytron and pronotum of an unsexed *C. signaticollis* individual were discovered in Buenos Aires Province, Argentina (Ramírez and Alonso 2016). The fossil is from the Late Pleistocene (Tarantian Stage) and the sediments containing the fossil dated between 12,100 ± 100 BP and 13,400 ± 200 BP (Ramírez and Alonso 2016). Neoichnological experiments demonstrated that *C. borealis* and *C. lurida lurida* larvae create diagnostic backfilled meniscate burrows and ellipsoidal chambers as they burrow through soil, while adults create poorly organized backfilled burrows (Counts and Hasiotis 2009). The diagnostic features of these burrows may allow for the future detection of cyclocephaline scarab beetle ichnofossils.

Cyclocephaline Phylogeny

Very little is known about the phylogeny of Dynastinae, and the monophyly of its tribes is in doubt. The lack of phylogenetic framework for the subfamily has limited the ability to hypothesize sister relationships among tribes and reconstruct the evolution of ecological (e.g., the floral feeding syndromes in Cyclocephalini) and morphological (e.g., such as thoracic and cephalic armature in Oryctini and Dynastini) traits. Indeed, the most meaningful comparison of characters for Dynastinae in the literature has centered around the subfamily's relationship to Rutelinae, especially among cyclocephalines (Jameson 1998, Jameson et al. 2002, Jameson and Wada 2004). Several studies have begun to address this gap in knowledge.

The morphological phylogenetic analysis (128 characters) of Rutelina (Rutelinae: Rutelini) (Jameson 1998) was the first empirical study to suggest that the monobasic ruteline tribal- and subtribal-groups Peltonotini and Acrobolbiina were more closely related to Cyclocephalini than Rutelini. This analysis, however, did not include enough exemplar taxa from Dynastinae to conclude anything about tribal relationships in the subfamily. Schiestl and Dötterl (2012) used an analysis of 18S sequence data to examine the evolution of olfactory preferences in scarabaeoids. This analysis suggested a sister relationship between Dynastinae and Rutelinae, but it did not resolve intrasubfamilial relationships of the included genera nor did it report statistical support for recovered nodes (Schiestl and Dötterl 2012). A *Cyclocephala* exemplar species was included in this analysis, and this species fell within the dynastine clade (Schiestl and Dötterl 2012). Rowland and Miller (2012) performed a four-gene phylogenetic analysis of Dynastini (Dynastinae) that included one *Cyclocephala* exemplar. This analysis was useful for recovering subtribal relationships within Dynastini, but the relationship of Dynastini to Cyclocephalini (*Cyclocephala*) and Pentodontini (*Orizabus*) was unresolved (Rowland and Miller 2012, see also Jin et al. 2016).

The most informative molecular phylogenetic analyses of phytophagous scarabs to date were conducted by McKenna et al. (2014) and Gunter et al. (2016). Both studies represent huge leaps forward in our understanding of subfamilial relationships in Scarabaeidae due to their resolution, statistical support, and taxa sampling. Despite their strengths, these studies are difficult to compare because of differences in gene selection and small (but significant for interpretation) differences in taxa sampling. McKenna et al. (2014) utilized 28S and CAD to phylogenetically analyze staphyliniform beetle (Histeroidea, Hydrophiloidea, and Staphylinoidea) relationships while using Scarabaeiformia as an outgroup. The most derived group of Scarabaeidae recovered from this analysis was a clade that included Cetoniinae + (Dynastinae and Rutelinae) (McKenna et al. 2014) (Fig. 2). Rutelinae was recovered as polyphyletic (McKenna et al. 2014) (Fig. 2). Three orthochilous (labrum vertically produced from clypeus and fused to clypeus) and three homalochilous (labrum horizontally produced relative to the clypeus and separated from the clypeus by a suture) rutelines from four total tribes were included in the analysis (McKenna et al. 2014). The included orthochilous rutelines (Anoplognathini and Anatistini) were recovered in the same clade, but the group was not monophyletic (McKenna et al. 2014) (Fig. 2).

The homalochilous Rutelinae (Anomalini and Rutelini) were polyphyletic, with *Oryctomorphus* (Rutelini) falling into a clade including Anatistini and Anoplognathini

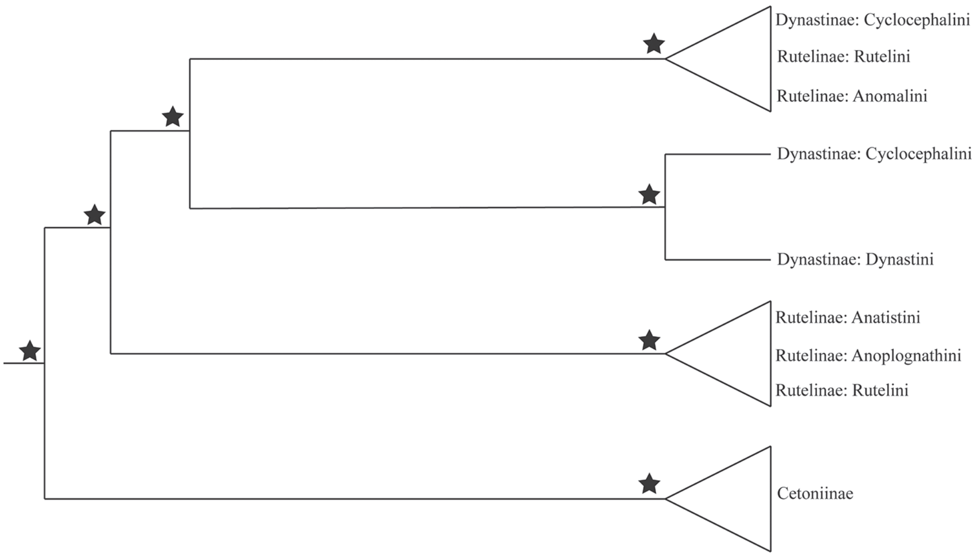


Figure 2. Summary of the hypothetical relationships of Dynastinae and Rutelinae tribes from McKenna et al. (2014). Stars indicate nodes with >75% bootstrap support. All but one of the starred nodes (Cyclocephalini + Rutelini + Anomalini) also had >0.95 posterior probability.

(McKenna et al. 2014). Three dynastines were included: *Dynastes*, *Cyclocephala*, and *Peltonotus* (McKenna et al. 2014). *Cyclocephala* was recovered in a clade along with *Dynastes* (McKenna et al. 2014) (Fig. 2). However, *Peltonotus* was recovered in a sister clade that included the remaining homalochilous rutelines (*Popillia* and *Parastasia*) (McKenna et al. 2014) (Fig. 2). These results suggest that Cyclocephalini is correctly classified in Dynastinae, but that the tribe is polyphyletic if it includes *Peltonotus*. This phylogenetic analysis is more in line with the placement of *Peltonotus* near the Asian parastasiine rutelines by Arrow (1908, 1910) than the hypotheses of Jameson (1998).

Gunter et al. (2016), building on the datasets of Ahrens et al. (2011, 2014), utilized 16S, 12S, CO1, and 28S to conduct a phylogenetic analysis of Scarabaeoidea that included over 400 taxa. A clade including Cetoniinae + (Dynastinae and Rutelinae) was recovered, but the node uniting these subfamilies was only weakly supported (0.89 posterior probability) (Gunter et al. 2016) (Fig. 3). These three analyses, built from similar datasets, together suggest that Rutelinae is a paraphyletic grade of tribes (Ahrens et al. 2011, 2014, Gunter et al. 2016). The subfamily Dynastinae in these analyses was consistently recovered as the most derived of all scarabaeoids (Ahrens et al. 2011, 2014, Gunter et al. 2016). Gunter et al. (2016) recovered a strongly supported node that suggests that the Asian orthochilous ruteline tribe Adoretini is sister to a monophyletic Dynastinae. This node had been similarly recovered by Ahrens et al. (2011). However, this relationship between Adoretini and Dynastini was weakly supported and interrupted by Pachydemini (Melolonthinae) in Ahrens et al. (2014). McKenna et al. (2014) did not include exemplars from Adoretini, making this relationship difficult to evaluate.

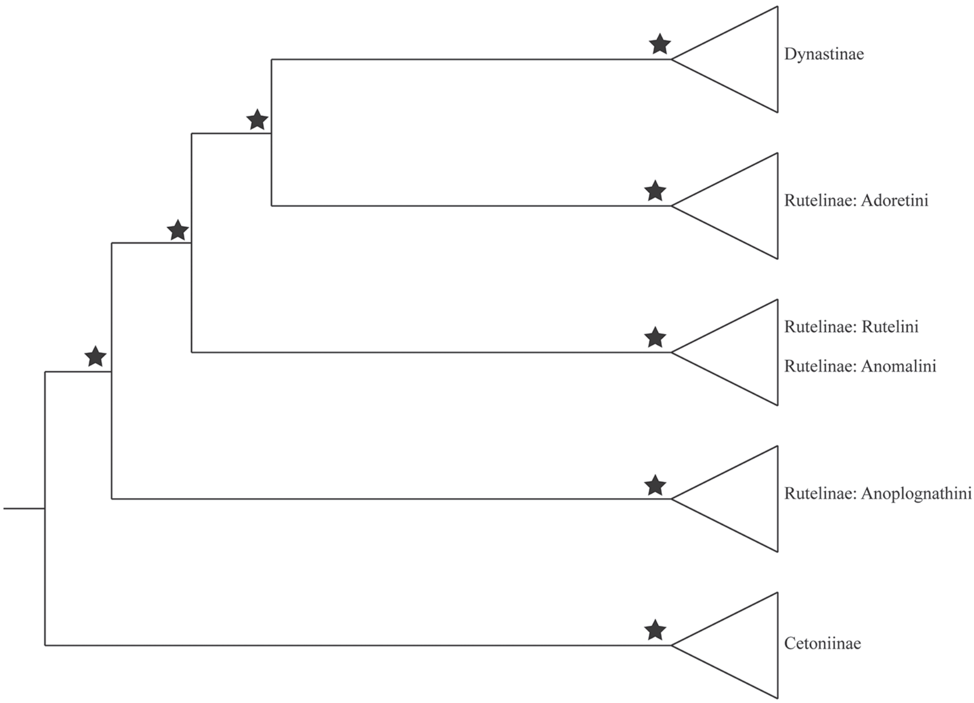


Figure 3. Summary of the hypothetical relationships of Rutelinae and Dynastinae from Gunter et al. (2016). Stars indicate nodes with >0.95 posterior probability.

The analysis by Gunter et al. (2016) included 22 dynastine species from 18 genera in 5 tribes. Nodes were generally poorly supported within Dynastinae, making it difficult to assess relationships among tribes (Gunter et al. 2016) (Fig. 4). The study included one *Cyclocephala* species, which was recovered as sister to *Onychionyx* (Oryctoderini), but this relationship was weakly supported (0.83 posterior probability). These results suggest future analyses of Cyclocephalini should include oryctoderine genera (nearly all of which were at some point previously included in Cyclocephalini) to assess the boundaries of the two tribes. Additionally, these analyses do not support the monophyly of the tribes Oryctoderini, Pentodontini, and Phileurini (Gunter et al. 2016).

Taken together, these studies demonstrate that the position of Cyclocephalini in the broader phylogeny of Dynastinae and Rutelinae is not resolved. In addition, very little is known about the relationships among cyclocephaline genera and species. Breeschoten et al. (2013) presented a morphological phylogeny of cyclocephaline genera, but few details of the analysis were provided and the support for recovered relationships were not reported. Moore et al. (2015) suggested that *Mimeoma* species were nested among a clade of *Cyclocephala* that included the type species of the genus, *C. amazona*. These data also provided evidence of two major clades of *Cyclocephala* based on morphological and molecular evidence (Moore et al. 2015). However, the relationship of *Cyclocephala* to the other cyclocephaline genera is completely unevaluated.

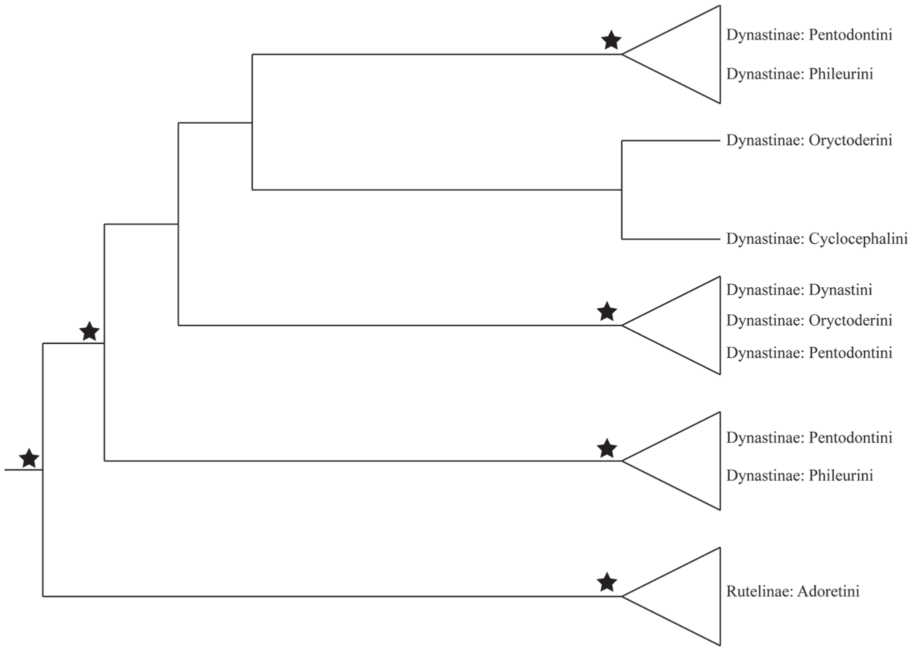


Figure 4. Summary of the hypothetical relationships of dynastine tribes from Gunter et al. (2016). Stars indicate nodes with >0.95 posterior probability.

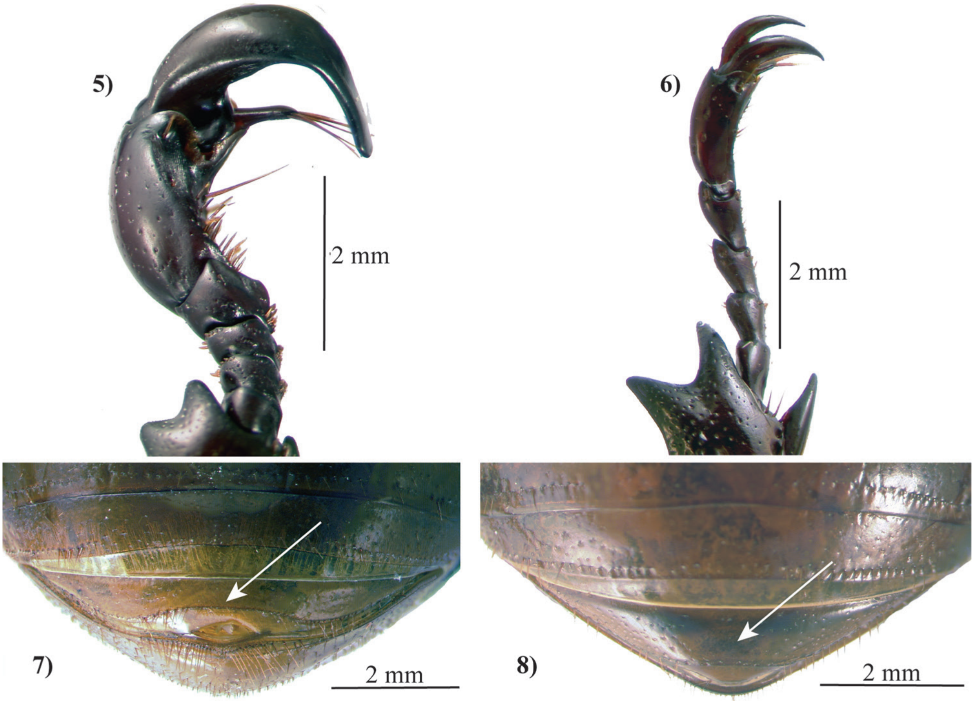
Generic overviews

The section below summarizes information on the distribution, recognition, and hypothesized relationships of cyclocephaline scarab beetle genera. The provided diagnoses are roughly parallel to each other and, in many cases, discuss morphological characters that have not been adequately described for the group. Diagnoses also rely on the dissection of the mandibles, maxillae, and hindwings. These diagnoses should allow for enhanced identification when in doubt of generic-level affinities. The last identification key to genera for the tribe did not include *Peltonotus* (Jameson et al. 2002). The key to genera below builds on the work of Jameson et al. (2002) and is supplemental to that identification tool. This key requires dissection of the hindwings and mouthparts and will aid in precise identification of these groups, along with provided diagnoses.

Key to the Adults of the World Genera of Cyclocephalini (Scarabaeidae: Dynastinae)

Males: Protarsomeres and inner protarsal claws enlarged except for in the genera *Stenocrates* and *Erioscelis* (Fig. 5). Last abdominal sternite emarginate (Fig. 7).

Females: Protarsomeres and inner protarsal claws simple, not enlarged (Fig. 6). Last abdominal sternite entire, not emarginate (Fig. 8).



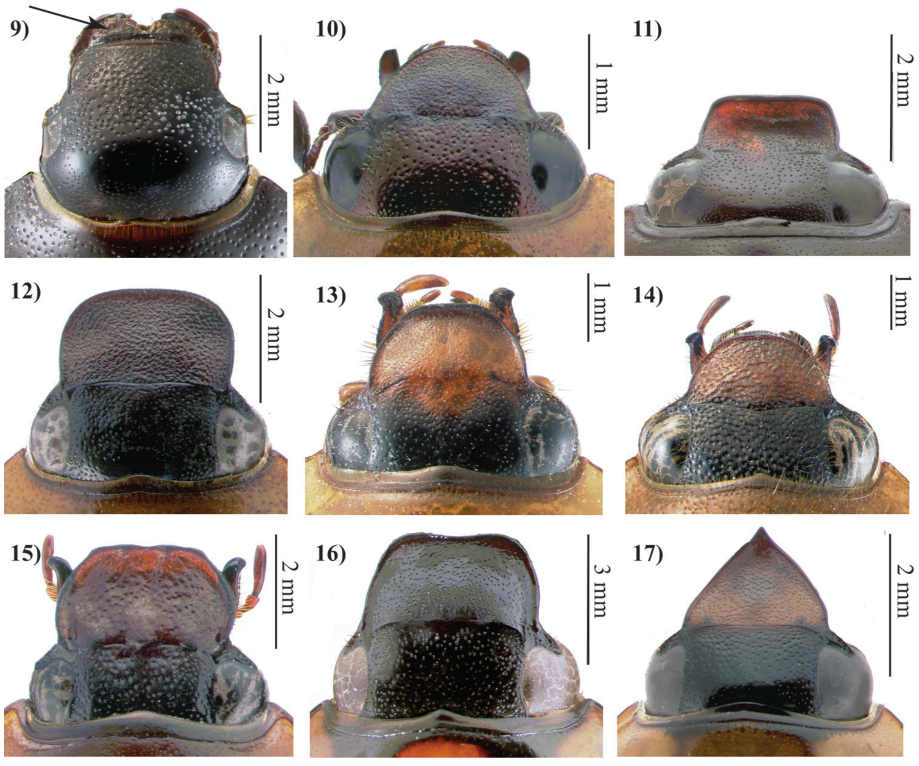
Figures 5–8. Gender specific characteristics of cyclocephaline species. **5)** *Surutu dytiscoides* Martínez; male protarsus. **6)** *S. dytiscoides*; female protarsus. **7)** *Cyclocephala conspicua* Sharp; male, last abdominal sternite emarginate. **8)** *C. conspicua* Sharp; female, last abdominal sternite entire.

1 Labrum extended anteriorly beyond the apex of the clypeus (Fig. 9). Hindwings with membranous areas pigmented and darkened (Fig. 18). Maxillae with an articulated tooth on the galea (Fig. 25). India, southern China, Southeast Asia, and Melanesia................................***Peltonotus* Burmeister**

– Labrum not extended anteriorly beyond apex of the clypeus (Figs 10–17). Hindwings with membranous areas lacking pigment, not darkened (Fig. 19). Maxillae lacking an articulated tooth on the galea (Fig. 26). Africa and the New World..**2**

2 Hindwings on leading edge distal to apical hinge with row of long erect setae with their origin at or proximal to the apical hinge (Figs 22–23) or lacking setae and lacking membrane distal to apical hinge (Fig. 26). Maxillary galea with 2-2-2 or 2-2-1 (from base to apex, most basal tooth bifurcate) teeth arrangement..**3**

– Hindwings on leading edge distal to apical hinge lacking setae and with a membranous border (Figs 20–21) or having a row of decumbent setae arising distal to apical hinge (Figs 26–27). Maxillary galea lacking teeth or with teeth in any other arrangement..**6**



Figures 9–17. Clypeal and labral form of cyclocephaline species. **9** *Peltonotus malayensis* Arrow; black arrow indicates the anteriorly produced labrum **10** *Augoderia nitidula* Burmeister; clypeus rounded **11** *Arriguttia brevissima* (Arrow); clypeus truncate and apex strongly reflexed dorsally **12** *Aspidolea singularis* Bates; clypeus broadly rounded and with lateral margins slightly divergent at base **13** *Cyclocephala weidneri* Endrődi; clypeus truncate without apex strongly reflexed dorsally **14** *Cyclocephala octopunctata* Burmeister; clypeus rounded **15** *Cyclocephala hartmannorum* Malý; clypeus bisinuate and with lateral margins divergent at base **16** *Cyclocephala mafaffa* Burmeister; clypeus emarginate **17** *Cyclocephala acuta* Arrow; clypeus acute.

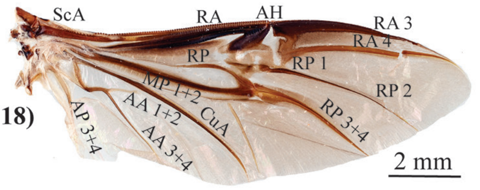
3 Vein RA with double row of pegs (second row begins mid-way along vein). Veins RA 3 and RA 4 contiguous at their base (Fig. 28). Protibiae tridentate or bidentate. Maxillary galea with 2-2-2 (six total teeth) or 2-2-1 (five total teeth) teeth arrangement .... ***Erioscelis* Burmeister**

– Vein RA with single row of pegs. Veins RA 3 and RA 4 separated at their bases and not contiguous (Fig. 29). Protibiae tridentate. Maxillary galea with 2-2-2 teeth arrangement **4**

4 Lateral margin of metacoxae simple, lacking longitudinal sulcus (Fig. 31). Meso- and metatibia dorsoventrally flattened and laterally expanded (Fig. 32). Mandibular molar area planar, lacking rounded depressions on distal portion (Fig. 36) .... ***Stenocrates* Burmeister**

– Lateral margin of metacoxae with longitudinal sulcus (Fig. 30). Meso- and metatibia not strongly dorsoventrally flattened (Fig. 33). Mandibular molar area with rounded depressions on distal portion (Fig. 37) **5**

18)



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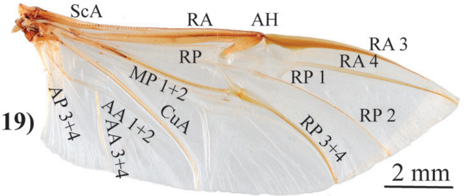

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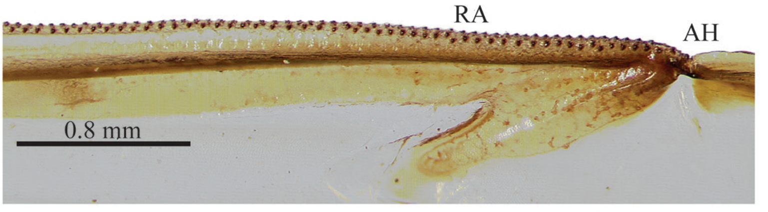

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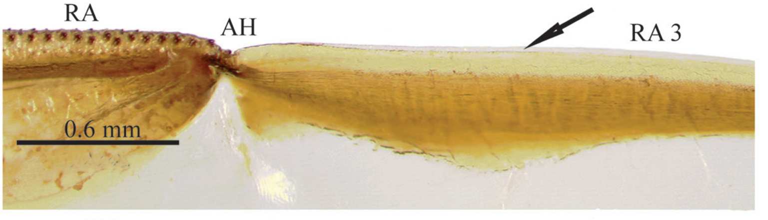

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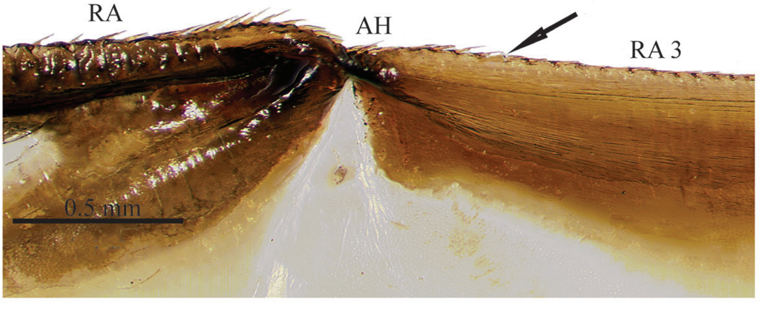
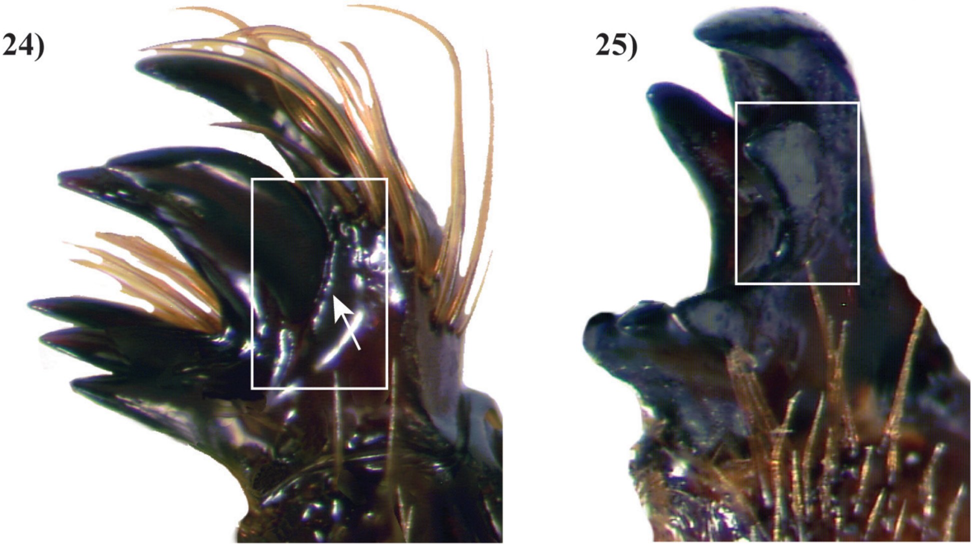
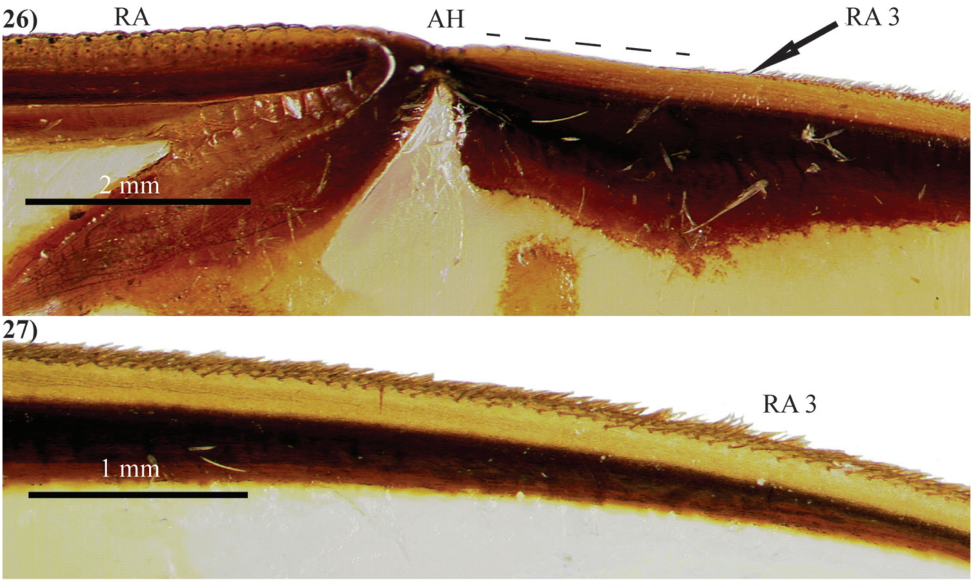


23)

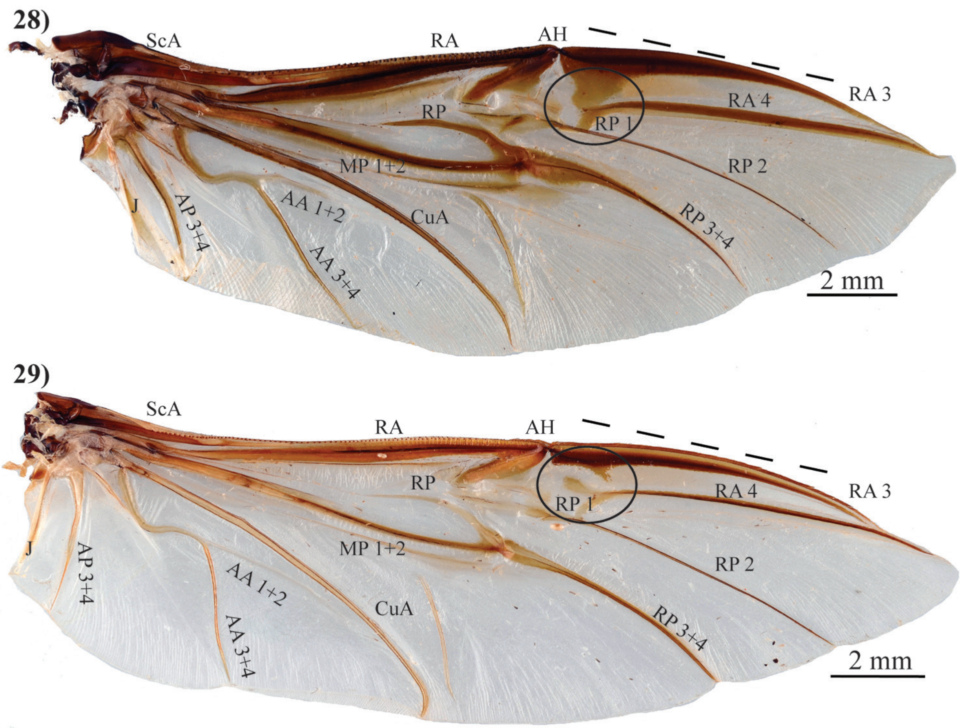
Figures 18–23. Hindwings of cyclocephaline species. **18** *Peltonotus nasutus* Arrow; labeled veins of the hindwing **19** *Cyclocephala amazona* (Linnaeus); labeled veins of the hindwing **20** *C. amazona*; view of vein RA proximal to AH showing lack of setae and double row of pegs **21** *C. amazona*; view of vein RA 3 distal to AH showing lack of setae. Arrow indicates membranous border of RA 3 **22** *Chalepides barbatus* (Fabricius); view of veins RA and RA 3 showing presence of setae proximally and distally from AH. Arrow indicates the presence of setae along RA 3 **23** *C. barbatus*; view of vein RA 3 distal to AH showing erect row of setae along the vein. Abbreviations: AA=Anal anterior vein; AP=Anal posterior vein; AH=Apical hinge of hind wing; CuA=Cubitus anterior vein; MP=Medial posterior vein; RA=Radius anterior vein; RP=Radius posterior vein; ScA=Subcosta anterior vein.



Figures 24–25. Galea of maxillae in *Peltonotus* and *Ruteloryctes*. **24** *Peltonotus nasutus* Arrow; galea of maxilla with articulated tooth indicated by arrow **25** *Ruteloryctes morio* Fabricius; galea of maxilla lacking articulated tooth.

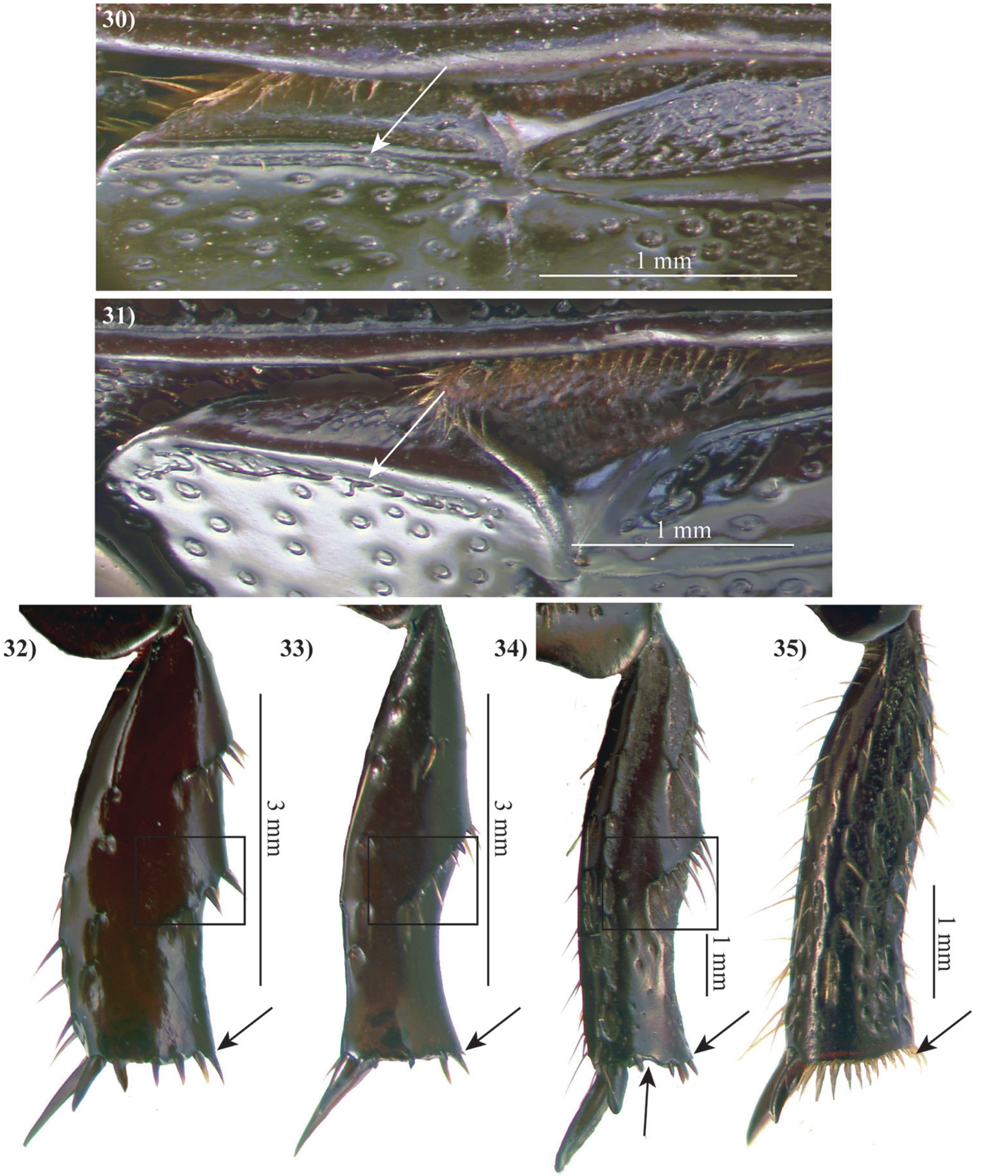


Figures 26–27. Leading edge of the hindwing in *Harposceles paradoxus* Burmeister. **26** *H. paradoxus*; distribution of setae on the leading edge of the hindwing. Arrow indicates setae on the edge of RA 3. Dashed line indicates glabrous area directly distal to AH **27** *H. paradoxus*; view of the decumbent setae of vein RA 3. Abbreviations: AH=Apical hinge of hind wing; RA=Radius anterior vein.

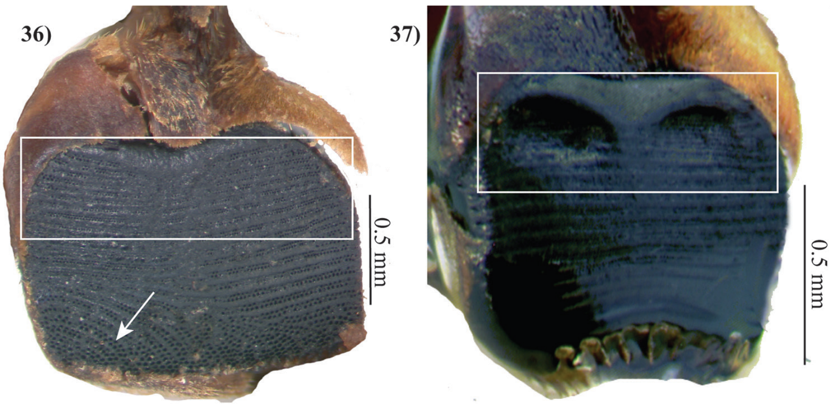


Figures 28–29. Hindwings of *Erioscelis emarginata* (Mannerheim) and *Stenocrates clipeatus* Endrődi. **28** *E. emarginata*; hindwing showing the veins RA 4 and RA 3 contiguous at their bases, indicated by the circle. Dashed line indicates glabrous region of RA 3 **29** *S. clipeatus*; hindwing showing veins RA 4 and RA 3 separated at their bases, indicated by the circle. Dashed line indicates row of erect setae along length of RA 3.

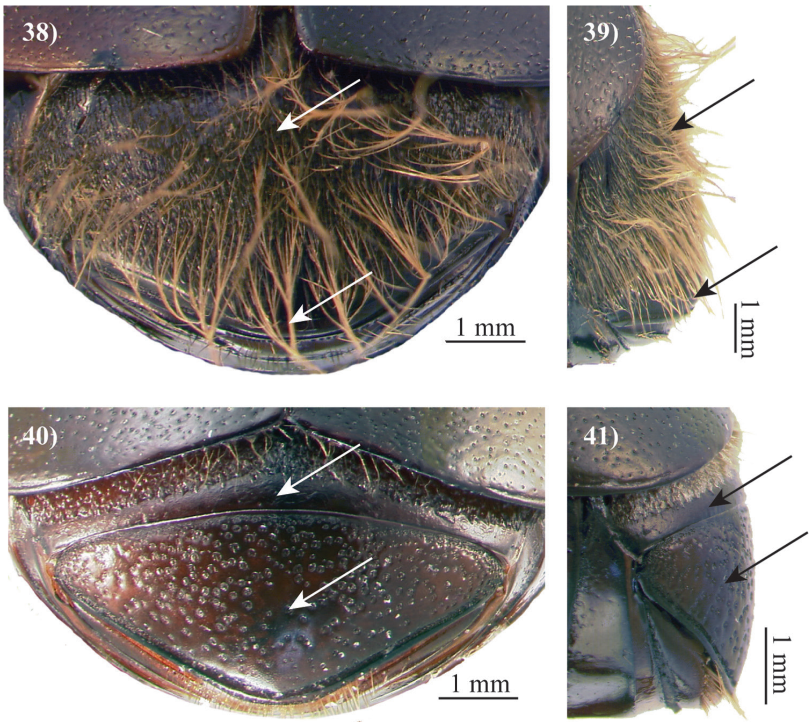
5	Propygidium and the pygidium fused. Propygidium expanded (Figs 38–39) or not. Males with inner protarsal claw enlarged and entire at apex............... .... ***Chalepides* Casey**
–	Propygidium not expanded and not fused with the pygidium (Figs 40–41). Males with inner protarsal claw enlarged and narrowly split at apex............. .... ***Dyscinetus* Harold**
6	Vein RA with single row of pegs.. **7**
–	Vein RA with double row of pegs.. **10**
7	Hindwing on leading edge distal to apical hinge lacking setae and with a membranous border (Figs 20–21). Maxillary teeth on galea lacking or reduced to small spines. Maxillary galea with 5 teeth in 3-1-2 arrangement if teeth are well-developed. Meso- and metatibiae with apices straight, not corbeled (Figs 32–33, 35) **8**
–	Hindwing on leading edge distal to apical hinge with decumbent setae arising distal to apical hinge (Figs 26–27). Membranous border lacking on leading edge of hindwing. Maxillary galea with more than 5 total teeth. Meso- and metatibiae with corbeled apices (Fig. 34) **9**



Figures 30–35. Metacoxal and metatibial morphology of cyclocephaline species. **30** *Dyscinetus morator* (Fabricius), metacoxa. White arrow indicates transverse sulcus on the lateral edge on the ventral surface of the metacoxa **31** *Stenocrates canuli* Delgado, metacoxa. White arrow indicates punctation on the lateral edge on the ventral surface of the metacoxa **32** *S. canuli*, metatibia. Arrow indicates the straight apex of the metatibia. Square indicates transverse carina **33** *Dyscinetus laevicollis* Arrow, metatibia. Arrow indicates the straight apex of the metatibia. Square indicates transverse carina **34)** *Surutu dytiscoides* Martínez, metatibia. Arrows indicate the corbeled apex of the metatibia. Square indicates transverse carina **35** *Augoderia nitidula* Burmeister, metatibia. Arrow indicates the straight apex of the metatibia.



Figures 36–37. Mandibular molar of *Cyclocephala kaszabi* Endrődi and *Dyscinetus laevipunctatus* Bates. **36** *C. kaszabi*; white box indicates the lack of depressions on distal portion of molar. Arrow indicates large circular punctures compared to micropunctures on the rest of the molar **37** *D. laevipunctatus*; white box indicates rounded depressions on the distal portion of the molar.



Figures 38–41. Pygidial morphology of *Dyscinetus* and *Chalepides* species **38** *Chalepides alliaceus* Burmeister; apex of the abdomen in caudal view. Top arrow indicates the propygidium. Bottom arrow indicates the reduced pygidium **39** *C. alliaceus*; apex of the abdomen in lateral view. Top arrow indicates the propygidium. Bottom arrow indicates the reduced pygidium **40** *Dyscinetus laevicollis* Arrow; apex of the abdomen in caudal view. Top arrow indicates the propygidium. Bttom arrow indicates the pygidium **41** *D. laevicollis*; apex of the abdomen in lateral view. Top arrow indicates the propygidium. Bottom arrow indicates the pygidium.

8 Mentum with apex weakly emarginate (emargination does not approach level of labial palp insertion). Maxillary galea with well-developed teeth in 3-1-2 arrangement (Fig. 25). Veins RA3 and RA4 contiguous at their base (Figs 18, 28). Afrotropics .... ***Ruteloryctes* Arrow**

– Mentum with apex deeply emarginate (emargination reaching level of labial palp insertion). Maxillary galea lacking well-developed teeth and teeth small and spinose when present. Veins RA3 and RA4 separated at their bases and not contiguous (Figs 19, 29). Neotropics .... ***Ancognatha* Erichson**

9 Apex of mentum deeply emarginate (Fig. 44). Anterior marginal bead of pronotum incomplete at middle (Fig. 43). Protibia straight (Fig. 47). Protibial spur articulated, not fused to protibia (Fig. 47). Males with protrochanters not produced into ventral spines. Mandibular molar area with rows of large, circular pits (Fig. 36)... ***Surutu* Martínez**

– Apex of mentum straight (Fig. 45). Anterior marginal bead of the pronotum complete at middle (Fig. 42). Males with protibia arcuate (Fig. 46). Males with protibial spur fused to protibia (Fig. 46). Males with protrochanters produced into ventral spines (Fig. 48). Mandibular molar area with rows of small micropunctures, lacking larger circular punctures .... ***Harposceles* Burmeister**

10 Apices of meso- and metatibiae produced into acute teeth (Figs 49–50). Males with many large, circular sensillae on the antennal club. Mesocoxae touching, not widely separated.. ***Acrobolbia* Ohaus**

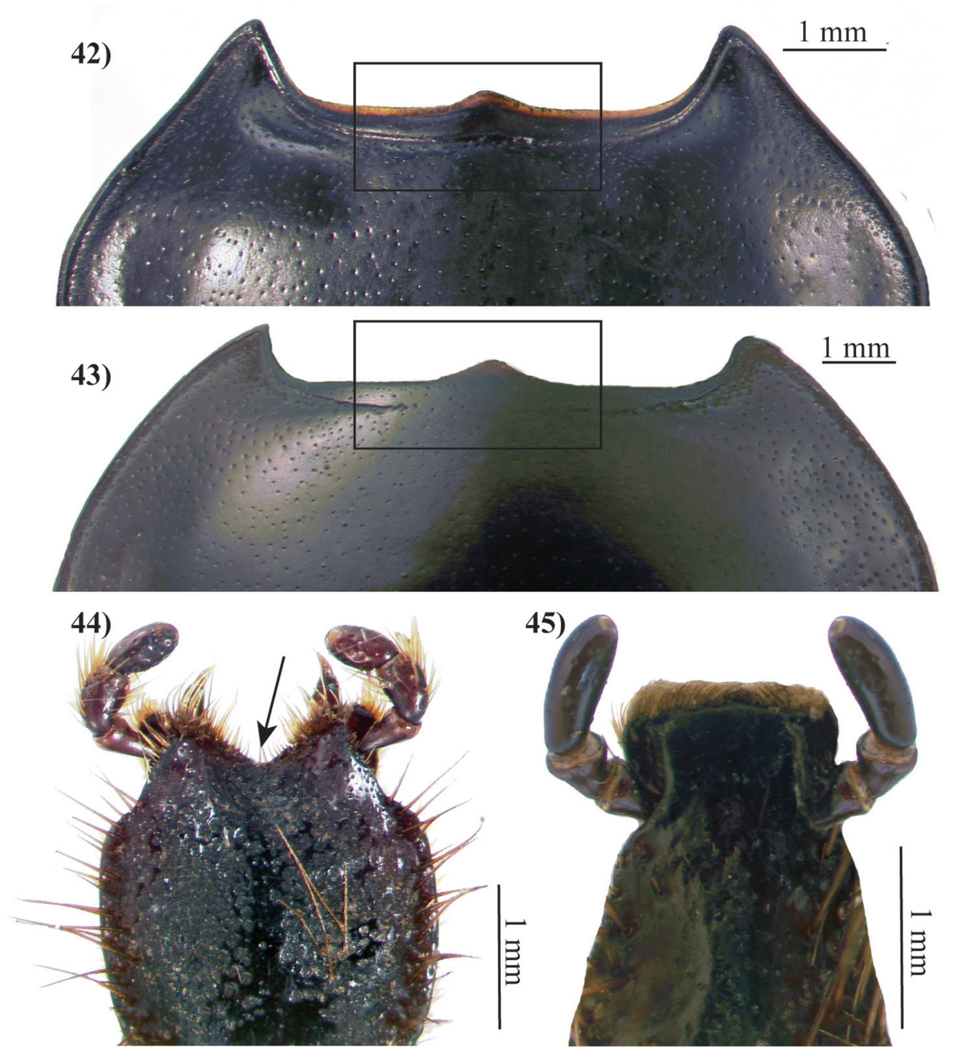
– Apices of meso- and metatibiae straight or weakly corbeled, not produced into acute teeth (Figs 32–35). Males lacking large sensillae on the antennal club. Mesocoxae touching or widely separated **11**

11 Metatibiae lacking raised, transverse carinae (Fig. 35). Dorsal coloration with a mother-of-pearl sheen or not. Mesocoxae widely separated, not touching. Clypeus with apex evenly rounded (Fig. 10) .... ***Augoderia* Burmeister**

– Metatibiae with at least one raised, transverse carina (Fig. 32–34). Dorsal coloration lacking a mother-of-pearl sheen. Mesocoxae widely separated or not. Clypeus with apex rounded, parabolic, truncate, emarginate, acute, or bisinuate (Figs 11–17) **12**

12 Body anteroposteriorly compressed and having a round gestalt. Clypeus with apex truncate and straight, appearing quadrate in dorsal view (Fig. 11). Clypeus with apex curved upward, creating a small depression on disc. Mesocoxae widely separated, not touching. Both sexes with tridentate protibiae, proximal most tooth reduced in size and removed from two distal teeth. Protibial spur straight to weakly decurved. Metacoxae with lateral surface perpendicular with respect to ventral surface................ ***Arriguttia* Martínez**

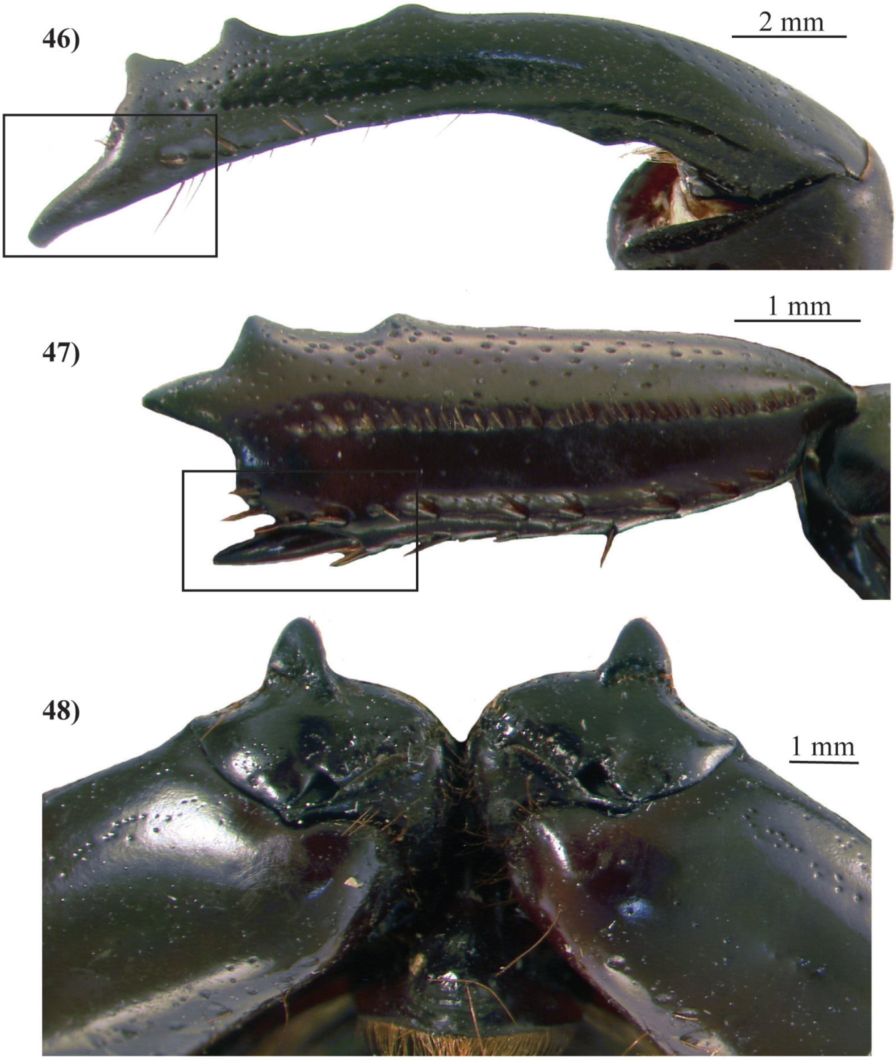
– Body not anteroposteriorly compressed and having an oval gestalt. Clypeus with apex rounded, parabolic, truncate, emarginate, acute, or bisinuate (Figs 12–17). Clypeal apex planar with base of clypeus, not strongly curved



Figures 42–45. Pronotum and labium morphology of *Harposceles paradoxus* Burmeister and *Surutu dytiscoides* Martínez. **42** *H. paradoxus*; anterior margin of pronotum. Box indicates the complete marginal bead **43** *S. dytiscoides*; anterior margin of pronotum. Box indicates the incomplete marginal bead **44** *S. dytiscoides*; apex of the mentum. Arrow indicates the deeply emarginate apex of the mentum **45** *H. paradoxus*; apex of the mentum.

upward. Mesocoxae widely separated or not. Males with protibiae tridentate or bidentate. Females with tridentate protibiae. Protibial spur straight to weakly decurved or strongly decurved. Metacoxae with lateral surface perpendicular with respect to ventral surface or angled beneath ventral surface **13**

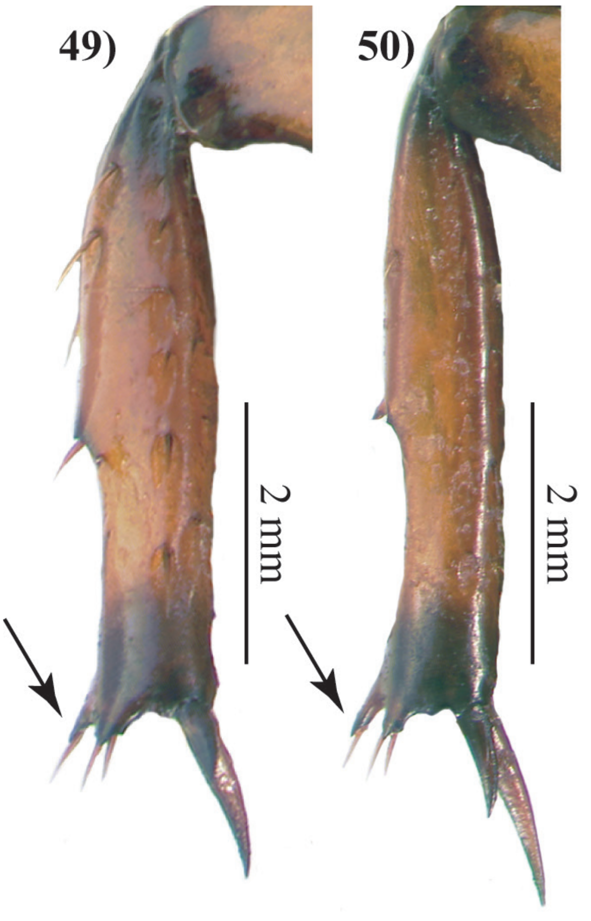
13 Clypeus with sides weakly divergent to straight at base (Fig. 12). Clypeal apex nearly straight across or broadly rounded, never acute or emarginate. Maxillae



Figures 46–48. Proleg morphology of *Harposceles paradoxus* Burmeister and *Surutu dytiscoides* Martínez. **46** *H. paradoxus*; arcuate protibia of male. Box indicates the fusion of the protibial spur to the protibia **47** *S. dytiscoides*; protibia. Box indicates the articulated protibial spur. **48** *H. paradoxus*; spines of the protrochanter.

with galea strongly dorsoventrally flattened into rounded lobe lacking well-developed teeth (except for *Aspidolea fuliginea*). Apex of maxillae with tight, dense brush of long, penicillate setae..................................***Aspidolea* Bates**

– Clypeus with sides convergent at base (except for species similar to *Cyclocephala porioni*) (Fig. 15). Clypeal apex acute, parabolic, broadly rounded, emarginate, truncate, or bisinuate. Maxillae with galea dorsoventrally flattened or not, but usually with well-developed teeth in many different arrangements. Apex of maxillae without tight, dense brush of long, penicillate setae ......***Cyclocephala* Dejean**



Figures 49–50. Meso- and metatibia of *Acrobolbia macrophylla* Ohaus. **49** *A. macrophylla*; mesotibia. Arrow indicates the acute, spine-like apices **50** *A. macrophylla*; metatibia. Arrow indicates the acute, spine-like apices.

Acrobolbia Ohaus, 1912

Type species. *Acrobolbia macrophylla* Ohaus, 1912, by monotypy. **Valid taxa.** One species.

The northern South American genus *Acrobolbia* is known from Peru, Ecuador, and possibly Venezuela (Ohaus 1912, Machatschke 1972, Jameson et al. 2002) (Fig. 51). *Acrobolbia* has a complicated classification history. Ohaus (1912) described *A. macrophylla* based upon a single male specimen collected in Peru. Ohaus (1912) compared *Acrobolbia* to *Cyclocephala*, but he ultimately classified the genus in the subtribe Areodina (Rutelinae: Rutelini). Ohaus (1918) later transferred the genus into its own subtribe, Acrobolbiina, within Rutelini. *Acrobolbia triangularis* was the second species to be described into the genus, but this species was later treated as a synonym and a "variant" of *A. macrophylla* (Benderitter 1922, Ohaus 1934a, b).

Figure 51. Country-level distribution of *Acrobolbia macrophylla* in South America. Numbers indicate taxa per country. The presence of *A. macrophylla* in Venezuela is based upon a single specimen without further label details.

Based on the elongated antennal club of the male in *Acrobolbia*, the genus was transferred into the ruteline subtribe Oryctomorphina (Dechambre and Ponchel 1999). Most recently, *Acrobolbia* was reviewed and transferred into Cyclocephalini by Jameson et al. (2002). *Acrobolbia* is hypothesized to be related to *Ancognatha* based upon characters of the clypeus, mentum, pronotum, prosternal process, protarsus, and mandibles (Jameson 1998, Jameson et al. 2002). Specimens of *Acrobolbia* are rare in collections, and almost nothing is known of their biology (Jameson et al. 2002). *Acrobolbia macrophylla* adults are attracted to lights at night, though specimens do not land or rest at light traps (Jameson et al. 2002). Specimens have been collected from 400–1,200 m in elevation (Jameson et al. 2002). The immature stages are undescribed and unknown.

Acrobolbia species can be recognized by the following combination of characters: 1) dorsal coloration varying from all black with variable reddish brown margins of the elytra and elytral suture, or with the elytra partially testaceous; 2) body not anteroposteriorly compressed or dorsoventrally flattened; 3) clypeal apex acuminate in dorsal view; 4) frontoclypeal suture distinct, but incomplete medially; 5) mandibles long, sickle-shaped, with pointed apex; 6) mandibular molar area with rows of circular micropunctures; 7) apical margin of mentum weakly emarginate to nearly straight; 8) galea of maxilla reduced to small, rectangular mound in dorsal view; 9) galea on inner surface with teeth greatly reduced to peg-like projections at the middle and apex; 10) galea on inner surface lacking teeth at base; 11) males with antennal club (segments 8–10) elongated, nearly twice as long as antennomeres 1–7; 12) pronotum with broadly incomplete beaded basal margin; 13) males and females with 3 protibial teeth, basal tooth reduced, removed from the apical 2 teeth, and oriented laterally; 14) protibial spur straight to weakly deflexed; 15) males with inner protarsal claw enlarged and narrowly cleft at apex; 16) mesocoxae touching, nearly contiguous; 17) meso- and metatibiae with distal, divided carinae; 18) metacoxae with lateral edge perpendicular to ventral surface; 19) anterior edge of hindwing distal to apical hinge lacking setae and with produced, membranous border; 20) vein RA with 2 rows of pegs extending distally nearly to margin of apical hinge.

Ancognatha Erichson, 1847

Type species. *Ancognatha scarabaeoides* Erichson, subsequent designation by Casey 1915: 111. **Valid taxa.** 22 species.

The 22 species of *Ancognatha* are distributed from the southwestern United States south to Argentina (Fig. 52). The species diversity in the genus is concentrated in north and western South America and in Mexico, west of the Isthmus of Tehuantepec. Biological information on *Ancognatha* species is lacking, and almost nothing is known about the natural history of adults. In Meso- and Central America, *Ancognatha* species are associated with premontane, lower montane, and montane tropical forests with some species being collected at elevations from 2,000 to 3,500 m above sea level (Ratcliffe 2003, Ratcliffe and Cave 2006, Ratcliffe et al. 2013). This pattern also holds in South America. Several *Ancognatha* species have been recorded from elevations over 4,000 m in Peru and northern Chile (Mondaca 2016, Figueroa and Ratcliffe 2016). Some South American *Ancognatha* species can be very large for the tribe. For example, *A. matilei* Dechambre from Colombia is up to the 36 mm long (Dechambre 2000). Adults are attracted to lights at night.

Larvae are described for four *Ancognatha* species (Ritcher 1966, Ramírez-Salinas et al. 2004, Vallejo and Morón 2008, Neita-Moreno and Morón 2008). South American larval descriptions are largely based on material collected in agroecosystems, and thus the natural ecology of *Ancognatha* immatures is poorly known. Mondaca (2016) reported the larvae of *A. aymara* Mondaca feeding on grass roots high in the altiplano steppe of northern Chile.

Figure 52. Distribution of *Ancognatha* taxa in North, Central, and South America. Numbers indicate taxa per country.

Ancognatha species can be recognized by the following combination of characters: 1) dorsal coloration variable, from all or partially black or testaceous, to light brown with variable dark maculae; 2) body convex and not strongly anteroposteriorly or dorsoventrally compressed; 3) clypeal apex rounded to parabolic, never truncate or emarginate; 4) frontoclypeal suture incomplete medially; 5) males with anterolateral margin of the mandibles without teeth; 6) mandibular apices narrow and elongated, recurved dorsally; 7) mandibular molar area with rows of circular micropunctures; 8) apical margin of mentum narrowly and deeply emarginated; 9) galea of maxilla reduced to a roughly quadrate process; 10) galea of the maxilla on inner surface lacking well-developed teeth, teeth when present and visible greatly reduced into spine-like projections; 11) males and females with 3 protibial teeth, basal tooth slightly removed from the more apical 2 teeth, and oriented laterally; 12) protibial spur straight to weakly deflexed; 13) males with inner protarsal claw enlarged and narrowly cleft at apex; 14) mesocoxae narrowly separated and touching; 15) meso- and metatibiae with distal, transverse carinae; 16) metacoxae with lateral edge perpendicular to ventral surface; 17) anterior edge of hindwing distal to apical hinge lacking setae and with produced, membranous border; 18) vein RA with single row of pegs extending distally nearly to margin of apical hinge; 19) elytral margin membranous.

The relationship of *Ancognatha* species to other cyclocephaline genera has not been evaluated. *Acrobolbia* may be related to *Ancognatha* based on characters of the clypeus, mentum, pronotum, prosternal process, protarsus, and mandibles (Jameson 1998, Jameson et al. 2002). *Surutu* also shares some intriguing characters with *Ancognatha*, which may be indicative of a close relationship between these two genera. For example, *Ancognatha* and *Surutu* species all have a rounded to parabolic clypeal apex and a narrowly, but deeply, emarginated apex of the mentum. *Surutu* species have a anteriorly projecting tooth at the apex of the labrum, and this is also shared in some *Ancognatha* species.

Arriguttia Martínez, 1960

Type species. *Cyclocephala brevissima* Arrow, 1911, by monotypy. **Valid taxa.** Two species.

Arriguttia contains two South American species known only from the Brazilian Amazon, Guyana, and French Guiana (Arrow 1911, 1937b, Blackwelder 1944, Martínez 1960a, 1968a, Endrődi 1966, 1985a, Ponchel 2006, 2011, 2015) (Fig. 53). Very little is known about the biology of *Arriguttia* species. *Arriguttia brevissima* (Arrow) feeds within the inflorescences of *Victoria* sp. in Brazil (Martínez 1968a). In French Guiana, *A. brevissima* was found in the spathes of an unidentified terrestrial aroid (Araceae) (Ponchel 2006, 2015). In Brazilian cerrado habitat, *A. brevissima* are floral visitors of *Annona coriacea* Mart. and are likely late-season, secondary pollinators of this species (Costa et al. 2017). Specimens of *A. brevissima* have been collected at lights at night (Martínez 1968a). The immature stages are undescribed and unknown.

Arriguttia was compared to *Surutu* in the original description of the genus (Martínez 1960a). This is possibly confusing for identification purposes. *Arriguttia* shares many more characters with *Cyclocephala* and *Augoderia* than with *Surutu*. *Arriguttia* species can be recognized by the following combination of characters: 1) dorsal coloration varying from all black or with variable dark, reddish coloration on the elytra; 2) body convex and anteroposteriorly compressed, creating a relatively round gestalt; 3) clypeus quadrate in dorsal view, with sides nearly parallel, and the apex distinctly reflexed upwards (most obvious in lateral view); 4) frontoclypeal suture complete medially; 5) males with anterolateral margin of the mandibles weakly toothed; 6) mandibular molar area with rows of circular micropunctures; 7) apical margin of mentum weakly emarginated; 8) galea of the maxilla on inner surface with 3 fused basal teeth,

Figure 53. Country-level distribution of *Arriguttia* taxa in South America. Numbers indicate taxa per country.

a free median tooth, and 2 fused apical teeth (3-1-2 arrangement); 9) pronotum with broadly incomplete beaded basal margin; 10) males and females with 3 protibial teeth, basal tooth reduced, removed from the more apical 2 teeth, and oriented anteriorly; 11) protibial spur straight to weakly deflexed; 12) males with inner protarsal claw enlarged and narrowly cleft at apex; 13) mesocoxae widely separated; 14) meso- and metatibiae with distal, transverse carinae; 15) metacoxae with lateral edge perpendicular to ventral surface; 16) anterior edge of hindwing distal to apical hinge lacking setae and with produced, membranous border; 17) vein RA with 2 rows of pegs extending distally nearly to margin of apical hinge.

The relationships of *Arriguttia* to other cyclocephaline genera have not been clearly discussed in the literature. Martínez (1968a) stated that *Arriguttia* should be "placed next to" *Surutu*, but he did not offer any character justifications for this hypothesis. Endrődi (1966) considered *Arriguttia* to be a "primitive" cyclocephaline based on his poorly justified character analysis. *Arriguttia* shares hindwing characters (two rows of pegs on vein RA and a membrane on the leading edge of the hindwing distal to the apical hinge) with *Augoderia*, *Aspidolea*, and *Cyclocephala*. The form of the maxilla (3-1-2 teeth arrangement), the mandibular form (males with anterolateral margin weakly toothed and the molar area with rows of circular micropunctures), the incomplete bead on the basal margin of the pronotum, and the shape and arrangement of the protibial teeth are shared among *Arriguttia*, *Augoderia*, and some *Cyclocephala* (especially species like *C. sexpunctata* Laporte and species formerly placed in *Stigmalia* Casey). Future analyses should focus on comparing characters in these *Cyclocephala* species-groups and genera to *Arriguttia*, rather than *Surutu*.

***Aspidolea* Bates, 1888**

Type species. *Aspidolea singularis* Bates, 1888: 296–297, by monotypy. **Valid taxa.** 26 species.

Aspidolea contains 26 species ranging from northern Mexico south through South America (Fig. 54) (Endrődi 1966, 1985a, Ratcliffe 2003, Ratcliffe and Cave 2006, Ratcliffe et al. 2013). The genus includes both widespread and narrowly distributed species. Most *Aspidolea* (22 of 26 species) are known only from a few South American localities. In contrast, *A. fuliginea* and *A. singularis* occur from Mexico south to Argentina and Ecuador, respectively. Bates (1888) described *Aspidolea* based upon the "elongate and robust" yet toothless maxillary galea found in the type species *A. singularis*. Bates (1888) noted a similar reduction in maxillary teeth in "*Cyclocephala fuliginea* Burmeister" and *Ancognatha* species. *Aspidolea* contained only *A. singularis* for over 30 years until Höhne (1922a, b, c) recircumscribed the genus and placed many new species into the group.

Höhne (1922a) offered an expanded diagnosis of *Aspidolea* using characters of the clypeus (sides parallel at base with apical margin perpendicular to the sides), maxilla (toothless and with penicillate setae at the apex), and dorsum (yellow to brownish coloration and generally lacking maculae) to distinguish the genus. *Cyclocephala clypeata* Burmeister and *C. laticeps* Harold were transferred into *Aspidolea* along with ten new species described by Höhne (1922a). The new genus *Paraspidolea* was erected to contain species similar to *Aspidolea*, but with at least two small teeth present at the apex of the galea (Höhne 1922a). Six new species were included in *Paraspidolea* along with the Burmeister species *C. fuliginea* (Höhne 1922a, b). The subgenus *Aspidolea* (*Aspidolites*) was erected to contain the species *A. atricollis* Höhne (Höhne 1923c). The homonym *Aspidolites* Höhne was replaced with *Aspidolella* (Prell 1936). *Aspidolea atricollis* is conspecific with *C. histrionica* Burmeister (Endrődi 1966), and the subgenus *Aspidolella* is considered a synonym of *Cyclocephala*. *Paraspidolea* was also synonymized within *Aspidolea* (Endrődi 1966).

Figure 54. Country-level distribution of *Aspidolea* taxa in Meso-, Central, and South America. Numbers indicate taxa per country.

The last major contribution to the knowledge of *Aspidolea* was provided by Dechambre (1992). Dechambre (1992) described three new *Aspidolea* species, which he included in the "*Aspidolea helleri* species-group" along with *A. helleri* (Höhne) and *A. chalumeaui* Endrődi. These species were placed into the "*helleri* species-group" based on the bidentate form of the protibial margin in males. This male protibial character is shared with species formerly included in *Mimeoma* and some *Cyclocephala* species (like *C. amazona*) (see Moore et al. 2015). The dorsal coloration of the "*helleri* species-group", especially the elongated, triangular maculae found along the elytral suture, is like that found in some former *Mimeoma* species (especially *Cyclocephala acuta* Arrow and *C. englemani* (Ratcliffe)). These characters suggest that *Aspidolea* may not be monophyletic as presently defined.

There is little available biological data for *Aspidolea* species. *Aspidolea* adults seem to be readily attracted to lights at night and can occasionally be collected in large numbers (Ratcliffe and Cave 2006, Touroult et al. 2010, Grossi et al. 2011). Floral association data for *Aspidolea* are mostly lacking. *Aspidolea fuliginea* were collected in male- and female-phase inflorescences of *Oenocarpus bataua* Mart. (Arecaceae) in Colombia, though they were only sporadically encountered (Núñez-Avellaneda and Rojas-Robles 2008). In French Guiana, *A. quadrata* Endrődi was collected from the inflorescence of *Montrichardia arborescens* (L.) Schott (Araceae) (Gibernau et al. 2003, Ponchel 2006). Neita-Moreno et al. (2007) described the larva and pupa of *A. singularis*. Larvae of *A. singularis* were collected from soil beneath cultivated cassava (*Manihot esculenta* Crantz; Euphorbiaceae) in Colombia (Neita-Moreno et al. 2007).

Aspidolea species can be recognized by the following combination of characters: 1) dorsal coloration highly variable, with or without black or brown maculae on the pronotum and elytra; 2) body not anteroposteriorly compressed or dorsoventrally flattened; 3) clypeus robust and broad, with sides more or less parallel at base, appearing quadrate in dorsal view; 4) frontoclypeal suture complete medially; 5) males with anterolateral margin of the mandibles weakly toothed (in *A. fuliginea*) or not; 6) mandibular molar area with rows of circular micropunctures; 7) apical margin of mentum broadly and deeply (nearly to level of labial palp insertion) emarginated; 8) galea of maxilla dorsoventrally flattened; 9) dentition of galea of maxilla variable, inner surface of galea lacking teeth or with reduced teeth (2 small, yet obvious teeth at the apex with 1 greatly reduced tooth at the base, presence or absence of medial teeth varies among species, teeth often obscured by dense setae); 10) apex of galea with dense brush of penicillate setae; 11) pronotum with broadly incomplete or complete beaded basal margin; 12) males with 2 or 3 protibial teeth, females with 3 protibial teeth, when 3 teeth are present, basal tooth reduced, removed from the more apical 2 teeth, and oriented laterally; 13) protibial spur straight to weakly deflexed or strongly deflexed; 14) males with inner protarsal claw enlarged and entire (not cleft with a small ramus) or narrowly cleft at apex; 15) mesocoxae widely separated; 16) meso- and metatibiae with distal, transverse carinae; 17) metacoxae with lateral edge acutely angled with respect to ventral surface; 18) anterior edge of hindwing distal to apical hinge lacking setae and with produced, membranous border; 19) vein RA with 2 rows of pegs extending distally nearly to margin of apical hinge.

***Augoderia* Burmeister, 1847**

Type species. *Augoderia nitidula* Burmeister, 1847: 34, by monotypy. **Valid taxa.** Five species and subspecies.

The five species and subspecies of *Augoderia* are distributed in Argentina, Bolivia, Brazil, French Guiana, Peru, and Venezuela (Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Guimarães 1944, Martínez 1966, Gibbs et al. 1977, Endrődi 1966, 1967a, 1981, 1985a, Riehs 2005, Ronqui and Lopes 2006, Ponchel 2009, Grossi et al. 2011, Ratcliffe et al. 2015) (Fig. 55). *Augoderia* species are similar to some *Cyclocephala* in overall appearance, although three taxa (*A. giuglarisi* Ponchel, *A. nitidula nitidula*, and *A. nitidula yungana* Martínez) are notable for their metallic,

Figure 55. Country-level distribution of *Augoderia* taxa in South America. Numbers indicate taxa per country.

mother-of-pearl luster that reflects circularly polarized light, a cuticular trait that is rare in Dynastinae (Endrődi 1967a, 1981, Ponchel 2009, Pye 2010). The biology of *Augoderia* species is completely unknown. Gibbs et al. (1977) reported *A. nitidula* as a floral visitor of *Magnolia ovata*, but this beetle was likely a misidentified *Cyclocephala* species (see Gottsberger et al. 2012, Moore and Jameson 2013). The immature stages are undescribed. Adults are attracted to lights at night (Riehs 2005, Ronqui and Lopes 2006, Grossi et al. 2011).

Augoderia, though maintained as a valid genus since Burmeister (1847), is poorly defined and diagnosed in the literature. The irregularly spaced punctures of the elytra and the mother-of-pearl sheen of some taxa are the only characters historically used to separate *Augoderia* from *Cyclocephala*. Thus, the genus has no clearly hypothesized synapomorphic characters. For example, many characters used to diagnose *Augoderia* in Endrődi's (1985a) *Dynastinae of the World* are all variably present in *Cyclocephala*, *Arriguttia*, and *Aspidolea* species: 1) body short, convex; 2) dorsal coloration yellow, with dark maculae, and with or without metallic reflections; 3) mandibles of males with small anterolateral tooth, lacking in females; 4) frontoclypeal suture complete; 5) 10-segmented antennae with a short club in both sexes; 6) large eyes; 7) males with thickened protarsi; and 8) protibia tridentate in both sexes.

The following combination of characters can be used to recognize *Augoderia* species: 1) dorsal coloration yellowish or light brown, with or without elytral maculae, with or without metallic, mother-of-pearl sheen; 2) body not anteroposteriorly compressed or dorsoventrally flattened; 3) clypeal apex evenly rounded in dorsal view; 4) frons mesad of eyes with long, erect setae; 5) frontoclypeal suture complete; 6) males with anterolateral margin of mandibles weakly toothed; 7) mandibular molar area with rows of circular micropunctures; 8) apical margin of mentum weakly emarginated; 9) galea of the maxilla on inner surface with 3 fused basal teeth, a free median tooth, and 2 fused apical teeth (3-1-2 arrangement); 10) pronotum at base with incomplete or complete marginal bead; 11) pronotum on anterolateral portions with long, erect setae; 12) males and females with 3 protibial teeth, basal tooth reduced, removed from the apical 2 teeth, and oriented anteriorly; 13) protibial spur straight to weakly deflexed; 14) males with inner protarsal claw enlarged and narrowly cleft at apex; 15) mesocoxae widely separated; 16) metatibiae without distal, transverse carinae; 17) metacoxae with lateral edge perpendicular to ventral surface; 18) anterior edge of hindwing distal to apical hinge lacking setae and with produced, membranous border; 19) vein RA with 2 rows of pegs extending distally nearly to margin of apical hinge.

Chalepides Casey, 1915

Type species. *Parachalepus* (*Chalepides*) *eucephalus* Casey, 1915, by original designation.
Valid taxa. 15 species.

The nomenclatural history of *Chalepides* was complicated by a case of homonymy. *Chalepides* was originally proposed as a subgenus of *Parachalepus* (Casey 1915). *Parachalepus* Casey, 1915 is a homonym of *Parachalepus* Baly, 1885 (Coleoptera: Chrysomelidae) (Prell 1936, Arrow 1937a). To rectify this problem, *Chalepides* was elevated to the status of genus and comprised the seven species originally included in *Parachalepus* (Casey 1915, Prell 1936, Arrow 1937a). *Parachalepus* was proposed based on abdominal characters. *Parachalepus* included *Dyscinetus*-like species with a rigid fusion of the propygidium and the pygidium (Casey 1915). The subgenus *Parachalepus* (*Chalepides*) was proposed for species with a dramatic reduction of the pygidium in addition to propygidial/pygidial fusion (Casey 1915). *Chalepides* has been recognized as a valid genus by subsequent authors and was recently revised (Arrow 1937a, b, Endrődi 1966, 1985a, Joly and Escalona 2002).

The 15 species of *Chalepides* are distributed across South America and the West Indies (Martínez 1978b, Endrődi 1966, 1973a, 1985a, Joly and Escalona 2002, Riehs 2005, Ratcliffe and Cave 2015) (Fig. 56). Species of *Chalepides* described by Prokofiev

Figure 56. Country-level distribution of *Chalepides* taxa in South America and the West Indies. Numbers indicate taxa per country or region.

(2012) require a special discussion. *Chalepides euhirtus* Prokofiev and *C. unduavicus* Prokofiev were described based on specimens from Peru and Bolivia (Prokofiev 2012), and the Peruvian data would represent a new country record for *Chalepides*. However, both species were placed into the wrong genus, based on the original descriptions and images of the holotypes. The holotype of *C. euhirtus* appears to be a female specimen of *A. fuliginea* (Prokofiev 2012). *Chalepides unduavicus* was later synonymized under *A. scarabaeoides* and was also considered an infrasubspecific ("ab.") entity (Prokofiev 2013, 2014). The discussion below covering the biology and genus-level recognition of *Chalepides* will exclude information on the misclassified species *C. euhirtus* and *C. unduavicus*.

Relatively little is known about the biology and natural history of *Chalepides* species. It is unclear, based on available data, if *Chalepides* species are floral visitors. Mannerheim (1829) reported that *C. dilatatus* (Mannerheim) was collected in flowers without further detail. Valla and Cirino (1972) reported a single specimen of an unidentified *Chalepides* species from the inflorescence of a *Victoria cruziana* A.D. Orb.

Chalepides barbatus adults and larvae are associated with sugar cane fields in Puerto Rico (Wolcott 1923, 1948). In Puerto Rico, adult *C. barbatus* are prey for the invasive cane toad *R. marina* (Wolcott 1937, 1948). Like *Dyscinetus*, *Chalepides* species may have some semi-aquatic habits. *Chalepides luridus* (Burmeister) and *C. alliaceus* (Burmeister) have been collected along the edges of river banks (Endrődi 1973a). *Chalepides barbatus* reportedly attacks the invasive, aquatic weed water hyacinth (*Eichhornia crassipes* [Mart.] Solms [Pontederiaceae]) in Uruguay (Silveira Guido 1965, Perkins 1974, Buckingham and Bennett 1989). *Chalepides* species are attracted to lights at night (Kusui 1992, Riehs 2005, Albuquerque et al. 2016).

Chalepides species can be recognized by the following combination of characters: 1) dorsal coloration yellowish brown, dark brown, or almost black with greenish reflections in some species; 2) body convex, not strongly anteroposteriorly compressed or dorsoventrally flattened; 3) clypeus trapezoidal with apex truncate in dorsal view; 4) frontoclypeal suture complete or narrowly incomplete medially; 5) males with anterolateral margin of the mandibles lacking weak tooth; 6) mandibular molar area with rows of circular micropunctures; 7) mandibular molar area on proximal margin with 2 semicircular depressed pits; 8) galea of maxilla on inner surface with 2 fused basal teeth, 2 free medial teeth, and 2 fused apical teeth (2-2-2 arrangement); 9) pronotum with broadly incomplete beaded basal margin; 10) males and females with 3 protibial teeth on lateral margin, basal tooth not greatly reduced, only slightly removed from apical 2 teeth, and oriented laterally; 11) protibial spur straight to weakly deflexed; 12) males with inner protarsal claw enlarged and entire at apex, not cleft; 13) mesocoxae not widely separated, nearly touching; 14) metacoxae on lateral edge with transverse, depressed sulcus; 15) metacoxae with lateral edge perpendicular to ventral surface; 16) meso- and metatibiae with distal, transverse carinae; 17) anterior edge of hindwing distal to apical hinge with erect setae and lacking produced, membranous border; 18) vein RA with single row of pegs proximal to the apical hinge; 19) propygidium expanded, propygidium and pygidium fused, pygidium with long, dense setae.

Cyclocephala Dejean, 1821

Type species. *Scarabaeus amazonus* Linnaeus, 1767: 551, subsequent designation by Casey (1915). **Valid taxa.** 359 species and subspecies.

The speciose genus *Cyclocephala* contains over 350 taxa distributed throughout the Nearctic and Neotropical realms (Fig. 57). *Cyclocephala* contains the only adventive species in Cyclocephalini, with *C. pasadenae* and *C. signaticollis* established in Hawaii and Australia, respectively (Carne 1956, Jameson et al. 2009). The greatest number of *Cyclocephala* species is found in northern South America, but many endemic species occur in Meso- and Central America. Some *Cyclocephala* species are extremely geographically widespread. For example, *C. lunulata* occurs from the southwestern United States south to Argentina. In contrast, there are also cases of endemism in mainland species of the genus. The pollination mutualist *C. jalapensis* occurs only in a narrow band of habitat in eastern Mexico (Veracruz,

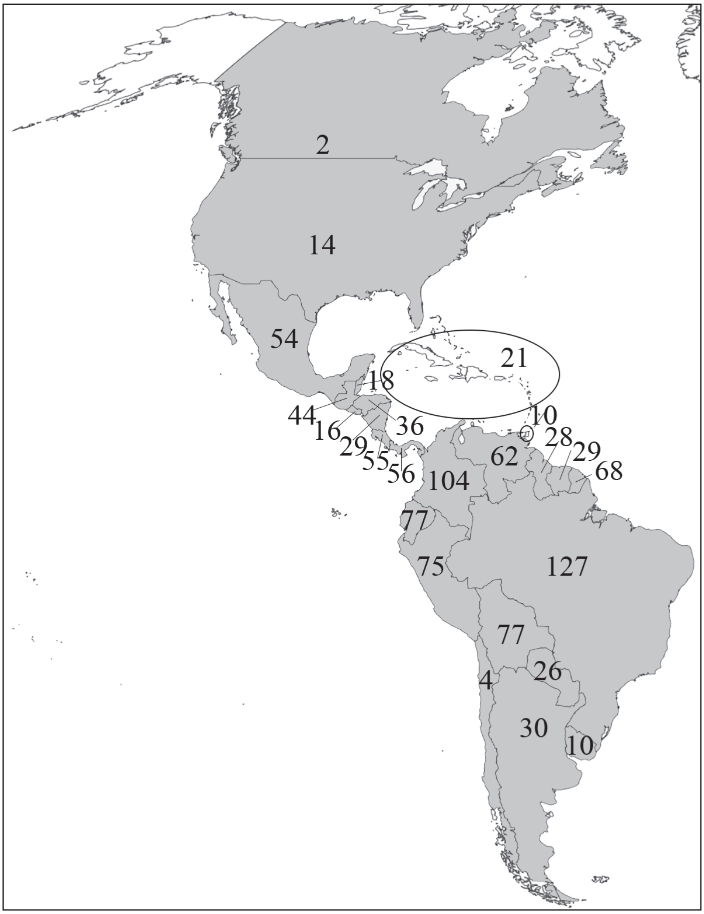


Figure 57. Country-level distribution of *Cyclocephala* taxa in the Neotropical and Neartic realms. Numbers indicate number of taxa per country or region.

Puebla, Oaxaca, Querétaro, and Hidalgo states) where its host plant *Magnolia schiedeana* Schltl. is found (Dieringer and Delgado 1994, Dieringer and Espinosa 1994).

Cyclocephala is a difficult genus to diagnose due to its species richness, diversity of forms, and probable non-monophyly. Many of the character descriptions below are complicated by these factors. *Cyclocephala* species can be recognized by the following combination of characters: 1) dorsal coloration highly variable; unicolored black, green, or light brown, pronotum in some species cherry-red, light brown species often have complex maculae patterns of the pronotum and elytra; 2) body not anteroposteriorly compressed or dorsoventrally flattened; 3) clypeal apex variable; evenly rounded, parabolic, acute, emarginate, triemarginate, or nearly straight; 4) frons mesad of eyes with or without long, erect setae; 5) frontoclypeal suture complete or incomplete medially; 6) males with anterolateral margin of mandibles weakly toothed or not; 7) mandibular molar area with rows of circular micropunctures either present or absent; 8) apical margin of mentum weakly emarginated or broadly and deeply emarginated; 9) galea of the maxilla well-developed [with or without teeth] or reduced into a rounded process; 10) galea of the maxilla dorsoventrally flattened or not; 10) galea of maxilla on inner surface variable (not all character states are given here); with 3 fused basal teeth, a free median tooth, and 2 fused apical teeth (3-1-2 arrangement) (in *C. amazona*-like species and former *Mimeoma*, the galea are flattened and the basal tooth is compressed and rotated, giving the appearance of being bidentate with the third tooth shifted dorsally); with 2 fused basal tooth and 2 fused apical teeth (2-0-2 arrangement); with 2 fused basal teeth, 1 middle tooth, and 2 fused apical teeth (2-1-2 arrangement); 11) pronotum at base with incomplete or complete marginal bead; 12) pronotum on anterolateral portions with or without long, erect setae; 13) males with 2 or 3 protibial teeth, females always with 3; 14) protibial spur straight to weakly deflexed or strongly decurved; 15) males with inner protarsal claw enlarged and narrowly cleft at apex or entire at apex; 16) mesocoxae widely separated or nearly touching, contiguous; 17) metatibiae with or without distal, transverse carinae; 18) metacoxae with lateral edge perpendicular to ventral surface or with lateral edge angled underneath the ventral surface; 19) anterior edge of hindwing distal to apical hinge lacking setae and with produced, membranous border or lacking membranous border and with decumbent setae (*C. cribrata* species-group); 20) vein RA with 2 rows of pegs extending distally nearly to margin of apical hinge.

Dyscinetus Harold, 1869

Type species. *Melolontha geminata* Fabricius, 1801, by monotypy. **Valid taxa.** 21 species.

The genus *Dyscinetus* comprises 21 species distributed from North America south to Argentina and the West Indies (Fig. 58). Smooth, large, and mostly black *Dyscinetus* species superficially resemble hydrophilid beetles. *Dyscinetus* is generally not considered an aquatic or semiaquatic genus. However, some species in the genus have an intriguing association with moist, mucky soils and aquatic plants. *Dyscinetus rugifrons* and another *Dyscinetus* sp. attack water hyacinth in Uruguay (Silveira Guido 1965, Bennett and Zwolfer 1968, Perkins 1974). *Dyscinetus morator* also attacks water hyacinth in Florida (Perkins 1974, Buckingham and Bennett 1989). These species are considered scavengers and enhancers of damage started by other arthropods on water hyacinth, though they are known to attack healthy tissues (Perkins 1974, Buckingham and Bennett 1989). Feeding damage on water hyacinth occurs inside petioles, crowns, petiole bases, and submerged roots (Perkins 1974, Buckingham and Bennett 1989).

Experiments indicated that *D. morator* can survive submerged in water for up to 36 hours (Buckingham and Bennett 1989). The mechanism allowing for this prolonged submersion is unclear. Air bubbles are visible along the elytral margin and on the metathorax in submerged individuals (Buckingham and Bennett 1989). *Dyscinetus laevipunctatus* Bates was also observed submerged in association with water hyacinth in

Figure 58. Distribution of *Dyscinetus* species in North, Central, and South America and the West Indies. Numbers indicate number of taxa per country or region.

Mexico (García-Rivera and Contreras-Ramos 2015). Unlike many other genera in the group, *Dyscinetus* adults are not known to visit flowers. A Brazilian *Dyscinetus* species was reportedly attracted to the floral odors of *Annona* sp., although these beetles were not encountered in any inflorescences (Gottsberger 1989). This is the only mention of *Dyscinetus* floral attraction in the literature.

Dyscinetus species can be recognized by the following combination of characters: 1) dorsal coloration dark piceous to black; 2) body convex, not strongly anteroposteriorly compressed or dorsoventrally flattened; 3) clypeus trapezoidal with apex truncate in dorsal view; 4) frontoclypeal suture complete medially; 5) males with anterolateral margin of the mandibles lacking weak tooth; 6) mandibular molar area with rows of circular micropunctures; 7) mandibular molar area on proximal margin with 2 semicircular depressed pits; 8) galea of maxilla on inner surface with 2 fused basal teeth, 2 free medial teeth, and 2 fused apical teeth (2-2-2 arrangement); 9) pronotum with broadly incomplete beaded basal margin; 10) males and females with 3 protibial teeth on lateral margin, basal tooth not greatly reduced, only slightly removed from the more apical 2 teeth, and oriented laterally; 11) protibial spur straight to weakly deflexed; 12) males with inner protarsal claw enlarged and narrowly cleft at apex; 13) mesocoxae not widely separated, nearly touching; 14) metacoxae on lateral edge with transverse, depressed sulcus; 15) metacoxae with lateral edge perpendicular to ventral surface; 16) meso- and metatibiae with distal, transverse carinae; 17) anterior edge of hindwing distal to apical hinge with erect setae and lacking produced, membranous border; 18) vein RA with single row of pegs proximal to apical hinge; 19) propygidium not expanded, with propygidium and pygidium not fused.

***Erioscelis* Burmeister, 1847**

Type species. *Apogonia emarginata* Mannerheim, 1829, by monotypy. **Valid taxa.** Five species.

The five species of *Erioscelis* are distributed in South America north to Nicaragua (Fig. 59). *Erioscelis* species are remarkable among cyclocephalines for their well-characterized floral visitation syndromes. *Erioscelis* species are associated with nocturnally blooming genera in the family Araceae. Three *Erioscelis* species have been reported from the spathes of *Dieffenbachia*, *Philodendron* Schott, *Syngonium* Schott, *Montrichardia* Crueg., and possibly *Xanthosoma* Schott (Schrottky 1910, Gottsberger and Amaral 1984, Young 1986, Grayum 1996, Croat 1997, Morón 1997, Beath 1998, 1999, Gibernau et al. 2003). While the association between *Erioscelis* species and aroid flowers is firmly established, there is little evidence of species- or genus-level specificity in this pollination mutualism. For example, *Erioscelis columbica* Endrődi has been collected from the spathes of nine different *Philodendron* species in Heredia, Costa Rica (Grayum 1996, Croat 1997, Morón 1997, Moore and Jameson 2013). Based on feeding damage to *Philodendron* inflorescences by *Erioscelis*, it was hypothesized that this genus may be an interloper on the cyclocephaline/aroid mutualism (Goldwasser 1987). Other observations seem to indicate that *Erioscelis* species are part of this mutualism.

The descriptions of *Erioscelis* spp. visitation of *Dieffenbachia* and *Philodendron* inflorescences are some the most detailed available for Cyclocephalini. In Costa Rica, *E. columbica* is a pollinator of *Dieffenbachia nitidipetiolata* Croat & Grayum (Young 1986, 1988a, 1988b, 1990). *Erioscelis columbica* arrive at receptive female-phase inflorescences during nightfall, where they feed on staminodia and mate (Young 1986). The beetles exit the spathe after 24 hours when the spadix is in the male-phase and shedding pollen (Young 1986). *Erioscelis columbica* are covered in sticky pollen grains

Figure 59. Country-level distribution of *Erioscelis* species in Central and South America. Numbers indicate taxa per country.

while exiting the spathe, and they may also feed on some of the pollen (Young 1986). *Erioscelis proba* (Sharp) displays similar behavior in the inflorescences of two other *Dieffenbachia* species in French Guiana (Gibernau 2015a).

Observational and experimental evidence suggests that *Erioscelis emarginata* (Mannerheim) prefers to feed upon sterile staminate flowers on the spadix in two *Philodendron* species (Maldonado et al. 2015). Furthermore, analyses of nutritional and defensive compound (calcium oxalate) content of sterile and fertile flowers in these *Philodendron* species suggested that sterile staminate flowers have lower amounts of defensive compounds (Maldonado et al. 2015). *Erioscelis* species are seemingly attracted to the strong floral scents that are volatilized during thermogenesis and receptivity of the staminate flowers in these aroids. The dynamics of floral scent attraction are mostly unexplored for *Erioscelis*. In the case of *Philodendron adamantium* Mart. ex Schott, a single dominant flower scent compound (Dihydro-β-ionone) extracted from this species was sufficient to attract *E. emarginata* to scent traps (Pereira et al. 2014).

Erioscelis was first revised by Saylor (1946) and again by Endrődi (1966, 1985a). These works provide a strong foundation for species-level identification, but characters that separate *Erioscelis* from other cyclocephalines are largely undiscussed. For example, Saylor (1946) commented, "When compared with such species as *Cyclocephala* (*Stigmalia*) *mafaffa* Burmeister, or *C.* (*Aclinidia*) *castanea* (Fabricius), the only character definitely to separate *Erioscelis* is the unenlarged front tarsal claws of both sexes". Unique protibial (2 teeth on the lateral margin in both sexes, subapical position of reduced protibial spur) and abdominal (bisinuate margin of 6th abdominal sternite, terminal spiracle not positioned on pleural suture) characters of *Erioscelis emarginata* also complicate recognition of the genus and may be reasons to doubt the monophyly of the group. These characters (except for the bisinuate margin of 6th abdominal sternite) are associated with Anomalini (Rutelinae) and are absent in all other members of *Erioscelis* and Cyclocephalini more broadly. Sister-relationships of *Erioscelis* have not been hypothesized and the immature stages are unknown for the genus.

Erioscelis species can be recognized by the following combination of characters: 1) dorsal coloration castaneous, rufocastaneous, or piceous; 2) body not dorsoventrally flattened nor anteroposteriorly compressed; 3) clypeal apex truncate, weakly emarginate, or deeply emarginate in dorsal view; 4) frontoclypeal suture complete medially; 5) apical margin of mentum shallowly emarginate; 6) anterolateral margin of mandible lacking tooth; 7) mandibular molar area with rows of circular micropunctures; 8) galea of maxilla not dorsoventrally flattened; 9) galea of maxilla on inner surface with 6 teeth in 2-2-2 arrangement (each pair shares a base); 10) pronotum with apical bead complete medially; 11) basal bead of pronotum incomplete medially; 12) anterior membrane of pronotum straight at middle, not projected anteriorly; 13) anterior membrane of the pronotum extending laterally to apicolateral margins of the pronotum; 14) protibia with 2 or 3 lateral teeth in both sexes; 15) when protibia tridentate, basal tooth not greatly reduced, only slightly removed from the apical 2 teeth, and oriented laterally; 16) protibial spur subapical or apically positioned; 17) protibial spur straight to weakly reflexed; 18) males and females with protarsal claws simple, not enlarged; 19) males and females with inner protarsal claws with apex entire, not cleft; 20) mesocoxae not widely separated, nearly touching; 21) metacoxae with lateral edge perpendicular to ventral surface; 22) anterior edge of hindwing distal to apical hinge simple (lacking setae or membrane) or with row of long, erect setae extending along vein; 23) vein RA with double row of pegs proximal to apical hinge; 24) terminal abdominal spiracle situated on pleural suture or not.

Harposceles Burmeister, 1847

Type species. *Harposceles paradoxus* Burmeister, 1847: 35, by monotypy. **Valid taxa.** One species.

The monotypic genus *Harposceles* was erected for the species *H. paradoxus*. This striking, relatively large cyclocephaline occurs in lowland forests in Brazil, Ecuador, French Guiana, Peru, Suriname, and possibly Colombia (Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Endrődi and Dechambre 1976, Lachaume 1992, Couturier and Kahn 1992, Andreazze 2001, Andreazze and da Silva Motta 2002, Touroult et al. 2010, Ponchel 2011, Saltin and Ratcliffe 2012, Ratcliffe et al. 2015) (Fig. 60). Males display dramatic, and unique, characters of the protibia. *Harposceles paradoxus* males have elongated, arcuate protibia with the protibial spurs fused to the base of the tibia. Females are much less common than male specimens in collections, and males are readily attracted to lights at night, especially between midnight and 4 am (Andreazze 2001, Andreazze and

Figure 60. Country-level distribution of *Harposceles paradoxus* in South America.

da Silva Motta 2002, Touroult et al. 2010, Saltin and Ratcliffe 2012). The immature stages of *H. paradoxus* are associated with the palms *Astrocaryum chonta* Mart. and *A. carnosum* F. Kahn & B. Millán (Arecaceae) (Couturier and Kahn 1992). The larvae and pupae were found in the organic litter accumulated between leaf sheaths of *A. carnosum* (Couturier and Kahn 1992). The immature stages are undescribed.

Harposceles species can be recognized by the following combination of characters: 1) dorsal coloration dark piceous to black; 2) body dorsoventrally flattened; 3) clypeus rounded in dorsal view; 4) frontoclypeal suture incomplete medially; 5) apical margin of mentum truncate; 6) anterolateral margin of mandible lacking tooth; 7) mandibular molar area with surface lacking circular pits, with large, disorganized, canal-like invaginations; 8) galea of maxilla dorsoventrally flattened; 9) galea on inner surface at base with large, flattened, blade-like, tooth (less produced than in *Surutu* species); 10) galea on inner surface with 7 teeth in 2-1-1-1-2 arrangement from base to apex; 11) apical and basal beaded margins of pronotum complete at middle; 12) anterior membrane of the pronotum interrupted before lateral pronotal margins; 13) males with protrochanter with ventrally produced tooth; 14) protibia with 3 teeth in both sexes; 15) males with protibia elongated and arcuate; 16) protibial spur straight to weakly reflexed; 17) males with protibial spur fused to protibia, not articulated at its base; 18) males with inner protarsal claw thickened and not cleft at apex; 19) mesocoxae not widely separated, nearly touching; 20) metacoxae with lateral edge perpendicular to ventral surface; 21) apices of the meso- and metatibiae with a corbel; 22) anterior edge of hindwing distal to apical hinge lacking membranous border; 23) anterior edge of hindwing distal to apical hinge with decumbent setae surrounding vein and originating away from apical hinge; 24) vein RA with single row of pegs proximal to apical hinge.

The relationship of *Harposceles* to other cyclocephalines has not been elaborated upon in the literature. However, *H. paradoxus* shares some characters with *Surutu* that may be indicative of a close relationship between the two genera. The rounded shape of the clypeal apex in *H. paradoxus* is like the clypeal form in *S. dytiscoides*. The single row of RA pegs in *H. paradoxus* is shared between *Ancognatha* and *Surutu*, though *Ancognatha* species lack setae on the anterior edge of the hindwing distal to the apical hinge. The decumbent setae of the hindwing leading edge (distal to apical hinge) found in *H. paradoxus* is also found in *Surutu* species and the "*Cyclocephala cribrata* species group" (which included species previously placed in *Mononidia* and *Surutoides*) (Dechambre 1997). These groups also all share corbeled meso- and metatibial apices and entirely black coloration. *Harposceles paradoxus* shares other interesting characters with *Surutu* species. These shared characters include: 1) body strongly dorsoventrally flattened; 2) dorsoventrally flattened maxillary galea; 3) a seven-toothed maxillary galea in a 2-1-1-1-2 arrangement from the base to apex; 4) an incomplete frontoclypeal suture; and 5) the apical pronotal membrane interrupted before the lateral margins of the pronotum. The large basal tooth of the maxillary galea is much smaller and less produced in *H. paradoxus* than in *Surutu* species. Several male characters of *H. paradoxus* are autapomorphic in Cyclocephalini: 1) the protibial spur fusion to the protibial; 2) the arcuate, elongated protibia (seen also in some Dynastini); and 3) the ventrally produced protrochanter teeth.

Peltonotus Burmeister, 1847

Type species. *Peltonotus morio* Burmeister, 1847: 75, by monotypy. **Valid taxa.** 25 species.

Peltonotus species are distributed throughout Southeast Asia, southern China, and the eastern portion of the Indian Subcontinent (Fig. 61). *Peltonotus* is currently considered the sole Asian lineage of Cyclocephalini, though its subfamilial classification has been unstable. The genus is remarkable for its confounding combination of morphological and behavioral traits that blurred the lines between historical concepts of the subfamilies Dynastinae and Rutelinae. For example, the sexual dimorphism of the protarsi in *Peltonotus* species has long been compared to that found in *Cyclocephala* (e.g., see Burmeister 1847). In contrast, the labral morphology of *Peltonotus* species matches that found in Asian parastasiine and fruhstoferiine (Rutelinae) scarabs (Arrow 1908, 1910). The floral feeding behavior of *Peltonotus*

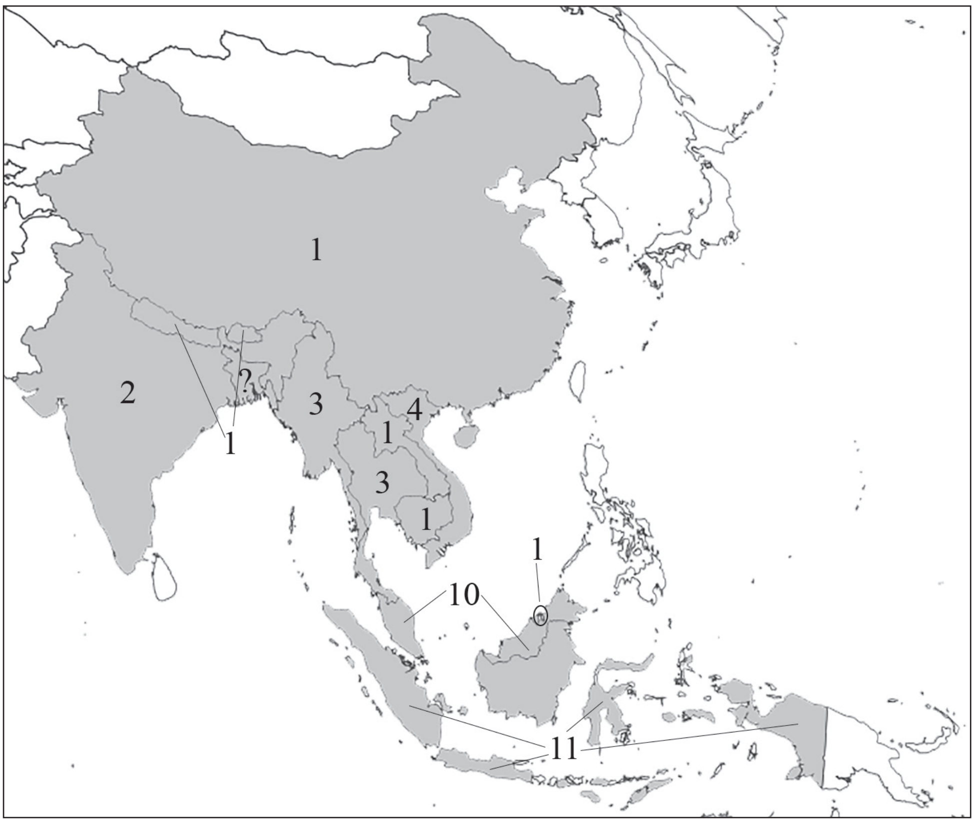


Figure 61. Country-level distribution of *Peltonotus* species in Southeast Asia, the Indian Subcontinent, and China. Numbers indicate taxa per country.

species on Araceae is also shared between cyclocephalines and Asian parastasiines, adding a further layer of intrigue to unresolved evolutionary relationships between the groups at the subfamilial- and tribal-level (e.g., see Moore and Jameson 2013, Kumano-Nomura and Yamaoka 2006, Kumano-Nomura and Yamaoka 2009, Tung et al. 2010, Hoe et al. 2011, 2016).

Peltonotus was described by Burmeister (1847), and he included it within the Chalepidae division of Cyclocephalidae. The classification of *Peltonotus* was stable until Arrow (1908, 1910) transferred the genus to Rutelinae based upon the exposed (in dorsal view, produced apically beyond the clypeus) and chitinized labrum. Arrow (1917) later erected the "division" Peltonotini for *Peltonotus* within his classification of Rutelinae. Ohaus (1918, 1934b) and Machatschke (1972) rejected Peltonotini and included *Peltonotus* in Pelidnotina (Rutelini) in their catalogs of Rutelinae. Morphological phylogenetic analysis of Rutelina (Rutelinae: Rutelini) suggested that *Peltonotus* were more closely related to Cyclocephalini than Rutelini (Jameson 1998). Subsequent works on the genus have treated *Peltonotus* as a member of Cyclocephalini (Jameson and Wada 2004, 2009, Jameson and Jákl 2010, Jameson and Drumont 2013).

Little is known about the biology and natural history of *Peltonotus* species. The immatures are undescribed. Adults are attracted to lights at night (Jameson and Wada 2004). *Peltonotus malayensis* Arrow was collected from the spathes of *Epipremnum falcifolium* Engl. (Araceae), where males and females were observed mating and feeding (Jameson and Wada 2004). In Thailand, *P. nasutus* visit the large inflorescences of the terrestrial aroid *Amorphophallus paeoniifolius* (Dennst.) Nicolson, where adult beetles feed and mate (Grimm 2009). *Peltonotus nasutus* can be attracted to the inflorescences in high numbers (over 70 individuals) (Danell 2010).

Peltonotus species can be recognized by the following combination of characters: 1) dorsal coloration brown to black with variable presence of maculae; 2) body convex, not dorsoventrally flattened; 3) clypeal apex rounded to straight in dorsal view; 4) frontoclypeal suture incomplete medially; 5) apical margin of mentum variably shaped with weak emargination; 6) anterolateral margin of mandible lacking tooth; 7) mandibular molar area with rows of circular micropunctures; 8) galea of maxilla not strongly dorsoventrally flattened; 9) galea of the maxilla on inner surface with 3 fused basal teeth, a free median tooth, and 2 fused apical teeth (3-1-2 arrangement); 10) galea with articulated medial tooth; 11) labrum extending apically beyond clypeal apex (obvious in dorsal view); 12) apical and basal margins of pronotum with beaded margin complete or incomplete at middle; 13) protibia of males with 2 or 3 teeth, females with 3 teeth; 14) protibial spur straight to weakly reflexed; 15) males with inner protarsal claw thickened and not cleft at apex (nib variably present or absent); 16) mesocoxae not widely separated, nearly touching; 17) metacoxae with lateral edge perpendicular to ventral surface; 18) anterior edge of hindwing distal to apical hinge lacking membranous border; 19) anterior edge of hindwing distal to apical hinge with row of long setae extending from apical hinge along length of the costal vein; 20) vein RA with single row of pegs proximal to apical hinge.

Ruteloryctes Arrow, 1908

Types species. *Ruteloryctes tristis* Arrow, 1908: 336, by monotypy. **Valid taxa.** Two species.

The two species of *Ruteloryctes* are distributed in the Guinea-Congo lowland rainforests of West and Central Africa. *Ruteloryctes* specimens have been collected in Angola, Benin, Cameroon, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Guinea, Guinea-Bissau, Nigeria, Senegal, Sierra Leone, and The Gambia (Burgeon 1947, Paulian 1954, Endrődi 1960, 1966, 1985a, Krell et al. 2003, Hirthe and Porembski 2003, Ervik and Knudsen 2003) (Fig. 62). *Ruteloryctes morio* is a pollinator of nocturnally blooming *Nymphaea lotus* L., and this floral association has been reported from Côte d'Ivoire, Senegal, and Nigeria (Fabricius 1798, Krell et al. 2003, Hirthe and Porembski 2003, Ervik and Knudsen 2003). The immature stages of *Ruteloryctes* are undescribed.

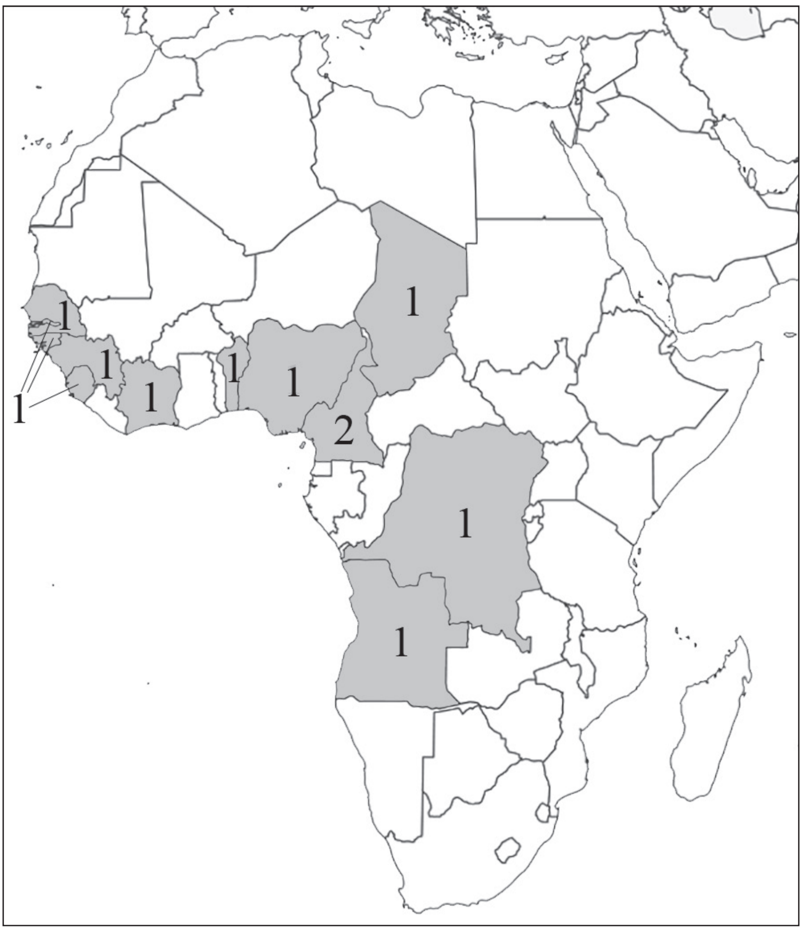


Figure 62. Country-level distribution of *Ruteloryctes* species in Africa. Numbers indicate taxa per country.

Ruteloryctes species can be recognized by the following combination of characters: 1) dorsal coloration black to dark brown; 2) body convex, not strongly anteroposteriorly compressed or dorsoventrally flattened; 3) clypeal apex truncate or rounded in dorsal view; 4) frontoclypeal suture incomplete medially; 5) males with anterolateral margin of the mandibles lacking weak tooth; 6) mandibular molar area with rows of circular micropunctures; 7) apex of mentum weakly emarginated at middle; 8) galea of maxilla on inner surface with 3 fused basal teeth, a free median tooth, and 2 fused apical teeth (3-1-2 arrangement); 9) pronotum with broadly incomplete beaded basal margin; 10) males and females with 3 protibial teeth on lateral margin, basal tooth not greatly reduced, slightly removed from apical 2 teeth, and oriented laterally; 11) protibial spur straight to weakly deflexed; 12) males with inner protarsal claw enlarged and narrowly cleft at apex; 13) mesocoxae not widely separated, nearly touching; 14) meso- and metatibiae with distal, transverse carinae; 15) metacoxae with lateral edge perpendicular to ventral surface; 16) anterior edge of hindwing distal to apical hinge lacking setae and with produced, membranous border; 17) vein RA with single row of pegs proximal to apical hinge.

The original description of *Ruteloryctes* compared the genus to New World *Dyscinetus* species, and it was hypothesized to have "strayed across the Atlantic" (Arrow 1908). Endrődi (1966) thought that *Ruteloryctes* was one of the most "primitive" cyclocephaline genera. The 3-1-2 arrangement of the teeth on the maxillary galea in *Ruteloryctes* is most similar to *Arriguttia*, *Augoderia*, and many *Cyclocephala* species. The membranous border of the hindwing present in *Ruteloryctes* is also shared with *Arriguttia*, *Acrobolbia*, *Ancognatha*, *Aspidolea*, and *Cyclocephala*. However, the single row of pegs present on the hindwing RA vein in *Ruteloryctes* is present in *Ancognatha*, *Surutu*, *Harposceles*, *Stenocrates*, *Dyscinetus*, *Erioscelis*, and *Chalepides*.

***Stenocrates* Burmeister, 1847**

Type species. *Scarabaeus laborator* Fabricius, subsequent designation by Casey 1915: 114.
Valid taxa. 52 species and subspecies.

The enigmatic genus *Stenocrates* comprises 52 taxa distributed from Mexico south throughout South America (except Chile) and Jamaica (Fig. 63). Species diversity in the group is highest in the tropical forests of Brazil, especially the northern and western states of Amazonas, Pará, Acre, and Rondônia. Many *Stenocrates* species are also known from eastern Brazil, especially Bahia, Espírito Santo, São Paulo, and Santa Catarina. *Stenocrates* species are problematic to identify due to conserved external morphology among species, making the group, "…possibly the most difficult genus of Dynastinae in the Americas with which to work" (Ratcliffe and Cave 2015). Male paramere morphology is diagnostic for species-level identification in the genus, and females not associated with males at the time of collection cannot be reliably identified with existing literature. Nothing is known about the natural history and biology of *Stenocrates* species. Adults can be collected at lights at night (Endrődi 1969a, Ratcliffe and Cave 2006, Ratcliffe 2014, 2015). Immature stages are undescribed for the genus.

Figure 63. Country-level distribution of *Stenocrates* species and subspecies in Meso-, Central, and South America and the West Indies. Numbers indicate taxa per country.

Stenocrates was erected by Burmeister (1847) for species that he considered highly similar to the historical concept of *Chalepus*, except for the lack of dimorphic protarsi. Burmeister (1847) included 4 species in *Stenocrates* and speculated that *Melolontha rufipennis* Fabricius could also be a member of the genus. Descriptions of new species of *Stenocrates* were slow to accumulate in the 19th and early 20th century. Kirsch (1870) described the sixth *Stenocrates* species from Colombia. Bates (1888) examined *S. laborator* specimens from Mexico and noted that the simple protarsi of the males and dorsoventrally flattened tibiae separated diagnosed *Stenocrates* within Cyclocephalini. *Stenocrates* was compared to *Euetheola* by Bates (1888) stating that the form of the mandibles and the proximal tarsomeres served to separate these genera. Arrow (1911, 1913) added two new species to *Stenocrates*, but he did not offer a diagnosis for the genus or make meaningful character comparisons for the genus. *Stenocrates* was revised by Endrődi (1966, 1985a), and many new species have been described since that work, which have not been incorporated into a comprehensive identification key.

Stenocrates species can be recognized by the following combination of characters: 1) dorsal coloration black or dark brown and without maculae; 2) body convex, not strongly anteroposteriorly compressed or dorsoventrally flattened; 3) clypeus trapezoidal with apex truncate in dorsal view; 4) frontoclypeal suture complete medially; 5) males with anterolateral margin of the mandibles lacking weak tooth; 6) mandibular molar area with rows of circular micropunctures; 7) mandibular molar area on proximal margin without semicircular depressed pits; 8) galea of maxilla on inner surface with 2 fused basal teeth, 2 fused medial teeth, and 2 fused apical teeth (2-2-2 arrangement); 9) pronotum with broadly incomplete beaded basal margin; 10) pronotum with narrowly incomplete beaded apical margin; 11) males and females with 3 protibial teeth on lateral margin, basal tooth not greatly reduced, only slightly removed from apical 2 teeth, and oriented laterally; 12) protibial spur straight to weakly deflexed; 13) males and females with protarsal claws simple (not cleft) and not enlarged; 14) mesocoxae not widely separated, nearly touching; 15) metacoxae on lateral edge without transverse, depressed sulcus; 16) metacoxae with lateral edge perpendicular to ventral surface; 17) meso- and metatibiae with distal, transverse carinae; 18) meso- and metatibiae dorsoventrally flattened and laterally expanded; 19) anterior edge of hindwing distal to apical hinge with erect setae and lacking produced, membranous border; 20) vein RA with single row of pegs proximal to apical hinge; 21) propygidium not expanded, propygidium and pygidium not rigidly fused.

***Surutu* Martínez, 1955**

Type species. *Surutu dytiscoides* Martínez, 1955: 245–249, by monotypy. **Valid taxa.** Five species.

The five species of the South American genus *Surutu* are distributed in Colombia, Bolivia, and Brazil (Martínez 1955, D'Andretta and Martínez 1956, Endrődi 1966, 1975a, 1985a, Ratcliffe 1981, Andreazze 2001, Otavo et al. 2013) (Fig. 64). These spectacular black species are truly the monsters of the Cyclocephalini, with some specimens of *Surutu seabrai* D'Andretta and Martínez measuring over 4 cm in length. Nothing is known about the biology of *Surutu* species. At least some species are attracted to lights at night (Ratcliffe 1981). The immature stages are undescribed for the genus as currently circumscribed.

Surutu species can be recognized by the following combination of characters: 1) dorsal coloration dark piceous to black; 2) body dorsoventrally flattened; 3) clypeus rounded to parabolic in dorsal view; 4) frontoclypeal suture incomplete medially; 5) apex of mentum narrowly and deeply emarginated (in *S. dytiscoides* and *S. seabrai*; other species unknown); 6) anterolateral margin of mandible lacking tooth; 7) galea of maxilla dorsoventrally flattened (in *S. dytiscoides* and *S. seabrai*; other species unknown); 8) galea on inner surface at base with large, flattened, blade-like, bifurcated tooth (in *S. dytiscoides* and *S. seabrai*; other species unknown); 9) galea on inner surface with 7 teeth in 2-1-1-1-2 arrangement from base to apex (in *S. dytiscoides* and *S. seabrai*; other species unknown); 10) apical and basal beaded margins of pronotum incomplete at middle (in *S. dytiscoides* and *S. seabrai*; other species unknown); 11) anterior membrane of the pronotum interrupted before lateral

Figure 64. Country-level distribution of *Surutu* species in South America. Numbers indicate taxa per country.

pronotal margins (in *S. dytiscoides* and *S. seabrai*; other species unknown); 12) protibia with 3 teeth in both sexes; 13) protibial spur straight to weakly reflexed; 14) males with protibial spur articulated at base, not fused to protibia; 15) males with inner protarsal claw thickened and narrowly cleft at apex (claw apex entire in *S. fenni* Ratcliffe and *S. schulzei* Endrődi); 16) mesocoxae not widely separated, nearly touching; 17), metacoxae with lateral edge perpendicular to ventral surface; 18) apices of the meso- and metatibiae with a corbel (in *S. dytiscoides* and *S. seabrai*; other species unknown); 19) anterior edge of hindwing distal to apical hinge lacking membranous border; 20) anterior edge of hindwing distal to apical hinge with decumbent setae surrounding the vein and originating away from the hinge; 21) vein RA with single row of pegs proximal to apical hinge.

Some characters of the head, mouthparts, and elytra of *Surutu* have been compared to *Ancognatha*, *Cyclocephala*, and *Mimeoma* (Martínez 1955, D'Andretta and Martínez

1956). The parabolic and rounded clypeal apex in *Surutu* species is like the clypeal form in several *Ancognatha* species. *Surutu dytiscoides* and *S. seabrai*, at least, have a deeply emarginated apex of the mentum that is also shared with *Ancognatha* species. The single row of RA pegs is also shared between *Ancognatha* and *Surutu*, although *Ancognatha* species lack setae on the anterior edge of the hindwing distal to the apical hinge. Instead, *Ancognatha* have a hindwing membrane like that found in *Cyclocephala*, *Augoderia*, *Arriguttia*, *Aspidolea*, and *Acrobolbia*. The dramatic dilations and knobs on the elytral epipleuron of *S. seabrai* are similar to those found in some *Ancognatha* and *Cyclocephala* species.

The distinctive setae of the hindwings found in *Surutu* are also found in *Harposceles* and species of the "*Cyclocephala cribrata* species group" (which included species previously placed in the genera *Mononidia* and *Surutoides*) (Dechambre 1997). These groups also share corbeled meso- and metatibial apices and entirely black coloration. *Harposceles paradoxus* shares other interesting characters with *Surutu* species, suggestive of a close relationship between the two genera. These shared characters include: 1) body strongly dorsoventrally flattened; 2) dorsoventrally flattened maxillary galea; 3) a 7-toothed maxillary galea in a 2-1-1-1-2 arrangement from the base to apex; 4) an incomplete frontoclypeal suture; and 5) the apical pronotal membrane interrupted before the lateral pronotal margins.

Platyphileurus felscheanus Ohaus (Dynastinae: Oryctini) warrants special discussion here. This species was described twice. *Platyphileurus felscheanus* was described from specimens collected from Santa Catarina, Brazil (Ohaus 1910). This new genus was compared to *Phileurus* Latreille and later included in the tribe Phileurini (Ohaus 1910, Arrow 1937b). Endrődi (1975) later described *Surutu jelineki* from Rio de Janeiro based on two female specimens. Comparison of the types of these species revealed that they are conspecific, with the name *Platyphileurus felscheanus* having priority over *Surutu jelineki* (Grossi et al. 2010).

The immatures of *Platyphileurus felscheanus* are associated with bromeliads (Grossi et al. 2010, Albertoni et al. 2014). Based on examination of larval, pupal, and adult characters, *P. felscheanus* was excluded from Phileurini and proposed to be a member of Oryctini (Albertoni et al. 2014). However, there are some intriguing adult character similarities between *P. felscheanus* and other *Surutu* species. For example, *P. felscheanus* is black, dorsoventrally flattened, and has dimorphic protarsal claw morphology (enlarged in males, simple in females) (Endrődi 1975, Grossi et al. 2010, Albertoni et al. 2014). The apices of the metatibiae in *P. felscheanus* are "weakly dentate" (Albertoni et al. [2014]: figure 30). Alternatively, the outer edge of the metatibia figured in Albertoni et al. (2014) could be considered not to be "weakly dentate", but corbeled (outer edge produced beyond the inner edge of the tibial apex). This tibial character is found in *Surutu*, *Harposceles*, and in the "*Cyclocephala cribrata* species group". The venter of the meso- and metatarsi in *P. felscheanus* is covered with dense, reddish, flattened setae (Albertoni et al. 2014). Similar flattened, scale-like setae are also found on the venter of the meso- and metatarsi of *S. seabrai* and *S. dytiscoides*. Future analyses of the tribal placement of *P. felscheanus* should focus on adult character comparisons with *Surutu* species and *H. paradoxus*, especially characters of the mandibles, maxillary galea, tibiae, tarsi, parameres, and hind wings.

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Annotated catalog and bibliography of the cyclocephaline scarab beetles (Coleoptera, Scarabaeidae, Dynastinae, Cyclocephalini)

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Abstract

Cyclocephaline scarab beetles represent the second largest tribe of the subfamily Dynastinae, and the group includes the most speciose genus of dynastines, *Cyclocephala*. The period following publication of Sebő Endrődi's *The Dynastinae of the World* has seen a huge increase in research interest on cyclocephalines, and much of this research has not been synthesized. The objective of this catalog and bibliography is to compile an exhaustive list of taxa in Cyclocephalini. This paper provides an updated foundation for understanding the taxonomy and classification of 14 genera and over 500 species in the tribe. It discusses the history of cataloging dynastine species, clarifies issues surrounding the neotype designations in Endrődi's revision of Cyclocephalini, synthesizes all published distribution data for cyclocephaline species, and increases accessibility to the voluminous literature on the group by providing an easily searchable bibliography for each species. We propose the nomen novum *Cyclocephala rogerpauli*, **new replacement name**, for *C. nigra* Dechambre.

Keywords

masked chafers, rhinoceros beetles, catalog, bibliography

Table of contents

Introduction

The Cyclocephalini, a group first defined by French naturalist Francis de Laporte de Castelnau in 1840, represents the second largest tribe of the subfamily Dynastinae. *Cyclocephala* Dejean, the type genus of Cyclocephalini, is the most speciose dynastine genus and comprises over 350 species-group taxa as of 2017. The last comprehensive, synoptic treatment of the tribe was *The Dynastinae of the World* (Endrődi 1985a). Endrődi's foundational book revolutionized the study of the subfamily and paved the way for a veritable explosion of new research into dynastines. This influence is most apparent in the scientific literature covering cyclocephaline scarab beetles. The post-Endrődi era of cyclocephaline research has been marked by ever diversifying interests and approaches to the group. Papers on cyclocephalines now span all modern entomological disciplines from taxonomy, evolutionary biology, ecology, ethology, agronomics, and physiology.

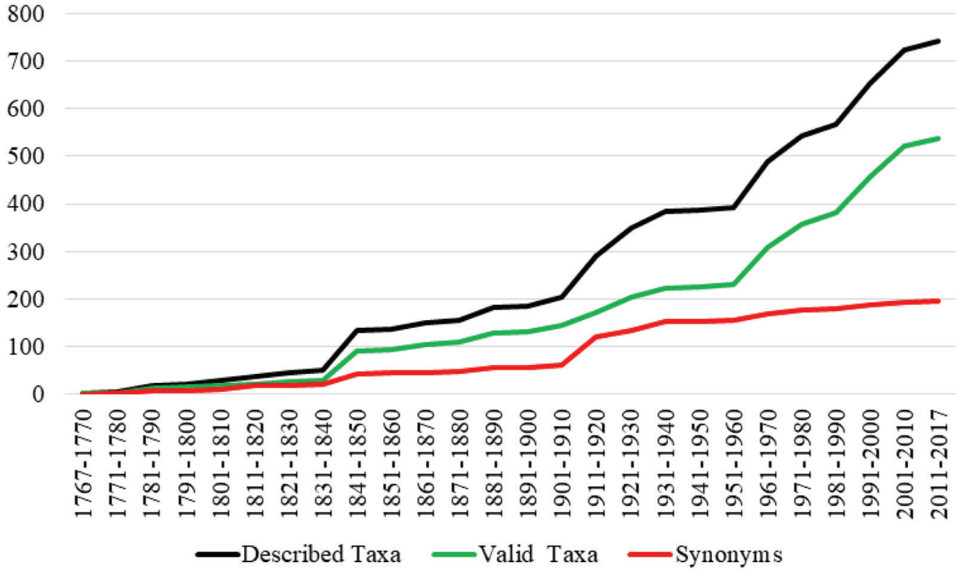

Figure 1. Cumulative number of described cyclocephaline species-group taxa by decade. Species description accumulation was based on the compiled catalog. The synonymy curve also includes names that were homonyms and later replaced.

Ever-growing numbers of cyclocephaline species have, at times, engendered lighthearted dismay among researchers of the group. For example, the Costa Rican *C. unamas* Ratcliffe (Spanish "una mas") was named after the overwhelming feeling one gets after the discovery of *yet another* new *Cyclocephala* species, epitomized by the species name *C. nodanotherwon* Ratcliffe. Over 170 new cyclocephaline species-group taxa have been described since 1985, and this has created challenges for species identification in several genera. While the most intense period of new species descriptions has probably passed (Fig. 1), many new South American taxa are likely to be discovered, especially in the genera *Cyclocephala* and *Stenocrates* Burmeister (Ratcliffe 2015).

Starting in the mid-1970s, a growing body of research covering the floral ecology of cyclocephalines began to develop. Many faunistic studies in Mesoamerica (especially Mexico) and South America have reported a great deal of cyclocephaline locality data that has yet to be synthesized. Additionally, researchers in the United States and South America have greatly expanded the agronomic literature on the tribe since publication of *The Dynastinae of the World*. This hugely expanded literature for the tribe has not been adequately synthesized and is unwieldy and inaccessible as a result. The objective of this catalog is to: 1) provide an updated foundation for understanding the taxonomic history of 14 genera and over 500 species of cyclocephaline scarab beetles; 2) identify destabilizing issues in the classification and nomenclature of the genera and species; 3) create an easily searchable bibliography to further promote research on these beetles; and 4) synthesize known distribution data for all species in the tribe.

Brief history of cyclocephalines in catalogs, checklists, and bibliographies

Coleopterists have a long history of compiling species catalogs at a global or regional scale. Prior to the Information Age, these catalogs were invaluable resources for the entomological community because they served to organize biodiversity research. Cataloging the diversity of cyclocephaline species began in Germany with the fourth volume of *Catalogus Coleopterorum Hucusque Descriptorum Synonymicus et Systematicus* (Harold 1869b). This catalog included information on over 120 valid species in the group and provided a brief list of citations for each taxon along with locality information. French entomologists Louis Chevrolat, Albert Fauvel, Auguste Sallé, and Edmond Fleutriaux provided early lists of cyclocephaline diversity in French Guiana (Fauvel 1861), Cuba (Chevrolat 1865), and Guadeloupe (Fleutiaux and Sallé 1889). Gilbert Arrow (1937b) published a comprehensive catalog of Dynastinae in the *Coleoptorum Catalogus* series. Arrow's catalog featured an updated classification of the subfamily and the tribe Cyclocephalini. His concept of Cyclocephalini was broader than that of later workers, and he included several genera in the tribe that would be subsequently included in Oryctoderini. This new catalog also updated the bibliographic information for each species (Arrow 1937b). Burgeon (1947) followed up Arrow's work and cataloged dynastine species of the Democratic Republic of Congo and provided an image and redescription of the African cyclocephaline *Ruteloryctes morio* (Fabricius). Friedrich Ohaus and Johann Machatschke published several catalogs of Rutelinae in the mid-20th century in the *Coleopterorum Catalogus* and *Genera Insectorum* series, which at the time included information about the cyclocephaline genera *Peltonotus* Burmeister and *Acrobolbia* Ohaus (Ohaus 1918, 1934b, Machatschke 1972, 1974). Milan Krajcik (2005, 2012) published exhaustive checklists of world Dynastinae and Scarabaeoidea in his Annima.X series.

Many North American Coleopterists created catalogs and checklists that included cyclocephalines. Frederick Melsheimer, Samuel Haldeman, and John LeConte compiled the first catalog of Coleoptera of the United States (Melsheimer et al. 1853). George Horn's (1894) list of Coleoptera of Baja California included three species of *Cyclocephala*. W. S. Blatchley (1910, 1930) cataloged the Coleoptera of Indiana and created a checklist of scarabs of Florida. Charles Leng, Andrew Mutchler, and Richard Blackwelder compiled enormous catalogs and checklists of beetles, which included cyclocephalines, throughout the New World, including the West Indies (Leng and Mutchler 1914, 1917, Leng 1920, Blackwelder 1939, 1944, 1948). George Wolcott (1923, 1936) assembled annotated checklists of the insects of Puerto Rico and later provided interesting observations of the natural history of Puerto Rican scarabs in other works. Alan Hardy (1991) created a very detailed annotated catalog of Rutelinae and Dynastinae of North America. Andrew Smith created a checklist of all scarabaeoid beetles of the Nearctic Realm (Smith 2009). Stewart Peck, along with collaborators, has cataloged Coleoptera from parts of the West Indies (Peck 2009, 2010, 2016, Peck et al. 2002). Relatively modern checklists or reviews of scarabaeoids have been produced for Canada (McNamara 1991, Bousquet et al. 2013, Ratcliffe and Cave 2017) and portions of the United States including Florida (Woodruff 1973, Peck and Thomas 1998), Maryland (Staines 1984), Nebraska (Ratcliffe 1991, Ratcliffe and Paulsen 2008), South Carolina (Harpootlian 2001), and Texas (Riley and Wolfe 2003).

Checklists of the economically injurious insects of Honduras (Passoa 1983), Nicaragua (Maes and Robleto 1988), Colombia (Posada Ochoa), French Guiana (Remillet 1988), and Suriname (Van Dinther 1960) report unique and fascinating records of cyclocephalines causing damage in agroecosystems. Cyclocephaline floral association data were compiled for the family Araceae (Gibernau 2003, 2011) and for the beetle tribe (Moore and Jameson 2013). Relatively recent checklists focusing on mainland Neotropical scarabaeoid or dynastine taxa have been produced for parts of Mexico (Deloya et al. 2014a, 2016), Nicaragua (Maes 1987, Maes et al. 1997), Panama (Ratcliffe 2002a), Colombia (Restrepo et al. 2003, Gasca-Álvarez and Amat-García 2010), Peru (Ratcliffe et al. 2015), and French Guiana (Ponchel 2011). Regional checklists of Dynastinae were published for Costa Rica and Panama (Ratcliffe 2003), Honduras, Nicaragua, and El Salvador (Ratcliffe and Cave 2006), Mexico, Guatemala, and Belize (Ratcliffe et al. 2013), the West Indies (Ratcliffe and Cave 2015), and the United States (Ratcliffe and Cave 2017). An updated catalog of *Stenocrates* was provided by Ratcliffe (2015), and Dupuis (2017) added details about *Stenocrates* in French Guiana. An updated checklist of the *Cyclocephala* of Colombia was provided by Gasca-Álvarez and Deloya (2016). *Cyclocephala* is the only genus in the tribe for which a tailored bibliography has been produced (Pike et al. 1976).

Materials and methods

All available literature was reviewed for compiling this catalog and bibliography. References to a cyclocephaline genus only were not included in the list of references. Cited references must have used a trackable specific epithet to have been included. The institutional and collection acronyms used throughout the catalog follow Evenhuis (2016) when possible.

CAS	California Academy of Sciences, San Francisco, California, USA
CERPE	Coleção Entomológica da Universidade Federal Rural de Pernambuco, Recife, Brazil
CMNC	Canadian Museum of Nature, Ottawa, Ontario, Canada
CNC	Canadian National Collection of Insects, Ontario, Ottawa, Ontario, Canada
BMNH	The Natural History Museum, London, United Kingdom
FSCA	Division of Plant Industry, Florida State Collection of Arthropods, Gainesville, Florida, USA
FDPC	Fabien Dupuis Collection, Saint-Chamond, France
FUJI	Masayuki Fujioka Collection, Tokyo, Japan
HNHM	Hungarian Natural History Museum, Budapest, Hungary

ICN	Universidad Nacional de Colombia, Insituto de Ciencias Naturales de la Universidad Nacional, Bogotá, Colombia
IEE	Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow, Russia
IEXA	Colección Entomológica, Instituto de Ecología, A.C., Xalapa, México
IMQC	Insectarium de Montreal, Montreal, Québec, Canada
INPA	Instituto Nacional de Pesquisas da Amazonia, Colecão Sistemática da Entomologia, Manaus, Amazonas, Brazil
IREC	Institut de Recherches Entomologique de la Caribe, Pointe-a-Pitre, Guadeloupe (also known as Centre de Recherches Agronomiques Antilles Guyana, Duclos, Petit-Bourg [CRAAG])
JPVC	J. Pierre Voirin Collection, Le Luc, France
LEMQ	Ste. Anne de Bellevue, McGill University, Lyman Entomological Museum, Québec, Canada
MACN	Museo Argentina de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires, Argentina
MCMC	Museo de Historia Natural de la Ciudad de Mexico, Distrito Federal, Mexico
MCZ	Harvard University, Museum of Comparative Zoology, Cambridge, Massachusetts, USA
MIZA	Museo del Instituto de Zoología Agrícola, Maracay, Venezuela
MLUH	Zentralmagazin Naturwissenschaftlicher Sammlungen, Martin-Luther Universität Halle-Wittenberg, Halle, Germany
MNCR	Museo Nacional de Costa Rica, San José, Costa Rica
MNHN	Muséum National d'Histoire Naturelle, Paris, France
MNNC	Coleccion Nacional de Insectos, Museo Nacional de Historia Natural, Santiago, Chile
MUSENUV	Universidad de Valle, Museo de Entomología, Cali, Colombia
MUSM	Museo de Historia Natural de la Universidad Nacional Mayor de San Marco, Lima, Peru
MTD	Museum für Tierkunde, Dresden, Germany
MXAL	Miguel Ángel Morón Collection, Xalapa, Mexico
MZSP	Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil.
NHMB	Naturhistorisches Museum, Basel, Switzerland
NHRS	Naturhistoriska riksmuseet, Stockholm, Sweden
NMPC	National Museum (Natural History), Prague, Czech Republic
NSMT	National Science Museum (Natural History), Tokyo, Japan
QSBG	Queen Sirikit Botanic Garden, Chiang Mai, Thailand
RIEB	Research Institute of Evolutionary Biology, Tokyo, Japan
RPDC	Roger-Paul Dechambre Collection, Paris, France
SDEI	Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany
UCDC	University of California-Davis, R.M. Bohart Museum of Entomology, Davis, California, USA
UNSM	University of Nebraska State Museum, Lincoln, Nebraska, USA

USNM	National Museum of Natural History, Washington, District of Columbia, USA
UUZM	Uppsala University, Uppsala, Sweden
UVGC	Universidad del Valle de Guatemala, Colección de Artrópodos, Guatemala City, Guatemala
WADA	Kaoru Wada Collection, Tokyo, Japan
ZMH	Zoologiska Museum, University of Helsinki, Helsinki, Finland
ZMHB	Museum für Naturkunde der Humboldt-Universität, Berlin, Germany
ZMUC	University of Copenhagen, Zoological Museum, Copenhagen, Denmark
ZMUH	Universität von Hamburg, Zoologisches Institut und Zoologisches Museum, Hamburg, Germany
ZMUK	Universität Kiel, Zoologisches Museum, Kiel, Germany
ZSMC	Zoologische Staatssammlung des Bayerischen Staates, Munich, Germany

A special note must be made about the type specimen housing institution reporting herein. For older literature, the remarks on type depositories relied on Endrődi's (1966) explanations. However, many private collections (or portions of collection holdings) have changed hands in the intervening period. This is most relevant for the Antonio Martínez Collection, Sebő Endrődi Collection, Henry and Anne Howden Collection, Frey Collection, and for some Fabrician types. These collections contain a significant number of primary type material for cyclocephaline species. Holotypes deposited in the Martínez Collection should be at MACN. Holotypes and invalid neotypes deposited in the Endrődi Collection should be at HNHM. Holotypes deposited in the Howden collection should be at CMNC. Holotypes deposited in the Frey Collection should be at NHMB. Fabrician lectotypes designated by Endrődi (1966) were originally at ZMUK, but they should now be at ZMUC.

Most of Endrődi's (1966) lectotypes were clearly designated. However, the types of many species (especially Arrow and Bates types at BMNH and Casey types at USNM) were not clearly discussed. The original descriptions of these species were not always explicit about the number of specimens in a type series. Endrődi (1966) does not clarify these cases and simply listed that a "Type" was at an institution. Herein, these "Type" specimens were not speculated to be holotypes by monotypy or as parts of a syntype series. Future workers who further examine the original descriptions and the type material will have to make those judgements.

As noted by a few authors, Endrődi's cyclocephaline neotype designations are invalid on several grounds (Dechambre 1991b, Ratcliffe and Hoffman 2011). Endrődi's (1966) revision of Cyclocephalini was published after the recently adopted 1964 version of the International Code of Zoological Nomenclature (ICZN 1964). ICZN (1964) Article 75c had six conditions that must have been met by Endrődi for his neotype designations to be valid: 1) a statement of characters for differentiating the taxon for which the neotype was designated (or a reference to such a statement); 2) data and description sufficient so that the neotype can be recognized; 3) explanation for believing that all of the original type material is lost or destroyed and the steps that were taken to determine this was the case; 4) explanation of why the neotype specimen is considered consistent with the original-type material; 5) explanation that the neotype came for as near as possible to the original type-locality; and 6) a statement that the neotype is immediately, or upon publication, the property of a recognized scientific or educational institution that maintains a research collection.

Every one of Endrődi's (1966) twenty neotype designations variably violates the conditions of ICZN (1964) Article 75c. Endrődi possibly satisfied condition (1) of Article 75c in some cases because his neotype designations were accompanied by detailed descriptions (but not necessarily explicitly stated to be descriptions of the neotype). Condition (2) was violated in every case. For example, he did not describe the labels of any of his neotype specimens, hampering recognition of the neotypes. He sometimes also omitted an explicit statement about the sex of the neotype (though they are presumably male). Usually, Endrődi only made vague statements about his search for type materials, amounting to the fact that he did not find a type. This violated condition (3). He typically did not report where exactly he had searched for the material that he did not find. For example, after his description of *Cyclocephala villosa* Blanchard, Endrődi only stated, "Die Type war trotz sorgfältiger Nachforschung nicht aufzufinden, darum designierte Ich mein einziges Exemplar als Neotype ♂" ["The type was not found despite a careful search, so I designated my only specimen as a neotype ♂"]. In contrast, he went into detail about his search (with the help of Bengt-Olof Landin) for Linnean type material of *C. amazona amazona*.

Endrődi never described why he thought his neotypes were consistent with the original type material, nor did he explicitly mention type locality (violating conditions 4 and 5). He was obviously aware of the concept of type locality as evidenced by his decisions when designating neotypes. For example, he designated a neotype of *C. castanea* (Olivier) from "Surinam", which is the type locality of this species based on the original description (Olivier 1789). However, he offered no explanation of these concepts. Lastly, all of Endrődi's neotypes were deposited in his personal collection (now at HNHM). Dechambre (1991b) recognized that deposition in Endrődi's collection did not satisfy condition (6). Endrődi's invalid neotypes are listed below, in their original name combinations, and are noted in the catalog. In some cases, Dechambre (1991b) discovered syntypes of these species at MNHN and designated lectotypes. Those lectotypes are noted here where applicable.

***Chalepus luridus* Burmeister:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966). Joly and Escalona (2002a) listed the housing institution as MLUH.

***Cyclocephala concolor* Burmeister:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966). Lectotype ♀ at MNHN (Dechambre 1991b).

***Cyclocephala fulvipennis* Burmeister:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966). Lectotype ♀ at MNHN (Dechambre 1991b).

***Cyclocephala gregaria* Heyne & Taschenberg:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

***Cyclocephala nigricollis* Burmeister:** invalid ♂ neotype at HNHM (Endrődi Collection) (Endrődi 1966). Lectotype ♂ at MNHN (Dechambre 1991b).

***Cyclocephala occipitalis* Fairmaire:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Cyclocephala octopunctata **Burmeister:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966). Lectotype ♀ at MNHN (Dechambre 1991b).
Cyclocephala putrida **Burmeister:** invalid neotype at HNHM (Endrődi Collection) (Endrődi 1966). Lectotype ♀ of *C. putrida* at MNHN (Dechambre 1991b).
Cyclocephala rubescens **Bates:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).
Cyclocephala signaticollis **Burmeister:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966). Lectotype ♀ at MNHN (Dechambre 1991b).
Cyclocephala subsignata **Burmeister:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966). Lectotype ♀ at MNHN (Dechambre 1991b).
Cyclocephala tetrica **Burmeister:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).
Cyclocephala villosa **Blanchard:** invalid ♂ neotype at MNHN (Endrődi Collection) (Endrődi 1966).
Cyclocephala villosa **Burmeister:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).
Melolontha castanea **Olivier:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).
Melolontha immaculata **Olivier:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966). Chalumeau and Gruner (1977) stated this neotype was at MNHN.
Melolontha picipes **Olivier:** invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).
Melolontha rustica **Olivier:** invalid neotype at HNHM (Endrődi Collection) (Endrődi 1966).
Melolontha undata **Olivier:** invalid ♂ neotype at HNHM (Endrődi Collection) (Endrődi 1966).
Scarabaeus amazonus **Linnaeus:** invalid neotype at HNHM (Endrődi Collection) (Endrődi 1966).

How to use this catalog

Entries for genera follow a format that tracks the history of genera as either valid or invalid through time. The generic-level entries also include the type species of the genus, a list of references that contain identification keys for the genus and/or its species, and the number of valid species and subspecies in the genus.

The very first line, in bold, is the current valid name of the taxon. Underneath that, the taxonomic history of the name is presented in chronological order. These histories can be extremely complicated and difficult to track. The types of changes included here are: 1) changes in generic classification; 2) changes in subgeneric classification; 3) names that the current valid name may have been synonymized under for a period; 4) revalidation of names as either species or subspecies; 5) changes in status that include movement between specific, subspecific, and infrasubspecific categories. These changes, outlined above, are cited using an abbreviated reference, with pagination, and what actions that author took.

Entries for synonyms are indented and labeled "syn." in bold. The taxonomic histories of synonyms can be just as complicated as valid names and those details are provided here in the same format as the taxonomic history of the valid name. Information about the primary types, as far as could be ascertained, is provided beneath the taxonomic histories. These include citations for that information and the primary type repository. A generalized distribution from the literature is provided below the type information. Country records are in all capital letters and state/department/commune-level records are given after the country. Lastly, a bibliography of each species is provided in rough chronological order and sorted by author.

Remarks are also given that clarify some data about a taxon where it is applicable. Remarks given here generally relate to conflicting distribution data in the literature or potential minor taxonomic and nomenclatural issues. Because so little is known of cyclocephaline relationships, the catalog is presented in alphabetic order by genus and then species-group taxa, instead of systematic order.

Annotated catalog and bibliography of the cyclocephaline scarab beetles (Coleoptera, Scarabaeidae, Dynastinae, Cyclocephalini)

Tribe CYCLOCEPHALINI Laporte 1840

Cyclocephalites Laporte, 1840: 124 [original usage].
Cyclocephalidae [Burmeister, 1847: 21].
Cyclocephalides [Lacordaire, 1856: 393].
Cyclocephalini [LeConte, 1862: 143].
Cyclocephalinae [Bates, 1888: 296].

Type genus. *Cyclocephala* Dejean, 1821.

Genus *ACROBOLBIA* Ohaus, 1912

Acrobolbia Ohaus, 1912: 316 [original usage].

Type species. *Acrobolbia macrophylla* Ohaus, 1912, by monotypy.
Keys. Jameson et al. 2002.
Valid taxa. 1 species.

Acrobolbia macrophylla Ohaus, 1912

Acrobolbia macrophylla Ohaus, 1912: 317–318 [original combination].
syn. *Acrobolbia triangularis* Benderitter, 1922: 147 [original combination].
Acrobolbia macrophylla Ohaus [synonymy by Ohaus 1934a: 14].

Types. Holotype ♂ of *A. macrophylla* at ZMHB (Jameson et al. 2002). Neotype ♂ of *A. triangularis* at UNSM (Jameson et al. 2002).

Distribution. ECUADOR: Napo, Pastaza. PERU: Huanuco, Madre de Dios. VENEZUELA.

References. Lucas 1918a, Benderitter 1922, Ohaus 1912, 1918, 1934a, b, Anonymous 1940, Machatschke 1972, Jameson 1998, Dechambre and Ponchel 1999, Jameson et al. 2002, Breeschoten et al. 2013.

Genus *ANCOGNATHA* Erichson, 1847

Ancognatha Erichson, 1847a: 97 [original usage].
Cyclocephala Dejean [synonymy by Lacordaire 1856: 398].
Ancognatha Erichson [revalidated genus status by Bates 1888: 297].
syn. *Barotheus* Bates, 1891: 30–31 [original usage]. Type species: *Barotheus andinus* Bates 1891, by monotypy.
Ancognatha Erichson [synonymy by Endrődi 1966: 365].
syn. *Lissodon* Paulian, 1954: 1154 [original usage]. Type species: *Lissodon argodi* Paulian, 1954, by monotypy.
Ancognatha Erichson [synonymy by Endrődi 1969b: 38].
syn. *Pseudoancognatha* Otoya, 1945: 275 [original usage]. Proposed as a subgenus. Type species: *Ancognatha nigriventris* Otoya, 1945, by original designation. *Ancognatha* Erichson [synonymy by Martínez 1965a: 64].

Type species. *Ancognatha scarabaeoides* Erichson, subsequent designation by Casey 1915: 111.

Keys. Saylor 1945 (USA), Arnett 1968 (USA), Endrődi 1966, 1985a, Figueroa and Ratcliffe 2016 (Peru), Morón and Deloya 1991 (Mexico, Durango), Morón-Ríos and Morón 2001 (Mexico, Chiapas), Ratcliffe et al. 2013 (Mexico), Neita-Moreno and Morón 2008 (larvae), Vallejo and Morón 2008 (larvae), Pardo-Locarno et al. 2006, Gasca-Álvarez and Amat-García 2010 (Colombia), Mondaca 2011 (Chile), Villalobos-Moreno et al. 2017 (Colombia), Ratcliffe and Cave 2017 (USA and Canada).

Valid taxa. 22 species.

Ancognatha atacazo (Kirsch, 1885)

Cyclocephala atacazo Kirsch, 1885: 223 [original combination].
Ancognatha atacazo (Kirsch) [new combination by Endrődi 1966: 370].

Types. Lectotype ♀ at MTD (Endrődi 1966).

Distribution. COSTA RICA: Cartago, San José. COLOMBIA: Quindío, Tolima, Valle del Cauca. ECUADOR: Pichincha.

References. Kirsch 1885, Bertkau 1886, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1967a, 1985a, Ratcliffe 2003, Pardo-Locarno et al. 2006, Krajcik 2005, 2012.

Ancognatha aymara Mondaca, 2016

Ancognatha aymara Mondaca, 2016: 60–63 [original combination].

Types. Holotype ♂ at MNNC (Mondaca 2016).

Distribution. CHILE: Arica y Parinacota.

References. Mondaca 2016.

Remarks. Specimens of *A. lutea* reported from Chile (e.g., see Gutiérrez 1950, Mondaca 2011, Ferrú and Elgueta 2011) were later determined to be *A. aymara* (Mondaca 2016).

Ancognatha castanea Erichson, 1847

Ancognatha castanea Erichson, 1847a: 98 [original combination].
Cyclocephala castanea (Erichson) [new combination by Lacordaire 1856: 398, 399].
Barotheus castaneus (Erichson) [new combination by Arrow 1911: 169].
Ancognatha castanea Erichson [revised combination by Endrődi 1966: 365].
syn. *Barotheus andinus* Bates, 1891: 31 [original combination].
Barotheus castaneus (Erichson) [synonymy by Arrow 1911: 169].
syn. *Lissodon argodi* Paulian, 1954: 1154–1155 [original combination].
Ancognatha castanea Erichson [synonymy by Endrődi 1969b: 38].

Types. Lectotype ♀ of *A. castanea* at ZMHB (Endrődi 1966). Type of *B. andinus* at BMNH (Endrődi 1966). Holotype ♂ at MNHN (Paulian 1954).

Distribution. COLOMBIA: Nariño. ECUADOR: Chimborazo, Napo, Pichincha. PERU: Ayacucho, Cuzco, Lima.

References. Erichson 1847a, Lacordaire 1856, Marschall 1857, Harold 1869b, Bates 1891, Bertkau 1892, Arrow 1911, 1937b, Blackwelder 1944, Paulian 1954, Endrődi 1966, 1969b, 1974, 1985a, Onore 1997, 2005, Pardo-Locarno et al. 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2015, Dossey et al. 2016, Figueroa and Ratcliffe 2016, Mitasuhashi 2016.

Remarks. Lacordaire's (1856) rejection of *Ancognatha* created a case of homonymy between the names *C. castanea* (Erichson) and *C. castanea* (Olivier). *Cyclocephala peruana* was proposed as a replacement for the junior homonym *C. castanea* (Erichson) (Harold 1869a). Subsequent authors did not use this replacement name (e.g., Arrow 1911, 1937b), with Endrődi (1966) stating that it was an "incorrect" new name.

Ancognatha corcuerai Figueroa & Ratcliffe, 2016

Ancognatha corcuerai Figueroa and Ratcliffe 2016: 65–67 [original combination].

Types. Holotype ♂ at MUSM (Figueroa and Ratcliffe 2016).
Distribution. PERU: Cajamarca.
References. Figueroa and Ratcliffe 2016.

Ancognatha erythrodera (Blanchard, 1846)

Cyclocephala erythrodera Blanchard, 1846: 191 [original combination].
Ancognatha erythrodera (Blanchard) [new combination by Arrow 1937b: 6].

Types. Efforts to find type specimens were unsuccessful (Endrődi 1966).
Distribution. ARGENTINA: Tucumán. BOLIVIA: La Paz. PERU: Arequipa, Puno.
References. Blanchard 1846, Erichson 1847b, Harold 1869b, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2015, Figueroa and Ratcliffe 2016.

Ancognatha falsa Arrow, 1911

Ancognatha falsa Arrow, 1911: 170 [original combination].
Cyclocephala falsa (Arrow) [new combination by Endrődi 1966: 194].
Ancognatha falsa Arrow [revised combination by Endrődi 1985a: 162].

Types. Type ♂ at BMNH (Arrow 1911, Endrődi 1966).
Distribution. MEXICO: Chiapas, Estado de México, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Oaxaca, Puebla, Veracruz.
References. Arrow 1911, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Ratcliffe and Morón 1997, Pacheco F. et al. 2008, Múñoz-Hernández et al. 2008, Ramírez-Ponce et al. 2009, Krajcik 2005, 2012, Romero-López et al. 2012, 2015, Ratcliffe et al. 2013, Deloya et al. 2016.

Ancognatha gracilis Endrődi, 1966

Ancognatha gracilis Endrődi, 1966: 372–373 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).
Distribution. COSTA RICA: Cartago, Heredia, Limón, San José. PANAMA: Chiriquí.
References. Endrődi 1966, 1985a, Ratcliffe 1992d, 2002a, 2003, Krajcik 2005, 2012.

Ancognatha horrida Endrődi, 1967

Ancognatha horrida Endrődi, 1967a: 409–411 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1967a).

Distribution. COLOMBIA: Nariño. ECUADOR: Cañar, Loja, Pichincha.

References. Endrődi 1967a, 1985a, Dechambre 2000, Pardo-Locarno et al. 2006, Krajcik 2005, 2012.

Ancognatha humeralis (Burmeister, 1847)

Cyclocephala humeralis Burmeister, 1847: 40 [original combination].
Ancognatha humeralis (Burmeister) [new combination by Arrow 1914: 274].
syn. *Cyclocephala longiceps* Kirsch, 1870: 354–355 (paginated incorrectly as 370–371) [original combination].
Ancognatha humeralis (Burmeister) [synonymy by Arrow 1914: 274].

Types. Lectotype ♂ of *C. humeralis* at MLUH (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba. CHILE. COLOMBIA: Antioquia, Caldas, Cauca, Cundinamarca, Quindío, Risaralda, Valle del Cauca. ECUADOR. PERU: Lima.

References. Burmeister 1847, Harold 1869b, Kirsch 1870, Bates 1888, Arrow 1911, 1914, 1937b, Blackwelder 1944, Martínez 1965a, Pike et al. 1976, Endrődi 1966, 1985a, Restrepo et al. 2003, Útima and Vallejo 2008, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2015, Figueroa and Ratcliffe 2016.

Remarks. *Ancognatha humeralis* was reported from Panama, Costa Rica, and Venezuela (Bates 1888, Blackwelder 1944). Some of these data probably refer to *A. vulgaris* (see Arrow 1911). Major faunistic studies have not reported *A. humeralis* from Panama or Costa Rica (Ratcliffe 2003).

Ancognatha hyltonscottae Martínez, 1965

Ancognatha hyltonscottae Martínez, 1965a: 64–70 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1965a).

Distribution. BOLIVIA: Cochabamba.

References. Martínez 1965a, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Ancognatha jamesoni Murray, 1857

Ancognatha jamesoni Murray, 1857: 230–232 [original combination].
syn. *Ancognatha crassimanus* Murray ,1857: 232–234 [original combination].

Ancognatha jamesoni Murray [synonymy by Endrődi 1966: 374].

Types. Types of both *A. jamesoni* and *A. crassimanus* are at BMNH (Endrődi 1966).

Distribution. ECUADOR: Pichincha.

References. Murray 1857, Gerstaecker 1858, Harold 1869b, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Dechambre 2000, Onore 1997, 2005, Krajcik 2005, 2012, Dossey et al. 2016.

Ancognatha lutea Erichson, 1847

Ancognatha lutea Erichson, 1847a: 97 [original combination].
Cyclocephala lutea (Erichson) [new combination by Lacordaire 1856: 398, 399].
Ancognatha lutea Erichson [revised combination by Arrow 1937b: 6].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. ARGENTINA. BOLIVIA. BRAZIL. COLOMBIA: Bogotá, D. C., Cundinamarca, Santander. GUYANA. PERU: Cajamarca, Cuzco, Lima, Puno. URUGUAY.

References. Erichson 1847a, Lacordaire 1856, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Restrepo et al. 2003, Gasca-Álvarez and Amat-García 2010, Ferrú and Elgueta 2011, Mondaca 2011, Krajcik 2005, 2012, López-García et al. 2015, Ratcliffe et al. 2015, Figueroa and Ratcliffe 2016, Mitasuhashi 2016.

Ancognatha manca (LeConte, 1866)

Cyclocephala manca LeConte, 1866: 382 [original combination].
Ancognatha manca (LeConte) [new combination by Bates 1888: 298].
syn. *Ancognatha aequata* Bates, 1888: 297 [original combination].
Ancognatha manca (LeConte) [synonymy by Arrow 1911: 169].
syn. *Ancognatha durangoana* Casey, 1915: 125 [original combination].
Ancognatha manca (LeConte) [synonymy by Saylor 1945: 125].
syn. *Ancognatha laevigata* Bates, 1888: 297–298 [original combination].
Ancognatha manca (LeConte) [synonymy by Saylor 1945: 379].
syn. *Ancognatha perspicua* Casey, 1915: 126 [original combination].
Ancognatha manca (LeConte) [synonymy by Arrow 1937b: 6].
syn. *Ancognatha zuniella* Casey, 1915: 127 [original combination].
Ancognatha manca (LeConte) [synonymy by Arrow 1937b: 6].

Types. Type of *C. manca* at MCZ (Endrődi 1966). Types of *A. aequata* and *A. laevigata* at BMNH (Endrődi 1966). Types of *A. zuniella*, *A. perspicua*, and *A. durangoana* at USNM (Endrődi 1966).

Distribution. MEXICO: Chihuahua, Durango, Estado de México, Guanajuato, Jalisco, Nayarit, Michoacán, San Luis Potosí, Sinaloa, Sonora, Zacatecas. UNITED STATES: Arizona, New Mexico.

References. LeConte 1866, Gerstaecker 1866, Harold 1869b, Henshaw 1885, Bates 1888, Fall and Cockerell 1907, Casey 1915, Leng 1920, Arrow 1911, 1937b, Blackwelder 1944, Saylor 1945, Blackwelder and Blackwelder 1948, Ritcher 1966, Arnett 1968, Ritcher and Baker 1974, Pike et al. 1976, Endrődi 1966, 1985a, Dimmitt and Ruibal 1980, Morón 1981, Hardy 1991, Hardy 1991, Morón and Deloya 1991, Poole and Gentili 1996, Ratcliffe and Morón 1997, Navarrete-Heredia et al. 2001, Ratcliffe 2002b, Smith 2003, 2009, Krajcik 2005, 2012, Morón and Márquez 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, Deloya et al. 2016, Ratcliffe and Cave 2017.

Ancognatha matilei Dechambre, 2000

Ancognatha matilei Dechambre, 2000: 183–184 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 2000).

Distribution. COLOMBIA: Valle del Cauca.

References. Dechambre 2000, Restrepo et al. 2003, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012.

Ancognatha quadripunctata Bates, 1888

Ancognatha quadripunctata Bates, 1888: 298 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. MEXICO: Chihuahua, Colima, Distrito Federal, Durango, Estado de México, Guanajuato, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Puebla, Sinaloa, Sonora, Veracruz.

References. Bates 1888, Arrow 1937b, Blackwelder 1944, Barrera 1969, Endrődi 1966, 1985a, Ratcliffe and Morón 1997, Deloya et al. 1993, 2014a, 2016, Navarrete-Heredia et al. 2001, Ramírez-Ponce et al. 2009, Krajcik 2005, 2012, Morón and Márquez 2012, Ratcliffe et al. 2013.

Remarks. *Ancognatha quadripunctata* has been reported from Ecuador (Endrődi 1966, 1985a) and Guatemala (Blackwelder 1944, Deloya et al. 2016). Major faunistic studies did not record additional specimens from Guatemala (Ratcliffe et al. 2013). No new data from Ecuador has been reported since Endrődi (1966).

Ancognatha rugulosa Endrődi, 1966

Ancognatha rugulosa Endrődi, 1966: 378–379 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966, Ratcliffe et al. 2013).

Distribution. MEXICO: Durango.

References. Endrődi 1966, 1985a, Ratcliffe and Morón 1997, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Ancognatha scarabaeoides Erichson, 1847

Ancognatha scarabaeoides Erichson, 1847a: 97 [original combination].
Cyclocephala scarabaeoides (Erichson) [new combination by Lacordaire 1856: 398, 399].
Ancognatha scarabaeoides Erichson [revised combination by Bates 1888: 297].
syn. *Chalepides unduavicus* Prokofiev, 2012: 3–5 [original combination].
Ancognatha scarabaeoides Erichson [synonymy by Prokofiev 2013: 131].

Types. Lectotype ♂ of *A. scarabaeoides* at ZMHB (Endrődi 1966). Holotype ♂ of *C. unduavicus* at IEE (Prokofiev 2012).

Distribution. BOLIVIA: Cochabamba, La Paz. COLOMBIA: Antioquia, Atlántico, Bogota, D. C., Boyacá, Caldas, Cauca, Cundinamarca, Huila, Meta, Nariño, Quindío, Risaralda, Santander, Tolima, Valle del Cauca. PANAMA: Chiriquí. PERU: Ancash, Apurimac, Cajamarca, Cusco, Huancavelica, Huánuco, Junín, La Libertad, Puno, San Martín. VENEZUELA.

References. Dejean 1833, 1836b, Sturm 1843, Erichson 1847a, 1848b, Burmeister 1847, Lacordaire 1856, Marschall 1857, Harold 1869b, Bates 1888, Arrow 1937b, Blackwelder 1944, Apolinar Maria 1946, Pike et al. 1976, Endrődi 1966, 1967b, 1985a, Ruiz and Posada 1986, Posada Ochoa 1989, Ruiz and Pamalpa 1990, Montoya et al. 1994, Díaz et al. 1997, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Marino et al. 2004, Lucero Malfa et al. 2006, Neita-Moreno and Gaigl 2008, Vallejo and Morón 2008, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012, Breeschoten et al. 2013, Prokofiev 2012, 2013, 2014, Ratcliffe et al. 2015, López-García et al. 2015, Figueroa and Ratcliffe 2016, Villalobos-Moreno et al. 2016, 2017.

Remarks. Prokofiev (2014) treated *A. scarabaeoides* ab. *unduavica* as an infrasubspecific entity (color variant) after treating the name as a synonym (Prokofiev 2013).

Ancognatha sellata Arrow, 1911

Ancognatha sellata Arrow, 1911: 170 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. EL SALVADOR: Chalatenango, Santa Ana. GUATEMALA: Alta Verapaz, Baja Verapaz, Chimaltenango, Chiquimula, El Progreso, Escuintla, Guatemala, Huehuetenango, Izabal, Jalapa, Quetzaltenango, Quiché, Sacatepéquez, San Marcos, Sololá, Suchitepéquez, Zacapa. HONDURAS: Cortés, El Paraíso, Francisco Morazán, Intibucá, La Paz, Lempira, Ocotepeque, Olancho. MEXICO: Chiapas, Oaxaca. NICARAGUA: Jinotega.

References. Arrow 1911, 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Morón-Ríos and Morón 2001, Ramírez-Salinas et al. 2004, Méndez-Aguilar et al. 2005, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Ancognatha ustulata (Burmeister, 1847)

Cyclocephala ustulata Burmeister, 1847: 39 [original combination].
Ancognatha ustulata (Burmeister) [new combination by Bates 1888: 297].
syn. *Ancognatha ustulata ustulatoides* Höhne, 1922d: 373–374 [original combination].
Ancognatha ustulata var. *ustulatoides* Höhne [new infrasubspecific status by Arrow 1937b: 6].
Ancognatha ustulata ab. *ustulatoides* Höhne [revised infrasubspecific status by Endrődi 1985a: 162].

Types. Lectotype ♂ of *C. ustulata* at MLUH (Endrődi 1966). Lectotype ♂ of *A. ustulata ustulatoides* at ZMHB (Endrődi 1966).

Distribution. COLOMBIA: Antioquia, Bogotá D. C., Boyacá, Caldas, Cauca, Chocó, Cundinamarca, Tolima, Valle del Cauca. ECUADOR. PERU: Pasco. VENEZUELA: Mérida.

References. Dejean 1833, 1836b, Sturm 1843, Burmeister 1847, Höhne 1922d, Arrow 1937b, Blackwelder 1944, Apolinar Maria 1946, Pike et al. 1976, Endrődi 1966, 1985a, Restrepo et al. 2003, Neita-Moreno and Morón 2008, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012, Breeschoten et al. 2013, López-García et al. 2015, Figueroa and Ratcliffe 2016.

Remarks. *Ancognatha ustulata ustulatoides* was a validly described subspecies (Höhne 1922d). The subspecies was considered an infrasubspecific entity after Arrow (1937b) and was referred to as an "ab." or "var." (e.g., see Endrődi 1966, 1985a). The name has not been clearly synonymized with *A. ustulata* (Burmeister), but was listed as a synonym by Krajcik (2005). Endrődi (1966, 1985a) reported *A. ustulata* from Mexico and Panama, but major faunistic studies have not found additional specimens from these countries (Ratcliffe 2003, Ratcliffe et al. 2013).

Ancognatha veliae Pardo-Locarno, Gonzalez, & Montoya-Lerma, 2006

Ancognatha veliae Pardo-Locarno, Gonzalez, & Montoya-Lerma, 2006: 64–67 [original combination].

Types. Holotype ♂ at MUSENUV (Pardo-Locarno et al. 2006).

Distribution. COLOMBIA: Chocó.

References. Pardo-Locarno et al. 2006, Gasca-Álvarez and Amat-García 2010, Krajcik 2012.

Ancognatha vexans Ratcliffe, 1992

Ancognatha vexans Ratcliffe, 1992d: 256–259 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992d).

Distribution. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Puntarenas, San José. PANAMA: Chiriquí.

References. Ratcliffe 1992d, 2002a, 2003, Krajcik 2005, 2012.

Ancognatha vulgaris Arrow, 1911

Ancognatha vulgaris Arrow, 1911: 169–170 [original combination].

syn. *Ancognatha* (*Pseudoancognatha*) *nigriventris* Otoya, 1945: 275–282 [original combination].

Ancognatha vulgaris Arrow [synonymy by Martínez 1965a: 64].

Types. Type of *A. vulgaris* at BMNH (Endrődi 1966). Holotype ♂ of *A. nigriventris* at ICN (Otoya 1945).

Distribution. BOLIVIA. BRAZIL: Amazonas. COLOMBIA: Antioquia, Boyacá, Cauca, Cundinamarca, Huila, Magdalena, Meta, Nariño, Norte de Santander, Quindío, Risaralda, Santander, Tolima. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. ECUADOR. PANAMA: Bocas del Toro, Chiriquí, Coclé, Panamá, Veraguas. PERU: Ayacucho, Cajamarca, Cuzco, Huánuco, La Libertad, Lima, Loreto, Pasco, Piura, San Martín, Ucayali. VENEZUELA: Mérida.

References. Arrow 1911, 1937b, Blackwelder 1944, Otoya 1945, Gutiérrez 1950, Martínez 1965a, Howden and Campbell 1974, Endrődi 1966, 1985a, Ruiz and Pamalpa 1990, Montoya et al. 1994, Restrepo et al. 2003, Ratcliffe 2002a, 2003, Onore 1997, 2005, Pardo-Locarno et al. 2005a, Útima and Vallejo 2008, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012, Moore 2012, Breeschoten et al. 2013, López-García et al. 2015, Ratcliffe et al. 2015, Dossey et al. 2016, Figueroa and Ratcliffe 2016, Mitasuhashi 2016, Villalobos-Moreno et al. 2016, 2017.

Remarks. Some authors attributed the name *A. humeralis* to Bates (1888) and subsequently treated this taxon as a synonym of *A. vulgaris* (e.g., Arrow 1937b, Endrődi 1966, 1985a, Krajcik 2005, 2012). Bates (1888) clearly attributed the name *A. humeralis* to Burmeister (1847), and his notes on this species should not be considered a description of a new species.

The identity and species status of *A. nigriventris* is ambiguous and needs clarification. *Ancognatha nigriventris* was described from male and female specimens collected in the Colombian departments of Meta and Santander (Otoya 1945). The species was placed in a new subgenus based on its relatively well-developed maxillary teeth (Otoya 1945). Gutiérrez (1950) discussed the subgenus and Martínez (1965a) implied that the species was a synonym of *A. vulgaris*. Endrődi (1966) remarked that he had not seen the type series, or any specimens, of *A. nigriventris* and treated the species as valid. Endrődi (1985a) did not further treat *A. nigriventris*. Some subsequent papers have cited the species from Colombia (Ruiz and Pamalpa 1990, Montoya et al. 1994), while others have ignored it (e.g., Restrepo et al. 2003 and Gasca-Álvarez and Amat-García 2010). *Ancognatha nigriventris* is reported from the Colombian states of Meta, Nariño, and Santander (Otoya 1945, Ruiz and Pamalpa 1990, Montoya et al. 1994).

Genus *ARRIGUTTIA* Martínez, 1960

Arriguttia Martínez, 1960a: 97–98 [original usage].

Type species. *Cyclocephala brevissima* Arrow, 1911, by monotypy.
Keys. Endrődi 1966, 1985a, Ratcliffe 1985, Jameson et al. 2002.
Valid taxa. 2 species.

Arriguttia bolivari Martínez, 1968

Arriguttia bolivari Martínez, 1968a: 185–188 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1968a).
Distribution. BRAZIL: Amazonas.
References. Martínez 1968a, Krajcik 2005, 2012.

Arriguttia brevissima (Arrow, 1911)

Cyclocephala brevissima Arrow, 1911: 175–176 [original combination].
Arriguttia brevissima (Arrow) [new combination by Martínez 1960a: 98].

Types. Type at BMNH (Endrődi 1966).
Distribution. BRAZIL: Mato Grosso, Pará. GUYANA. FRENCH GUIANA: Cayenne.
References. Arrow 1911, 1937b, Blackwelder 1944, Martínez 1960a, 1968a, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012, Ponchel 2006, 2011, 2015, Costa et al. 2017.

Genus *ASPIDOLEA* Bates, 1888

Aspidolea Bates, 1888: 296 [original usage].
syn. *Paraspidolea* Höhne, 1922a: 90–91 [original usage]. Type species: *Paraspidolea suturalis* Höhne, 1922, by original designation.
Aspidolea Bates [synonymy by Endrődi 1966: 338].

Type species. *Aspidolea singularis* Bates, 1888, by monotypy.

Keys. Arnett 1968 (USA), Endrődi 1966, 1985a, Morón 1979 (Veracruz, Mexico), Morón et al. 1985 (Chiapas, Mexico), Ratcliffe 1985, Dechambre 1992, Maes 1994 (Nicaragua), Jameson et al. 2002, Ratcliffe 2003 (Costa Rica and Panama), Ratcliffe and Cave 2006 (Honduras, Nicaragua, and El Salvador), Neita-Moreno et al. 2007 (larvae), Gasca-Álvarez and Amat-García 2010 (Colombia), Pardo-Locarno 2013 (Valle del Cauca, Colombia), Ratcliffe et al. 2013 (Guatemala, Belize, and Mexico).

Valid taxa. 24 species.

Aspidolea bleuzeni Dechambre, 1992

Aspidolea bleuzeni Dechambre, 1992: 73, 74–75 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. FRENCH GUIANA: Kourou, Roura, St.-Laurent du Maroni.

References. Dechambre 1992, Touroult et al. 2010, Ponchel 2011, Krajcik 2005, 2012.

Aspidolea boulardi Dechambre, 1992

Aspidolea boulardi Dechambre, 1992: 73, 74 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. BRAZIL: Pará.

References. Dechambre 1992, Krajcik 2005, 2012, Breeschoten et al. 2013.

Aspidolea brunnea Höhne, 1922

Aspidolea brunnea Höhne, 1922a: 90 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba, La Paz, Santa Cruz. COLOMBIA: Cundinamarca, Meta. PERU: Ayacucho, Cusco, Madre de Dios, Puno.

References. Höhne 1922a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Restrepo-Giraldo et al. 2003, Krajcik 2005, 2012, López-García et al. 2015, Ratcliffe et al. 2015).

Aspidolea chalumeaui Endrődi, 1977

Aspidolea chalumeaui Endrődi, 1977a: 5–6 [original combination].

Types. Holotype ♂ at HNHM (Dechambre 1992).
Distribution. BRAZIL: Mato Grosso.
References. Endrődi 1977a, 1985a, Dechambre 1992, Krajcik 2005, 2012.

Aspidolea cognata Höhne, 1922

Aspidolea cognata Höhne, 1922a: 83–84 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).
Distribution. COLOMBIA: Boyacá, Cauca, Cundinamarca, Risaralda. ECUADOR: Morona-Santiago. PERU. VENEZUELA: Aragua, Capital District (Caracas).
References. Höhne 1922a, Arrow 1937b, Blackwelder 1944, Roze 1955, Martínez 1975, Endrődi 1966, 1985a, Restrepo-Giraldo et al. 2003, Krajcik 2005, 2012, Breeschoten et al. 2013, López-García et al. 2015.
Remarks. Ratcliffe et al. (2013) do not record *A. cognata* from Mexico, Guatemala, or Belize. The data from Mexico previously reported for *A. cognata* may be erroneous (Höhne 1922a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Ratcliffe et al. 2013).

Aspidolea collaris Endrődi, 1966

Aspidolea collaris Endrődi, 1966: 342, 346–347 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).
Distribution. PERU: Madre de Dios.
References. Endrődi 1966, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Aspidolea clypeata (Burmeister, 1847)

Cyclocephala clypeata Burmeister, 1847: 42 [original combination].
Aspidolea clypeata (Burmeister) [new combination by Höhne 1922a: 81].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. BOLIVIA: Beni. COLOMBIA. FRENCH GUIANA: Cayenne, Mana, St.-Laurent du Maroni. GUYANA: Upper Demerara-Berbice.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Gruner 1971, Pike et al. 1976, Endrődi 1966, Endrődi 1973a, 1985a, Restrepo-Giraldo et al. 2003, Ponchel 2011, Krajcik 2005, 2012.

Remarks. *Aspidolea clypeata* possibly occurs in Mato Grosso, Brazil based on reported locality data for the unavailable name *A. clypeata* ab. *brasiliana* (Endrődi 1966).

Aspidolea ecuadoriana Endrődi, 1985

Aspidolea ecuadoriana Endrődi, 1985b: 74 [original combination].

Types. Holotype ♂ at JPVC (Colette Voirin) (Endrődi 1985b).

Distribution. ECUADOR: Pichincha.

References. Endrődi 1985b, Krajcik 2005, 2012.

Aspidolea epipleuralis Höhne, 1922

Aspidolea epipleuralis Höhne, 1922a: 84–85 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).

Distribution. ECUADOR: Morona-Santiago.

References. Höhne 1922a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Aspidolea fuliginea (Burmeister, 1847)

Cyclocephala fuliginea Burmeister, 1847: 42 [original combination].
Paraspidolea fuliginea (Burmeister) [new combination by Höhne 1922a: 81, 91].
Aspidolea fuliginea (Burmeister) [new combination by Endrődi 1966: 348–350.

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. ARGENTINA. BELIZE: Cayo, Stann Creek, Toledo. BRAZIL. COLOMBIA: Antioquia, Bolívar, Boyacá, Caldas, Cauca, Chocó, Cundinamarca, Meta, Risaralda, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Heredia, Limón, Puntarenas, San José. ECUADOR: Guayas. EL SALVADOR: Ahuachapán, Cuscatlán, La Libertad. GUATEMALA: Alto Verapaz, Baja Verapaz, Chimaltenango, Escuintla, Guatemala, Huehuetenango, Izabal, Jutiapa, Petén, Sacatepéquez, San Marcos, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Choluteca, Comayagua, Cortés, Francisco Morazán, Gracias a Dios, Lempira, Olancho, Yoro. MEXICO: Chiapas, Guerrero, Hidalgo, Jalisco, Morelos, Oaxaca, Puebla, Tabasco, Veracruz. NICARAGUA: Masaya, Río San Juan. PANAMA: Bocas del Toro, Panama Canal Zone, Chiriquí, Colón, Darien, Panamá. PERU: Cusco, Madre de Dios, Puno. TRINIDAD AND TOBAGO: Trinidad (Couva-Tabaquite-Talparo). VENEZUELA: Capital District (Caracas), Mérida.

References. Bates 1888, Arrow 1937b, Martorell and Salas 1939, Blackwelder 1944, Roze 1955, Pike et al. 1976, Endrődi 1966, 1985a, Morón 1979, Thomas 1993, Lobo and Morón 1993, Morón 1994, Ratcliffe and Morón 1997, Navarrete-Heredia et al. 2001, Carrillo-Ruiz and Morón 2003, Ratcliffe 2002a, 2003, Restrepo-Giraldo et al. 2003, Espino 2005, Pardo-Locarno et al. 2003, 2005a, Neita-Moreno et al. 2006, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Núñez-Avellaneda and Rojas-Robles 2008, Útima and Vallejo 2008, García-López et al. 2011, Neita-Moreno 2011, Krajcik 2005, 2012, Moore 2012, Breeschoten et al. 2013, Pardo-Locarno 2013, Deloya et al. 1993, 2014, López-García et al. 2015, Ratcliffe et al. 2013, 2015.

Aspidolea gaudairethorei Endrődi, 1980

Aspidolea gaudairethorei Endrődi, 1980: 39–40 [original combination].

Types. Holotype ♀ in André Gaudaíre-Thore Collection (Sens, France) (Endrődi 1980).

Distribution. FRENCH GUIANA: Cayenne, Roura.

References. Endrődi 1980, 1985a, Touroult et al. 2010, Ponchel 2011, Krajcik 2005, 2012.

Aspidolea helleri (Höhne, 1922)

Paraspidolea helleri Höhne, 1922b: 371 [original combination].
Aspidolea helleri (Höhne) [new combination by Endrődi 1966: 341, 351].

Types. Lectotype ♂ at MTD (Dechambre 1992).

Distribution. BRAZIL: Pará. FRENCH GUIANA: Cayenne. SURINAME.

References. Höhne 1922b, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Dechambre 1979a, 1992, Krajcik 2005, 2012.

Aspidolea kuntzeni Höhne, 1922

Aspidolea kuntzeni Höhne, 1922a: 87–89 [original combination].
syn. *Aspidolea pygidialis* Höhne, 1922a: 89–90 [original combination].
Aspidolea kuntzeni ab. *pygidialis* Höhne [new status by Endrődi 1966: 351].
Aspidolea kuntzeni Höhne [synonymy by Ratcliffe 2002a: 32].

Types. Holotype of *A. kuntzeni* at ZMHB (Endrődi 1966). Holotype of *A. pygidialis* at ZMHB (Endrődi 1966).

Distribution. COLOMBIA: Chocó, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. PANAMA: Bocas del Toro, Panama Canal Zone, Darien, Panamá. SURINAME. VENEZUELA: Aragua, Capital District (Caracas), Carabobo, Mérida.

References. Höhne 1922a, Arrow 1937b, Blackwelder 1944, Roze 1955, Endrődi 1966, 1985a, Poole and Gentili 1996, Ratcliffe 2002a, 2003, Restrepo-Giraldo et al. 2003, Neita-Moreno 2011, Krajcik 2005, 2012

Remarks. Endrődi (1966, 1985a) erroneously reported *A. kuntzeni* from the United States (New Mexico) (Ratcliffe 2003).

Aspidolea laticeps (Harold, 1869)

Cyclocephala laticeps Harold, 1869a: 124 [original combination].
Aspidolea laticeps (Harold) [new combination by Höhne 1922a: 81].
syn. *Cyclocephala clypeata* Erichson, 1847a: 97 [original combination].
Cyclocephala laticeps Harold [new replacement name by Harold 1869a: 124, homonym of *Cyclocephala clypeata* Burmeister, 1847: 42–43].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. PERU: Pasco. VENEZUELA: Carabobo.

References. Erichson 1847a, Burmeister 1847, Harold 1869a, Arrow 1937b, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Aspidolea lindae Ratcliffe, 1977

Aspidolea lindae Ratcliffe, 1977: 429–430 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1977).

Distribution. COLOMBIA: Amazonas. PERU.

References. Ratcliffe 1977, Dupuis 1999, Restrepo-Giraldo et al. 2003, Krajcik 2005, 2012, Otavo et al. 2013, Ratcliffe et al. 2015.

Aspidolea mimethes (Höhne, 1922)

Paraspidolea mimethes Höhne, 1922a: 93–94 [original combination].
Aspidolea mimethes (Höhne) [new combination by Endrődi 1966: 342, 353–354].

Types. Male type was not found. A female type is at MTD (Endrődi 1966).

Distribution. PERU: Pasco.

References. Höhne 1922a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Aspidolea notaticollis Höhne, 1922

Aspidolea notaticollis Höhne, 1922a: 86 [original combination].
syn. *Aspidolea bigutticollis* Höhne, 1922a: 87 [original combination].
Aspidolea notaticollis Höhne [synonymy by Endrődi 1966: 339, 354].
syn. *Aspidolea tibialis* Höhne, 1922a: 85–86 [original combination].
Aspidolea notaticollis ab. *tibialis* (Höhne) [new infrasubspecific status by Endrődi 1980: 41].

Types. Holotype ♂ of *A. notaticollis*, type of *A. bigutticollis*, and holotype ♂ of *A. tibialis* at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba. COLOMBIA: Antioquia, Chocó, Cundinamarca, Meta, Tolima. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Puntarenas. ECUADOR: Morona-Santiago, Orellana, Pastaza. PANAMA: Bocas del Toro, Colón, Darien, Panama Canal Zone. PERU: Ayacucho, Huánuco, Junín, Madre de Dios, Cusco, Pasco.

References. Höhne 1922a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1980, 1985a, Ratcliffe 2002a, 2003, Restrepo-Giraldo et al. 2003, García-López et al. 2010, Neita-Moreno 2011, Krajcik 2005, 2012, Moore 2012, López-García et al. 2015, Ratcliffe et al. 2015.

Aspidolea pelioptera (Burmeister, 1847)

Cyclocephala pelioptera Burmeister, 1847: 42 [original combination].
Paraspidolea pelioptera (Burmeister) [new combination by Höhne 1922a: 81, 91].
Aspidolea pelioptera (Burmeister) [new combination by Endrődi 1966: 338, 343, 355–356].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires. BRAZIL: Espírito Santo, Paraná, Rio de Janeiro, Rio Grande so Sul, Santa Catarina, São Paulo.

References. Burmeister 1847, Harold 1869b, Höhne 1922a, Arrow 1937b, Blackwelder 1944, Guimarães 1944, Pike et al. 1976, Endrődi 1966, 1985a, Grossi et al. 2011, Krajcik 2005, 2012, Fuhrmann 2013.

Aspidolea pokornyi **Dupuis, 2014**

Aspidolea pokornyi Dupuis, 2014: 54–56 [original combination].

Types. Holotype ♂ in Pokorny Collection (Prague, Czech Republic) (Dupuis 2014).
Distribution. ECUADOR: Napo.
References. Dupuis 2014.

Aspidolea quadrata **Endrődi, 1980**

Aspidolea quadrata Endrődi, 1980: 40–41 [original combination].

Types. Holotype ♂ in André Gaudaíre-Thore Collection (Sens, France) (Endrődi 1980).
Distribution. FRENCH GUIANA: Kourou, Roura, Sinnamary.
References. Endrődi 1980, 1985a, Gibernau et al. 2003, Touroult et al. 2010, Krajcik 2005, 2012, Dupuis 2014, Ponchel 2006, 2015.

Aspidolea singularis **Bates, 1888**

Aspidolea singularis Bates, 1888: 296–297 [original combination].
syn. *Aspidolea cevallosi* Martínez, 1975a: 307–313 [original combination].
Aspidolea singularis Bates [synonymy by Endrődi 1985a: 155].
syn. *Aspidolea similis* Höhne, 1922a: 82–83 [original combination].
Aspidolea singularis ab. *similis* (Höhne) [new infrasubspecific status by Endrődi 1966: 356].
Aspidolea singularis Bates [synonymy by Ratcliffe 2002a: 27].
syn. *Aspidolea texana* Höhne, 1922a: 84 [original combination].
Aspidolea singularis Bates [synonymy by Endrődi 1966: 356].

Types. Type of *A. singularis* at BMNH (Endrődi 1966). Holotypes of *A. texana* and *A. similis* both at ZMHB (Endrődi 1966). Holotype ♂ of *A. cevallosi* at MACN (Antonio Martínez Collection) (Martínez 1975).

Distribution. BELIZE: Cayo, Stann Creek. BRAZIL. COLOMBIA: Amazonas, Antioquia, Boyacá, Cauca, Chocó, Cundinamarca, Meta, Risaralda, Santander, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. ECUADOR: Bolívar, Guayas, Loja, Los Ríos. EL SALVADOR: Ahuachapán, La Libertad, Morazán, San Salvador, Santa Ana. GUATEMALA: Alta Veracruz, Baja Veracruz, Chiquimula, El Progresso, Escuintla, Huehuetenango, Izabal, Quetzaltenango, Quiché, Retalhuleu, San Marcos, Santa Rosa, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Choluteca, Copán, Cortés, El Paraíso, Francisco Morazán, Gracias a Dios, Lempira, Olancho, Santa Bárbara, Yoro. MEXICO: Chiapas, Oaxaca, Puebla, Tabasco, Veracruz. NICARAGUA: Chontales, Jinotega, Matagalpa, Nueva Segovia, RAA Norte, Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Darien, Herrera, Panamá, Panama Canal Zone, San Blas, Veraguas. PERU.

References. Bates 1888, Höhne 1922a, Arrow 1937b, Blackwelder 1944, Martínez 1975, Endrődi 1966, 1985a, Morón et al. 1985, Palacios-Rios et al. 1990, Thomas 1993, Maes 1987, 1994, Poole and Gentili 1996, Ratcliffe and Morón 1997, Dupuis 1999, Elizondo-Solís 2002, Ratcliffe 2002a, 2003, Restrepo-Giraldo et al. 2003, Pardo-Locarno et al. 2003, 2005a, Huerta-Espino 2005, Neita-Moreno et al. 2006, 2007, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Útima and Vallejo 2008, Neita-Moreno 2011, Krajcik 2005, 2012, García-López et al. 2010, 2011, 2013, Pardo-Locarno 2013, Otavo et al. 2013, Yepes-Rodriguez et al. 2013, López-García et al. 2015, Ratcliffe et al. 2013, 2015.

Remarks. *Aspidolea singularis* was reported from San Antonio, Texas (United States) (Höhne 1922a, Blackwelder and Blackwelder 1948, Endrődi 1966, 1985a). Saylor (1945) suggested that these data were likely erroneous. More complete data indicate that the northern range limit of *A. singularis* is near the state of Puebla, Mexico (Ratcliffe et al. 2013).

Aspidolea suturalis (Höhne, 1922)

Paraspidolea suturalis Höhne, 1922a: 91–92 [original combination].
Aspidolea suturalis (Höhne) [new combination by Endrődi 1966: 338, 341, 357–358].
syn. *Paraspidolea ohausi* Höhne, 1922a: 94–95 [original combination].
Aspidolea suturalis (Höhne) [synonymy by Endrődi 1966: 357].

Types. Holotypes of *P. suturalis* and *P. ohausi* at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba, La Paz, Yungas. COLOMBIA: Antioquia. ECUADOR: Bolívar, Loja. PERU: Ayacucho. VENEZUELA: Mérida.

References. Höhne 1922a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Restrepo-Giraldo et al. 2003, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Remarks. Endrődi (1966, 1985a) reported *A. suturalis* from Mexico, but this is likely an erroneous record (Ratcliffe et al. 2013).

Aspidolea suturella (Höhne, 1922)

Paraspidolea suturella Höhne, 1922a: 95 [original combination].
Aspidolea suturella (Höhne) [new combination by Endrődi 1966: 338, 342, 358–359].

Types. Holotype ♂ at ZMHB (Endrődi 1966).

Distribution. COLOMBIA: Antioquia, Cauca, Cundinamarca, Valle de Cauca.

References. Höhne 1922a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Restrepo-Giraldo et al. 2003, Krajcik 2005, 2012.

Aspidolea testacea (Höhne, 1922)

Paraspidolea testacea Höhne, 1922a: 92–93 [original combination].
Aspidolea testacea (Höhne) [new combination by Endrődi 1966: 338, 342, 359].

Types. Holotype ♂ at ZMHB (Endrődi 1966).
Distribution. BOLIVIA. COLOMBIA.
References. Höhne 1922a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Restrepo-Giraldo et al. 2003, Krajcik 2005, 2012.

Aspidolea theresae Dupuis, 1999

Aspidolea theresae Dupuis, 1999: 186–187 [original combination].

Types. Holotype ♂ at MNHN (Dupuis 1999).
Distribution. ECUADOR: Napo.
References. Dupuis 1999, Krajcik 2005, 2012.

Aspidolea vicina Dechambre, 1992

Aspidolea vicina Dechambre, 1992: 73, 74 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).
Distribution. BRAZIL: Pará.
References. Dechambre 1992, Krajcik 2005, 2012.

Genus *AUGODERIA* Burmeister, 1847

Augoderia Burmeister, 1847: 33–34 [original usage].

Type species. *Augoderia nitidula* Burmeister 1847, by monotypy.
Keys. Endrődi 1966, 1985a, Ratcliffe 1985, Jameson et al. 2002.
Valid taxa. 5 species and subspecies.

Augoderia boliviana Endrődi, 1981

Augoderia boliviana Endrődi, 1981: 198 [original combination].

Types. Holotype ♂ at ZSMC (Endrődi 1981).

Distribution. BOLIVIA: Santa Cruz.

References. Endrődi 1981, 1985a, Ponchel 2009, Krajcik 2005, 2012.

Augoderia freyi Endrődi, 1967

Augoderia freyi Endrődi, 1967a: 407–409 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1967a).

Distribution. BOLIVIA. PERU: Madre de Dios.

References. Endrődi 1967a, 1981, 1985a, Ponchel 2009, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Augoderia giuglarisi Ponchel, 2009

Augoderia giuglarisi Ponchel, 2009: 183–184 [original combination].

Types. Holotype ♂ in the Yannig Ponchel Collection (Ponchel 2009).

Distribution. FRENCH GUIANA.

References. Ponchel 2009, Krajcik 2012.

Augoderia nitidula nitidula Burmeister, 1847

Augoderia nitidula Burmeister, 1847: 34 [original combination].

Types. Lectotype at MLUH (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires, Misiones. BOLIVIA: Cochabamba, Santa Cruz. BRAZIL: Minas Gerais, São Paulo, Paraná. VENEZUELA: Caracas.

References. Burmeister 1847, Harold 1869b, Ohaus 1909, Arrow 1937b, Anonymous 1900, 1940, Blackwelder 1944, Guimarães 1944, Lima 1953, Martínez 1966, Gibbs et al. 1977, Endrődi 1966, 1981, 1985a, Riehs 2005, Ronqui and Lopes 2006, Ponchel 2009, Grossi et al. 2011, Krajcik 2005, 2012, Breeschoten et al. 2013.

Augoderia nitidula yungana Martínez, 1966

Augoderia nitidula yungana Martínez, 1966: 73–75 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1966).

Distribution. BOLIVIA: Cochabamba.

References. Martínez 1966, Endrődi 1985a, Ponchel 2009, Krajcik 2005, 2012.

Genus *CHALEPIDES* Casey, 1915

Parachalepus (*Chalepides*) Casey, 1915: 176–177 [original usage]. Proposed as a subgenus.
Chalepides Casey [new genus status by Prell 1936: 151; see also Arrow 1937a: 36].
syn. *Parachalepus* (*Parachalepus*) Casey, 1915: 175–176 [original usage]. *Parachalepus* Casey is a junior homonym of *Parachalepus* Baly, 1885.

Type species. *Parachalepus* (*Chalepides*) *eucephalus* Casey, 1915, by original designation.
Keys. Casey 1915, Endrődi 1966, 1985a, Jameson et al. 2002, Joly and Escalona 2002a, Gasca-Álvarez and Amat-García 2010 (Colombia).
Valid taxa. 15 species.

Chalepides alliaceus (Burmeister, 1847)

Chalepus alliaceus Burmeister, 1847: 77 [original combination].
Dyscinetus alliaceus (Burmeister) [new combination by Harold 1869a: 123].
Parachalepus (*Chalepides*) *alliaceus* (Burmeister) [new combination and new subgeneric classification by Casey 1915: 176].
Chalepides alliaceus (Burmeister) [new combination by Prell 1936: 151].

Types. Lectotype ♂ at MLUH (Endrődi 1966, Joly and Escalona 2002a).
Distribution. BOLIVIA: Beni, Santa Cruz. BRAZIL: Mato Grosso, Mato Grosso do Sul, Paraná, Rio de Janeiro.
References. Burmeister 1847, Harold 1869a, Ohaus 1909, Casey 1915, Prell 1936, Arrow 1937b, Anonymous 1940, Blackwelder 1944, Endrődi 1966, 1973a, 1985a, Joly and Escalona 2002a, Riehs 2005, Krajcik 2005, 2012.

Chalepides anomalus Martínez, 1978

Chalepides anomalus Martínez, 1978b: 17–19 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1978b, Joly and Escalona 2002a).
Distribution. ARGENTINA: Corrientes, Entre Ríos. URUGUAY: Artigas.
References. Martínez 1978b, Endrődi 1985a, Joly and Escalona 2002a, Krajcik 2005, 2012.

***Chalepides barbatus* (Fabricius, 1787)**

Scarabaeus barbatus Fabricius, 1787: 10 [original combination].
Melolontha barbata (Fabricius) [new combination by Fabricius 1801: 167].
Chalepus barbatus (Fabricius) [new combination by Burmeister 1847: 77].
Dyscinetus barbatus (Fabricius) [new combination by Harold 1869a: 123].
Parachalepus (*Parachalepus*) *barbatus* (Fabricius) [new combination and new subgeneric classification by Casey 1915: 175].
Chalepides barbatus (Fabricius) [new combination by Prell 1936: 151].
syn. *Chalepides hydrophiloides argentinus* Prell, 1937c: 9 [original combination].
Chalepides barbatus argentinus Prell [new subspecific status by Endrődi 1966: 403].
Chalepides barbatus (Fabricius) [synonymy by Ratcliffe and Cave 2015: 71].

Types. Lectotype ♀ of *S. barbatus* deposited at ZMUK, now housed at ZMUC (Endrődi 1966). Lectotype ♀ of *C. hydrophiloides argentinus* at ZMHB (Endrődi 1966).

Distribution. ANTIGUA: St. Philip. ARGENTINA: Buenos Aires, Corrientes, Entre Ríos, Santa Fe. BRAZIL: Mato Grosso, Rio Grande do Sul, Santa Catarina, São Paulo. BRITISH VIRGIN ISLANDS: Anegada. DOMINICAN REPUBLIC: Distrito Nacional, Duarte, Espaillat, Hato Mayor, La Altagracia, La Vega, María Trinidad Sánchez, Monseñor Nouel, Puerto Plata, Samana, San Cristóbal, San Juan. MARTINIQUE: Fort-de-France. PARAGUAY: Alto Paraná, Caaguazú, Itapúa, Misiones, San Pedro. PUERTO RICO: Aguada, Aguadilla, Añasco, Arecibo, Barceloneta, Barranquitas, Bayamón, Cabo Rojo, Caguas, Camuy, Carolina, Cataño, Cayey, Ciales, Fajardo, Florida, Guánica, Guaynabo, Isabela, Jayuya, Lajas, Lares, Las Piedras, Loiza, Luquillo, Manatí, Maricao, Mayagüez, Morovis, Nagüabo, Patillas, Ponce, Quebradillas, Rincón, Río Grande, San Germán, San Juan, Santa Isabel, Toa Baja, Utuado, Vega Alta, Vega Baja, Villalba. SAINT BARTHÉLEMY: Lorient. SAINT KITTS AND NEVIS: St. Kitts, Nevis. SAINT LUCIA: Micoud, Vieux Fort. SAINT MARTIN. SAINT VINCENT: St. Andrew, St. David. URUGUAY: Artigas, Colonia. UNITED STATES VIRGIN ISLANDS: St. Croix, St. Thomas.

References. Fabricius 1787, 1801, Dejean 1821, 1833, 1836b, Moritz 1836, Sturm 1843, Burmeister 1847, Reiche 1859, Harold 1869a, Stahl 1882, Casey 1915, Smyth 1916, Leng and Mutchler 1917, Stevenson 1918, Box 1925, Wolcott 1936, 1937, Prell 1937c, Paulian 1947, Van Dinther 1960, Zimsen 1964, Barrera 1969, Miskimen and Bond 1970, Chalumeau 1982, Endrődi 1966, 1985a, Audureau 2001, Joly and Escalona 2002a, Soave et al. 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe and Cave 2015, Peck 2009, 2016.

Remarks. *C. barbatus* was reported from Guatemala (Bates 1888) and Cuba (Endrődi 1966, 1985a), but major faunistic studies have not found additional specimens from these countries (Ratcliffe et al. 2013, Ratcliffe and Cave 2015).

Chalepides carinatus **Joly & Escalona, 2002**

Chalepides carinatus Joly & Escalona, 2002a: 42, 44, 65–67 [original combination].

Types. Holotype ♂ at USNM (Joly and Escalona 2002a).

Distribution. ARGENTINA: Buenos Aires. BRAZIL: Rio Grande do Sul. URUGUAY: Montevideo.

References. Joly and Escalona 2002a, Krajcik 2005, 2012.

Chalepides comes **Prell, 1937**

Chalepides comes Prell, 1937a: 187 [original combination].
syn. *Chalepides punctulatus* Arrow, 1937a [original combination].
Chalepides comes Prell [synonymy by Endrődi 1966: 405].
syn. *Chalepides semipunctatus* Prell, 1937c: 8 [original combination].
Chalepides comes Prell [synonymy by Endrődi 1966: 405].

Types. Lectotype ♀ of *C. comes* and lectotype ♂ of *C. semipunctatus* both at ZMHB (Endrődi 1966). Type of *C. punctulatus* at BMNH (Endrődi 1966).

Distribution. BOLIVIA: Beni, Santa Cruz. BRAZIL: Amapá, Bahia, Distrito Federal, Mato Grosso, Minas Gerais, Pará, Pernambuco, Rio Grande do Sul, São Paulo. COLOMBIA: Antioquia, Bolívar. FRENCH GUIANA. PARAGUAY: Amambay, San Pedro. VENEZUELA: Amazonas, Apure, Bolívar, Guárico, Monagas, Táchira.

References. Arrow 1937a, b, Prell 1937a, c, Blackwelder 1944, Roze 1955, Martínez 1978b, Endrődi 1966, 1985a, Joly and Escalona 2002a, Restrepo-Giraldo et al. 2003, Gasca-Álvarez and Amat-García 2010, Ponchel 2011, Krajcik 2005, 2012.

Chalepides dilatatus **(Mannerheim, 1829)**

Apogonia dilatata Mannerheim, 1829: 55–56 [original combination].
Chalepus dilatatus (Mannerheim) [new combination by Burmeister 1847: 77].
Dyscinetus dilatatus (Mannerheim) [new combination by Harold 1869a: 123].
Chalepides dilatatus (Mannerheim) [new combination by Arrow 1937b: 18].

Types. Lectotype ♀ at ZMH (Endrődi 1966).

Distribution. BRAZIL: Minas Gerais, São Paulo.

References. Mannerheim 1829, Burmeister 1847, Harold 1869a, Arrow 1937b, Endrődi 1966, 1985a, Joly and Escalona 2002a, Krajcik 2005, 2012.

Chalepides eucephalus **(Casey, 1915)**

Parachalepus (*Chalepides*) *eucephalus* Casey, 1915: 176–177 [original combination].
Chalepides eucephalus (Casey) [new combination by Prell 1936: 151].

Types. Holotype ♀ at USNM (Endrődi 1966, Joly and Escalona 2002a).

Distribution. BRAZIL: Espírito Santo. PARAGUAY: Alto Paraná.

References. Casey 1915, Prell 1936, Endrődi 1966, 1981, 1985a, Joly and Escalona 2002a, Krajcik 2005, 2012.

Chalepides euhirtus **Prokofiev, 2012**

Chalepides euhirtus Prokofiev, 2012: 1–2 [original combination].

Types. Holotype ♀ at IEE (Prokofiev 2012).

Distribution. Peru: Junín.

References. Prokofiev 2012.

Remarks. Based on the original description and figures of the holotype, *C. euhirtus* was described from a misidentified female specimen of *Aspidolea fuliginea*.

Chalepides fuliginosus **(Burmeister, 1847)**

Chalepus fuliginosus Burmeister, 1847: 78 [original combination].
Dyscinetus fuliginosus (Burmeister) [new combination by Harold 1869a: 123].
Parachalepus (*Chalepides*) *fuliginosus* (Burmeister) [new combination and new subgeneric classification by Casey 1915: 176].
Chalepides fuliginosus (Burmeister) [new combination by Prell 1936: 151].

Types. Lectotype ♀ at MLUH (Endrődi 1966).

Distribution. ARGENTINA: Misiones. BOLIVIA: Santa Cruz. BRAZIL: Espírito Santo, Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, São Paulo, Santa Catarina. CHILE: Santiago. URUGUAY: Artigas.

References. Burmeister 1847, Harold 1869a, Casey 1915, Prell 1936, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Joly and Escalona 2002a, Grossi et al. 2011, Krajcik 2005, 2012.

Remarks. *Chalepides fuliginosus* was collected at lights at night in Wakayama, Japan, but a population has not established there (Kusui 1992).

Chalepides howdenorum **Joly & Escalona, 2002**

Chalepides howdenorum Joly & Escalona, 2002a: 42, 43, 57–59 [original combination].

Types. Holotype ♂ at CNC (Joly and Escalona 2002a).

Distribution. BOLIVIA: Beni.

References. Joly and Escalona 2002a, Krajcik 2005, 2012.

Chalepides hydrophiloides **(Burmeister, 1847)**

Chalepus hydrophiloides Burmeister, 1847: 77 [original combination].
Dyscinetus hydrophiloides (Burmeister) [new combination by Harold 1869a: 123].
Dyscinetus barbatus (Fabricius) [synonymy by Bates 1888: 313].
Parachalepus (*Parachalepus*) *hydrophiloides* (Burmeister) [revalidated status, new combination, and new subgeneric classification by Casey 1915: 175].
Chalepides hydrophiloides (Burmeister) [new combination by Prell 1936: 151].
Chalepides barbatus (Fabricius) [synonymy by Arrow 1937b: 18].
Chalepides barbatus hydrophiloides (Burmeister) [new subspecies status by Endrődi 1966: 403].
Chalepides hydrophiloides (Burmeister) [revalidated species status by Joly and Escalona 2002a: 41, 43, 49].
syn. *Parachalepus* (*Parachalepus*) *rhomboidalis* Casey, 1915: 175 [original combination].
Chalepides rhomboidalis (Casey) [new combination by Prell 1936: 151].
Chalepides barbatus (Fabricius) [synonymy by Arrow 1937b: 18].
Chalepides barbatus hydrophiloides (Burmeister) [synonymy by Endrődi 1966: 403].
syn. *Chalepides acillioides* Prell, 1937c: 8–9 [original combination].
Chalepides barbatus hydrophiloides (Burmeister) [synonymy by Endrődi 1966: 403].

Types. Lectotype ♀ of *C. hydrophiloides* at MLUH (Endrődi 1966). Type of *C. rhomboidalis* at USNM (Endrődi 1966). Lectotype ♂ of *C. acillioides* at ZMHB (Endrődi 1966).

Distribution. ARGENTINA: Chaco, Santa Fe. BOLIVIA. BRAZIL: Bahia, Espírito Santo, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, São Paulo. PARAGUAY: Distrito Capital. URUGUAY: Artigas, Canelones, Cerro Largo, Durazno, Florida, Maldonado, Montevideo, Rivera, Treinta y Tres.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Steinheil 1874, Bates 1888, Tremoleras 1910, Casey 1915, Heikertinger 1919, Arrow 1937b, Prell 1936, 1937c, Endrődi 1966, 1969a, 1985a, Saenz and Morelli 1985, Joly and Escalona 2002a, Krajcik 2005, 2012.

Chalepides luridus (Burmeister, 1847)

Chalepus luridus Burmeister, 1847: 78 [original combination].
Dyscinetus luridus (Burmeister) [new combination by Harold 1869a: 123].
Parachalepus (*Parachalepus*) *luridus* (Burmeister) [new combination and new subgeneric classification by Casey 1915: 175].
Chalepides luridus (Burmeister) [new combination by Prell 1936: 151].

Types. Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966). Joly and Escalona (2002a) listed the housing institution as MLUH.

Distribution. ARGENTINA: Buenos Aires, Chaco Misiones, Corrientes, Entre Ríos, Formosa, Santa Fe, Tucumán. BOLIVIA: Beni, La Paz, Santa Cruz. BRAZIL: Mato Grosso, Rio Grande so Sul. PARAGUAY: Cordillera, Paraguarí. URUGUAY: Canelones, Florida, Montevideo, Salto, Soriano.

References. Burmeister 1847, Harold 1869a, Frenzel 1891, Casey 1915, Prell 1936, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1969a, 1973a, 1985a, Saenz and Morelli 1985, Joly and Escalona 2002a, Krajcik 2005, 2012.

Chalepides narcisoi Martínez, 1978b

Chalepides narcisoi Martínez, 1978b: 15–17 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1978b).

Distribution. BRAZIL: Goiás, Mato Grosso, Minas Gerais. PARAGUAY: Caaguazú, Concepción.

References. Martínez 1978b, Endrődi 1985a, Joly and Escalona 2002a, Krajcik 2005, 2012.

Chalepides osunai Joly & Escalona, 2002

Chalepides osunai Joly & Escalona, 2002a: 42, 43, 55–57 [original combination].

Types. Holotype ♂ at MIZA (Joly and Escalona 2002a).

Distribution. VENEZUELA: Amazonas, Apure, Aragua, Guárico.

References. Joly and Escalona 2002a, Krajcik 2005, 2012.

Chalepides unicolor (Endrődi, 1963)

Cyclocephala unicolor Endrődi, 1963: 331 [original combination].
Chalepides unicolor (Endrődi) [new combination by Endrődi 1964: 466].
Chalepides luridus (Burmeister) [synonymy by Endrődi 1966: 408].

Chalepides unicolor (Endrődi) [revalidated species status by Joly and Escalona 2002a: 42, 43, 64].

Types. Holotype ♂ at ZSMC (Endrődi 1966).

Distribution. ARGENTINA: La Rioja. BOLIVIA: Beni, La Paz, Santa Cruz. BRAZIL: Amapá, Amazonas, São Paulo, Rondônia.

References. Pike et al. 1976, Endrődi 1963, 1964, 1966, 1985a, Joly and Escalona 2002a, Krajcik 2005, 2012.

Genus *CYCLOCEPHALA* Dejean, 1821

Cyclocephala Dejean, 1821: 57 [original useage].

syn. *Aclinidia* Casey, 1915: 113 [original usage]. Type species: *Melolontha castanea* Olivier, by original designation.

Cyclocephala (*Aclinidia*) Casey [new subgenus status by Arrow 1937b: 8].

Cyclocephala Dejean [synonymy by Endrődi 1966: 34].

syn. *Albridarollia* Bolívar y Pieltain, Jiménez-Asúa, & Martínez, 1963: 182 [original usage]. Type species: *Albridarollia ocellata* Bolívar y Pieltain, Jiménez-Asúa, & Martínez, by original designation.

Cyclocephala Dejean [synonymy by Endrődi 1966: 34].

syn. *Aspidolella* Prell, 1936: 374 [original usage]. Proposed as a subgenus, replacement name for the subgenus *Aspidolites* Höhne. Type species: *Aspidolea* (*Aspidolites*) *atricollis* Höhne, by monotypy.

Cyclocephala Dejean [synonymy by Endrődi 1966: 61].

syn. *Diapatalia* Casey, 1915: 111 [original usage]. Type species: *Cyclocephala discicollis* Arrow, by original designation.

Cyclocephala (*Diapatalia*) Casey [new subgenus status by Arrow 1937b: 8].

Cyclocephala Dejean [synonymy by Endrődi 1966: 33].

syn. *Dichromina* Casey, 1915: 112 [original usage]. Type species: *Cyclocephala dimidiata* Burmeister, by original designation.

Cyclocephala (*Dichromina*) Casey [new subgenus status by Arrow 1937b: 8].

Cyclocephala Dejean [synonymy by Saylor 1945: 380].

syn. *Graphalia* Casey, 1915: 159 [original usage]. Proposed as a subgenus of *Ochrosidia*. Type species: not yet designated.

Cyclocephala (*Graphalia*) Casey [new subgenus classification by Arrow 1937b: 8].

Cyclocephala Dejean [synonymy by Endrődi 1966: 34].

syn. *Halotosia* Casey, 1915: 113 [original usage]. Type species: *Cyclocephala fasciolata* Bates, by original designation.

Cyclocephala (*Halotosia*) Casey [new subgenus status by Arrow 1937b: 8].

Cyclocephala Dejean [synonymy by Endrődi 1966: 62].

syn. *Homochromina* Casey, 1915: 111 [original usage]. Type species: *Homochromina divisa* Casey, by original designation.

Cyclocephala (*Homochromina*) Casey [new subgenus status by Arrow 1937b: 8].

Cyclocephala Dejean [synonymy by Endrődi 1966: 34].
syn. *Isocoryna* Casey, 1915: 136 [original usage]. Proposed as a subgenus. Type species: *Cyclocephala* (*Isocoryna*) *jalapensis* Casey, by monotypy.
Cyclocephala Dejean [synonymy by Endrődi 1966: 62].
syn. *Mimeoma* Casey, 1915: 111 [original usage]. Type species: *Cyclocephala maculata* Burmeister, by original designation.
Cyclocephala Dejean [synonymy by Moore et al. 2015: 898].
syn. *Mononidia* Casey, 1915: 110 [original usage]. Type species: *Cyclocephala carbonaria* Arrow, by original designation.
Cyclocephala (*Mononidia*) Casey [new subgenus status by Arrow 1937b: 8].
Cyclocephala Dejean [synonymy by Endrődi 1966: 33].
syn. *Ochrosidia* Casey, 1915: 112 [original usage]. Type species: *Melolontha immaculata* Olivier, by original designation.
Cyclocephala (*Ochrosidia*) Casey [new subgenus status by Arrow 1937b: 8].
Cyclocephala Dejean [synonymy by Saylor 1945: 380].
syn. *Paraclinidia* Martínez, 1965b: 13 [original usage]. Proposed as a subgenus. Type species: *Cyclocephala* (*Paraclinidia*) *endrodii* Martínez, by original designation.
Cyclocephala Dejean [synonymy by Endrődi 1966: 34].
syn. *Plagiosalia* Casey, 1915: 135 [original usage]. Proposed as a subgenus. Type species: not yet designated.
Cyclocephala Dejean [synonymy by Endrődi 1966: 62].
syn. *Spilosota* Casey, 1915: 112 [original usage]. Type species: *Spilosota nubeculina* Casey, by original designation.
Cyclocephala (*Spilosota*) Casey [new subgenus status by Arrow 1937b: 8].
Cyclocephala Dejean [synonymy by Saylor 1945: 380].
syn. *Stigmalia* Casey, 1915: 111 [original usage]. Type species: *Cyclocephala mafaffa* Burmeister, by original designation.
Cyclocephala (*Stigmalia*) Casey [new subgenus status by Arrow 1937b: 8].
Cyclocephala Dejean [synonymy by Endrődi 1966: 33].
syn. *Surutoides* Endrődi, 1981: 198 [original usage]. Type species: *Surutoides mirabilis* Endrődi, by original designation.
Cyclocephala Dejean [synonymy by Dechambre 1991a: 282].

Type species. *Melolontha signata* Fabricius, subsequent designation by Casey 1915: 112.

Keys. LeConte 1863 (North America), Horn 1871 (North America), Wickham 1894 (Canada), Blatchley 1910 (Indiana, USA), Dawson 1922 (Nebraska, USA), Hayes 1928, 1929 (larvae, USA), Chapin 1932 (Cuba), Saylor 1937 (California, USA), Sanderson 1940 (Arkansas, USA), Saylor 1945 (USA), Paulian 1947 (French Antilles), Arnett 1968 (USA), Chalumeau and Gruner 1977 (French Antilles), Cartwright and Chalumeau 1978 (Dominica), Morón 1979 (Veracruz, Mexico), Dechambre 1980, Martínez and Morón 1984, Morón et al. 1985 (Chiapas, Mexico), Morón et al. 1988 (Jalisco, Mexico), Morón and Deloya 1991 (Durango, Mexico), Morelli 1989, 1991(larvae, Uruguay), Dechambre 1992, Delgado and Castañeda 1994, Ratcliffe 1991 (Nebraska, USA), Ratcliffe 1992a, Ratcliffe 1992b (Brazil), Deloya and Morón 1994 (Morelos, Mexico), Dupuis 1996, Dechambre 1997, Morón et al. 1998 (Nayarit, Mexico), Joly 2000a, Ratcliffe 2003 (Costa Rica and Panama), Reyes Novelo and Morón 2005 (Yucatán, Mexico), Pacheco F. et al. 2006 (Guerrero, Mexico), Bran et al. 2006 (larvae), Ratcliffe and Cave 2006 (Honduras, Nicaragua, and El Salvador), Ratcliffe and Paulsen 2008 (Nebraska, USA), Dupuis 2008, Joly 2009, Gasca-Álvarez and Amat-García 2010 (Colombia), Stechauner-Rohringer and Pardo-Locarno 2010 (Larvae, Colombia), Mondaca 2011 (Chile), Mora-Aguilar and Delgado 2012, Ratcliffe et al. 2013 (Mexico, Guatemala, and Belize), Pardo-Locarno 2013 (Colombia), Albuquerque et al. 2014 (larvae), Souza et al. 2014a (larvae), Ratcliffe and Cave 2015 (West Indies), Ratcliffe and Cave 2017 (USA and Canada), Villalobos-Moreno et al. 2017 (Colombia), Romero-López and Morón 2017 (Mexico).

Valid taxa. 359 species and subspecies.

Remarks. The generic and subgeneric synonyms of *Cyclocephala* have been treated unevenly in the literature. This makes summarizing the synonymies confusing. Casey (1915) proposed most of the generic-level synonyms of *Cyclocephala*, and the usefulness of these groups was first discussed in detail by Arrow (1937a). Arrow (1937b) went on to treat all of Casey's new genus-group names as subgenera of *Cyclocephala*, except for *Mimeoma* which he accepted as valid. However, Arrow (1937b) did not clearly place any *Cyclocephala* species into these subgenera in his catalog of Dynastinae. Some authors following Arrow used these subgenera. For example, Saylor (1937) treated *Spilosota* as a valid subgenus of *Cyclocephala*. However, Saylor (1945) later abandoned use of the subgenera (at least in North American taxa) and listed *Dichromina*, *Ochrosidia*, and *Spilosota* in synonymy with *Cyclocephala*. Endrődi (1966) was the first author to discuss these generic groups in totality and proposed many synonyms in the early portion of his monograph. However, Endrődi (1966) impled later in the monograph that *Aclinidia*, *Halotosia*, and *Paraclinidia* were valid subgenera without further comment (see Hardy 1991). Endrődi's (1966) meaning was ambiguous, and subsequent authors have treated all the above generic-group names as synonyms of *Cyclocephala*.

Cyclocephala abrelata Ratcliffe & Cave, 2002

Cyclocephala abrelata Ratcliffe & Cave, 2002: 155–156 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe and Cave 2002).

Distribution. HONDURAS: Yoro.

References. Ratcliffe and Cave 2002, 2006, Krajcik 2005, 2012.

Cyclocephala acoma Ratcliffe, 2008

Cyclocephala acoma Ratcliffe, 2008: 222–224 [original combination].

Types. Holotype ♂ at BMNH (Ratcliffe 2008).

Distribution. BOLIVIA: Santa Cruz.

References. Ratcliffe 2008, Krajcik 2012.

Cyclocephala acuta Arrow, 1902

Cyclocephala acuta Arrow, 1902: 139–140 [original combination].
Mimeoma acuta (Arrow) [new combination by Endrődi 1966: 361].
Cyclocephala acuta Arrow [revised combination by Moore et al. 2015: 898].

Types. Type at BMNH (Endrődi 1966).

Distribution. BELIZE: Cayo, Toledo. COLOMBIA: Chocó. COSTA RICA: Alajuela, Cartago, Heredia, Limón, Puntarenas. ECUADOR: Guayas. GUATEMALA: Izabal. HONDURAS: Atlántida, El Paraíso, Gracias a Dios, Olancho. MEXICO: Chiapas. NICARAGUA: Matagalpa, RAA Norte, Río San Juan. PANAMA: Bocas del Toro, Darien, Former Canal Zone, Panamá.

References. Arrow 1902, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Bullock 1981, Beach 1984, Morón et al. 1985, Thomas 1993, Ratcliffe and Morón 1997, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Ratcliffe and Cave 2006, Neita-Moreno 2011, Krajcik 2005, 2012, Moore 2012, Ratcliffe et al. 2013, Moore et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala aequatoria Endrődi, 1963

Cyclocephala aequatoria Endrődi, 1963: 332 [original combination].

Types. Holotype ♀ at HNHM (Endrődi Collection) (Endrődi 1963).

Distribution. ECUADOR: Cañar, Cotopaxi, Esmeraldas, Guayas, Los Ríos, Manabí, Pichincha. GUATEMALA: Alta Verapaz, Izabal. MEXICO: Chiapas, Guerrero, Jalisco, Michoacán, Nayarit, Oaxaca, Veracruz.

References. Barrera 1969, Pike et al. 1976, Dechambre 1982, Endrődi 1963, 1964, 1966, 1985a, Balslev and Henderson 1987, Morón et al. 1988, Ratcliffe 1992c, Thomas 1993, Lobo and Morón 1993, Delgado and Castañeda 1994, Ratcliffe and Morón 1997, Ervik et al. 1999, Navarrete-Heredia et al. 2001, Pacheco F. et al. 2008, Ulmen et al. 2010, Krajcik 2005, 2012, Ratcliffe et al. 2013, Deloya et al. 2014a, 2016, Romero-López and Morón 2017.

Cyclocephala affinis Endrődi, 1966

Cyclocephala affinis Endrődi, 1966: 88, 144, 145–146 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).

Distribution. BRAZIL: Amazonas. BOLIVIA: La Paz. COLOMBIA: Valle del Cauca. PERU: Cusco, Huánuco, Madre de Dios.

References. Pike et al. 1976, Endrődi 1966, 1985a, Dupuis 1996, Andreazze and Fonseca 1998, Dechambre 1999, Restrepo-Giraldo et al. 2003, Krajcik 2005, 2012, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala alazonia Ratcliffe, 2003

Cyclocephala alazonia Ratcliffe, 2003: 60, 65, 69, 75, 80–81 [original combination].

Types. Holotype ♂ at MNCR (originally deposited at INBio) (Ratcliffe 2003).
Distribution. COSTA RICA: Alajuela.
References. Ratcliffe 2003, Krajcik 2005, 2012.

Cyclocephala alexi Ratcliffe & Delgado-Castillo, 1990

Cyclocephala alexi Ratcliffe & Delgado-Castillo, 1990: 48–51 [original combination].

Types. Holotype at UNSM (Ratcliffe and Delgado-Castillo 1990).
Distribution. GUATEMALA: Baja Verapaz, El Progreso, Huehuetenango, Izabal, Petén, Quiché, San Marcos, Suchitepéquez, Zacapa. MEXICO: Chiapas.
References. Ratcliffe and Delgado-Castillo 1990, Delgado and Castañeda 1994, Thomas 1993, Ratcliffe and Morón 1997, Gómez et al. 1999, Méndez-Aguilar et al. 2005, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Cyclocephala almitana Dechambre, 1992

Cyclocephala almitana Dechambre, 1992: 65–66 [original combination].
syn. *Cyclocephala dissimulata* Ratcliffe, 1992a: 218–219 [original combination]. *Cyclocephala almitana* Dechambre [synonymy by Ratcliffe 2003: 81].

Types. Holotype ♂ of *C. almitana* at MNHN (Dechambre 1992). Holotype ♂ of *C. dissimulata* at UNSM (Ratcliffe 1992).
Distribution. COLOMBIA: Chocó. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, San José. ECUADOR: Esmeraldas. PANAMA: Chiriquí, Bocas del Toro, Panamá. PERU.
References. Dechambre 1992, Dupuis 1996, Ratcliffe 1992a, 2002a, 2003, Neita-Moreno 2011, Krajcik 2005, 2012, García-López et al. 2013, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala altamontana Dechambre, 1999

Cyclocephala altamontana Dechambre, 1999: 3–4 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. PERU: Amazonas.
References. Dechambre 1999, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala alutacea Höhne, 1923

Cyclocephala alutacea Höhne, 1923b: 359–360 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).
Distribution. ARGENTINA: Córdoba.
References. Höhne 1923b, Arrow 1937b, Pike et al. 1976, Endrődi 1966, 1985a, Joly 2000a, Krajcik 2005, 2012.

Cyclocephala alvarengai Dechambre, 1980

Cyclocephala alvarengai Dechambre, 1980: 42–44 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1980).
Distribution. BRAZIL: Rio de Janeiro.
References. Dechambre 1980, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala amazona amazona (Linnaeus, 1767)

Scarabaeus amazonus Linnaeus, 1767: 551 [original combination].
Melolontha amazona (Linnaeus) [new combination by Schönherr 1817: 188].
Cyclocephala amazona (Linnaeus) [new combination by Burmeister 1847: 45].
Cyclocephala amazona amazona (Linnaeus) [new subspecies status by Endrődi 1966: 147].
syn. *Cyclocephala* (*Cyclocephala*) *auriculata* Casey, 1915: 141 [original combination].
Cyclocephala detecta Bates [synonymy by Arrow 1937b: 10].
syn. *Cyclocephala detecta* Bates, 1888: 300 [original combination].
Cyclocephala (*Cyclocephala*) *detecta* Bates [new subgeneric classification by Casey 1915: 141].
Cyclocephala detecta Bates [removal of subgeneric classification by Arrow 1937b: 8, 10].
Cyclocephala amazona (Linnaeus) [synonymy by Endrődi 1964: 466].
syn. *Cyclocephala* (*Cyclocephala*) *beaumonti* Casey, 1915: 140 [original combination].
Cyclocephala detecta Bates [synonymy by Arrow 1937b: 10].

syn. *Cyclocephala signata* var. *inconstans* Burmeister, 1847: 45 [original combination].
Cyclocephala (*Cyclocephala*) *inconstans* Burmeister [new subgeneric classification and new species status by Casey 1915: 140].
Cyclocephala inconstans Burmeister [removal of subgeneric classification by Arrow 1937b: 8, 11].
Cyclocephala amazona ab. *inconstans* Burmeister [revised infrasubspecific status by Endrődi 1966: 147].
syn. *Melolontha pallens* Fabricius, 1798: 132 [original combination].
Cyclocephala pallens (Fabricius) [new combination by Burmeister 1847: 46].
Cyclocephala amazona ab. *pallens* (Fabricius) [new subspecific status by Endrődi 1964: 466].
syn. *Melolontha uncinata* Illiger, 1802b: 49 [original combination].
Cyclocephala signata (Fabricius) [synonymy by Arrow 1937b: 16].
syn. *Melolontha signata* Fabricius, 1781: 39 [original combination].
Cyclocephala signata (Fabricius) [new combination by Burmeister 1847: 43].
Cyclocephala (*Cyclocephala*) *signata* (Fabricius) [new subgeneric classification by Casey 1915: 137].
Cyclocephala signata (Fabricius) [removal of subgeneric classification by Arrow 1937b: 8, 16].
Cyclocephala amazona signata (Fabricius) [new subspecies status by Endrődi 1964: 466].
Cyclocephala amazona (Linnaeus) [synonymy by Ratcliffe 2003: 83].
syn. *Scarabaeus nigrocephalus* DeGeer, 1774: 321 [original combination].
Melolontha signata Fabricius [synonymy by Illiger 1802b: 49].

Types. Invalid neotype of *S. amazonus* at HNHM (Endrődi Collection) (Endrődi 1966). Type of *M. pallens* deposited at ZMUK, now housed at ZMUC (Endrődi 1966). Type of *S. nigrocephalus* at NHRS (Endrődi 1966). Type of *M. uncinata* is missing (Endrődi 1966). Type of *C. inconstans* at MLUH (Endrődi 1966). Type of *C. detecta* at BMNH (Endrődi 1966). Types of *C. beaumonti* at USNM (Endrődi 1966). Type of *C. auriculata* at USNM (Endrődi 1966).

Distribution. BARBADOS. BOLIVIA: Beni, La Paz, Santa Cruz. BRAZIL: Amazonas, Paraná, Pernambuco, Piauí, Santa Catarina, São Paulo. CHILE. COLOMBIA: Amazonas, Antioquia, Bolívar, Boyacá, Caldas, Caquetá, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, Guajira, Magdalena, Meta, Nariña, Quindío, Risaralda, Santander, Sucre, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas. CUBA: Holguin. DOMINICAN REPUBLIC: Samana. ECUADOR: Cañar, Chimborazo, Los Ríos. FRENCH GUIANA: Cayenne, Sinnamary, St.-Laurent du Maroni. GRENADA: St. Andrew, St. George, St. John. GUYANA: Demerara-Mahaica. HAITI: Ouest. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Former Canal Zone, Panamá, San Blas. PARAGUAY. PERU: Lima, Loreto, San Martín. SURINAME: Paramaribo. ST. BARTHÉLEMY. ST. MARTIN. TRINIDAD AND TOBAGO: Trinidad, Tobago. VENEZUELA: Aragua, Capital District.

References. Linnaeus 1767, DeGeer 1774, Fabricius 1781, 1798, Illiger 1802b, Schönherr 1817, Dejean 1821, 1833, 1836b, Drury 1770, 1837, Sturm 1843, Burmeister 1847, Gerstaecker 1866, Harold 1869b, Stahl 1882, Bates 1888, Gundlach 1891, Leng and Mutchler 1914, Casey 1915, Stahl and Scaramuzza 1929, Arrow 1900, 1937b, Martorell 1939, Martorell and Salas 1939, Blackwelder 1944, Gruner 1971, Martínez 1975b, Pike et al. 1976, Mora-Urpí and Solís 1980, Bullock 1981, Mora-Urpí 1982, Remillet et al. 1982, Pava-O. et al. 1983, Beach 1982, 1984, Henderson 1984, Gottsberger 1986, Endrődi 1963, 1964, 1966, 1979, 1985a, Villalta 1988, Posada Ochoa 1989, Rickson et al. 1990, Silberbauer-Gottsberger 1990, Murray 1993, Bernal and Ervik 1996, Woodruff et al. 1998, Dechambre 1999, Ervik et al. 1999, Johnson and Nicolson 2001, Peck et al. 2002, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Bouchard and Bjorndal 2006, Fernández García 2006, Neita Moreno et al. 2006, Pardo-Locarno et al. 2005a, 2008, Útima and Vallejo 2008, Núñez-Avellaneda and Neita-Moreno 2009, Neita-Moreno 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Yepes-Rodriguez et al. 2013, López-García et al. 2015, Ratcliffe and Cave 2015, Ratcliffe et al. 2015, Ponchel 2006, 2011, 2015, Gasca-Álvarez and Deloya 2016, Peck 2016, Villalobos-Moreno et al. 2016, 2017.

Remarks. The distribution of *C. amazona amazona* is obscured due to historical confusion of this species with *C. multiplex*. The data reported here follow Ratcliffe (2003), which hypothesized that *C. amazona amazona* occurs in South America north through Costa Rica and the West Indies.

Cyclocephala amazona boliviensis Höhne, 1923

Cyclocephala signata boliviensis Höhne, 1923b: 354–355 [original combination].
Cyclocephala signata var. *boliviensis* Höhne [new infrasubspecific status by Arrow 1937b: 16].
Cyclocephala amazona boliviensis Höhne [revalidated subspecies status by Endrődi 1966: 147].

Types. Type at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Beni, La Paz, Santa Cruz. BRAZIL: Amazonas, Mato Grosso, Rondônia.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1973a, 1985a, Krajcik 2005, 2012.

Cyclocephala amblyopsis Bates, 1888

Cyclocephala amblyopsis Bates, 1888: 307–308 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. BOLIVIA: Santa Cruz. BRAZIL: São Paulo. COLOMBIA: Antioquia, Cauca, Chocó, Córdoba, Nariña, Risaralda, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José.

ECUADOR: Imbabura. EL SALVADOR: Ahuachapán, La Libertad. GUATEMALA: Guatemala, Izabal, Quetzaltenango, San Marcos, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Copán, Cortés, El Paraíso, Olancho, Santa Bárbara, Yoro. MEXICO: Chiapas. NICARAGUA: Chontales, Matagalpa, RAA Norte. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Darien, Panamá, Veraguas. PERU: Cusco.

References. Bates 1888, Arrow 1937b, Blackwelder 1944, Barrera 1969, Martínez 1975b, Pike et al. 1976, Endrődi 1966, 1985a, Valerio 1984, 1988, Young 1986, 1988a, b, 1990, Maes 1987, 1994, Morón 1997, Ratcliffe and Morón 1997, Croat 1997, Beath 1998, 1999, Morón-Ríos and Morón 2001, Ratcliffe 2002a, 2003, Restrepo et al. 2003, García-Robledo et al. 2004, 2005, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Pardo-Locarno et al. 2005a, 2008, García-Robledo 2010, Neita-Moreno 2011, Krajcik 2005, 2012, Ratcliffe et al. 2013, García-López et al. 2013, Gasca-Álvarez and Deloya 2016.

Cyclocephala ampliata Bates, 1888

Cyclocephala ampliata Bates, 1888: 311 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. COSTA RICA: Heredia, Limón. NICARAGUA: Chontales. PANAMA: Bocas de Toro, Chiriquí.

References. Bates 1888, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Young 1990, Maes 1987, 1994, Croat 1997, Beath 1998, 1999, Ratcliffe 1992a, 2002a, 2003, Ratcliffe and Cave 2006, Krajcik 2005, 2012.

Cyclocephala amplitarsis Ratcliffe, 1992

Cyclocephala amplitarsis Ratcliffe, 1992b: 179–180 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992b).

Distribution. BRAZIL: Rondônia.

References. Ratcliffe 1992b, Krajcik 2005, 2012.

Cyclocephala anibali Joly, 2009

Cyclocephala anibali Joly, 2009: 49, 62–64 [original combination].

Types. Holotype ♂ at MIZA (Joly 2009).

Distribution. VENEZUELA: Apure.

References. Joly 2009, Krajcik 2012.

Cyclocephala antoinei Dupuis, 2018

Cyclocephala antoinei Dupuis, 2018: 2–4 [original combination].

Types. Holotype ♂ at MNHN (Dupuis 2018).
Distribution. VENEZUELA: Apure (Dupuis 2018).
References. Dupuis 2018.

Cyclocephala aravaipensis Ratcliffe, 1992

Cyclocephala aravaipensis Ratcliffe, 1992c: 253–255 [original combination].

Types. Holotype ♂ at FSCA (Ratcliffe 1992c).
Distribution. UNITED STATES: Arizona.
References. Ratcliffe 1992c, Poole and Gentili 1996, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe and Cave 2017.

Cyclocephala arenosa Howden & Endrődi, 1966

Cyclocephala arenosa Howden & Endrődi, 1966: 296–298 [original combination].

Types. Holotype ♂ at CAS (Howden and Endrődi 1966).
Distribution. MEXICO: Sonora.
References. Howden and Endrődi 1966, Martínez 1968a, Pike et al. 1976, Endrődi 1985a, Ratcliffe and Morón 1997, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Cyclocephala arnaudi Dechambre, 1980

Cyclocephala arnaudi Dechambre, 1980: 44 [original combination].
syn. *Cyclocephala carlsoni* Ratcliffe, 2008: 224–226 [original combination].
Cyclocephala arnaudi Dechambre [synonymy by Ponchel 2010: 172].

Types. Holotype ♂ of *C. arnaudi* at MNHN (Dechambre 1980). Holotype ♂ of *C. carlsoni* at UNSM (Ratcliffe 2008).
Distribution. FRENCH GUIANA: Cayenne, Roura, St.-Laurent du Maroni.
References. Dechambre 1980, Endrődi 1985a, Ratcliffe 2008, Ponchel 2011, Krajcik 2005, 2012, Dupuis 2018.

Cyclocephala arrowiana Martínez, 1967

Cyclocephala arrowiana Martínez, 1967: 127–131 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1967).

Distribution. BOLIVIA: Cochabamba.

References. Martínez 1967, Pike et al. 1976, Dechambre 1979a, Endrődi 1985a, Ratcliffe 1992a, Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala atricapilla Mannerheim, 1829

Cyclocephala atricapilla Mannerheim, 1829: 53–53 [original combination].
Stigmalia atricapilla (Mannerheim) [new combination by Casey 1915: 123].
Cyclocephala atricapilla Mannerheim [revised combination by Arrow 1937b: 8].
syn. *Cyclocephala pinguis* Höhne, 1923b: 365–366 [original combination].
Cyclocephala atricapilla Mannerheim [synonymy by Endrődi 1964: 466].

Types. Lectotype ♂ of *C. atricapilla* at ZMH (Endrődi 1966). Lectotype of *C. pinguis* at ZMHB (Endrődi 1966).

Distribution. ARGENTINA: Entre Ríos, Mendoza, Salta, Santa Fe. BOLIVIA. BRAZIL: Bahia, Distrito Federal, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, São Paulo. COLOMBIA: Córdoba. PARAGUAY: Cordillera, Paraguarí. VENEZUELA: Bolívar.

References. Mannerheim 1829, Burmeister 1847, Harold 1869b, Casey 1915, Luederwaldt 1916, Höhne 1923b, Arrow 1937b, Blackwelder 1944, Martínez 1975b, Pike et al. 1976, Dechambre 1980, Endrődi 1963, 1964, 1966, 1985a, Ramírez 1992, Lunau 2002, Restrepo et al. 2003, Gottsberger and Silberbauer-Gottsberger 1988, 2006, Silberbauer-Gottsberger et al. 2001, 2003, Cavalcante et al. 2009, Krajcik 2005, 2012, Maia et al. 2012, Breeschoten et al. 2013, Paulino-Neto 2014, Gasca-Álvarez and Deloya 2016, Gottsberger 1986, 1988, 1989, 1992, 1999, 2016, Costa et al. 2017.

Remarks. A single no-data specimen of *C. atricapilla* was reported from Mexico (Endrődi 1966), but this species is South American (Ratcliffe et al. 2013).

Cyclocephala atriceps (Casey, 1915)

Homochromina atriceps Casey, 1915: 164 [original combination].
Cyclocephala atriceps (Casey) [new combination by Arrow 1937b: 8].

Types. Type at USNM (Endrődi 1966).

Distribution. MEXICO: Veracruz.

References. Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala atricolor Chapin, 1932

Cyclocephala atricolor Chapin, 1932: 287, 289–290 [original combination].

Types. Type at USNM (Endrődi 1966).

Distribution. CUBA: Ciego de Ávila, Granma, Guantánamo, Holguin, Pinar del Río, Santiago de Cuba.

References. Chapin 1932, Arrow 1937b, Blackwelder 1944, Howden and Endrődi 1966, Endrődi 1966, 1985a, Fernández García 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe and Cave 2015, 2017.

Cyclocephala atripes Bates, 1888

Cyclocephala atripes Bates, 1888: 309 [original combination].
Stigmalia atripes (Bates) [new combination by Casey 1915: 123].
Cyclocephala atripes Bates [revised combination by Arrow 1937b: 8].

Types. Lectotype at BMNH (Endrődi 1966).

Distribution. COLOMBIA: Antioquia, Boyacá, Chocó, Cundinamarca, Magdalena. COSTA RICA: Alajuela, Guanacaste, Heredia, Limón. ECUADOR: Cañar. HONDURAS: Atlántida, Olancho. NICARAGUA: Chontales, Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Colón, Former Canal Zone, Panamá.

References. Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Beach 1982, Endrődi 1966, 1975b, 1985a, Young 1986, 1988a, 1990, Maes 1987, 1994, Ratcliffe 1992a, 2002a, 2003, Restrepo et al. 2003, Ratcliffe and Cave 2006, Neita-Moreno 2011, Krajcik 2005, 2012, Moore and Jameson 2013, Gasca-Álvarez and Deloya 2016.

Cyclocephala aulustjaorum Hielkema, 2017

Cyclocephala pubescens brevis Höhne, 1923b: 373 [original combination].
Cyclocephala pubescens var. *brevis* Höhne [new infrasubspecific status by Arrow 1937b: 15].
Cyclocephala brevis Höhne [new species status by Ratcliffe 2002a: 28].
Cyclocephala aulustjaorum Hielkema [new replacement name by Hielkema 2017: 8].
syn. *Cyclocephala pubescens* Burmeister, 1847: 68–69 [original combination].
Cyclocephala brevis Höhne [synonymy by Ratcliffe 2002a: 28].

Types. Lectotype ♀ of *C. pubescens* Burmeister at MLUH (Endrődi 1966). Endrődi (1966) did not comment on the location of the Höhne type material.

Distribution. COLOMBIA: Amazonas, Antioquia, Chocó, Cundinamarca, Meta, Risaralda, Santander. COSTA RICA: Alajuela, Guanacaste, Heredia, Limón, San José. GUATEMALA: Baja Verapaz, Izabal, San Marcos, Suchitepéquez, Zacapa. HONDU-

RAS: Atlántida, Cortés, Olancho, Santa Bárbara, Yoro. MEXICO: Chiapas, Jalisco, Michoacán, Oaxaca, Veracruz. NICARAGUA: Jinotega, RAA Norte, Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Colón, Darien, San Blas, Veraguas, Former Canal Zone.

References. Burmeister 1847, Harold 1869b, Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Silberbauer-Gottsberger et al. 2001, Ratcliffe 2002a, 2003. Neita-Moreno et al. 2006, Ratcliffe and Cave 2006, Neita-Moreno 2011, Otavo et al. 2013, Ratcliffe et al. 2013, López-García et al. 2015, Moore et al. 2015, Deloya et al. 2014a, 2016, Gasca-Álvarez and Deloya 2016, Hielkema 2017.

Cyclocephala barrerai Martínez, 1969

Cyclocephala barrerai Martínez, 1969: 2–5 [original combination].
syn. *Cyclocephala pasadenae mexica* Martínez, 1969: 5–6 [original combination].
Cyclocephala barrerai Martínez [synonymy by Ratcliffe et al. 2013: 114].

Types. Holotype ♂ of *C. barrerai* at MCMC (Martínez 1969). Holotype ♂ of *C. pasadenae mexica* at MACN (Martínez 1969).

Distribution. MEXICO: Aguascalientes, Chihuahua, Distrito Federal, Durango, Guanajuato, Jalisco, Michoacán, Morelos, Puebla, Tlaxcala.

References. Martínez 1969, Pike et al. 1976, Endrődi 1985a, Morón and Deloya 1991, Deloya et al. 1993, Lobo and Morón 1993, Ratcliffe and Morón 1997, Marín Jarillo 2001, Navarrete-Heredia et al. 2001, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe et al. 2013, Morón et al. 2014, Minor and Morón 2016, Deloya et al. 2016.

Cyclocephala batesi Delgado & Castañeda, 1994

Cyclocephala batesi Delgado & Castañeda, 1994: 456–458 [original combination].

Types. Holotype ♂ at UVGC (Delgado and Castañeda 1994).

Distribution. GUATEMALA: Baja Verapaz, Chiquimula, Huehuetenango, Izabal, Zacapa. HONDURAS: Copán, Cortés.

References. Delgado and Castañeda 1994, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Ratcliffe et al. 2013, Romero-López and Morón 2017.

Cyclocephala bella Endrődi, 1969

Cyclocephala bella Endrődi, 1969b: 32–33 [original combination].

Types. Holotype ♂ at MZSP (Pereira Collection) (Endrődi 1969b).

Distribution. BRAZIL: Minas Gerais. São Paulo.

References. Pike et al. 1976, Endrődi 1969b, 1985a, Joly 2000a, Krajcik 2005, 2012.

Cyclocephala berti Delgado, 1992

Cyclocephala berti Delgado, 1992: 75–78 [original combination].
syn. *Cyclocephala picopijola* Ratcliffe & Cave, 2006: 58, 61, 141–144 [original combination].
Cyclocephala berti Delgado [synonymy by Ratcliffe et al. 2013: 118].

Types. Holotype ♂ of *C. berti* at CMNC (Henry and Anne Howden Collection) (Delgado 1992). Holotype ♂ of *C. picopijola* at UNSM (Ratcliffe and Cave 2006).

Distribution. GUATEMALA: Baja Verapaz, Huehuetenango, Izabal. HONDURAS: Atlántida, Cortés, Yoro. MEXICO: Veracruz.

References. Delgado 1992, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Mora-Aguilar and Delgado 2012, Ratcliffe et al. 2013.

Cyclocephala bicolor Laporte, 1840

Cyclocephala bicolor Laporte, 1840: 124–125 [original combination].

Type. Type at MNHN (Endrődi 1966).

Distribution. BRAZIL: Acre, Amazonas, Amapá, Bahia, Ceará, Mato Grosso, Pará, Pernambuco, Rio Grande do Norte, Rondônia. BOLIVIA: Beni. COLOMBIA: Caquetá. GUYANA: Cuyuni-Mazaruni, Potaro-Siparuni, Upper Demerara-Berbice. FRENCH GUIANA: Cayenne, Kourou, Mana, Maripasoula, Régina, Sinnamary, St.-Élie, St.-Georges, St.-Laurent du Maroni. PERU: Huánuco. SURINAME: Brokopondo, Marowijne, Paramaribo. VENEZUELA: Amazonas, Bolívar, Táchira.

Reference. Laporte 1840, Burmeister 1847, Harold 1869b, Prudhomme 1906, Bodkin 1919, Arrow 1937b, Gruner 1971, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Remillet et al. 1982, Dechambre 1979a, 1992, Ratcliffe 1992b, Andreazze and Fonseca 1998, Andreazze 2001, Joly 2009, Potascheff 2010, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Potascheff et al. 2014, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala bicolorata Endrődi, 1964

Cyclocephala bicolorata Endrődi, 1964: 441–442 [original combination].

Types. Holotype ♂ at HNHM (Endrődi 1964).

Distribution. BRAZIL: Pará. VENEZUELA: Apure, Bolívar.

References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Dechambre 1979a, 1992, Joly 2009, Krajcik 2005, 2012.

Cyclocephala bimaculata **Dechambre, 1999**

Cyclocephala bimaculata Dechambre, 1999: 4–5 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. BOLIVIA: Cochabamba.
References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala binotata **Dechambre, 1999**

Cyclocephala binotata Dechambre, 1999: 5–6 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. ARGENTINA: Chaco.
References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala bleuzeni **Dechambre, 1995**

Cyclocephala bleuzeni Dechambre, 1995: 12 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1995).
Distribution. VENEZUELA: Bolívar.
References. Dechambre 1995, Krajcik 2005, 2012.

Cyclocephala boliviana **Dechambre, 1992**

Cyclocephala weidneri boliviana Dechambre, 1992: 71 [original combination].
Cyclocephala boliviana Dechambre [new species status by Dupuis 2018: 4].

Types. Holotype ♂ at MNHN (Dechambre 1992, Dupuis 2018).
Distribution. BOLIVIA: Beni, Cochabamba. PERU: Cusco.
References. Dechambre 1992, Krajcik 2005, 2012, Dupuis 2018.

Cyclocephala bollei **Dechambre & Endrődi, 1984**

Cyclocephala bollei Dechambre & Endrődi, 1984: 168–169 [original combination].

Types. Holotype ♂ at MNHN (Dechambre and Endrődi 1984).
Distribution. ARGENTINA: Santiago del Estero.
References. Dechambre and Endrődi 1984, Krajcik 2005, 2012.

Cyclocephala borburatae Endrődi, 1980

Cyclocephala borburatae Endrődi, 1980: 38 [original combination].

Types. Holotype ♀ in André Gaudaíre-Thore Collection (Sens, France) (Endrődi 1980).

Distribution. VENEZUELA: Carabobo.

References. Endrődi 1980, 1985a, Krajcik 2005, 2012.

Cyclocephala borealis Arrow, 1911

Cyclocephala borealis Arrow, 1911: 172 [original combination, new replacement name for *Cyclocephala villosa* Burmeister).

syn. *Cyclocephala villosa* Burmeister 1847: 54 [original combination, homonym of *Cyclocephala villosa* Blanchard].

Cyclocephala angularis (Knoch) [synonymy by Harold 1869b: 1241].

Cyclocephala villosa Burmeister [revalidated species status by Horn 1871: 336–337].

Ochrosidia (*Ochrosidia*) *villosa* (Burmeister) [new combination and new subgeneric classification by Casey 1915: 147].

Cyclocephala borealis Arrow [synonymy by Arrow 1937b: 8].

Types. Invalid neotype ♂ of *C. villosa* at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. UNITED STATES: Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia.

References. Knoch 1801, Burmeister 1847, Melsheimer et al. 1853, Reiche 1859, Harold 1869b, Horn 1871, Crotch 1873, Henshaw 1885, Fall 1901, Fall and Cockerell 1907, Blatchley 1910, Swenk 1911, 1913, King 1914, Casey 1915, Hayes 1918, Arrow 1911, 1937b, Leng 1920, Dawson 1922, Leonard 1923, Sim 1934, Anderson 1936, Britton 1932, 1938, Metcalf and Flint 1939, Sanderson 1940, Johnson 1941a, b, Blackwelder 1939, Riegel 1942a, 1948, White 1947, Blackwelder and Blackwelder 1948, Fleming 1948, Adams 1949, Metcalf et al. 1951, Neiswander 1938a, b, 1951, Peterson 1951, Jaques 1951, Bigger and Blanchard 1955, Maddock and Fehn 1958, Harris 1959, Martínez 1954, Dutky 1941, 1963, Polivka 1950, 1952, 1959, 1960, 1965, Howden and Endrődi 1966, Ritcher 1958, 1966, App and Kerr 1969, Beard 1972, Swan and Papp 1972, Woodruff 1973, Gerhardt and Stanghellini 1971, Kawanishi 1974, Pike et al. 1976, MacLean 1977, Pike et al. 1977, Meyer 1978, 1979, 1981, Potter 1980, 1981, 1995, 1998, Warren and Potter 1983, Bulla et al. 1985, Endrődi 1966, 1985a, Tashiro 1987, Klein 1988, Sutton 1988, Gaugler and Georgis 1991, Hardy 1991, McNamara

1991, Youngman et al. 1993, Suggars Downing 1994, Haynes and Potter 1995, Poole and Gentili 1996, Potter et al. 1996, Fuxa 1998, Peck and Thomas 1998, Bhargava 1999, Brandenburg and Royals 1999, Rothwell and Smitley1999, Vittum et al. 1999, Held et al. 2000a, b, c, Harpootlian 2001, DeFoliart 2002, Cappaert and Koppenhöfer 2003, Riley and Wolfe 2003, Rogers et al. 2003, Wilson et al. 2003, Cranshaw 2004, Grewal et al. 2001, 2002, 2004, Rogers and Potter 2004a, b, c, Koppenhöfer and Grewal 2005, Grewal et al. 2005, Shapiro-Ilan and Cottrell 2005, Harris 2006, Georgis et al. 2006, Jackson and Klein 2006, Heller and Walker 1999a, b, c, d, 2000a, b, 2001a, b, c, d, 2002a, b, c, d, e, f, g, 2003a, b, c, d, e, f, g, 2004a, b, c, 2005a, b, c, d, e, Heller and Kline 2005a, b, c, 2007a, b, c, d, e, f, g, h, i, Bixby et al. 2007, An and Grewal 2007, Ratcliffe and Paulsen 2008, Dingman 2008, Koppenhöfer et al. 2002b, 2005, 2006, 2007, 2008, 2013, Counts and Hasiotis 2009, Koppenhöfer and Fuzy 2003a, b, 2006, 2008a, b 2009, Krinsky 2009, Heller et al. 2000a, b, 2006a, b, c, d, e, f, 2008a, b, c, d, e, f, g, h, i, j, k, l, m, 2009a, b, c, d, e, f, g, h, i, j, k, l, Li et al. 2007, 2009, Peck 2009, Popay 2009, Power et al. 2009, Samples et al. 2009, Smith 2003, 2009, Bélair et al. 2010, Ennis et al. 2010, Holmstrup et al. 2010, Mashtoly et al. 2009, 2010, Redmond and Potter 2010, Jordan et al. 2012, Krajcik 2005, 2012, Redmond et al. 2012a, b, Bousquet et al. 2013, Gardner 2013, Guo et al. 2013, Ranger et al. 2009, 2013, Williamson et al. 2004, 2008, 2013, Hussaini 2014, Anderson et al. 2015, Behle et al. 2015, Chong and Hinson 2015, Renkema et al. 2015, Shetlar and Andon 2013, 2015, An and Grewal 2016, Behle and Goett 2016, Christians et al. 2016, Dossey et al. 2016, Gyawaly et al. 2016, Koppenhöfer and Wu 2016, Mitasuhashi 2016, Park and Tak 2016, Schrader et al. 2016, Subramanian and Muthulakshmi 2016, Del Valle et al. 2017, Ratcliffe and Cave 2017.

Remarks. A specimen of *C. borealis* was reported from Mexico (Durango), but this record is considered erroneous (Endrődi 1966, 1985a, Ratcliffe and Morón 1997, Ratcliffe et al. 2013). Records for Iowa, Nebraska, and Texas for *C. borealis* are doubtful or spurious (Ratcliffe and Cave 2017). *Cyclocephala borealis* has been recorded in Canada (Ontario and Nova Scotia) (McNamara 1991, Bousquet et al. 2013), though major faunistic studies did not report additional data (Ratcliffe and Cave 2017).

Cyclocephala boucheri Dechambre, 1997

Cyclocephala boucheri Dechambre, 1997: 14, 23–24 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1997).

Distribution. FRENCH GUIANA: Montsinéry-Tonnegrande, Régina, Roura, St.-Laurent du Maroni.

References. Dechambre 1997, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala boulardi Dechambre, 1979

Cyclocephala boulardi Dechambre, 1979a: 161–162 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979a).

Distribution. BRAZIL: Amazonas. FRENCH GUIANA. SURINAME.

References. Dechambre 1979a, 1980, Endrődi 1985a, Ratcliffe 1992b, Küchmeister et al. 1998, Silberbauer-Gottsberger et al. 2001, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala brasiliana Endrődi, 1966

Cyclocephala brasiliana Endrődi, 1966: 72, 131, 159–160 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Goiás, Rio de Janeiro.

References. Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala brevipennis Endrődi, 1985

Cyclocephala brevipennis Endrődi, 1985b: 69 [original combination].

Types. Holotype ♂ at JPVC (Colette Voirin) (Endrődi 1985b).

Distribution. ECUADOR: Imbabura, Pichincha, Santo Domingo de los Tsáchilas.

References. Endrődi 1985b, Malý 2006, Krajcik 2005, 2012.

Cyclocephala brittoni Endrődi, 1964

Cyclocephala brittoni Endrődi, 1964: 438–440 [original combination].

Types. Holotype ♂ at BMNH (Endrődi 1964).

Distribution. COLOMBIA: Antioquia, Boyacá, Chocó, Cundinamarca, Magdalena, Santander, Valle del Cauca. COSTA RICA: Heredia, Limón, Puntarenas, San José. FRENCH GUIANA: Cayenne, Kourou, St.-Élie, St.-Laurent du Maroni. GUYANA: Mahaica-Berbice. PANAMA: Bocas del Toro, Chiriquí, Darien, Former Canal Zone, Panamá. SURINAME. TRINIDAD AND TOBAGO: Trinidad.

References. Martínez 1967, Pike et al. 1976, Dechambre 1979a, Endrődi 1964, 1966, 1969b, 1985a, Bullock 1981, Villalta 1988, Silberbauer-Gottsberger et al. 2001, Ratcliffe 1992a, 2002a, 2003, Restrepo et al. 2003, Neita-Moreno et al. 2006, Ponchel

2011, Neita-Moreno 2011, Krajcik 2005, 2012, Moore 2012, Breeschoten et al. 2013, Gasca-Álvarez 2013, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala burmeisteri Endrődi, 1964

Cyclocephala burmeisteri Endrődi, 1964: 449–451 [original combination].

Types. Holotype ♂ at USNM (Endrődi 1964).

Distribution. BOLIVIA: Santa Cruz.

References. Martínez 1975b, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala caelestis Delgado-Castillo & Ratcliffe, 1990

Cyclocephala caelestis Delgado & Ratcliffe, 1990: 51–56 [original combination].

Types. Holotype ♂ at MXAL (Ratcliffe and Delgado-Castillo 1990).

Distribution. MEXICO: Tamaulipas.

References. Ratcliffe and Delgado-Castillo 1990, Ratcliffe and Morón 1997, Dieringer et al. 1998, 1999, Smith 2003, 2009, Thien et al. 2009, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Cyclocephala camachicola Ohaus, 1910

Cyclocephala camachicola Ohaus, 1910: 672 [original combination].

Types. Type at SDEI (Endrődi 1966).

Distribution. ECUADOR: Azuay.

References. Ohaus 1910, Arrow 1937a, Blackwelder 1944, Pike et al. 1976, Dechambre and Endrődi 1984, Endrődi 1966, 1975b, 1985a, Krajcik 2005, 2012.

Cyclocephala capitata Höhne, 1923

Cyclocephala capitata Höhne, 1923a: 253–254 [original combination].

Types. Type specimens, housing institution is uncertain, but Endrődi (1966) thought they should be at ZMHB or ZMUH.

Distribution. MEXICO: Chiapas, Colima, Guerrero, Jalisco, Michoacán, Nayarit, Oaxaca, Sinaloa.

References. Höhne 1923a, Arrow 1937a, Blackwelder 1944, Pike et al. 1976, Martínez and Martínez 1981, Endrődi 1966, 1967b, 1985a, Morón et al. 1988, Ratcliffe and Morón 1997, Navarrete-Heredia et al. 2001, Ramos-Elorduy and Pino Moreno 2004, Krajcik 2005, 2012, Ratcliffe et al. 2013, Deloya et al. 2014a, 2016, Dossey et al. 2016, Romero-López and Morón 2017.

Cyclocephala carbonaria Arrow, 1911

Cyclocephala carbonaria Arrow, 1911: 173–174 [original combination].
Mononidia carbonaria (Arrow) [new combination by Casey 1915: 114–115].
Cyclocephala carbonaria Arrow [revised combination by Arrow 1937b: 8, 9].
Mononidia carbonaria (Arrow) [revised combination by Bolívar y Pieltain et al. 1963: 185].
Cyclocephala carbonaria Arrow [revised combination by Endrődi 1966: 164].
syn. *Mononidia carbonaria punctulata* Prell, 1934: 162 [original combination].
Cyclocephala carbonaria var. *punctulata* (Prell) [new combination and new infrasubspecific status by Arrow 1937b: 9].
Cyclocephala carbonaria ab. *punctulata* (Prell) [revised infrasubspecific status by Endrődi 1964: 466].
Cyclocephala carbonaria Arrow [synonymy by Endrődi 1966: 164].
syn. *Mononidia carbonaria trachypyga* Prell, 1934: 162 [original combination].
Cyclocephala carbonaria Arrow [synonymy by Arrow 1937b: 9].
syn. *Cyclocephala howdeni* Endrődi, 1967b: 83–84 [original combination].
Cyclocephala carbonaria Arrow [synonymy by Ratcliffe 2003: 99].

Types. Type of *C. carbonaria* at BMNH (Endrődi 1966). Holotype ♂ of *C. howdeni* at ZMHB (Endrődi 1967b). Location of the Prell types was not reported by Endrődi (1966).

Distribution. BELIZE: Cayo, Stann Creek. BOLIVIA. COLOMBIA: Boyacá, Chocó, Córdoba, Cundinamarca, Santander, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas. ECUADOR: Guayas, Santo Domingo de los Tsáchilas. GUATEMALA: Alta Verapaz, Huehuetenango, Izabal, Petén, Zacapa. HONDURAS: Atlántida, Colón, Cortés, Olancho, Santa Bárbara, Yoro. MEXICO: Chiapas, Puebla. NICARAGUA: Chontales, Jinotega, RAA Norte, Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Former Canal Zone, Panamá, San Blas. VENEZUELA: Amazonas, Bolívar.

References. Casey 1915, Prell 1934, Arrow 1911, 1937b, Blackwelder 1944, Bolívar y Pieltain et al. 1963, Pike et al. 1976, Endrődi 1964, 1966, 1967b, 1985a, Maes 1987, 1994, Joly 1995a, Dechambre 1991a, 1997, Ratcliffe and Morón 1997, Beath 1998, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Neita-Moreno et al. 2006, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Neita-Moreno 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe and Cave 2013, García-López et al. 2013, Ratcliffe et al. 2013, Yepes-Rodriguez et al. 2013, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala cardini Chapin, 1935

Cyclocephala cardini Chapin, 1935a: 74 [original combination, new replacement name for *Cyclocephala signatoides* Chapin].

syn. *Cyclocephala signatoides* Chapin, 1932: 287, 289 [original combination, junior homonym of *Cyclocephala signatoides* Höhne, 1923].

Types. Holotype ♂ at USNM (Endrődi 1966, Ratcliffe and Cave 2015).

Distribution. CUBA: Artemisa, La Habana, Pinar del Río, Santiago de Cuba.

References. Chapin 1932, 1935a, Arrow 1937b, Blackwelder 1944, Bruner et al. 1975, Pike et al. 1976, Endrődi 1966, 1985a, Fernández García 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe and Cave 2015, 2017.

Cyclocephala carinatipennis Martínez & Morón, 1984

Cyclocephala carinatipennis Martínez & Morón, 1984: 48–52 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection).

Distribution. VENEZUELA: Táchira.

References. Martínez and Morón 1984, Krajcik 2005, 2012.

Cyclocephala cartwrighti Endrődi, 1964

Cyclocephala cartwrighti Endrődi, 1964: 442–444 [original combination].

Types. Holotype ♂ at USNM (Endrődi 1964).

Distribution. BOLIVIA: Beni. FRENCH GUIANA: Saül

References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Ratcliffe 1992a, Dechambre and Duranton 2005, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013.

Remarks. Endrődi (1966, 1985a) reported *C. cartwrighti* from Panama (Canal Zone), but this specimen was misidentified (Ratcliffe 2003). *Cyclocephala cartwrighti* does not occur in Panama (Ratcliffe 2003).

Cyclocephala casanova Ratcliffe & Cave, 2009

Cyclocephala casanova Ratcliffe & Cave, 2009: 326–328 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe and Cave 2009).

Distribution. GUATEMALA: Baja Verapaz.

References. Ratcliffe and Cave 2009, Krajcik 2012, Ratcliffe et al. 2013.

Cyclocephala castanea (Olivier, 1789)

Melolontha castanea Olivier, 1789: 79 [original combination].
Cyclocephala castanea (Olivier) [new combination by Hope 1837: 40].
Aclinidia castanea (Olivier) [new combination by Casey 1915: 113, 165].
Cyclocephala castanea (Olivier) [revised combination by Arrow 1937b: 8, 9].
syn. *Melolontha elongata* Olivier, 1789: 23–24 [original combination].
Cyclocephala castanea (Olivier) [synonymy by Burmeister 1847: 49].
syn. *Cyclocephala latipes* Laporte, 1840: 125 [original combination].
Cyclocephala castanea (Olivier) [synonymy by Burmeister 1847: 49].
syn. *Melolontha valida* Schönherr, 1817: 187 [original combination].
Cyclocephala castanea (Olivier) [synonymy by Burmeister 1847: 49].

Types. Invalid neotype ♂ of *M. castanea* at HNHM (Endrődi Collection) (Endrődi 1966). Status of other types was not reported by Endrődi (1966).

Distribution. BRAZIL: Amapá, Amazonas, Pará. COLOMBIA: Amazonas, Guaviare. GUYANA: Demerara-Mahaica, Upper Demerara-Berbice. FRENCH GUIANA: Cayenne, St.-Laurent du Maroni. SURINAME: Paramaribo. VENEZUELA: Amazonas, Bolívar.

References. Olivier 1789, Schönherr 1817, Dejean 1821, 1833, 1836b, Hope 1837, Laporte 1840, Sturm 1843, Burmeister 1847, Erichson 1848a, Fauvel 1861, Harold 1869b, von Bayern 1897, Knuth et al. 1904, Arcangeli 1908, Ohaus 1909, 1911, Casey 1915, Bodkin 1919, Arrow 1937b, Anonymous 1940, Blackwelder 1944, Gessner 1962, Cramer et al. 1975, Pike et al. 1976, Prance and Anderson 1976, Faegri and van der Pijl 1979, Endrődi 1966, 1969b, 1975c, 1985a, Lachaume 1992, Joly 2000b, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Otavo et al. 2013, Maia et al. 2014, Gasca-Álvarez and Deloya 2016.

Cyclocephala castaniella Bates, 1888

Cyclocephala castaniella Bates, 1888: 304 [original combination].
syn. *Cyclocephala obscurata* Endrődi, 1966: 84, 270–271 [original combination].
Cyclocephala castaniella Bates [synonymy by Ratcliffe 2003].

Types. Type of *C. castaniella* at BMNH (Endrődi 1966). Holotype ♂ of *C. obscurata* at ZMHB (Endrődi 1966).

Distribution. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Puntarenas, San José. PANAMA: Chiriquí.

References. Bates 1888, Arrow 1937b, Blackwelder 1944, Martínez 1964, Pike et al. 1976, Endrődi 1966, 1985a, Abarca and Quesada 1997, Vargas and Abarca 1998, Ratcliffe 1992a, 2002a, 2003, Krajcik 2005, 2012.

Remarks. Endrődi (1966, 1985a) reported a single specimen of *C. castaniella* from Brazil with no further details. These data are likely erroneous (Ratcliffe 2003).

Cyclocephala caussaneli Dechambre, 1999

Cyclocephala caussaneli Dechambre, 1999: 6 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. ARGENTINA: Chaco.
References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala cearae Höhne, 1923

Cyclocephala cearae Höhne, 1923b: 363–364 [original combination].

Types. Lectotype at ZMHB (Endrődi 1966).
Distribution. BRAZIL: Bahia, Ceará, Pernambuco, Rio Grande do Norte, São Paulo.
References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012, Breeschoten et al. 2013, Maia et al. 2012, 2013a, b, 2014, Albuquerque et al. 2016.
Remarks. The specific epithet *cearae* is misspelled as *clarae* in some catalogs (Arrow 1937b, Blackwelder 1944). Krajcik (2005) lists *C. clarae* Arrow as a synonym of *C. cearae* Höhne.

Cyclocephala celata Dechambre, 1980

Cyclocephala celata Dechambre, 1980: 44–46 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1980).
Distribution. BRAZIL: Pernambuco, Tocantins. PARAGUAY: Guairá.
References. Dechambre 1980, Endrődi 1985a, Gonçalves and Maia 2006, Maia and Schlindwein 2006, Krajcik 2005, 2012, Maia et al. 2010, 2012, 2013a, b, 2014, Souza et al. 2014b, Gottsberger 2016.

Cyclocephala cerea Burmeister, 1847

Cyclocephala cerea Burmeister, 1847: 51 [original combination].
Cyclocephala sanguinicollis cerea (Burmeister) [new subspecies status by Endrődi 1966: 301].
Cyclocephala cerea Burmeister [revised species status by Endrődi 1967b: 88].
Cyclocephala sanguinicollis cerea (Burmeister) [revalidated subspecies status by Endrődi 1985a: 115].
Cyclocephala cerea Burmeister [revalidated species status by Ratcliffe and Cave 2015: 75, 83].

syn. *Cyclocephala sororia* Bates, 1888: 303 [original combination].
Cyclocephala cerea Burmeister [synonymy by Ratcliffe and Cave 2015: 83].
syn. *Cyclocephala flava* Dechambre, 1999: 10–11 [original combination].
Cyclocephala sororia Bates [synonymy by Ratcliffe and Cave 2006: 155].
Cyclocephala cerea Burmeister [synonymy by Ratcliffe and Cave 2015: 83].

Types. Lectotype ♀ of *C. cerea* at MLUH (Endrődi 1966). Type of *C. sororia* at BMNH (Endrődi 1966). Holotype ♂ of *C. flava* at MNHN (Dechambre 1999).

Distribution. BELIZE: Toledo. COSTA RICA: Cartago, Guanacaste, Heredia, Puntarenas, San José. CUBA: Camagüey, Ciego de Ávila, Cienfuegos, Guantánamo, Holguin, La Habana, Pinar del Río, Santiago de Cuba, Villa Clara. DOMINICAN REPUBLIC: Azua, Barahona, Independencia, Pedernales, San José de Ocoa, San Juan. GUATEMALA: Baja Verapaz, El Progreso, Escuintla, Guatemala, Huehuetenango, Izabal, Petén, Quiché, Sacatepéquez, San Marcos, Sololá, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Cortés, Francisco Morazán, Ocotepeque. JAMAICA: Clarendon, Manchester, Portland, St. Andrew, St. Catherine, St. Elizabeth, St. James, Westmoreland. MEXICO: Chiapas, Colima, Durango, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Puebla, Querétaro, San Luis Potosí, Sinaloa, Tamaulipas, Veracruz.

References. Burmeister 1847, Harold 1869b, Bates 1888, Leng and Mutchler 1914, Arrow 1937b, Blackwelder 1944, Howden 1970, Endrődi 1966, Endrődi 1967b, 1985a, Thomas 1993, Lobo and Morón 1993, Morón 1994, Ratcliffe and Morón 1997, Dechambre 1999, Navarrete-Heredia et al. 2001, Ratcliffe 2003, Luna et al. 2007, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, Ratcliffe and Cave 2006, 2015, Deloya et al. 1993, 2014a, 2016.

Cyclocephala chalumeaui Martínez, 1978

Cyclocephala chalumeaui Martínez, 1978b: 9–12 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1978b).

Distribution. ECUADOR: Pichincha.

References. Martínez 1978b, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala chera Ratcliffe, 2008

Cyclocephala chera Ratcliffe, 2008: 226–227 [original combination].

Types. Holotype ♀ at USNM (Ratcliffe 2008).

Distribution. GUYANA: Potaro-Siparuni.

References. Ratcliffe 2008, Krajcik 2012.

Cyclocephala chiquitita Ratcliffe, 2008

Cyclocephala chiquitita Ratcliffe, 2008: 227–229 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2008).
Distribution. ECUADOR: Napo.
References. Ratcliffe 2008, Krajcik 2012.

Cyclocephala colasi Endrődi, 1964

Cyclocephala colasi Endrődi, 1964: 440–441 [original combination].
syn. *Cyclocephala hayekae* Endrődi 1966: 92, 212–213 [original combination].
Cyclocephala colasi ab. *hayekae* Endrődi [new infrasubspecific status by Endrődi 1985a: 110].

Types. Holotype ♂ of *C. colasi* at HNHM (Endrődi Collection) (Endrődi 1964). Holotype ♂ of *C. hayekae* at BMNH (Endrődi 1966).

Distribution. BOLIVIA: Beni. BRAZIL: Amazonas, Pernambuco. COLOMBIA: Casanare. FRENCH GUIANA: Campoi, Cayenne, Kourou, Maripasoula, Sinnamary, St.-Laurent du Maroni. PERU: Loreto. SURINAME. VENEZUELA: Bolívar.

References. Gruner 1971, Pike et al. 1976, Dechambre 1979a, 1980, Dechambre and Endrődi 1984, Endrődi 1964, 1966, 1973a, 1985a, Andreazze and Fonseca 1998, Andreazze 2001, Gibernau et al. 1999, 2000, 2003, Milius 2003, Davis et al. 2008, Seymour et al. 2003, 2009, Breeschoten et al. 2013, Thien et al. 2009, Ponchel 2006, 2011, 2015, Krajcik 2005, 2012, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala collaris Burmeister, 1847

Cyclocephala collaris Burmeister, 1847: 47 [original combination].
Cyclocephala (*Cyclocephala*) *collaris* Burmeister [new subgeneric classification by Casey 1915: 138].
Cyclocephala collaris Burmeister [removal of subgeneric classification by Arrow 1937b: 8, 9].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. BRAZIL: Bahia, Rio de Janeiro. ECUADOR. MARTINIQUE. SURINAME. VENEZUELA: Bolívar.

References. Burmeister 1847, Harold 1869b, Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Martínez 1975b, Pike et al. 1976, Dechambre 1982, Dechambre and Endrődi 1984, Endrődi 1964, 1966, 1985a, Marques and Gil-Santana 2009, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Remarks. A few authors reported *C. collaris* from Guatemala (Alto Verapaz), Honduras, and Belize (Bates 1888, Blackwelder 1944, Endrődi 1966, 1985a). Faunistic studies have not recorded *C. collaris* from these areas, and it is possible that these data are erroneous (Ratcliffe and Cave 2006, Ratcliffe et al. 2013).

Cyclocephala comata Bates, 1888

Cyclocephala comata Bates, 1888: 305–306 [original combination].
Ochrosidia (*Graphalia*) *comata* (Bates) [new combination by Casey 1915: 159].
Cyclocephala comata Bates [revised combination by Arrow 1937b: 8, 9].

Types. Type at BMNH (Endrődi 1966).

Distribution. MEXICO: Durango, Estado de México, Guanajuato, Jalisco, Michoacán, Oaxaca, San Luis Potosí, Tamaulipas.

References. Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Ratcliffe and Morón 1997, Marín Jarillo 2001, Navarrete-Heredia et al. 2001, Díaz Mederos et al. 2006, Lugo-García et al. 2009, Smith 2003, 2009, Joly 2010, Krajcik 2005, 2012, Ratcliffe et al. 2013, Deloya et al. 2016.

Cyclocephala compacta Ratcliffe, 2008

Cyclocephala compacta Ratcliffe, 2008: 229–231 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2008).

Distribution. BRAZIL: Rondônia.

References. Ratcliffe 2008, Krajcik 2012.

Cyclocephala complanata Burmeister, 1847

Cyclocephala complanata Burmeister, 1847: 48–49 [original combination].
Cyclocephala (*Plagiosalia*) *complanata* Burmeister [new subgeneric classification by Casey 1915: 135].
Cyclocephala complanata Burmeister [removal of subgeneric classification by Arrow 1937b: 8, 9].
syn. *Cyclocephala* (*Plagiosalia*) *emacerata* Casey, 1915: 136 [original combination].
Cyclocephala complanata Burmeister [synonymy by Arrow 1937b: 9].
syn. *Cyclocephala* (*Plagiosalia*) *obliquata* Casey, 1915: 135 [original combination].
Cyclocephala complanata Burmeister [synonymy by Arrow 1937b: 9].

Types. Lectotype ♂ of *C. complanata* at MLUH (Endrődi 1966). Types of *C. emacerata* and *C. obliquata* at USNM (Endrődi 1966).

Distribution. BELIZE: Cayo, Orange Walk, Toledo, Stann Creek. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. EL SALVADOR: Ahuachapán, Chalatenango, San Salvador, Santa Ana. GUATEMALA: Alta Verapaz, Baja Verapaz, El Progreso, Escuintla, Guatemala, Huehuetenango, Izabal, Jutiapa, Petén, Quetzaltenango, Quiché, Retalhuleu, Sacatepéquez, San Marcos, Santa Rosa, Sololá, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Choluteca, Comayagua, Cortés, El Paraíso, Francisco Morazán, Gracias a Dios, Lempira, Olancho, Santa Bárbara, Yoro. MEXICO: Chiapas, Morelos, Oaxaca, Quintana Roo, Tabasco, Veracruz, Yucatán. NICARAGUA: Chontales, Jinotega, Matagalpa, RAA Norte, Río San Juan. PANAMA: Bocas del Toro.

References. Burmeister 1847, Harold 1869b, Bates 1888, Casey 1915, Arrow 1937b, Pike et al. 1976, Endrődi 1966, 1985a, Morón 1979, Maes 1987, Thomas 1993, Lobo and Morón 1993, Ratcliffe and Morón 1997, García-Luna et al. 2002, Alcázar-Ruiz et al. 2003, Ratcliffe 1992c, 2002a, 2003, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013.

Cyclocephala concolor Burmeister, 1847

Cyclocephala concolor Burmeister, 1847: 50 [original combination].

Types. Lectotype ♀ at MNHN (Dechambre 1991b). Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. COLOMBIA: Antioquia, Tolima. COSTA RICA: Alajuela, Cartago, Heredia, Puntarenas. GUATEMALA: Alta Verapaz, Baja Verapaz, Escuintla, Huehuetenango, Izabal, Zacapa. HONDURAS: Atlántida, Cortés, Francisco Morazán, Lempira, Ocotepeque, Santa Bárbara, Yoro. MEXICO: Chiapas, Oaxaca. PANAMA: Bocas del Toro. PARAGUAY: Paraguarí.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1991b, 1992, Ratcliffe and Morón 1997, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, García-López et al. 2013, Gasca-Álvarez and Deloya 2016, Romero-López and Morón 2017.

Cyclocephala confusa Endrődi, 1966

Cyclocephala confusa Endrődi, 1966: 90, 141, 143, 174–175 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).

Distribution. BELIZE: Cayo. COLOMBIA: Antioquia, Santander. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas. EL SALVADOR: Ahuachapán, Morazán. FRENCH GUIANA: Macouria. GUATEMALA: Alta Verapaz, Chiquimula, Izabal, San Marcos. HONDURAS: Atlántida, Copán, Cortés, El Paraíso, Gracias a Dios, Olancho, Yoro. MEXICO: Chiapas, Oaxaca. NICARAGUA: Jinotega, RAA Norte, Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Colón, Former Canal Zone, Panamá. PERU.

References. Gruner 1971, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1992, Maes et al. 1997, Ratcliffe 1992a, b, 2002a, 2003, Restrepo et al. 2003, Ratcliffe and Cave 2006, Krajcik 2005, 2012, García-López et al. 2013, Dupuis 2014, Ratcliffe et al. 2013, 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala conspicua Sharp, 1877

Cyclocephala conspicua Sharp, 1877: 135 [original combination].
Stigmalia conspicua (Sharp) [new combination by Casey 1915: 123].
Cyclocephala conspicua Sharp [revised combination by Arrow 1937b: 8, 9].
syn. *Cyclocephala conspicua gregaroides* Dechambre, 1992: 71 [original combination].
Cyclocephala conspicua Sharp [synonymy by Ratcliffe 2003: 114].
syn. *Cyclocephala conspicua fusca* Dechambre, 1992: 72 [original combination].
Cyclocephala conspicua Sharp [synonymy by Ratcliffe 2003: 114].

Types. Type of *C. conspicua* at MNHN (Endrődi 1966). Holotype ♂ of *C. conspicua gregaroides* at MNHN (Dechambre 1992). Holotype ♂ of *C. conspicua fusca* at MNHN (Dechambre 1992).

Distribution. BRAZIL: Amazonas. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Puntarenas, San José. ECUADOR: Napo, Pichincha. HONDURAS: El Paraíso. NICARAGUA: Chontales, Jinotega, Matagalpa, RAA Norte. PANAMA: Bocas del Toro, Chiriquí, Coclé, Former Canal Zone, Panamá, Veraguas. PERU.

References. Sharp 1877, Bertkau 1878, Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Beach 1982, Endrődi 1966, 1985a, Young 1988a, 1990, Dechambre 1992, Maes 1987, 1994, Croat 1997, Ratcliffe 2002a, 2003, Ratcliffe and Cave 2006, Krajcik 2005, 2012, García-López et al. 2013.

Cyclocephala contraria Kirsch, 1873

Cyclocephala contraria Kirsch, 1873: 343–344 [original combination].

Types. Lectotype ♂ at MTD (Endrődi 1966).

Distribution. BOLIVIA: La Paz. COLOMBIA: Meta. ECUADOR: Napo. PERU: Pasco.

References. Kirsch 1873, Arrow 1937b, Blackwelder 1944, Martínez 1975b, Pike et al. 1976, Endrődi 1966, 1985a, Restrepo et al. 2003, Ratcliffe 2008, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. Authors since Kirsch (1873) have referred to this species as *C. contracta* without explanation (Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Restrepo et al. 2003, Ratcliffe et al. 2015). The original and correct spelling is *C. contraria*, as listed in Gasca-Álvarez and Deloya (2016).

Cyclocephala coriacea Dechambre, 1992

Cyclocephala coriacea Dechambre, 1992: 58 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).
Distribution. ECUADOR: Sucumbíos.
References. Dechambre 1992, Dupuis 2008, 2014, Krajcik 2005, 2012.

Cyclocephala couturieri Dechambre, 1999

Cyclocephala couturieri Dechambre, 1999: 7 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. PERU: San Martín.
References. Dechambre 1999, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala crassa Endrődi, 1967

Cyclocephala crassa Endrődi, 1967c: 1–3 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1967c).
Distribution. COLOMBIA: Amazonas. ECUADOR.
References. Martínez 1975b, Pike et al. 1976, Endrődi 1967c, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala crepuscularis Martínez, 1954

Cyclocephala crepuscularis Martínez, 1954: 17–26 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1954).
Distribution. ARGENTINA: Buenos Aires.
References. Pike et al. 1976, Martínez 1954, 1978a, Endrődi 1966, 1985a, Schawaller 1994, Krajcik 2005, 2012, Breeschoten et al. 2013.

Cyclocephala cribrata Burmeister, 1847

Cyclocephala cribrata Burmeister, 1847: 69–70 [original combination].

Types. Type at MLUH (Endrődi 1966).

Distribution. COLOMBIA. BRAZIL: Bahia, Espírito Santo, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, São Paulo.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Luederwaldt 1926, Luederwaldt and Pinto da Fonseca 1922, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Gottsberger and Amaral 1984, Gottsberger 1986, Dechambre 1997, Weber et al. 2001, Restrepo et al. 2003, Malý 2006, Weber 2008, Marques and Gil-Santana 2009, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala curta Bates, 1888

Cyclocephala curta Bates, 1888: 305 [original combination].
syn. *Cyclocephala fusciventris* Arrow, 1902: 139 [original combination].
Cyclocephala curta Bates [synonymy by Endrődi 1964: 466].

Types. Types of *C. curta* and *C. fusciventris* at BMNH (Endrődi 1966).

Distribution. COSTA RICA: Guanacaste. EL SALVADOR: San Salvador. HONDURAS: Comayagua, Cortés, La Paz. MEXICO: Chiapas, Guerrero, Michoacán, Nayarit, Oaxaca, Sinaloa, Veracruz.

References. Bates 1888, Arrow 1902, 1937b, Blackwelder 1944, Martínez 1964, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Ratcliffe and Morón 1997, Ratcliffe 2003, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, Deloya et al. 2014a, 2016.

Cyclocephala dalensi Ponchel, 2009

Cyclocephala dalensi Ponchel, 2009: 184–185 [original combination].

Types. Holotype ♂ in the Yannig Ponchel Collection (Ponchel 2009).

Distribution. FRENCH GUIANA: Maripasoula.

References. Ponchel 2009, 2011, Krajcik 2012.

Cyclocephala deceptor (Casey, 1915)

Stigmalia deceptor Casey, 1915: 117–118 [original combination].
Cyclocephala mafaffa (Burmeister) [synonymy by Arrow 1937b: 12].

Cyclocephala deceptor (Casey) [revalidated species status by Ratcliffe and Delgado 1990: 43–45].
syn. *Stigmalia cuernavacana* Casey, 1915: 116-117 [original combination].
Cyclocephala mafaffa Burmeister [synonymy by Arrow 1937b: 12].
Cyclocephala mafaffa ab. *cuernavacana* (Casey) [new infrasubspecific status by Endrődi 1966: 247].
Cyclocephala deceptor (Casey) [synonymy by Ratcliffe and Delgado-Castillo 1990: 43].
syn. *Stigmalia deficiens* Casey, 1915: 117 [original combination].
Cyclocephala mafaffa Burmeister [synonymy by Arrow 1937b: 12].
Cyclocephala deceptor (Casey) [synonymy by Ratcliffe and Delgado-Castillo 1990: 43].
syn. *Stigmalia fallaciosa* Casey, 1915: 117 [original combination].
Cyclocephala mafaffa Burmeister [synonymy by Arrow 1937b: 12].
Cyclocephala mafaffa ab. *fallaciosa* (Casey) [new infrasubspecific status by Endrődi 1966: 247].
Cyclocephala deceptor (Casey) [synonymy by Ratcliffe and Delgado-Castillo 1990: 43].

Types. These Casey types are at USNM (Endrődi 1966).

Distribution. BELIZE: Cayo. EL SALVADOR: Ahuachapán, La Libertad, La Paz, Morazán, San Salvador, San Vicente, Santa Ana, Sonsonate. GUATEMALA: Baja Verapaz, Chimaltenango, Chiquimula, El Progreso, Escuintla, Guatemala, Huehuetenango, Izabal, Jalapa, Jutiapa, Petén, Quiché, Sacatepéquez, San Marcos, Santa Rosa, Suchitepéquez, Zacapa. HONDURAS: Choluteca, Comayagua, Copán, Cortés, El Paraíso, Francisco Morazán, La Paz, Olancho. MEXICO: Aguascalientes, Chiapas, Colima, Durango, Estado de México, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Puebla, Sinaloa, Sonora, Tamaulipas, Veracruz. NICARAGUA: Estelí, Matagalpa.

References. Casey 1915, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Ratcliffe and Delgado-Castillo 1990, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Ratcliffe et al. 2013, Deloya et al. 2014a, 2016, Romero-López and Morón 2017.

Cyclocephala dechambrei Dupuis, 2018

Cyclocephala boliviana Dechambre, 1997: 14, 21–23 [original combination, homonym of *C. boliviana* Dechambre 1992].
Cyclocephala dechambrei Dupuis [new replacement name by Dupuis 2018: 8].

Types. Holotype ♂ at MNHN (Dechambre 1997, Dupuis 2018).

Distribution. BOLIVIA: Chuquisaca, Cochabamba, La Paz.

References. Dechambre 1997, 1999, Krajcik 2005, 2012, Dupuis 2018.

Cyclocephala decorella Endrődi, 1966

Cyclocephala decorella Endrődi, 1966: 76, 134, 181–182 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Rio de Janeiro.

References. Pike et al. 1976, Endrődi 1966, 1969b, 1985a, Krajcik 2005, 2012.

Cyclocephala defecta Endrődi, 1970

Cyclocephala defecta Endrődi, 1970: 105–106 [original combination].

Types. Holotype ♂ at "Pereira Collection in Sao Paulo" (Endrődi 1970). This is possibly referring to MZSP.

Distribution. COLOMBIA: Antioquia.

References. Pike et al. 1976, Endrődi 1970, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala deltoides Ratcliffe, 1992

Cyclocephala deltoides Ratcliffe, 1992b: 181–183 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992b).

Distribution. BRAZIL: Pará.

References. Ratcliffe 1992b, Krajcik 2005, 2012.

Cyclocephala dichroa Dechambre, 1992

Cyclocephala dichroa Dechambre, 1992: 67–68 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. BRAZIL: Pará. FRENCH GUIANA: Régina, Saül, St.-Laurent du Maroni. PERU: Huánuco. VENEZUELA: Amazonas, Barinas, Bolívar, Portuguesa, Táchira.

References. Dechambre 1992, Joly 2009, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala dilatata **(Prell, 1934)**

Mononidia dilatata Prell, 1934: 162 [original combination].
Cyclocephala dilatata (Prell) [new combination by Arrow 1937b: 8, 10].

Types. Lectotype ♀ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba, La Paz, Santa Cruz. BRAZIL: Mato Grosso. ECUADOR: Napo. FRENCH GUIANA: Roura. PERU: Huánuco, Pasco, Madre de Dios. SURINAME: Brokopondo. VENEZUELA: Amazonas, Bolívar.

References. Prell 1934, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1967b, 1985a, Joly 1995a, Dechambre 1997, 1999, Dupuis 1999, Ponchel 2011, Krajcik 2005, 2012, Ratcliffe et al. 2015, Dupuis 2018.

Cyclocephala diluta **Erichson, 1847**

Cyclocephala diluta Erichson, 1847a: 97 [original combination].

Types. Lectotype ♀ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba, Santa Cruz. BRAZIL: Pará, Santa Catarina. ECUADOR: Cañar, Guayas. FRENCH GUIANA: Saül, St.-Élie. PERU: Ayacucho, Cusco, Junín, Madre de Dios, Pasco.

References. Erichson 1847a, Harold 1869b, Bates 1891, Gruner 1971, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1979a, 1999, Dechambre and Duranton 2005, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2015.

Cyclocephala discicollis **Arrow, 1902**

Cyclocephala discicollis Arrow, 1902: 140–141 [original combination].
Diapatalia discicollis (Arrow) [new combination by Casey 1915: 111, 129].
Cyclocephala discicollis Arrow [revised combination by Arrow 1937b: 8, 10].

Types. Type at BMNH (Endrődi 1966).

Distribution. COLOMBIA: Casanare. FRENCH GUIANA: Cayenne. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Darien, Former Canal Zone, Panamá, Veraguas. PERU. VENEZUELA.

References. Casey 1915, Arrow 1902, 1937b, Blackwelder 1944, Gruner 1971, Pike et al. 1976, Endrődi 1966, 1985a, Ratcliffe 2003, Núñez-Avellaneda and Neita 2009, Krajcik 2005, 2012, Núñez-Avellaneda 2014.

Remarks. Specimens of *C. discicollis* were reported from Nayarit, Mexico (Endrődi 1966, 1985a). Deloya et al. (2014) reported *C. discicollis* from Guerrero, Jalisco, and Nayarit. Navarrete-Heredia et al. (2001) reported *C. discicollis* from Jalisco. Major faunistic studies did not record any specimens from Mexico (Ratcliffe et al. 2013).

Cyclocephala discolor (Herbst, 1790)

Melolontha discolor Herbst, 1790: 73 [original combination].
Cyclocephala discolor (Herbst) [new combination by Burmeister 1847: 45–46].
syn. *Cyclocephala andina* Bréthes, 1905: 331–332 [original combination].
Cyclocephala discolor andina Bréthes [new subspecies status by Endrődi 1966: 185].
Cyclocephala discolor (Herbst) [synonymy by Ratcliffe 2003: 118].
syn. *Cyclocephala aurantiaca* Prell, 1937b: 496 [original combination].
Cyclocephala discolor ab. *aurantiaca* Prell [new infrasubspecific status by Endrődi 1966: 185].
Cyclocephala discolor (Herbst) [synonymy by Ratcliffe 2003: 118].
syn. *Melolontha unciata* Schönherr, 1817: 189 [original combination].
Cyclocephala discolor (Herbst) [synonymy by Burmeister 1847: 46].

Types. Lectotype ♀ of *C. discolor* at ZMHB (Endrődi 1966). Type of *C. aurantiaca* at ZMHB (Endrődi 1966). Endrődi (1966) apparently did not examine the type of *C. andina* but wrote that the type was at "Mus. Buenos Aires", possibly referring to MACN.

Distribution. ARGENTINA: Salta, Tucumán. BELIZE: Cayo, Stann Creek. BOLIVIA: Beni, Cochabamba, La Paz. BRAZIL: Amazonas, Minas Gerais. COLOMBIA: Amazonas, Antioquia, Cesar, Chocó, Cundinamarca, Meta, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas. ECUADOR: Los Ríos, Morona-Santiago, Napo, Pastaza. FRENCH GUIANA: Cayenne. GUATEMALA: Alta Verapaz, Izabal. GUYANA. HONDURAS: Atlántida, Colón, Comayagua, Cortés, El Paraíso, Francisco Morazán, Gracias a Dios, La Paz, Olancho, Yoro. MEXICO: Chiapas, Colima, Jalisco, Michoacán, Nayarit, Oaxaca, San Luis Potosí. NICARAGUA: Jinotega, RAA Norte, Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Darien, Former Canal Zone, Panamá. PERU: Cusco, Huánuco, Loreto, San Martín. SURINAME. TRINIDAD AND TOBAGO: Trinidad. VENEZUELA: Aragua, Capital District, Monagas.

References. Herbst 1790, Schönherr 1817, Burmeister 1847, Erichson 1848a, Senoner 1864, Harold 1869b, Bréthes 1905, Seidlitz 1905, Arrow 1937b, Prell 1937b, Blackwelder 1944, Martínez 1954, Pike et al. 1976, Endrődi 1963, 1966, 1969b, 1985a, Maes et al. 1997, Ratcliffe and Morón 1997, Ervik et al. 1999, Morón-Ríos and Morón 2001, Navarrete-Heredia et al. 2001, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Ponchel 2006, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Núñez-Avellaneda and Rojas-Robles 2008, Núñez-Avellaneda and Neita 2009, Neita-Moreno 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, 2015, Deloya et al. 2016, Gasca-Álvarez and Deloya 2016, Romero-López and Morón 2017.

Remarks. Endrődi (1966) reported *C. discolor* from Haiti with no further details. This record is either spurious or erroneous (Ratcliffe and Cave 2015).

Cyclocephala dispar **(Herbst, 1790)**

Melolontha dispar Herbst, 1790: 65–66 [original combination].
Cyclocephala dispar (Herbst) [new combination by Reiche 1859: 7].
syn. *Cyclocephala dorsalis* Burmeister, 1847: 64 [original combination].
Cyclocephala dispar (Herbst) [synonymy by Reiche 1859: 7].
syn. *Cyclocephala stolata* Erichson, 1848a: 562].
Cyclocephala dispar (Herbst) [synonymy by Arrow 1911: 171].

Types. Lectotype ♀ of *M. dispar* at ZMHB (Endrődi 1966). Type of *C. dorsalis* at MLUH (Endrődi 1966, Dupuis 2018). Type of *C. stolata* at ZMHB (Endrődi 1966, Dupuis 2018).

Distribution. BRAZIL: Acre, Amazonas, Pará, Roraima. COLOMBIA: Meta. GUYANA: Demerara-Berbice. PARAGUAY. PERU: Loreto.

References. Herbst 1790, Burmeister 1847, Erichson 1848a, Reiche 1859, Harold 1869b, Arrow 1911, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012, Ratcliffe and Cave 2015, Ratcliffe et al. 2015, Dupuis 2018.

Remarks. Endrődi (1966, 1985a) reported *C. dispar* from Puerto Rico. This record is likely erroneous (Ratcliffe and Cave 2015).

Cyclocephala distincta **Burmeister, 1847**

Cyclocephala distincta Burmeister, 1847: 47 [original combination].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. BOLIVIA: Beni. BRAZIL: Amazonas, Bahia, Pará, Pernambuco, Rio de Janeiro, Santa Catarina, São Paulo. COLOMBIA. GUYANA.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Dechambre 1980, Endrődi 1966, 1973a, 1985a, Voeks 2002, Restrepo et al. 2003, Marques and Gil-Santana 2009, Krajcik 2005, 2012, Souza et al. 2014a, 2015, Albuquerque et al. 2016, Gasca-Álvarez and Deloya 2016.

Cyclocephala divaricata **Joly, 2005**

Cyclocephala divaricata Joly, 2005: 1–5 [original combination].

Types. Holotype ♂ at MIZA (Joly 2005).

Distribution. VENEZUELA: Amazonas.

References. Joly 2005, Krajcik 2012.

Cyclocephala dolichotarsa Ratcliffe & Cave, 2008

Cyclocephala dolichotarsa Ratcliffe & Cave, 2008: 3–5 [original combination].

Types. Holotype ♂ at FSCA (Ratcliffe and Cave 2008).
Distribution. BAHAMAS: Great Inagua.
References. Krajcik 2012, Ratcliffe and Cave 2008, 2015.

Cyclocephala dominicana Endrődi, 1985

Cyclocephala dominicana Endrődi, 1985b: 70–71 [original combination].

Types. Holotype ♂ at JPVC (Endrődi 1985b).
Distribution. ECUADOR: Pichincha, Santo Domingo de los Tsáchilas.
References. Endrődi 1985b, Krajcik 2005, 2012.

Cyclocephala duodecimpunctata Endrődi, 1966

Cyclocephala duodecimpunctata Endrődi, 1966: 82, 127, 189–190 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).
Distribution. BRAZIL: Espírito Santo, Rio de Janeiro. COLOMBIA.
References. Pike et al. 1976, Endrődi 1966, 1975b, 1985a, Ratcliffe 1992a, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala dupuisi Ratcliffe, 2014

Cyclocephala dupuisi Ratcliffe, 2014: 664–666 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2014).
Distribution. BOLIVIA: Santa Cruz.
References. Ratcliffe 2014.

Cyclocephala durantonorum Dechambre, 1999

Cyclocephala durantonorum Dechambre, 1999: 8–9 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. FRENCH GUIANA: Régina, Roura, Sinnamary, St.-Élie.
References. Dechambre 1999, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala dyscinetoides **Dechambre, 1999**

Cyclocephala dyscinetoides Dechambre, 1999: 9–10 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. ECUADOR: Santo Domingo de los Tsáchilas.
References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala emarginata **Endrődi, 1966**

Cyclocephala emarginata Endrődi, 1966: 67, 123, 190–191 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).
Distribution. BRAZIL: Amazonas. FRENCH GUIANA: St.-Élie.
References. Pike et al. 1976, Dechambre 1979a, Endrődi 1966, 1985a, Gibernau et al. 1999, Krajcik 2005, 2012, Ponchel 2006, 2011, 2015.

Cyclocephala endrodii **Martínez, 1965**

Cyclocephala (*Paraclinidia*) *endrodii* Martínez, 1965b: 14–18 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1965b, Endrődi 1966).
Distribution. BRAZIL: Pará, Rondônia.
References. Martínez 1965b, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1992, Krajcik 2005, 2012.

Cyclocephala endroedyyoungai **Endrődi, 1964**

Cyclocephala endroedyyoungai Endrődi, 1964: 435–436 [original combination].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1964).
Distribution. BRAZIL: Espírito Santo.
References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala englemani **(Ratcliffe, 1977)**

Mimeoma englemani Ratcliffe, 1977: 430–432 [original combination].
Cyclocephala englemani (Ratcliffe) [new combination by Moore et al. 2015: 898].

Types. Holotype ♂ at UNSM (Ratcliffe 1977).

Distribution. PANAMA: Darien, Former Canal Zone, Panamá.

References. Ratcliffe 1977, 2002a, 2003, Endrődi 1985a, Krajcik 2005, 2012, Moore et al. 2015.

Cyclocephala enigma Ratcliffe, 2003

Cyclocephala enigma Ratcliffe, 2003: 60, 70, 121–123 [original combination].

Types. Holotype ♂ at MNCR (originally deposited at INBio) (Ratcliffe 2003).

Distribution. COSTA RICA: Guanacaste.

References. Ratcliffe 2003, Krajcik 2005, 2012.

Cyclocephala epistomalis Bates, 1888

Cyclocephala epistomalis Bates, 1888: 303–304 [original combination].
Homochromina epistomalis (Bates) [new combination by Casey 1915: 165].
Cyclocephala epistomalis Bates [revised combination by Arrow 1937b: 8, 10].
syn. *Cyclocephala mollis* Endrődi, 1963: 323–325 [original combination].
Cyclocephala epistomalis ab. *mollis* Endrődi [new infrasubspecific status by Endrődi 1985a: 90].
Cyclocephala epistomalis Bates [synonymy by Ratcliffe 2003: 123].

Types. Type of *C. epistomalis* at BMNH (Endrődi 1966). Holotype ♂ of *C. mollis* at ZSMC (1966).

Distribution. BOLIVIA: Beni, Santa Cruz. BRAZIL: Amazonas, Mato Grosso, Mato Grosso do Sul, Pará. COLOMBIA: Amazonas, Caquetá, Cundinamarca, Meta, Risaralda, Valle del Cauca. FRENCH GUIANA: Cayenne. GUATEMALA: Sacatepéquez. PANAMA: Coclé. PARAGUAY. VENEZUELA: Apure.

References. Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Gruner 1971, Pike et al. 1976, Prance 1980, Endrődi 1963, 1964, 1966, 1985a, Ratcliffe 2003, Pardo-Locarno et al. 2011, Krajcik 2005, 2012, Ratcliffe et al. 2013, Maia et al. 2014, López-Garcia et al. 2015, Gasca-Álvarez and Deloya 2016, Santos Fava and Gomes 2017.

Cyclocephala ergastuli Dechambre, 1997

Cyclocephala ergastuli Dechambre, 1997: 14, 16–17 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1997).

Distribution. COLOMBIA: Valle del Cauca. FRENCH GUIANA: Iracoubo, Kourou, Régina, Roura, St.-Laurent du Maroni. TRINIDAD AND TOBAGO: Trinidad. VENEZUELA: Bolívar.

References. Dechambre 1997, Restrepo et al. 2003, Krajcik 2005, 2012, Ponchel 2011, 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala erotylina Arrow, 1914

Cyclocephala erotylina Arrow, 1914: 275 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. COSTA RICA: Alajuela, Guanacaste, Limón, Puntarenas, San José. GUATEMALA: Escuintla, Guatemala, Jutiapa, Quetzaltenango, San Marcos, Santa Rosa, Sololá, Suchitepéquez. HONDURAS: Olancho, Yoro. MEXICO: Chiapas, Colima. NICARAGUA: Jinotega, Matagalpa, RAA Norte. PANAMA: Coclé, Panamá.

References. Arrow 1914, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1980, 1985a, Maes et al. 1997, Ratcliffe and Morón 1997, Ratcliffe 2002a, 2003, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Krajcik 2005, 2012, García-López et al. 2013, Ratcliffe et al. 2013, Romero-López and Morón 2017.

Cyclocephala everardoi Grossi, Santos, & Almeida, 2016

Cyclocephala everardoi Grossi, Santos, & Almeida, 2016: 249–250 [original combination].

Types. Holotype ♂ at CERPE (Grossi et al. 2016).

Distribution. BRAZIL: Minas Gerais.

References. Grossi et al. 2016.

Cyclocephala fankhaeneli Endrődi, 1964

Cyclocephala fankhaeneli Endrődi 1964: 461–462 [original combination].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1964).

Distribution. BOLIVIA: Tarija. BRAZIL: Paraná, Rio Grande do Sul.

References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Grossi et al. 2011, Krajcik 2005, 2012, Breeschoten et al. 2013.

Cyclocephala fasciolata Bates, 1888

Cyclocephala fasciolata Bates, 1888: 301 [original combination].
Halotosia fasciolata (Bates) [new combination by Casey 1915: 113].
Cyclocephala fasciolata Bates [revised combination by Arrow 1937b: 8, 10].

Types. Type at BMNH (Endrődi 1966).

Distribution. COLOMBIA: Antioquia, Chocó. COSTA RICA: Guanacaste, Puntarenas. GUATEMALA: Alta Verapaz, Chiquimula, Izabal. MEXICO: Chiapas, Jalisco, Puebla, Veracruz. PANAMA: Chiriquí.

References. Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Búrquez et al. 1987, Lobo and Morón 1993, Ratcliffe and Morón 1997, Carrillo-Ruiz and Morón 2003, Restrepo et al. 2003, Ratcliffe 2002a, 2003, Ramos-Elorduy and Pino Moreno 2002, 2004 Malý 2006, Múñoz-Hernández et al. 2008, Pacheco F. et al. 2008, Neita-Moreno 2011, Aguirre et al. 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, García-López et al. 2013, Morón et al. 2014, Dossey et al. 2016, Gasca-Álvarez and Deloya 2016, Mitasuhashi 2016.

Cyclocephala figurata Burmeister, 1847

Cyclocephala figurata Burmeister, 1847: 65 [original combination].

Types. Lectotype ♂ at MNHN (Dechambre 1991b).

Distribution. FRENCH GUIANA: Cayenne.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1991b, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala flavipennis Arrow, 1914

Cyclocephala flavipennis Arrow, 1914: 275 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. BOLIVIA. BRAZIL: Rio de Janeiro, Rio Grande do Sul. ECUADOR: Bolívar.

References. Arrow 1914, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1967b, 1985a, Dechambre 1999, Bolliger et al. 2006, Krajcik 2005, 2012, Cherman et al. 2013, Diez-Rodríquez et al. 2015.

Cyclocephala flavoscutellaris Höhne, 1923

Cyclocephala flavoscutellaris Höhne, 1923b: 357–358 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Amazonas. COLOMBIA. ECUADOR: Morona-Santiago, Pichincha. PERU: Cusco.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

***Cyclocephala flora* Arrow, 1911**

Cyclocephala flora Arrow, 1911: 175 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. BRAZIL: Amazonas. PERU: Loreto.

References. Arrow 1911, 1937b, Blackwelder 1944, Pike et al. 1976, Martínez 1978b, Endrődi 1964, 1966, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

***Cyclocephala forcipulata* Howden & Endrődi, 1966**

Cyclocephala forcipulata Howden & Endrődi, 1966: 299–301 [original combination].

Types. Holotype ♂ at CNC (Howden and Endrődi 1966).

Distribution. MEXICO: Durango, Guerrero, Jalisco, Nayarit, Oaxaca, Sinaloa.

References. Howden and Endrődi 1966, Martínez 1975b, Pike et al. 1976, Endrődi 1985a, Ratcliffe and Delgado-Castillo 1990, Ratcliffe and Morón 1997, Joly 2000a, Navarrete-Heredia et al. 2001, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe et al. 2013.

***Cyclocephala forsteri forsteri* Endrődi, 1963**

Cyclocephala forsteri forsteri Endrődi, 1963: 325–326 [original combination].

Types. Holotype ♂ at ZSMC (Endrődi 1966).

Distribution. BOLIVIA: La Paz, Santa Cruz. BRAZIL: Amazonas, Distrito Federal, Goiás, Mato Grosso, Mato Grosso do Sul, Rio de Janeiro, Santa Catarina. COLOMBIA: Casanare, Meta. PARAGUAY: Concepción, Distrito Capital.

References. Pike et al. 1976, Endrődi 1963, 1964, 1966, 1985a, Scariot et al. 1991, Hardy 1991, Poole and Gentili 1996, Santos and Ávila 2007, Núñez-Avellaneda and Neita-Moreno 2009, Coutinho et al. 2011, Oliveira and Ávila 2011, Rodrigues et al. 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Gasca-Álvarez and Deloya 2016.

***Cyclocephala forsteri maracayensis* Endrődi, 1963**

Cyclocephala forsteri maracayensis Endrődi, 1963: 326 [original combination].

Types. Holotype ♂ at ZSMC (Endrődi 1966).

Distribution. VENEZUELA: Aragua, Carabobo.

References. Pike et al. 1976, Endrődi 1963, 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala freudei Endrődi, 1963

Cyclocephala freudei Endrődi, 1963: 328–329 [original combination].

Types. Holotype ♂ at ZSMC (Endrődi 1966).

Distribution. EL SALVADOR: Cuscatlán, San Salvador. GUATEMALA: Totonicapán, Zacapa. MEXICO: Colima, Durango, Guerrero, Jalisco, Michoacán, Nayarit, Oaxaca, Puebla, Querétaro, Sinaloa, Sonora, Veracruz.

References. Pike et al. 1976, Endrődi 1963, 1966, 1985a, Hardy 1991, Thomas 1993, Poole and Gentili 1996, Morón et al. 1988, 1996, 1998, Ratcliffe and Morón 1997, Navarrete-Heredia et al. 2001, Riley and Wolfe 2003, Ratcliffe and Cave 2006, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe et al. 2013, Deloya et al. 2014a, 2016.

Remarks. *Cyclocephala freudei* was reported from the United States (Texas), Costa Rica (Santa Elena), and Ecuador (San José de Canelos) (Endrődi 1966, 1985a). This species does not occur in the United States and the Costa Rican record is based only on one specimen (Ratcliffe 2003, Ratcliffe and Cave 2006, Ratcliffe et al. 2013). The Ecuadorian record has not been evaluated with further sampling (Ratcliffe and Cave 2006).

Cyclocephala freyi freyi Endrődi, 1964

Cyclocephala freyi Endrődi, 1964: 464–466 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1964).

Distribution. BOLIVIA: Santa Cruz. PERU: Cusco, Junín, Madre de Dios.

References. Pike et al. 1976, Dechambre 1979a, Endrődi 1964, 1966, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala freyi integra Dechambre, 1999

Cyclocephala freyi integra Dechambre, 1999: 22 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).

Distribution. FRENCH GUIANA: Saül, Sinnamary.

References. Dechambre 1999, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala frontalis Chevrolat, 1844

Cyclocephala frontalis Chevrolat, 1844: 90–91 [original combination].
Cyclocephala cubana Chapin [synonymy by Endrődi 1966: 179].
Cyclocephala frontalis Chevrolat [revalidated species status by Ratcliffe and Cave 2015: 87].
syn. *Cyclocephala cubana* Chapin, 1932: 291–292 [original combination].

Cyclocephala frontalis Chevrolat [synonymy by Ratcliffe and Cave 2015: 87].

Types. Neotype ♂ of *C. frontalis* at UNSM (Ratcliffe and Cave 2015). Type of *C. cubana* at USNM (Endrődi 1966).

Distribution. BAHAMAS: Eleuthera. CUBA: Artemisa, Camagüey, Ciego de Ávila, Cienfuegos, Granma, La Habana, Las Tunas, Matanzas, Pinar del Río, Sancti Spíritus, Santiago de Cuba, Villa Clara. DOMINICAN REPUBLIC: Azua, Barahona, Elías Piña, Monte Cristi, Pedernales, San Juan, Valverde. HAITI: Grand Anse, Ouest, Sud. PUERTO RICO: Cabo Rojo, Guánica, Lajas.

References. Latreille 1829, 1837, Marschall 1857, Chevrolat 1844, 1865, Burmeister 1847, Harold 1869b, Gundlach 1891, Leng and Mutchler 1914, Chapin 1932, Arrow 1937b, Blackwelder 1944, Bruner et al. 1975, Pike et al. 1976, Endrődi 1966, 1969b, 1985a, González et al. 1998, Fernández García 2006, Krajcik 2005, 2012, Ratcliffe and Cave 2015.

Cyclocephala fulgurata Burmeister, 1847

Cyclocephala fulgurata Burmeister, 1847: 63 [original combination].

Ochrosidia (*Graphalia*) *fulgurata* (Burmeister) [new combination and new subgeneric classification by Casey 1915: 159].

Cyclocephala fulgurata Burmeister [revised combination and removal of subgeneric classification by Arrow 1937b: 8, 11].

Types. Lectotype at MLUH (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires. BELIZE: Stann Creek. BOLIVIA: Beni, Cochabamba, Santa Cruz. BRAZIL: Pará. COLOMBIA: Antioquia, Boyacá, Cauca, Chocó, Cundinamarca, Risaralda, Santander, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Limón, Puntarenas. ECUADOR: Bolívar, Cañar, Los Ríos. FRENCH GUIANA: Cayenne. GUATEMALA: Alta Verapaz, Baja Verapaz, Chimaltenango, Guatemala, Huehuetenango, Izabal, Petén, San Marcos, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Cortés, El Paraíso, Olancho, Yoro. MEXICO: Chiapas, Distrito Federal, Hidalgo, Jalisco, Nayarit, Oaxaca, Tamaulipas, Veracruz, Zacatecas. PANAMA: Bocas del Toro, Chiriquí, Coclé, Darien, Former Canal Zone, Panamá, Veraguas. PERU: Cajamarca, Junín, Madre de Dios. VENEZUELA: Capital District, Carabobo, Mérida, Monagas.

References. Burmeister 1847, Harold 1869b, Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Figueroa-P. 1952, Pike et al. 1976, Dechambre 1979a, Endrődi 1964, 1966, 1969b, 1985a, Dechambre 1979a, Thomas 1993, Ratcliffe and Morón 1997, Caicedo and Bellotti 2002, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Villegas-Urbano 2004, Patiño 2004, Vásquez and Sánchez 2004, Pardo-Locarno et al. 1995, 2003, 2005a, Ratcliffe and Cave 2006, Neita-Moreno et al. 2006, Bran et al. 2006, Pacheco F. et al. 2008, Villegas-Urbano et al. 2008, Neita-Moreno 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Pardo-Locarno 2013, Yepes-Rodriguez et al. 2013, López-García et al. 2015, Ratcliffe et al. 2013, 2015, Gasca-Álvarez and Deloya 2016, Villalobos-Moreno et al. 2016, 2017.

Cyclocephala fulvipennis Burmeister, 1847

Cyclocephala fulvipennis Burmeister, 1847: 71 [original combination].

Types. Lectotype ♀ at MNHN (Dechambre 1991b). Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. BOLIVIA: Beni, La Paz. BRAZIL: Bahia, Rio de Janeiro, São Paulo. PERU.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1973a, 1985a, Dechambre 1979b, 1991b, 1992, Ratcliffe 1992a, Malý 2006, Dupuis 2008, 2014, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Remarks. *Cyclocephala fulvipennis* was reported from Honduras and Nicaragua (Endrődi 1966, 1985a). These records are likely based on misidentified specimens of *C. porioni* Dechambre (Ratcliffe 2003).

Cyclocephala gabaldoni Martínez & Martínez, 1981

Cyclocephala gabaldoni Martínez & Martínez, 1981: 203–206 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez and Martínez 1981).

Distribution. FRENCH GUIANA. VENEZUELA: Amazonas.

References. Martínez and Martínez 1981, Endrődi 1985a, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala genieri Joly, 2010

Cyclocephala genieri Joly, 2010: 141–146 [original combination].

Types. Holotype ♂ at USNM (Joly 2010).

Distribution. PERU: Ucayali.

References. Joly 2010, Krajcik 2012, Ratcliffe et al. 2015.

Cyclocephala gigantea Dupuis, 1999

Cyclocephala gigantea Dupuis, 1999: 186 [original combination].

Types. Holotype ♀ at MNHN (Dupuis 1999).

Distribution. ECUADOR: Pastaza, Sucumbíos.

References. Dupuis 1999, Malý 2006, Krajcik 2005, 2012.

Cyclocephala goetzi Endrődi, 1966

Cyclocephala goetzi Endrődi, 1966: 208–209 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).

Distribution. BOLIVIA: Beni. PERU: Madre de Dios.

References. Pike et al. 1976, Endrődi 1966, 1985a, Ratcliffe 1992a, Dechambre and Duranton 2005, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala gravis Bates, 1888

Cyclocephala gravis Bates, 1888: 308 [original combination].

syn. *Cyclocephala meinanderi* Endrődi, 1964: 457–459 [original combination].

Cyclocephala gravis ab. *meinanderi* Endrődi [new infrasubspecific status by Endrődi 1967: 90].

Cyclocephala gravis Bates [synonymy by Maes 1994: 11].

Types. Type of *C. gravis* at BMNH (Endrődi 1966). Holotype ♂ of *C. meinanderi* at HNHM (Endrődi Collection) (Endrődi 1964).

Distribution. BELIZE: Cayo, Orange Walk, Stann Creek, Toledo. BOLIVIA: Cochabamba, Santa Cruz. BRAZIL: Bahia, Espírito Santo, Mato Grosso, Minas Gerais, Pernambuco, Rio de Janeiro. COLOMBIA: Antioquia, Boyacá, Caquetá, Chocó, Cundinamarca, Magdalena, Santander, Tolima. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. ECUADOR: Santo Domingo de los Tsáchilas. EL SALVADOR: Morazán. FRENCH GUIANA: Cayenne, St.-Élie, St.-Laurent du Maroni. GUATEMALA: Alta Verapaz, Huehuetenango, Izabal, Petén, Sololá, Zacapa. GUYANA: Upper Demerara-Berbice. HONDURAS: Atlántida, Choluteca, Cortés, El Paraíso, Francisco Morazán, Gracias a Dios, Olancho, Santa Bárbara, Yoro. MEXICO: Campeche, Chiapas, Guanajuato, Oaxaca, Quintana Roo, San Luis Potosí, Tabasco, Veracruz, Yucatán. NICARAGUA: Chontales, Jinotega, Matagalpa, RAA Norte, Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Colón, Former Canal Zone, Panamá. PARAGUAY: Distrito Capital. SURINAME. VENEZUELA: Capital District, Guárico.

References. Bates 1888, Bodkin 1919, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Dechambre 1979a, 1980, Endrődi 1964, 1966, 1967, 1985a, Young 1986, 1988a, b, 1990, Thomas 1993, Lobo and Morón 1993, Maes 1987, 1994, Ramírez and Brito 1992, Croat 1997, Ratcliffe and Morón 1997, Beath 1998, 1999, Ratcliffe 1992b, 2002a, 2003, Restrepo et al. 2003, Reyes Novelo and Morón 2005, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Neita-Moreno 2011, Ponchel 2011, García-López et al. 2013, Moore and Jameson 2013, Ratcliffe et al. 2013, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala gregaria Heyne & Taschenberg, 1907

Cyclocephala gregaria Heyne & Taschenberg, 1907: 91–92 [original combination]
Stigmalia gregaria (Heyne & Taschenberg) [new combination by Casey 1915: 115, 122].
Cyclocephala gregaria Heyne & Taschenberg [revised combination by Arrow 1937b: 8, 11].
syn. *Cyclocephala gregaria pallida* Arrow, 1911: 172 [original combination].
Cyclocephala gregaria ab. *pallida* Arrow [new infrasubspecific status by Endrődi 1966: 210].

Types. Invalid neotype ♂ of *C. gregaria* at HNHM (Endrődi Collection) (Endrődi 1966). Endrődi (1966) did not examine the type of *C. gregaria pallida*, and it may be at BMNH.

Distribution. BOLIVIA: Santa Cruz. BRAZIL: Pará, São Paulo. COLOMBIA: Antioquia, Boyacá, Caldas, Cauca, Cundinamarca, Magdalena, Quindío, Risaralda, Santander, Tolima, Valle del Cauca. ECUADOR: Morona-Santiago. VENEZUELA: Mérida.

References. Heyne and Taschenberg 1907, Casey 1915, Arrow 1911, 1937b, Blackwelder 1944, Daniel 1945, Martínez 1968c, Pike et al. 1976, Endrődi 1966, 1985a, Montoya et al. 1994, Dechambre 1995, Restrepo et al. 2003, García-Robledo et al. 2004, 2005, Útima and Vallejo 2008, García-Robledo 2010, Krajcik 2005, 2012, Breeschoten et al. 2013, Yepes-Rodriguez et al. 2013, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. Heyne and Taschenberg (1907) briefly described an *in litt*. specimen of *C. gregaria* from Steinheil's collection. Arrow (1911) published a longer description and designated types for *C. gregaria* that were sent to him from insect specimen dealers Otto Staudinger and Andreas Bang-Haas. *Cyclocephala gregaria* Arrow could be considered a homonym and synonym of *C. gregaria* Heyne & Taschenberg. Endrődi (1966) could not locate the type of *C. gregaria* and designated an invalid neotype. Endrődi (1966, 1985a) reported *C. gregaria* Heyne & Taschenberg from Boquete (Chiriquí, Panama). Ratcliffe (2003) considers this record as likely erroneous and probably based on misidentified specimens of *C. conspicua* Sharp. Arrow (1911) described *C. gregaria* var. *pallida*. However, Arrow (1911) did not discuss or name subspecies, meaning that var. *pallida* is ambiguously infrasubspecific and should be treated as a subspecies at original description.

Cyclocephala guaguarum Dechambre & Endrődi, 1984

Cyclocephala guaguarum Dechambre & Endrődi, 1984: 169 [original combination].

Types. Holotype ♂ at MNHN (Dechambre and Endrődi 1984).

Distribution. COLOMBIA: Valle del Cauca. ECUADOR: Cotopaxi, Pichincha.

References. Dechambre and Endrődi 1984, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala guianae Endrődi, 1969

Cyclocephala guianae Endrődi, 1969b: 33–34 [original combination].

Types. Holotype ♂ at USNM (Endrődi 1969b).

Distribution. BRAZIL: Amazonas. COLOMBIA: Casanare, Meta. FRENCH GUIANA: Kourou, St.-Élie, St.-Laurent du Maroni. SURINAME: Brokopondo.

References. Pike et al. 1976, Dechambre 1979a, Endrődi 1969b, 1985a, Ratcliffe 1992b, Küchmeister et al. 1998, Andreazze 2001, Silberbauer-Gottsberger et al. 2001, Andreazze and da Silva Motta 2002, Krajcik 2005, 2012, Gasca-Álvarez et al. 2014, Núñez-Avellaneda 2014, Ponchel 2011, 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala guttata Bates, 1888

Cyclocephala guttata Bates, 1888: 306 [original combination].
Dichromina guttata (Bates) [new combination by Casey 1915: 160].
Cyclocephala guttata Bates [revised combination by Arrow 1937b: 8, 11].

Types. Type at BMNH (Endrődi 1966).

Distribution. GUATEMALA: El Progreso, Escuintla, Izabal, Retalhuleu, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Choluteca, Yoro. MEXICO: Chiapas, Morelos, Oaxaca, Puebla, San Luis Potosí, Tabasco, Veracruz. NICARAGUA: Granada, Masaya, Río San Juan, Rivas.

References. Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Morón 1979, Morón et al. 1985, Thomas 1993, Lobo and Morón 1993, Maes and Ratcliffe 1996, Camino-Lavín et al. 1996, Sanchez Soto 1997, Ratcliffe and Morón 1997, Ramos-Elorduy and Pino Moreno 2004, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Krajcik 2005, 2012, Ratcliffe et al. 2013, Dossey et al. 2016.

Cyclocephala guycolasi Dechambre, 1992

Cyclocephala guycolasi Dechambre, 1992: 62 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. PERU: Junín.

References. Dechambre 1992, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala halffteriana Martínez, 1968

Cyclocephala halffteriana Martínez, 1968a: 188–190 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1968a).

Distribution. MEXICO: Baja California Sur, Sonora.

References. Martínez 1968a, Pike et al. 1976, Endrődi 1985a, Ratcliffe and Morón 1997, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Cyclocephala hardyi Endrődi, 1975

Cyclocephala hardyi Endrődi, 1975c: 281–284 [original combination].

Types. Holotype ♂ at INPA (Endrődi 1975c).

Distribution. BRAZIL: Amazonas. GUAYANA: Upper Takutu-Upper Essequibo.

References. Endrődi 1975c, Prance and Arias 1975, Pike et al. 1976, Faegri and van der Pijl 1979, Endrődi 1975c, 1985a, Andreazze and Fonseca 1998, Joly 2000b, Andreazze 2001, Seymour and Matthews 2006, Davis et al. 2008, Soderstrom 2008, Thien et al. 2009, Krajcik 2005, 2012, Gottsberger 2016.

Cyclocephala hartmannorum Malý, 2006

Cyclocephala hartmannorum Malý, 2006: 2–5 [original combination].

Types. Holotype ♂ at NMPC (Malý 2006).

Distribution. COSTA RICA: Cartago, Guanacaste, Heredia, San José. PANAMA: Chiriquí, Colón, Panamá.

References. Malý 2006, Krajcik 2012, Dupuis 2008, 2014.

Cyclocephala helavai Endrődi, 1975

Cyclocephala helavai Endrődi, 1975b: 258–260 [original combination].

Types. Holotype ♂ at CMNC (Henry and Anne Howden Collection) (Endrődi 1975b).

Distribution. COLOMBIA: Antioquia.

References. Pike et al. 1976, Endrődi 1975b, 1985a, Restrepo et al. 2003, Gasca-Álvarez and Deloya 2016.

***Cyclocephala herteli* Endrődi, 1964**

Cyclocephala herteli Endrődi, 1964: 447–449 [original combination].
syn. *Cyclocephala barroensis* Endrődi, 1979: 216 [original combination].
Cyclocephala herteli Endrődi, 1964 [synonymy by Ratcliffe 2002a: 29].

Types. Holotype ♂ of *C. herteli* at USNM (Endrődi 1964). Holotype ♂ of *C. barroensis* at USNM (Endrődi 1979).

Distribution. PANAMA: Coclé, Colón, Former Canal Zone, Panamá.

References. Pike et al. 1976, Endrődi 1964, 1966, 1979, 1985a, Ratcliffe 1992a, 2002a, 2003, Krajcik 2005, 2012.

Remarks. *Cyclocephala barroensis* is incorrectly listed as a synonym of *C. helavai* Endrődi in Krajcik (2005).

***Cyclocephala hiekei* Endrődi, 1964**

Cyclocephala hiekei Endrődi, 1964: 454–456 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1964).

Distribution. COLOMBIA: Cauca, Chocó.

References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Restrepo et al. 2003, Neita-Moreno 2011, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

***Cyclocephala hirsuta* Höhne, 1923**

Cyclocephala hirsuta Höhne, 1923b: 358–359 [original combination].

Types. Lectotype at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: La Paz. BRAZIL: São Paulo. ECUADOR: Orellana. PERU: San Martín.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Joly 2000a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

***Cyclocephala hirta hirta* LeConte, 1861**

Cyclocephala hirta LeConte, 1861: 346 [original combination].
Spilosota hirta (LeConte) [new combination by Casey 1915: 132].
Cyclocephala (*Spilosota*) *hirta* LeConte [new subgeneric classification by Saylor 1937: 68].
Cyclocephala hirta LeConte [removal of subgeneric classification by Arrow 1937b: 8, 11].
syn. *Spilosota inconspicua* Casey, 1915: 133 [original combination].

Cyclocephala inconspicua (Casey) [new combination by Arrow 1937b: 8, 11].
Cyclocephala (*Spilosota*) *hirta* LeConte [synonymy by Saylor 1937: 68].
syn. *Spilosota magister* Casey, 1915: 132 [original combination].
Cyclocephala magister (Casey) [new combination by Arrow 1937b: 8, 12].
Cyclocephala (*Spilosota*) *hirta* LeConte [synonymy by Saylor 1937: 68].
syn. *Spilosota nubeculina* Casey, 1915: 131 [original combination].
Cyclocephala nubeculina (Casey) [new combination by Arrow 1937b: 8, 13].
Cyclocephala hirta LeConte [synonymy by Saylor 1945: 384].
syn. *Spilosota pallidissima* Casey, 1915: 133 [original combination].
Cyclocephala pallidissima (Casey) [new combination by Arrow 1937b: 8, 14].
Cyclocephala (*Spilosota*) *hirta* LeConte [synonymy by Saylor 1937: 68].

Types. Endrődi (1966) was uncertain about the housing institutions for the types of *C. hirta* and its synonyms. He thought they were all at USNM.

Distribution. MEXICO: Aguascalientes, Baja California, Chihuahua, Coahuila, Durango, Estado de México, Sonora. USA: Arizona, California, Colorado, Iowa, Kansas, Nebraska, Nevada, New Mexico, Oklahoma, South Dakota, Texas, Utah.

References. LeConte 1861, Gerstaecker 1862, Harold 1869b, Horn 1871, Crotch 1873, Henshaw 1885, Fall 1901, Casey 1915, Leng 1920, Dawson 1922, Moore 1937, Arrow 1937b, Saylor 1936, 1937, 1945, 1948, Blackwelder 1939, 1944, Bohart 1947, Blackwelder and Blackwelder 1948, Howden and Endrődi 1966, Hatch 1971, Kirk and Balsbaugh 1975, Ritcher and Baker 1974, Pike et al. 1976, 1977, Endrődi 1966, 1969b, 1985a, Hardy 1991, Ratcliffe 1991, Stahly and Klein 1992, Tanada and Kaya 1993, Thurston et al. 1993, 1994, Kaya et al. 1992, 1993, 1995, Cranshaw and Ward 1996, Poole and Gentili 1996, Ratcliffe and Morón 1997, Converse and Grewal 1998, Koppenhöfer and Kaya 1996, 1997, 1998, Theunis 1998, Bauernfeind 2001, Stock et al. 2001, Koppenhöfer et al. 1999, 2000a, b, c, 2002a, b, 2007, 2012, 2013, Riley and Wolfe 2003, Yildrim and Hoy 2003, Ansari et al. 2004, Cranshaw 2004, Mottern et al. 2004, Koppenhöfer and Grewal 2005, Grewal et al. 2005, Jaramillo et al. 2005, Jackson and Klein 2006, Oestergaard et al. 2006, Stuart et al. 2006, Koppenhöfer 2008, Koppenhöfer and Fuzy 2003b, c, 2008b, Ratcliffe and Paulsen 2008, Morales-Rodriguez and Peck 2009, Smith 2003, 2009, Bélair et al. 2010, Holmstrup et al. 2010, Negrisoli et al. 2010, Krajcik 2005, 2012, Perera et al. 2012, Breeschoten et al. 2013, de Coninck et al. 2013, Ratcliffe et al. 2013, Hussaini 2014, Li and Bouwer 2014, Christians et al. 2016, Gyawaly et al. 2016, Del Valle et al. 2017, Wu et al. 2017, Ratcliffe and Cave 2017.

Cyclocephala hirta pilosicollis Saylor, 1936

Spilosota hirta pilosicollis Saylor, 1936: 2 [original combination].
Cyclocephala (*Spilosota*) *hirta pilosicollis* Saylor [new subgeneric classification by Saylor 1937: 69].
Cyclocephala pilosicollis (Saylor) [removal of subgeneric classification and new species status by Arrow 1937b: 8].

Cyclocephala hirta LeConte [synonymy by Ratcliffe et al. 2013: 165].
Cyclocephala hirta pilosicollis Saylor [revalidated subspecies status by Ratcliffe and Cave 2017: 67].

Types. Type at USNM (Endrődi 1966).
Distribution. USA: California.
References. Saylor 1936, 1937, 1945, Blackwelder and Blackwelder 1948, Howden and Endrődi 1966, Pike et al. 1976, Endrődi 1966, 1985a, Hardy 1991, Poole and Gentili 1996, Krajcik 2005, 2012, Ratcliffe et al. 2013, Ratcliffe and Cave 2017.

Cyclocephala histrionica Burmeister, 1847

Cyclocephala histrionica Burmeister, 1847: 41 [original combination].
Paraspidolea histrionica (Burmeister) [new combination by Arrow 1937b: 7].
Cyclocephala histrionica Burmeister [revised combination by Endrődi 1966: 77, 127, 217–218].
syn. *Aspidolea* (*Aspidolites*) *atricollis* Höhne, 1922c: 374–376 [original combination].
Aspidolea (*Aspidolella*) *atricollis* Höhne [new subgeneric classification by Prell 1936: 146].
Cyclocephala histrionica Burmeister [synonymy by Endrődi 1966: 217, 339].

Types. Lectotype ♂ of *C. histrionica* at MLUH (Endrődi 1966). Lectotype ♂ of *A. atricollis* at ZMHB (Endrődi 1966).
Distribution. BRAZIL: Minas Gerais, São Paulo.
References. Burmeister 1847, Harold 1869b, Höhne 1922c, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala holmbergi Martínez, 1968

Cyclocephala holmbergi Martínez, 1968b: 23–26 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1968b).
Distribution. BOLIVIA: Santa Cruz.
References. Martínez 1968b, Pike et al. 1976, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala howdenannae Endrődi, 1975

Cyclocephala howdenannae Endrődi, 1975b: 257–258 [original combination].

Types. Holotype ♂ at CMNC (Henry and Anne Howden Collection) (Endrődi 1975b).

Distribution. COLOMBIA: Valle del Cauca.

References. Pike et al. 1976, Endrődi 1975b, 1985a, Ratcliffe 1992a, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala huamilule Romero-López & Morón, 2017

Cyclocephala huamilule Romero-López & Morón, 2017: 890–894 [original combination].

Types. Holotype ♂ at MXAL (Romero-López and Morón 2017).

Distribution. MEXICO: Guerrero (Romero-López and Morón 2017).

References. Romero-López and Morón 2017.

Cyclocephala huesingi Endrődi, 1964

Cyclocephala huesingi Endrődi, 1964: 436–438 [original combination].

Types. Holotype ♂ at MLUH (Endrődi 1966, Endrődi [1964] mistakenly stated the holotype was at BMNH).

Distribution. COLOMBIA. VENEZUELA: Mérida.

References. Pike et al. 1976, Endrődi 1964, 966, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala iani Ratcliffe, 1992

Cyclocephala iani Ratcliffe, 1992b: 183 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992b).

Distribution. BRAZIL: Amazonas.

References. Ratcliffe 1992b, Krajcik 2005, 2012.

Cyclocephala immaculata ferruginea (Fabricius, 1801)

Melolontha ferruginea Fabricius, 1801: 170 [original combination].
Cyclocephala ferruginea (Fabricius) [new combination by Burmeister 1847: 58].
Cyclocephala immaculata (Olivier) [synonymy by Chalumeau and Gruner 1977: 582].
Cyclocephala immaculata ferruginea (Fabricius) [revalidated subspecies status by Endrődi 1985a: 101].

syn. *Melolontha nigriceps* Gyllenhal, 1817a: 188–189 [original combination].
Cyclocephala ferruginea (Fabricius) [synonymy by Burmeister 1847: 58].

Types. Lectotype ♀ of *M. ferruginea* deposited at ZMUK, now housed at ZMUC (Endrődi 1966). The type of *M. nigriceps* was unknown to Endrődi (1966).

Distribution. FRENCH GUIANA: Cayenne.

References. Fabricius 1801, Gyllenhal 1817a, Schönherr 1817, Dejean 1821, 1833, 1836b, Sturm 1843, Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Zimsen 1964, Pike et al. 1976, Chalumeau and Gruner 1977, Dechambre 1980, Endrődi 1966, 1985a, Ponchel 2011, Krajcik 2005, 2012, Ratcliffe and Cave 2015.

Cyclocephala immaculata immaculata (Olivier, 1789)

Melolontha immaculata Olivier, 1789: 29 [original combination].
Cyclocephala immaculata (Olivier) [new combination by Dejean 1821: 57].
Ochrosidia (*Ochrosidia*) *immaculata* (Olivier) [new combination and new subgeneric classification by Casey 1915: 112, 142].
Cyclocephala immaculata (Olivier) [revised combination and removal of subgeneric classification by Arrow, 1937b: 8, 11].
syn. *Cyclocephala danforthi* Chapin, 1935b: 69 [original combination].
Cyclocephala immaculata (Olivier) [synonymy by Chalumeau and Gruner 1977: 582].

Types. Invalid neotype ♂ of *M. immaculata* at HNHM (Endrődi Collection) (Endrődi 1966). Chalumeau and Gruner (1977) stated this neotype was at MNHN. Type of *C. danforthi* at USNM (Endrődi 1966).

Distribution. ANTIGUA: St. Paul. BARBUDA. BRITISH VIRGIN ISLANDS: Anegada. DOMINICA: St. Paul. GUADELOUPE: Grande-Terre, La Désirade. JAMAICA: St. Andrew. SAINT BÁRTHÉLEMY. SAINT KITTS AND NEVIS: Nevis, St. Kitts. SAINT MARTIN. U. S. VIRGIN ISLANDS: Buck Island, St. Croix.

References. Olivier 1789, Dejean 1821, 1833, 1836b, Sturm 1843, Reiche 1859, Bates 1888, Leng and Mutchler 1914, Casey 1915, Chapin 1935b, Arrow 1937b, Blackwelder 1944, Paulian 1947, Howden and Endrődi 1966, Pike et al. 1976, Chalumeau and Gruner 1977, Endrődi 1963, 1966, 1969b, 1985a, Dupuis 1996, Riley and Wolfe 2003, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe and Cave 2015, Peck 2016.

Cyclocephala inca Endrődi, 1966

Cyclocephala inca Endrődi, 1966: 73, 133, 221–222 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).

Distribution. BOLIVIA: Beni. COLOMBIA. PERU: Cusco, Madre de Dios, Puno.

References. Pike et al. 1976, Dechambre 1979a, 1980, Endrődi 1966, 1985a, Núñez-Avellaneda and Neita-Moreno 2009, Krajcik 2005, 2012, Moore et al. 2015, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala insulicola Arrow, 1937

Cyclocephala insulicola Arrow, 1937a: 40–41 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. GUADELOUPE: Basse-Terre, Grande-Terre. MARTINIQUE: Saint-Pierre. ST. VINCENT.

References. Arrow 1937a, b, Blackwelder 1944, Paulian 1947, Pike et al. 1976, Endrődi 1966, 1985a, Gruner 1975, Gruner and Marival 1974, Chalumeau and Gruner 1977, Chalumeau 1983, Dutrillaux et al. 2007, Krajcik 2005, 2012, Giannoulis et al. 2012, Dutrillaux et al. 2013, 2014, Ratcliffe and Cave 2015, Peck 2016.

Cyclocephala isabellina Höhne, 1923

Cyclocephala isabellina Höhne, 1923b: 368–369 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. COLOMBIA: Cundinamarca, Meta, Nariño. ECUADOR. PERU.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Martínez 1968c, 1975b, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Dechambre 1999, Restrepo et al. 2003, Krajcik 2005, 2012, López-García et al. 2015, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala isthmiensis Ratcliffe, 1992

Cyclocephala isthmiensis Ratcliffe, 1992a: 219–220 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992a).

Distribution. PANAMA: Former Canal Zone.

References. Ratcliffe 1992a, 2002a, 2003, Krajcik 2005, 2012.

Cyclocephala italoi Dupuis, 1999

Cyclocephala italoi Dupuis, 1999: 185–186 [original combination].

Types. Holotype ♂ at MNHN (Dupuis 1999).

Distribution. ECUADOR: Imbabura.

References. Dupuis 1999, Krajcik 2005, 2012.

Cyclocephala jalapensis Casey, 1915

Cyclocephala (*Isocoryna*) *jalapensis* Casey, 1915: 136–137 [original combination].
Cyclocephala jalapensis Casey [removal of subgeneric classification by Arrow 1937b: 8, 11].

Types. Type at USMN (Endrődi 1966).

Distribution. MEXICO: Chiapas, Hidalgo, Oaxaca, Puebla, Querétaro, Veracruz.

References. Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Morón 1977b, 1994, Thomas 1993, Dieringer and Delgado 1994, Dieringer and Espinosa 1994, Ratcliffe and Morón 1997, Carrillo-Ruiz and Morón 2003, Múñoz-Hernández et al. 2008, Krajcik 2005, 2012, Morón and Márquez 2012, Ratcliffe et al. 2013, Martínez-Morales and Morón 2013, Morón et al. 2014, Romero-López and Morón 2017.

Cyclocephala jauffreti Dechambre, 1979

Cyclocephala jauffreti Dechambre, 1979a: 163–164 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979a).

Distribution. BRAZIL: Pará.

References. Dechambre 1979a, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala kahanoffae Martínez, 1975

Cyclocephala kahanoffae Martínez, 1975b: 270–274 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1975b).

Distribution. BRAZIL: Federal District.

References. Martínez 1975b, Pike et al. 1976, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala kaszabi Endrődi, 1964

Cyclocephala kaszabi Endrődi, 1964: 433–435 [original combination].

Types. Holotype ♂ at BMNH (Endrődi 1964).

Distribution. COLOMBIA: Risaralda. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas. ECUADOR. GUATEMALA: Huehuetenango, Izabal. HONDURAS: Atlántida, Colón, Cortés, Olancho, Yoro. NICARAGUA: Jinotega, RAA Norte. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Former Canal Zone, Panamá, San Blas. PERU.

References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Young 1986, 1987, 1988a, 1990, Croat 1997, Ratcliffe 1992a, 2002a, 2003, Garcia-Robledo et al. 2004, 2005, Ratcliffe and Cave 2006, Krajcik 2005, 2012, García-López et al. 2013, Ratcliffe et al. 2013, 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala kechua (Martínez, 1957)

Mimeoma kechua Martínez, 1957: 29–32 [original combination].
Cyclocephala kechua (Martínez) [new combination by Endrődi 1966: 75, 129, 225].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1957).

Distribution. ARGENTINA: Jujuy, Salta, Tucumán. BOLIVIA: Santa Cruz.

References. Martínez 1957, 1975b, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala krombeini Endrődi, 1979

Cyclocephala krombeini Endrődi, 1979: 215 [original combination].
syn. *Cyclocephala rorschachoides* Ratcliffe, 1992a: 227–229 [original combination].
Cyclocephala krombeini Endrődi [synonymy by Ratcliffe 2002a: 29].

Types. Holotype ♂ of *C. krombeini* at USNM (Endrődi 1979). Holotype ♂ of *C. rorschachoides* at UNSM (Ratcliffe 1992a).

Distribution. COLOMBIA: Chocó. COSTA RICA: Heredia, Limón, Puntarenas. PANAMA: Bocas del Toro, Chiriquí, Colón, Former Canal Zone, Panamá, San Blas.

References. Endrődi 1979, 1985a, Joly 2000a, Ratcliffe 1992a, 2002a, 2003, Neita-Moreno 2011, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala kuntzeniana Höhne, 1923

Cyclocephala kuntzeniana Höhne, 1923b: 366–368 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba. BRAZIL: Amazonas. COLOMBIA: Cundinamarca, Meta. FRENCH GUIANA. SURINAME: Sipaliwini. VENEZUELA: Táchira.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Martínez 1967, 1975b, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Dechambre 1979a, Restrepo et al. 2003, Ponchel 2011, Krajcik 2005, 2012, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala labidion **Ratcliffe, 2003**

Cyclocephala labidion Ratcliffe, 2003: 64, 68, 74, 79, 143–144 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2003).
Distribution. COSTA RICA: Puntarenas. PANAMA: Chiriquí.
References. Ratcliffe 2003, Krajcik 2005, 2012.

Cyclocephala lachaumei **Dechambre, 1992**

Cyclocephala lachaumei Dechambre, 1992: 57 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).
Distribution. BOLIVIA: La Paz.
References. Dechambre 1992, Dupuis 2008, 2014, Krajcik 2005, 2012.

Cyclocephala laevis **Arrow, 1937**

Cyclocephala laevis Arrow, 1937a: 40 [original combination].

Types. Type at BMNH (Endrődi 1966).
Distribution. DOMINICAN REPUBLIC: Barahona, Dajabón, Distrito Nacional, Duarte, Elías Piña, La Altagracia, La Romana, La Vega, Monseñor Nouel, Monte Cristi, Monte Plata, Pedernales, Puerto Plata, Samana, San Cristóbal, San José de Ocoa, San Juan, Santiago, Santo Domingo, Valverde. HAITI: Ouest.
References. Arrow 1937a, b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012, Ratcliffe and Cave 2015.

Cyclocephala lamarcki **Dechambre, 1999**

Cyclocephala lamarcki Dechambre, 1999: 11 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. ECUADOR: Napo.
References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala laminata Burmeister, 1847

Cyclocephala laminata Burmeister, 1847: 57 [original combination].
syn. *Dichromina regularis* Casey, 1915: 161 [original combination].
Cyclocephala regularis (Casey) [new combination by Arrow 1937b: 8, 15].
Cyclocephala laminata Burmeister [synonymy by Ratcliffe et al. 2013: 171].

Types. Lectotype ♂ of *C. laminata* at MLUH (Endrődi 1966). Endrődi (1966) did not examine or report the type housing location for *D. regularis* (probably at USNM).

Distribution. ARGENTINA: Buenos Aires, Córdoba, Santa Fe. BOLIVIA: Beni, Cochabamba, La Paz, Santa Cruz. BRAZIL: Bahia, Espírito Santo, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, São Paulo. COLOMBIA: Bolívar, Valle del Cauca. FRENCH GUIANA: Cayenne, Kourou, St.-Laurent du Maroni. GUATEMALA: Alta Verapaz, El Progreso, Escuintla, Zacapa. GUYANA. MEXICO: Chiapas, Durango, Oaxaca. PARAGUAY: Concepción, Distrito Capital, Paraguarí. PERU: Huánuco, Madre de Dios. SURINAME. UNITED STATES: Texas.

References. Burmeister 1847, Harold 1869b, Tremoleras 1910, Casey 1915, Arrow 1937b, Blackwelder 1944, Gruner 1971, Pike et al. 1976, Dechambre 1979a, Endrődi 1966, 1973a, 1985a, Hardy 1991, Dechambre 1992, Dupuis 1996, Poole and Gentili 1996, Ratcliffe and Morón 1997, Rosa et al. 1995, 1999, Lachance et al. 2001, Freitas et al. 2002, Restrepo et al. 2003, Riley and Wolfe 2003, Pinto et al. 2004, Marques and Gil-Santana 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, Ponchel 2011, 2015, Gasca-Álvarez and Deloya 2016, Ratcliffe and Cave 2017.

Remarks. *Cyclocephala laminata* was reported from Costa Rica, Panama, and Puerto Rico (Endrődi 1966, Dechambre 1979a). *Cyclocephala laminata* has not been recorded from these areas again, and these records may be based on misidentifications (Ratcliffe 2003, Ratcliffe and Cave 2013). Tremoleras (1910) reported *C. laminata* from Uruguay.

Cyclocephala larssoni Endrődi, 1964

Cyclocephala larssoni Endrődi, 1964: 451–452 [original combination].

Types. Holotype ♂ at USNM (Endrődi 1964).

Distribution. GUATEMALA: El Progresso, Zacapa. MEXICO: Guerrero, Jalisco, Nayarit, Oaxaca, Sonora. NICARAGUA: Chinandega, León, Managua, Masaya.

References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Maes and Téllez Robleto 1988, Morón et al. 1988, Maes 1987, 1994, Ratcliffe and Morón 1997, Navarrete-Heredia et al. 2001, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Ratcliffe et al. 2013, Deloya et al. 2014a.

***Cyclocephala latericia* Höhne, 1923**

Cyclocephala latericia Höhne, 1923b: 360–362 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. ARGENTINA: Misiones. BOLIVIA: Santa Cruz. BRAZIL: Goiás, Mato Grosso, Pará, Pernambuco, Rio Grande do Norte, Rio Grande do Sul, Santa Catarina. PARAGUAY: Itapúa.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Martínez 1968a, Pike et al. 1976, Dechambre 1979a, Endrődi 1966, 1985a, Cavalcante et al. 2009, Krajcik 2005, 2012, Breeschoten et al. 2013.

***Cyclocephala latipennis* Arrow, 1911**

Cyclocephala latipennis Arrow, 1911: 174 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. ECUADOR: Morona-Santiago.

References. Arrow 1911, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1997, Krajcik 2005, 2012.

***Cyclocephala latreillei* Dechambre, 1999**

Cyclocephala latreillei Dechambre, 1999: 12 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).

Distribution. ECUADOR: Cotopaxi.

References. Dechambre 1999, Krajcik 2005, 2012.

***Cyclocephala lecourti* Dechambre, 1992**

Cyclocephala lecourti Dechambre, 1992: 63–64 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. BOLIVIA: La Paz.

References. Dechambre 1992, Krajcik 2005, 2012.

Cyclocephala letiranti Young, 1992

Cyclocephala letiranti Young, 1992: 52–55 [original combination].

Types. Holotype ♂ at CAS (Young 1992).

Distribution. COLOMBIA. COSTA RICA: Alajuela, Heredia, Puntarenas.

References. Young 1992, Ratcliffe 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala lichyi Dechambre, 1980

Cyclocephala lichyi Dechambre, 1980: 46 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1980).

Distribution. VENEZUELA: Amazonas.

References. Dechambre 1980, 1999, Endrődi 1985a, Dupuis 1996, Krajcik 2005, 2012.

Cyclocephala ligyrina Bates, 1888

Cyclocephala ligyrina Bates, 1888: 309 [original combination].
Stigmalia ligyrina (Bates) [new combination by Casey 1915: 123].
Cyclocephala ligyrina Bates [revised combination by Arrow 1937b: 8, 12].

Types. Type at BMNH (Endrődi 1966).

Distribution. BRAZIL: Espírito Santo. COLOMBIA: Boyacá, Cauca, Chocó, Meta, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas. ECUADOR: Morona-Santiago. GUATEMALA: Izabal. HONDURAS: Atlántida, Colón. NICARAGUA: Chontales, Jinotega, Matagalpa, RAA Norte. PANAMA: Bocas del Toro, Chiriquí, Coclé, Former Canal Zone, Panamá. PERU: Junín.

References. Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1964, 1966, 1967b, 1975b, 1985a, Young 1986, 1988a, 1990, Maes 1987, 1994, Croat 1997, Joly 2000a, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Ratcliffe and Cave 2006, Neita-Moreno et al. 2006, Neita-Moreno 2011, Krajcik 2005, 2012, García-López et al. 2013, Ratcliffe et al. 2013, 2015, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala lineata Dupuis, 2008

Cyclocephala lineata Dupuis, 2008: 123–124 [original combination].

Types. Holotype ♂ at FDPC (Dupuis 2008).

Distribution. COLOMBIA: Boyacá.

References. Dupuis 2008, Krajcik 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala lineigera Höhne, 1923

Cyclocephala lineigera Höhne, 1923b: 355–357 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Amazonas. COLOMBIA: Caquetá, Cauca. PERU: Loreto.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. Endrődi (1966, 1985a) reported a single *C. lineigera* specimen from Guatemala (Panzos). *Cyclocephala lineigera* has not been reported from Central America since this record (e.g., Ratcliffe et al. 2013) and this species is possibly distributed only in South America.

Cyclocephala liomorpha Arrow, 1911

Cyclocephala liomorpha Arrow, 1911: 174–175 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. BRAZIL: Amazonas, Pará. GUYANA. PERU.

References. Arrow 1911, 1937b, Blackwelder 1944, Pike et al. 1976, Dechambre 1979a, Endrődi 1964, 1966, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala literata Burmeister, 1847

Cyclocephala literata Burmeister, 1847: 60–61 [original combination].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. BRAZIL: Rio de Janeiro, Santa Catarina, São Paulo. FRENCH GUIANA: St.-Laurent du Maroni.

References. Burmeister 1847, Arrow 1937b, Blackwelder 1944, Guimarães 1944, Pike et al. 1976, Endrődi 1966, 1969b, 1985a, Krajcik 2005, 2012, Gottsberger and Silberbauer-Gottsberger 2006, Gottsberger et al. 2012, Breeschoten et al. 2013, Maia et al. 2014, Gottsberger 1986, 1989, 1992, 2016.

Cyclocephala lizeri Martínez, 1964

Cyclocephala lizeri Martínez, 1964: 87–91 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1964).

Distribution. ARGENTINA: Salta. BOLIVIA: Chuquisaca.

References. Martínez 1964, Pike et al. 1976, Endrődi 1966, 1971b, 1985a, Krajcik 2005, 2012.

Cyclocephala longa Endrődi, 1963

Cyclocephala longa Endrődi, 1963: 332 [original combination].

Types. Holotype ♂ at ZSMC (Endrődi 1966).

Distribution. BOLIVIA: Santa Cruz. BRAZIL: Acre. COLOMBIA: Amazonas, Boyacá, Casanare, Cundinamarca.

References. Pike et al. 1976, Endrődi 1963, 1966, 1985a, Ratcliffe 1992b, Dechambre 1999, Krajcik 2005, 2012, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala longicollis Burmeister, 1847

Cyclocephala longicollis Burmeister, 1847: 43 [original combination].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. BRAZIL. COLOMBIA.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012, Restrepo et al. 2003, Gasca-Álvarez and Deloya 2016.

Remarks. A single specimen of *C. longicollis* was reported from Mexico without further details (Endrődi 1966, 1985a). This specimen was likely mislabeled, and *C. longicollis* Burmeister is considered a South American species (Ratcliffe et al. 2013).

Cyclocephala longimana Dechambre, 1980

Cyclocephala longimana Dechambre, 1980: 46–47 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1980).

Distribution. BRAZIL: Minas Gerais.

References. Dechambre 1980, Endrődi 1985a, Ratcliffe 1992b, Krajcik 2005, 2012.

Cyclocephala longitarsis **Dechambre, 1999**

Cyclocephala longitarsis Dechambre 1999: 13 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. ECUADOR: Esmeraldas, Pichincha.
References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala longula **LeConte, 1863**

Cyclocephala longula LeConte, 1863: 79 [original combination].
Ochrosidia (*Ochrosidia*) *longula* (LeConte) [new combination and new subgeneric classification by Casey 1915: 142].
Cyclocephala longula LeConte [revised combination and removal of subgeneric classification by Arrow 1937b: 8, 12].
syn. *Ochrosidia* (*Ochrosidia*) *abrupta* Casey, 1915: 152 [original combination].
Cyclocephala abrupta (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8].
Cyclocephala (*Spilosota*) *abrupta* (Casey) [new subgeneric classification by Saylor 1937: 69].
Cyclocephala longula LeConte [synonymy by Saylor 1945: 384].
syn. *Ochrosidia* (*Ochrosidia*) *ambiens* Casey, 1915: 155 [original combination].
Cyclocephala ambiens (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8].
Cyclocephala longula LeConte [synonymy by Saylor 1945: 384].
syn. *Ochrosidia* (*Ochrosidia*) *rustica* Casey, 1915: 157 [original combination].
Cyclocephala californica Arrow, 1937b: 9 [original combination, new replacement name for *Cyclocephala rustica* (Casey)].
Cyclocephala (*Spilosota*) *abrupta* (Casey) [synonymy by Saylor 1937: 69].
Cyclocephala longula LeConte [synonymy by Saylor 1945: 384].
syn. *Ochrosidia* (*Ochrosidia*) *marcida* Casey, 1915: 155 [original combination].
Cyclocephala marcida (Casey) [new combination and removal of subgeneric classification by Arrow 1937b, 8, 12].
Cyclocephala longula LeConte [synonymy by Saylor 1945: 384].
syn. *Ochrosidia* (*Ochrosidia*) *modulata* Casey, 1915: 154 [original combination].
Cyclocephala modulata (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 13].
Cyclocephala longula LeConte [synonymy by Saylor 1945: 384].
syn. *Ochrosidia* (*Ochrosidia*) *obesula* Casey, 1915: 156 [original combination].
Cyclocephala obesula (Casey) [new combination by Arrow 1937b: 8, 13].
Cyclocephala (*Spilosota*) *abrupta* (Casey) [synonymy by Saylor 1937: 69].
Cyclocephala longula LeConte [synonymy by Saylor 1945: 384].

syn. *Ochrosidia* (*Ochrosidia*) *oblongula* Casey, 1915: 156 [original combination].
Cyclocephala oblongula (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 13].
Cyclocephala (*Spilosota*) *abrupta* (Case) [synonymy by Saylor 1937: 69].
syn. *Ochrosidia* (*Ochrosidia*) *phasma* Casey, 1915: 153 [original combination].
Cyclocephala phasma (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 14].
Cyclocephala (*Spilosota*) *abrupta* (Casey) [synonymy by Saylor 1937: 69].
syn. *Ochrosidia* (*Ochrosidia*) *prona* Casey, 1915: 157 [original combination].
Cyclocephala prona (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 14].
Cyclocephala longula LeConte [synonymy by Saylor 1945: 384].
syn. *Ochrosidia* (*Ochrosidia*) *reflexa* Casey, 1915: 153 [original combination].
Cyclocephala reflexa (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 15].
Cyclocephala (*Spilosota*) *abrupta* (Casey) [synonymy by Saylor 1937: 69].
syn. *Ochrosidia* (*Ochrosidia*) *rugulifrons* Casey, 1915: 154 [original combination].
Cyclocephala rugulifrons (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 15].
Cyclocephala longula LeConte [synonymy by Saylor 1945: 384].

Types. Type of *C. longula* at MCZ (Endrődi 1966). Types of the Casey synonyms are at USNM (Endrődi 1966).

Distribution. CANADA: British Columbia. MEXICO: Baja California, Baja California Sur, Chihuahua, Sonora. UNITED STATES: Arizona, California, Colorado, Idaho, Illinois, Kansas, Montana, Nebraska, Nevada, New Mexico, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming.

References. LeConte 1863, Gerstaecker 1865, Crotch 1873, Henshaw 1885, Horn 1894, Wickham 1896, Fall 1901, Casey 1915, Leng 1920, Dawson 1922, Arrow 1937b, Moore 1937, Blackwelder 1939, 1944, Riegel 1942b, Saylor 1937, 1945, 1948, Blackwelder and Blackwelder 1948, Allred and Beck 1965, Ritcher 1966, Howden and Endrődi 1966, Arnett 1968, Pike et al. 1976, Endrődi 1966, 1969b, 1985a, Hatch 1971, Kirk and Balsbaugh 1975, Bechtel et al. 1983, Hardy 1991, McNamara 1991, Ratcliffe 1991, Poole and Gentili 1996, Ratcliffe and Morón 1997, Bauernfeind et al. 1999, Bauernfeind 2001, Riley and Wolfe 2003, Ratcliffe and Paulsen 2008, Smith 2003, 2009, Krajcik 2005, 2012, Haviland and Hernandez 2012, Bousquet et al. 2013, Breeschoten et al. 2013, Ratcliffe et al. 2013, Ratcliffe and Cave 2017.

Remarks. *Cyclocephala longula* was reported from Wisconsin and Florida (USA) (Endrődi 1966, 1985a). These records are likely based on misidentifications (Ratcliffe and Paulsen 2008). Additionally, *C. longula* was reported from Nicaragua (Boaco and Managua) (Maes 1987, 1994). The validity of these records is uncertain as faunistic studies focused on Nicaragua did not report additional specimens of *C. longula* (Ratcliffe and Cave 2006).

Cyclocephala lunulata Burmeister, 1847

Cyclocephala lunulata Burmeister, 1847: 62 [original combination].
Ochrosidia (*Graphalia*) *lunulata* (Burmeister) [new combination and new subgeneric classification by Casey 1915: 159].
Cyclocephala lunulata Burmeister [revised combination and removal of subgeneric classification by Arrow 1937b: 8, 12].
syn. *Cyclocephala nubeculosa* Burmeister, 1847: 63 [original combination].
Cyclocephala lunulata Burmeister [synonymy by Endrődi 1964: 466].
syn. *Ochrosidia* (*Graphalia*) *oblita* Casey, 1915: 159 [original combination].
Cyclocephala oblita (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 13].
Cyclocephala lunulata Burmeister [synonymy by Endrődi 1964: 466].

Types. Lectotype ♀ of *C. lunulata* at MLUH (Endrődi 1966). Lectotype ♂ of *C. nubeculosa* at MLUH (Endrődi 1966). Type of *O. oblita* at USNM (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires, Tucumán. BELIZE: Cayo, Orange Walk, Stann Creek, Toledo. BOLIVIA: Beni, Cochabamba, La Paz, Santa Cruz. BRAZIL: Acre, Amazonas, Bahia, Espírito Santo, Goiás, Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, São Paulo. COLOMBIA: Antioquia, Bolívar, Boyacá, Caldas, Caquetá, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, Huila, La Guajira, Meta, Nariño, Norte de Santander, Putumayo, Quindío, Risaralda, Santander, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. ECUADOR: Bolívar, Cañar, Chimborazo, El Oro, Guayas, Loja, Morona-Santiago. EL SALVADOR: Ahuachapán, Cabañas, La Libertad, La Unión, Morazán, San Miguel, San Salvador, Santa Ana, Usulután. FRENCH GUIANA: Cayenne, Sinnamary, St.-Laurent du Maroni. GUATEMALA: Alta Verapaz, Baja Verapaz, Chiquimula, El Progreso, Escuintla, Guatemala, Huehuetenango, Izabal, Jalapa, Jutiapa, Petén, Quetzaltenango, Quiché, Talhuleu, Sacatepéquez, San Marcos, Santa Rosa, Suchitepéquez, Zacapa. GUYANA: Cuyuni-Mazaruni, East Berbice-Corentyne. HONDURAS: Atlántida, Choluteca, Comayagua, Copán, Cortés, El Paraíso, Francisco Morazán, Gracias a Dios, Intibucá, Isla de la Bahía, Lempira, Ocotepeque, Olancho, Santa Bárbara, Valle, Yoro. MEXICO: Aguascalientes, Chiapas, Colima, Baja California Sur, Campeche, Chiapas, Coahuila, Distrito Federal, Estado de México, Guanajuato, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Puebla, Querétaro, Quintana Roo, San Luis Potosí, Sinaloa, Sonora, Tabasco, Tamaulipas, Veracruz, Yucatán, Zacatecas. NICARAGUA: Carazo, Chinandega, Chontales, Estelí, Jinotega, León, Managua, Masaya, Matagalpa, RAA Norte, RAA Sur, Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Darien, Former Canal Zone, Veraguas. PARAGUAY: Alto Paraná, Amambay. PERU: Cusco, Junín, Lima, Madre de Dios, Pasco. TRINIDAD AND TOBAGO: Trinidad. UNITED STATES: Arizona, Texas. VENEZUELA: Aragua, Capital District, Carabobo, Mérida.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Bates 1888, Casey 1915, Bodkin 1919, Arrow 1937b, Blackwelder 1944, Guimarães 1944, Howden 1955, Carrillo-S. et al. 1966, Gruner 1971, Pike et al. 1976, Dechambre 1979a, Pava-O. et al. 1983, King 1984, Endrődi 1963, 1964, 1966, 1969a, b, 1985a, Maes and Tellez Robleto 1988, Hardy 1991, Pérez Dominguez 1991, Thomas 1993, Lobo and Morón 1993, Deloya and Morón 1994, Maes 1987, 1992, 1994, Morón 1994, Poole and Gentili 1996, Abraca and Quesada 1997, Ratcliffe and Morón 1997, Sanchez Soto 1997, Aragón-Garcia and Morón 2000, Marín Jarillo 2001, Navarrete-Heredia et al. 2001, Andreazze and da Silva Motta 2002, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Pardo-Locarno et al. 2005a, Díaz Mederos et al. 2006, Neita-Moreno et al. 2006, Ratcliffe and Cave 2006, Múñoz-Hernández et al. 2008, Pacheco F. et al. 2006, 2008, Útima and Vallejo 2008, García et al. 2009, Smith 2003, 2009, Stechauner-Rohringer and Pardo-Locarno 2010, Neita-Moreno 2011, Yanes-Gómez and Morón 2010, Ponchel 2011, Aragón-García et al. 2012, Krajcik 2005, 2012, Lugo et al. 2012, Breeschoten et al. 2013, García-López et al. 2013, Pardo-Locarno 2013, Rivera-Gasperín et al. 2013, Rivera-Gasperín and Morón 2013, Yepes-Rodriguez et al. 2013, Morón et al. 1985, 1988, 1998, 2014, Ratcliffe et al. 2013, 2015, López-García et al. 2015, Deloya et al. 1993, 2014a, b, 2016, Gasca-Álvarez and Deloya 2016, Ratcliffe and Cave 2017.

Remarks. Endrődi (1966) reported a single *C. lunulata* specimen, without details, from New Mexico (USA). Major faunistic studies did not find further specimens from New Mexico (Ratcliffe and Cave 2017).

Cyclocephala lurida coahuilae Bates, 1888

Cyclocephala coahuilae Bates, 1888: 302 [original combination].
Ochrosidia (*Ochrosidia*) *coahuilae* (Bates) [new combination and new subgeneric classification by Casey 1915: 151].
Cyclocephala coahuilae Bates [revised combination and removal of subgeneric classification by Arrow 1937b: 8, 9].
Cyclocephala immaculata coahuilae Bates [new subspecific status by Endrődi 1966: 219].
Cyclocephala lurida coahuilae Bates [revised subspecific status by Endrődi 1985a: 107].

Types. Type at BMNH (Endrődi 1966).

Distribution. MEXICO: Chihuahua, Coahuila, Durango, Estado de México, Guanajuato, Hidalgo, Jalisco, Nuevo León, Puebla, Querétaro, San Luis Potosí, Sonora, Veracruz.

References. Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Ratcliffe and Morón 1997, Marín Jarillo 2001, Carrillo-Ruiz and Morón 2003, Díaz Mederos et al. 2006, Múñoz-Hernández et al. 2008, Smith 2003, 2009, Krajcik 2005, 2012, Morón and Márquez 2012, Ratcliffe et al. 2013, Ratcliffe and Cave 2017.

Remarks. Endrődi (1966, 1985a) reported *C. lurida coahuilae* from Costa Rica (Cartago), Colombia (no details), and Brazil (no details). This species has not been recorded again from Costa Rica, and these data are considered erroneous (Ratcliffe 2003). *Cyclocephala lurida coahuilae* is apparently known only from Mexico in Central America (Ratcliffe et al. 2013), and the South American records are possibly incorrect.

Cyclocephala lurida lurida Bland, 1863

Cyclocephala lurida Bland, 1863: 354 [original combination].
Spilosota lurida (Bland) [new combination by Casey 1915: 131].
Cyclocephala lurida Bland [revised combination by Arrow 1937b: 8, 12].
Cyclocephala hirta LeConte [synonymy by Saylor 1945: 384].
Cyclocephala lurida Bland [revalidated species status by Endrődi 1985a: 107].
syn. *Ochrosidia* (*Ochrosidia*) *pagana* Casey, 1915: 148 [original combination].
Cyclocephala pagana (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 14].
Cyclocephala immaculata (Olivier) [synonymy by Saylor 1945: 385].
Cyclocephala lurida lurida Bland [synonymy by Endrődi 1985a: 107].
syn. *Ochrosidia* (*Ochrosidia*) *protenta* Casey, 1915: 144 [original combination].
Cyclocephala protenta (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 14].
Cyclocephala immaculata (Olivier) [synonymy by Saylor 1945: 385].
Cyclocephala lurida lurida Bland [synonymy by Endrődi 1985a: 107].
syn. *Ochrosidia* (*Ochrosidia*) *rufifrons* Casey, 1915: 145 [original combination].
Cyclocephala rufifrons (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 15].
Cyclocephala immaculata (Olivier) [synonymy by Saylor 1945: 385].
Cyclocephala lurida lurida Bland [synonymy by Endrődi 1985a: 107].
syn. *Ochrosidia* (*Ochrosidia*) *tenuicutis* Casey, 1915: 146 [original combination].
Cyclocephala tenuicutis (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 16].
Cyclocephala immaculata (Olivier) [synonymy by Saylor 1945: 385].
Cyclocephala lurida lurida Bland [synonymy by Endrődi 1985a: 107].

Types. Endrődi (1966) speculated that the type(s) of *C. lurida* were at USNM.

Distribution. CANADA: Ontario. UNITED STATES: Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin.

References. Bland 1863, Lederer 1864a, b, Gerstaecker 1865, Harold 1869b, Miller 1870, Henshaw 1885, Moffat 1890, Lucas 1896, 1899, Forbes 1890, 1891, 1894, 1896, 1907, Swenk 1911, 1913, Casey 1915, Davis 1916, Leng 1920, Jaynes and Gardner 1924, Hayes 1928, Arrow 1937b, Sanderson 1939, 1940, Saylor 1945, 1948, Peterson 1951, Dutky 1963, Roberts 1963a, b, Ritcher 1940a, b, 1944, 1958, 1966, App and Kerr 1969, Beard 1972, Woodruff 1973, Harris 1977, Arnaud 1978; Barrows and Gordh 1978, Warren and Potter 1983, Potter and Gordon 1984, Endrődi 1966, 1969b, 1985a, Tashiro 1987, Ratcliffe 1991, Crocker 1992a, b, Crocker et al. 1992, Haynes et al. 1992, Potter and Haynes 1993, Youngman et al. 1993, Rice 1994, Dougherty and Knapp 1994, Suggars Downing 1994, Crutchfield et al. 1995, Crutchfield and Potter 1994, 1995a, b, c, Crutchfield et al. 1995, Haynes and Potter 1995, Merchant and Crocker 1996, Poole and Gentili 1996, Wedin and Huff 1996, Peck and Thomas 1998, Potter 1980, 1981, 1982, 1983, 1995, 1998, Bauernfeind et al. 1999, Crocker et al. 1999, Parker et al. 1999, Vittum et al. 1999, Weinhold et al. 1999, Held et al. 2000a, b, c, d, Muegge et al. 2000, Potter et al. 1992, 1996, 2000, Flanders et al. 2000, Mankin et al. 2000, Bauernfeind 2001, Harpootlian 2001, Weinhold and Baxendale 2001, Zenger and Gibb 2001, Carstens et al. 2002, Muegge and Quigg 2002, Walker and Royer 2002, Riley and Wolfe 2003, Rogers et al. 2003, Zhang et al. 2003a, b, Anderson et al. 2004, Cranshaw 2004, Hatch and White 2004, Rogers and Potter 2004a, b, c, Daly and Buntin 2005, Grewal et al. 2005, Kriska and Young 2005, Royer and Walker 2005a, b, Buss 2006, Eickhoff et al. 2005, 2006, Jackson and Klein 2006, Bixby et al. 2007, Toda et al. 2006, 2007, Dingman 2008, Kuldau and Bacon 2008, Koppenhöfer 2008, Pierson et al. 2008, Ratcliffe and Paulsen 2008, Schaeffer et al. 2008, Su et al. 2008, Counts and Hasiotis 2009, Held and Ray 2009, Popay 2009, Rebek et al. 2009a, b, Samples et al. 2009, Smith 2003, 2009, Royer et al. 2009, Baxendale et al. 2003, 2005, 2010, Caceres et al. 2010, Heng-Moss et al. 2005, 2010, Mashtoly et al. 2009, 2010, Ramm et al. 2010, Redmond and Potter 2010, Barden et al. 2011, Krajcik 2005, 2012, Lewis et al. 2012, Redmond et al. 2012a, b, Brill et al. 2013, Koppenhöfer et al. 2004, 2013, Rebek 2013, Williamson et al. 2004, 2008, 2013, Young et al. 2013, Wu et al. 2014, Behle et al. 2015, Chong and Hinson 2015, Stamm et al. 2008a, b, 2009, 2012, 2013, 2015, Behle and Goett 2016, Christians et al. 2016, Gyawaly et al. 2015, 2016, Koppenhöfer and Wu 2016, Reynolds et al. 2016, Buss and Dale 2017, Ratcliffe and Cave 2017.

Remarks. Ratcliffe et al. (2013) listed all the Casey synonyms under *C. lurida coahuilae* Bates. It is more appropriate to treat these as synonyms of the nominate subspecies as all the Casey names were applied to species described from the United States (Alabama, Kansas, Louisiana, Missouri, Oklahoma, Texas) (Casey 1915).

Cyclocephala lutea Endrődi, 1966

Cyclocephala lutea Endrődi, 1966: 92, 141, 244 [original combination].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. ARGENTINA: Chaco, Córdoba, Mendoza. BOLIVIA: Potosí. BRAZIL: Pará. CHILE: Atacama.

References. Martínez 1968a, Pike et al. 1976, Vidal et al. 1979, Endrődi 1966, 1985a, Krajcik 2005, 2012, Breeschoten et al. 2013.

Cyclocephala machadoi Grossi, Santos, & Almeida, 2016

Cyclocephala machadoi Grossi, Santos, & Almeida, 2016: 246–247 [original combination].

Types. Holotype ♂ at CERPE (Grossi et al. 2016).

Distribution. BRAZIL: Minas Gerais.

References. Grossi et al. 2016.

Cyclocephala macrophylla Erichson, 1847

Cyclocephala macrophylla Erichson, 1847a: 97 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Chapare. COLOMBIA: Bolívar, Chocó, Meta, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. ECUADOR: Guayas. GUYANA: Demerara-Mahaica. PANAMA: Bocas del Toro, Chiriquí, Coclé, Former Canal Zone, Panamá, San Blas. PERU: Ayacucho, Callao, La Libertad, Lima, Madre de Dios, Piura.

References. Erichson 1847a, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Dechambre 1980, Endrődi 1966, 1985a, Dupuis 1996, Ratcliffe 1992a, 2002a, 2003, Neita-Moreno 2011, Krajcik 2005, 2012, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. *Cyclocephala macrophylla* was reported from Guadeloupe (La Désirade) (Endrődi 1966, 1985a). This species has not been reported from the Antilles since these records (e. g., see Ratcliffe and Cave 2015). It is possible that this record was based on misidentified specimens of the similar species *C. melanocephala,* which occurs on Guadeloupe.

Cyclocephala maculata Burmeister, 1847

Cyclocephala maculata Burmeister, 1847: 40 [original combination].
Mimeoma maculata (Burmeister) [new combination by Casey 1915: 111, 128].
Cyclocephala maculata Burmeister [revised combination by Moore et al. 2015: 898].
syn. *Cyclocephala hielkemaorum* Ratcliffe, 2008: 231–234 [original combination].
Mimeoma maculata (Burmeister) [synonymy by Ponchel 2010: 172].

Types. Lectotype ♂ of *C. maculata* at MLUH (Endrődi 1966). Holotype ♂ of *C. hielkemaorum* at UNSM (Ratcliffe 2008).

Distribution. BRAZIL: Amazonas. COLOMBIA. FRENCH GUIANA: Cayenne, St.-Laurent du Maroni. GUYANA.

References. Burmeister 1847, Harold 1869b, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, Breeschoten et al. 2013, Moore et al. 2015, Ponchel 2006, 2010, 2011, 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala maculiventris Höhne, 1923

Cyclocephala maculiventris Höhne, 1923b: 345–346 [original combination].
syn. *Cyclocephala warneri* Ratcliffe, 1992c: 250–253 [original combination].
Cyclocephala maculiventris Höhne [synonymy by Ratcliffe et al. 2013: 186].

Types. Lectotype ♂ of *C. maculiventris* at ZMHB (Endrődi 1966). Holotype ♂ of *C. warneri* at UNSM (Ratcliffe 1992c).

Distribution. BELIZE: Toledo. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. GUATEMALA: Alta Verapaz, Huehuetenango. HONDURAS: Colón, Yoro. MEXICO: Chiapas, Veracruz. NICARAGUA: Jinotega.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1963, 1966, 1985a, Thomas 1993, Lobo and Morón 1993, Ratcliffe and Morón 1997, Ratcliffe 1992c, 2003, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Ratcliffe et al. 2013, Romero-López and Morón 2017.

Cyclocephala mafaffa grandis Burmeister, 1847

Cyclocephala grandis Burmeister, 1847: 69 [original combination].
Cyclocephala mafaffa ab. *grandis* Burmeister [new infrasubspecific status by Endrődi 1964: 466].
Cyclocephala mafaffa grandis Burmeister [new subspecific status by Chalumeau 1982: 336].
Cyclocephala mafaffa ab. *grandis* Burmeister [revalidated infrasubspecific status by Endrődi 1985a: 87].
Cyclocephala mafaffa Burmeister [synonymy by Ratcliffe 2002a: 29].
Cyclocephala mafaffa grandis Burmeister [revalidated subspecific status by Ratcliffe and Cave 2015].

Types. Endrődi (1966) did not find the type material of *C. grandis*. Neotype of *C. mafaffa grandis* at USNM (Chalumeau 1982).

Distribution. GUADELOUPE: Basse-Terre, Grande-Terre. MONTSERRAT: Saint Georges, Saint Peter. SABA. ST. KITTS AND NEVIS: St. Kitts.

References. Dejean 1833, 1836b, Burmeister 1847, Harold 1869b, Fleutiaux and Sallé 1889, Arrow 1937b, Blackwelder 1944, Paulian 1947, Pike et al. 1976, Chalumeau and Gruner 1977, Chalumeau 1982, Endrődi 1966, 1985a, Ratcliffe 2002a, 2003, Dutrillaux et al. 2007, Ivie et al. 2008, Krajcik 2005, 2012, Dutrillaux and Dutrillaux 2013, Ratcliffe et al. 2013, Dutrillaux et al. 2013, 2014, Gillett and Gillett 2015, Ratcliffe and Cave, 2006, 2015.

Cyclocephala mafaffa mafaffa Burmeister, 1847

Cyclocephala mafaffa Burmeister, 1847: 69 [original combination].
Stigmalia mafaffa (Burmeister) [new combination by Casey 1915: 119].
Cyclocephala mafaffa Burmeister [revised combination by Arrow 1937b: 8, 12].
syn. *Stigmalia mafaffa histrionica* Casey, 1915: 119 [original combination].
Cyclocephala mafaffa Burmeister [synonymy by Arrow 1937b: 12].

Types. Lectotype ♂ of *C. mafaffa* at MLUH (Endrődi 1966). Type material of *Stigmalia mafaffa histrionica* at USNM (Endrődi 1966).

Distribution. BELIZE: Cayo, Stann Creek, Toledo. BRAZIL: Amazonas. COLOMBIA: Antioquia, Boyacá, Cesar, Chocó, Cundinamarca, Magdalena, Nariño, Risaralda, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. ECUADOR: Cañar, Napo. EL SALVADOR: Ahuachapán, Chalatenango, La Libertad, Morazán, San Salvador, Santa Ana, Usulután. GUATEMALA: Alta Verapaz, Baja Verapaz, Chiquimula, El Progreso, Escuintla, Guatemala, Huehuetenango, Izabal, Jalapa, Jutiapa, Petén, Quetzaltenango, Quiché, Sacatepéquez, San Marcos, Santa Rosa, Sololá, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Choluteca, Comayagua, Copán, Cortés, El Paraíso, Francisco Morazán, La Paz, Ocotepeque, Olancho, Santa Bárbara, Yoro. MEXICO: Aguascalientes, Chiapas, Colima, Durango, Estado de México, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Puebla, San Luis Potosí, Sinaloa, Sonora, Tamaulipas, Veracruz. NICARAGUA: Chontales, Estelí, Granada, Jinotega, Managua, Nueva Segovia, RAA Norte. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Darien, Former Canal Zone, Panamá. TRINIDAD AND TOBAGO: Trinidad. VENEZUELA: Carabobo.

References. Burmeister 1847, Harold 1869b, Bates 1888, Leng and Mutchler 1914, Casey 1915, Arrow 1937b, Blackwelder 1944, Carrillo-S. et al. 1966, Barrera 1969, Pike et al. 1976, Dechambre 1979a, Endrődi 1964, 1966, 1985a, Maes and Téllez Robleto 1988, Valerio 1988, Ratcliffe and Delgado-Castillo 1990, Murray 1993, Thomas 1993, Lobo and Morón 1993, Maes 1987, 1994, Poole and Gentili 1996, Croat 1997, Morón 1979, 1994, 1997, Ratcliffe and Morón 1997, Navarrete-Heredia et al. 2001, García-Luna et al. 2002, Carrillo-Ruiz and Morón 2003, Ratcliffe 1992a, 2002a, 2003, Restrepo et al. 2003, Ponchel 2006, Luna et al. 2007, Pacheco F. et al. 2008, Útima and Vallejo 2008, Neita-Moreno and Gaigl 2008, Smith 2003, 2009, Neita-Moreno 2011, Krajcik 2005, 2012, García-López et al. 2013, Moore and Jameson 2013, Ratcliffe et al. 2013, Giannoulis et al. 2012, Yepes-Rodriguez et al. 2013, López-García et al. 2015, Ratcliffe and Cave 2006, 2015, 2017, Deloya et al. 1993, 2014a, 2016, Gasca-Álvarez and Deloya 2016.

Cyclocephala magdalenae Young & Le Tirant, 2005

Cyclocephala magdalenae Young & Le Tirant, 2005: 267–270.

Types. Holotype ♂ at IMQC (Young and Le Tirant 2005).
Distribution. COLOMBIA: Huila.
References. Young and Le Tirant 2005, Krajcik 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala malleri Martínez, 1968

Cyclocephala malleri Martínez, 1968c: 81–84 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1968c).
Distribution. BRAZIL: Mato Grosso.
References. Martínez 1968c, Pike et al. 1976, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala malyi Dupuis, 2014

Cyclocephala malyi Dupuis, 2014: 52–54 [original combination].

Types. Holotype ♂ in Pokorny Collection (Prague, Czech Republic) (Dupuis 2014).
Distribution. ECUADOR: Pastaza.
References. Dupuis 2014.

Cyclocephala mannheimsi Endrődi, 1964

Cyclocephala mannheimsi Endrődi, 1964: 444–445 [original combination].

Types. Holotype ♂ at USNM (Endrődi 1964).
Distribution. BOLIVIA: Santa Cruz. COLOMBIA: Amazonas, Caquetá, Nariño. ECUADOR: Pichincha. PERU.
References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Pardo-Locarno et al. 2011, Krajcik 2005, 2012, Gasca-Álvarez 2014, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala marginalis Kirsch, 1870

Cyclocephala marginalis Kirsch, 1870: 356–357 [original combination].
syn. *Cyclocephala cincta* Prell, 1937b: 496 [original combination].

Cyclocephala marginalis ab. *cincta* Prell [new infrasubspecific status by Endrődi 1966: 249].
syn. *Cyclocephala intermissa* Prell, 1937b: 496 [original combination].
Cyclocephala marginalis ab. *intermissa* Prell [new infrasubspecific status by Endrődi 1966: 249].

Types. Holotype ♀ of *C. marginalis* at MTD (Endrődi 1966). Types of *C. intermissa* and *C. cincta* at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba. BRAZIL: Amazonas, Pará, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, São Paulo. COLOMBIA: Meta. FRENCH GUIANA: St.-Élie, St.-Laurent du Maroni. GUYANA: East Berbice-Corentyne. PERU.

References. Kirsch 1870, Arrow 1937b, Prell 1937b, Blackwelder 1944, Pike et al. 1976, Dechambre 1979a, Endrődi 1966, 1985a, Küchmeister et al. 1998, Silberbauer-Gottsberger et al. 2001, Núñez-Avellaneda and Neita-Moreno 2009, Ponchel 2011, Krajcik 2005, 2012, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala marginicollis Arrow, 1902

Cyclocephala marginicollis Arrow, 1902: 138 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. MEXICO: Chiapas, Quintana Roo, Tabasco, Veracruz, Yucatán.

References. Arrow 1902, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Morón 1979, Thomas 1993, Ratcliffe and Morón 1997, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Cyclocephala marianista Dechambre & Endrődi, 1984

Cyclocephala marianista Dechambre & Endrődi, 1984: 170 [original combination].

Types. Holotype ♂ at MNHN (Dechambre and Endrődi 1984).

Distribution. ECUADOR: Napo.

References. Dechambre and Endrődi 1984, Krajcik 2005, 2012.

Cyclocephala marqueti Dechambre, 1997

Cyclocephala marqueti Dechambre, 1997: 14, 22 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1997).

Distribution. ECUADOR: Napo.

References. Dechambre 1997, Krajcik 2005, 2012.

Cyclocephala martinezi Endrődi, 1964

Cyclocephala martinezi Endrődi, 1964: 456–457 [original combination].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1964, Dupuis 2018).

Distribution. COLOMBIA: Antioquia, Caldas, Meta. VENEZUELA: Apure, Bolívar.

References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016, Dupuis 2018.

Cyclocephala marylizae Ratcliffe, 2003

Cyclocephala marylizae Ratcliffe, 2003: 61, 66, 71, 76, 157–161 [original combination].

Types. Holotype ♂ at MNCR (originally deposited at INBio) (Ratcliffe 2003).

Distribution. COSTA RICA: Puntarenas.

References. Ratcliffe 2003, Krajcik 2005, 2012.

Cyclocephala mathani Dechambre, 1982

Cyclocephala mathani Dechambre, 1982: 1–2 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1982).

Distribution. ECUADOR: Bolívar, Napo. PERU.

References. Dechambre 1982, 1992, Krajcik 2005, 2012.

Cyclocephala mechae Martínez, 1978

Cyclocephala mechae Martínez, 1978a: 5–8 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1978a).

Distribution. PARAGUAY: Misiones.

References. Martínez 1978a, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala mecynotarsis Höhne, 1923

Cyclocephala mecynotarsis Höhne, 1923b: 351–354 [original combination].

Types. Lectotype ♂ (Endrődi 1966). Endrődi did not state clearly where the lectotype was deposited. It may be at ZMHB.

Distribution. BRAZIL: Amazonas, Distrito Federal, Mato Grosso. PARAGUAY. PERU: Ayacucho, Cusco. VENEZUELA (Höhne 1923b, Endrődi 1966, 1985a).

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Martínez 1968b, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Scariot et al. 1991, Andreazze and Fonseca 1998, Gottsberger and Silberbauer-Gottsberger 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2015.

Cyclocephala megalophylla Endrődi, 1966

Cyclocephala megalophylla Endrődi, 1966: 89, 142, 253–254 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).

Distribution. ARGENTINA: Santa Fe.

References. Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala melane Bates, 1888

Cyclocephala melane Bates, 1888: 310 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. COSTA RICA: Cartago, Heredia, Puntarenas, San José. PANAMA: Chiriquí.

References. Bates 1888, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Croat 1997, Ratcliffe 1992a, 2002a, 2003, Krajcik 2005, 2012, Moore and Jameson 2013.

Remarks. The original spelling of this specific epithet is "*melane*" (Bates 1888). Subsequently, some authors have spelled the name as "*melanae*" without explanation (Endrődi 1966, 1985a, Ratcliffe 1992a, 2002a, 2003, Croat 1997, Moore and Jameson 2013).

Cyclocephala melanocephala (Fabricius, 1775)

Melolontha melanocephala Fabricius, 1775: 36 [original combination].
Cyclocephala melanocephala (Fabricius) [new combination by Burmeister 1847: 56–57].
Dichromina melanocephala (Fabricius) [new combination by Casey 1915: 160].
Cyclocephala melanocephala (Fabricius) [revised combination by Arrow 1937b: 8, 13].

syn. *Chalepus leucophthalmus* Fischer, 1823: 265 [original combination].
Dyscinetus leucophthalmus (Fischer) [new combination by Harold 1869a: 123].
Cyclocephala melanocephala (Fabricius) [synonymy by Arrow 1911: 172].

syn. *Cyclocephala dimidiata* Burmeister, 1847: 57 [original combination].
Dichromina dimidiata (Burmeister) [new combination by Casey 1915: 161].

Cyclocephala (*Dichromina*) *dimidiata* (Burmeister) [revised combination and new subgeneric classification by Saylor 1937: 70].
Cyclocephala dimidiata Burmeister [removal of subgeneric classification by Arrow 1937b: 8, 10].
Cyclocephala melanocephala (Fabricius) [synonymy by Endrődi 1964: 466].
syn. *Cyclocephala elegans* Horn, 1871: 337 [original combination].
Cyclocephala dimidiata Burmeister [synonymy by Horn 1875: 143].
Dichromina elegans (Horn) [revalidated species status and new combination by Casey 1915: 162].
Cyclocephala dimidiata Burmeister [synonymy by Saylor 1945: 382].
Cyclocephala melanocephala (Fabricius) [synonymy by Endrődi 1964: 466].
syn. *Cyclocephala rubiginosa* Burmeister, 1847: 59 [original combination].
Cyclocephala melanocephala rubiginosa Burmeister [new subspecific status by Chalumeau and Gruner 1977: 584].
Cyclocephala melanocephala (Fabricius) [synonymy by Ratcliffe and Cave 2015].
syn. *Cyclocephala ventralis* Erichson, 1847a: 97 [original combination].
Cyclocephala melanocephala (Fabricius) [synonymy by Endrődi 1964: 466].
syn. *Dichromina ocularis* Casey, 1915: 162 [original combination].
Cyclocephala ocularis (Casey) [new combination by Arrow 1937b: 8, 14].
Cyclocephala dimidiata Burmeister [synonymy by Saylor 1945: 382].

Types. Type of *M. melanocephala* at BMNH (Banks Collection) (Endrődi 1966). Lectotype of *C. ventralis* at ZMHB (Endrődi 1966). Type of *C. dimidiata* is missing (Endrődi 1966). The type of *C. leucophthalmus* is unknown (Endrődi 1966). Type of *D. ocularis* at USNM (Endrődi 1966). Type of *C. elegans* at USNM (Endrődi 1966). The type of *C. rubiginosa* is missing (Endrődi 1966).

Distribution. ARGENTINA: Córdoba, Salta, Santa Fe, Tucumán. BELIZE: Cayo, Orange Walk, Stann Creek, Toledo. BOLIVIA: Beni, Cochabamba, Santa Cruz. BRAZIL: Amazonas, Bahia, Ceará, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo. COLOMBIA: Antioquia, Atlántico, Boyacá, Casanare, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, Huila, La Guajira, Meta, Risaralda, Santander, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. DOMINICA: St. David, St. Joseph, St. Patrick, St. Paul. DOMINICAN REPUBLIC: Barahona. ECUADOR: Bolívar, Cañar, Esmeraldas, Guayas, Loja, Los Ríos, Morona-Santiago, Santa Elena. EL SALVADOR: Ahuachapán, Chalatenango, La Libertad, Morazán, Santa Ana. FRENCH GUIANA: Cayenne. GRENADA: St. Andrew, St. David, St. George, St. John. GRENADINES: Bequia, Canouan, Carriacou, Union Island. GUADELOUPE: Basse-Terre, Îles des Saintes, Marie-Galante. GUATEMALA: Alta Verapaz, Baja Verapaz, Chiquimula, El Progreso, Escuintla, Guatemala, Huehuetenango, Izabal, Petén, Quetzaltenango, Quiché, Retalhuleu, San Marcos, Santa Rosa, Sololá, Suchitepéquez, Zacapa. GUYANA: Cuyuni-Mazaruni, East Berbice-Corentyne, Pomeroon-Supenaam. HONDURAS: Atlántida, Choluteca, Comayagua, Cortés, El Paraíso, Francisco Morazán, Gracias a Dios, Intibucá, Olancho, Santa Bárbara, Yoro. MARTINIQUE: Fort-de-France, La Trinité, Le Marigot, Le Marin, Saint-Pierre. MEXICO: Aguascalientes, Baja California, Baja California Sur, Chiapas, Chihuahua, Distrito Federal, Colima, Durango, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Nuevo León, Oaxaca, Puebla, Querétaro, Quintana Roo, San Luis Potosí, Sinaloa, Sonora, Tabasco, Tamaulipas, Veracruz, Yucatán, Zacatecas. MONTSERRAT. NICARAGUA: Carazo, Chinandega, Granada, Jinotega, León, Matagalpa, RAA Norte, RAA Sur, Río San Juan, Rivas. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Darien, Former Canal Zone, Panamá, San Blas, Veraguas. PARAGUAY: Asunción, Paraguarí. PERU: Ayacucho, Callao, Cusco, Junín, La Libertad, Madre de Dios, Pasco. PUERTO RICO. SAINT BARTHÉLEMY. SURINAME: Marowjine. TRINIDAD AND TOBAGO: Trinidad. UNITED STATES: Arizona, Arkansas, California, Kansas, Louisiana, Mississippi, Nevada, New Mexico, Oklahoma, Texas, Utah. VENEZUELA: Bolívar, Capital District, Carabobo, Mérida, Zulia.

References. Fabricius 1775, 1801, Herbst 1790, Illiger 1802a, 1805, Dejean 1833, 1836b, Sturm 1843, Erichson 1847a, Burmeister 1847, Harold 1869b, Bertkau 1873, Crotch 1873, Austin 1880, Henshaw 1885, Bates 1888, Cockerell 1897, Horn 1871, 1894, Fall 1901, Fall and Cockerell 1907, Ohaus 1910, Leng and Mutchler 1914, Casey 1915, Bodkin 1919, Leng 1920, Arrow 1900, 1911, 1937b, Moore 1937, Guimarães 1944, Saylor 1937, 1945, 1948, Sanderson 1940, Blackwelder 1939, 1944, Paulian 1947, Blackwelder and Blackwelder 1948, Mariconi 1959, Linsley 1960, Zimsen 1964, Carrillo-S. et al. 1966, Martínez 1968a, Squire 1972, Ritcher and Baker 1974, Pike et al. 1976, Chalumeau and Gruner 1977, Cartwright and Chalumeau 1978, Chalumeau 1982, 1983, Boiça et al. 1984, Endrődi 1964, 1966, 1973a, 1985a, Ungaro et al. 1985, Gottsberger 1986, Morón et al. 1985, 1988, Sutton 1988, Dechambre 1992, Rogers 1992, Murray 1993, Thomas 1993, Lobo and Morón 1993, Deloya and Morón 1994, Morón 1979, 1994, Dupuis 1996, Poole and Gentili 1996, Charlet et al. 1997, Ratcliffe and Morón 1997, Sanchez Soto 1997, Woodruff et al. 1998, Bauernfeind 2001, Navarrete-Heredia et al. 2001, DeFoliart 2002, Peck et al. 2002, Carrillo-Ruiz and Morón 2003, Joly 2003, Luna et al. 2003, Marquet and Roquet 2003, Raguso et al. 2003, Riley and Wolfe 2003, Ratcliffe 1992c, 2002a, 2003, Restrepo et al. 2003, Pardo-Locarno et al. 2005a, Neita-Moreno et al. 2006, Ponchel 2006, Pacheco F. et al. 2008, Múñoz-Hernández et al. 2008, Útima and Vallejo 2008, Barbosa Moreira et al. 2009, Smith 2003, 2009, Yanes-Gómez and Morón 2010, Neita-Moreno 2011, Giannoulis et al. 2012, Hay et al. 2012, Krajcik 2005, 2012, Breeschoten et al. 2013, García-López et al. 2013, Lima Nogueira et al. 2013, Pardo-Locarno 2013, Yepes-Rodriguez et al. 2013, Dutrillaux et al. 2007, 2014, Alberio et al. 2015, García-Atencia and Martínez-Hernández 2015, López-García et al. 2015, Ratcliffe et al. 2013, 2015, Deloya et al. 2014a, b, 2016, Dossey et al. 2016, Gasca-Álvarez and Deloya 2016, Mitasuhashi 2016, Peck 2016, Schrader et al. 2016, Ratcliffe and Cave 2006, 2015, 2017, Romero-López and Morón 2017.

Cyclocephala melanopoda Ratcliffe, 2008

Cyclocephala melanopoda Ratcliffe, 2008: 234–236 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2008).

Distribution. ECUADOR: Pichincha, Santo Domingo de los Tsáchilas.

References. Ratcliffe 2008, Krajcik 2012.

Cyclocephala melolonthida Ratcliffe & Cave, 2002

Cyclocephala melolonthida Ratcliffe & Cave, 2002: 153–155 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe and Cave 2002).

Distribution. EL SALVADOR: La Paz. GUATEMALA: Escuintla, Santa Rosa.

References. Ratcliffe and Cave 2002, 2006, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Cyclocephala mesophylla Mora-Aguilar & Delgado, 2012

Cyclocephala mesophylla Mora-Aguilar & Delgado, 2012: 139–141 [original combination].

Types. Holotype ♂ at IEXA (Mora-Aguilar and Delgado 2012).

Distribution. MEXICO: Chiapas, Oaxaca, Veracruz.

References. Mora-Aguilar and Delgado 2012, Ratcliffe et al. 2013.

Cyclocephala metrica Steinheil, 1874

Cyclocephala metrica Steinheil, 1874: 559–560 [original combination].

syn. *Cyclocephala parvula* Berg, 1881a: 100 [original combination].
Cyclocephala metrica Steinheil [synonymy by Arrow 1937b: 13].

Types. Type of *C. metrica* at MNHN (Endrődi 1966). The location of the type(s) of *C. parvula* is unknown (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires, Córdoba, La Pampa, Salta, San Luis, Tucumán. BRAZIL: Rio Grande do Sul. URUGUAY: Canelones, Maldonado, Montevideo.

References. Steinheil 1874, Berg 1881a, b, Anonymous 1881, 1886, Kolbe 1907, Arrow 1937b, Blackwelder 1944, Hayward 1946, Pike et al. 1976, Endrődi 1966, 1985a, Saenz and Morelli 1984, Krajcik 2005, 2012, Breeschoten et al. 2013, Cherman et al. 2013.

Cyclocephala miamiensis **Howden & Endrődi, 1966**

Cyclocephala miamiensis Howden & Endrődi, 1966: 295–296 [original combination].

Types. Holotype ♂ at CNC (Howden and Endrődi 1966).

Distribution. UNITED STATES: Florida.

References. Howden and Endrődi 1966, Woodruff 1973, Pike et al. 1976, Endrődi 1985a, Hardy 1991, Poole and Gentili 1996, Peck and Thomas 1998, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe and Cave 2017.

Cyclocephala minuchae **Joly, 2003**

Cyclocephala minuchae Joly, 2003: 38–40 [original combination].

Types. Holotype ♂ at MIZA (Joly 2003).

Distribution. VENEZUELA: Anzoátegui, Aragua, Falcón, Miranda.

References. Joly 2003, Krajcik 2005, 2012.

Cyclocephala minuta **Burmeister, 1847**

Cyclocephala minuta Burmeister, 1847: 59 [original combination].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. FRENCH GUIANA: Cayenne. GUYANA: Pomeroon-Supenaam. PARAGUAY: Paraguarí. SURINAME: Para. VENEZUELA.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Dechambre 1980, Endrődi 1966, 1985a, Gruner 1971, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013.

Cyclocephala modesta **Burmeister, 1847**

Cyclocephala modesta Burmeister, 1847: 38 [original combination].

Types. Lectotype ♀ at MLUH (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires, Catamarca, Chaco, Córdoba, Mendoza, Misiones, Salta, Santa Fe, Tucumán. BOLIVIA: Cochabamba. BRAZIL: Bahia, Espírito Santo, Mato Grosso do Sul, Pará, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, São Paulo. CHILE: Santiago Metropolitan Region. PARAGUAY: Guairá. SURINAME. URUGUAY: Canelones, Maldonado, Montevideo, Paysandú, Rivera, San José, Soriano, Tacuarembó.

References. Burmeister 1847, Harold 1869b, Tremoleras 1910, Arrow 1937b, Blackwelder 1944, Martínez 1954, Pike et al. 1976, Alvarado 1980, Saenz and Morelli 1984, Endrődi 1966, 1969a, 1985a, Achinelly and Camino 2008, Mondaca 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Cherman et al. 2013, Crespo and Castelo 2013, Barrantes and Castelo 2014, Salgado-Neto et al. 2016.

Cyclocephala molesta Endrődi, 1969

Cyclocephala molesta Endrődi, 1969b: 35–36 [original combination].

Types. Holotype ♂ at "Pereira Collection in Sao Paulo" (Endrődi 1969b). This is possibly referring to MZSP.

Distribution. BOLIVIA: Cochabamba. BRAZIL: Pará. PERU.

References. Pike et al. 1976, Dechambre 1979a, Endrődi 1969b, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala monacha Ratcliffe, 2008

Cyclocephala monacha Ratcliffe, 2008: 236–237 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2008).

Distribution. COLOMBIA: Amazonas, Boyacá.

References. Ratcliffe 2008, Krajcik 2012, Gasca-Álvarez 2013, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala monzoni Ratcliffe & Cave, 2009

Cyclocephala monzoni Ratcliffe & Cave, 2009: 328–332 [original combination].

Types. Holotype ♂ at UVGC (Ratcliffe and Cave 2009).

Distribution. GUATEMALA: Baja Verapaz, El Progreso, San Marcos, Zacapa.

References. Ratcliffe and Cave 2009, Ratcliffe et al. 2013.

Cyclocephala moreti Dechambre, 1992

Cyclocephala moreti Dechambre, 1992: 68–70 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. ECUADOR: Napo. PERU.

References. Dechambre 1992, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala morphoidina **Prell, 1937**

Cyclocephala morphoidina Prell, 1937b: 495–496 [original combination].
Albridarollia morphoidina (Prell) [new combination by Bolivar et al. 1963: 185].
Cyclocephala morphoidina Prell [revised combination by Endrődi 1966: 61, 262].

Types. Endrődi (1966) did not find the type(s) of *C. morphoidina* but he suspected that it was at ZMHB (Prell Collection).

Distribution. COLOMBIA: Antioquia, Meta, Risaralda. BOLIVIA: La Paz. ECUADOR: Pastaza. PERU.

References. Prell 1937b, Blackwelder 1944, Bolivar et al. 1963, Pike et al. 1976, Endrődi 1966, 1985a, Restrepo et al. 2003, Dupuis 2008, Útima and Vallejo 2008, Krajcik 2005, 2012, Yepes-Rodriguez et al. 2013, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. *Cyclocephala morphoidina* was previously reported from Mexico and Guatemala (Endrődi 1966, 1985a). These records are considered spurious and likely do not reflect permanent populations (Ratcliffe et al. 2013).

Cyclocephala multiplex **Casey, 1915**

Cyclocephala (*Cyclocephala*) *multiplex* Casey, 1915: 139 [original combination].
Cyclocephala detecta Bates [synonymy by Arrow 1937b: 10].
Cyclocephala amazona (Linneaus) [synonymy by Endrődi 1964: 466].
Cyclocephala multiplex Casey [revalidated species status by Ratcliffe 2003: 165].

Types. Type of *C. multiplex* at USNM (Endrődi 1966).

Distribution. BELIZE: Belize, Cayo, Stann Creek, Toledo. COSTA RICA: Alajuela, Guanacaste, Heredia. EL SALVADOR: La Libertad, Morazán, San Salvador, Santa Ana. GUATEMALA: Alta Verapaz, Baja Verapaz, Chiquimula, El Progresso, Huehuetenango, Izabal, Petén, Quiché, Santa Rosa, Zacapa. HONDURAS: Atlántida, Choluteca, Comayagua, Copán, Cortés, El Paraíso, Francisco Morazán, Gracias a Dios, Islas de la Bahía, Lempira, Olancho, Santa Bárbara, Yoro. MEXICO: Chiapas, Guerrero, Hidalgo, Oaxaca, Puebla, Quintana Roo, Tabasco, Veracruz. NICARAGUA: Carazo, Chontales, Estelí, Granada, Jinotega, Masaya, RAA Sur, Río San Juan.

References. Casey 1915, Arrow 1937b, Barrera 1969, Pike et al. 1976, Morón 1979, Endrődi 1964, 1966, 1985a, Sanchez Soto 1998, Ratcliffe 2003, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Krajcik 2005, 2012, Ratcliffe et al. 2013.

Remarks. The complete distribution of *C. multiplex* is unknown due to this species' historical confusion with *C. amazona amazona*. The locality records from recent monographs are given here as these are based on authoritatively identified specimens (Ratcliffe 2003, Ratcliffe and Cave 2006, Ratcliffe et al. 2013). *Cyclocephala detecta* was described from specimens collected in Mexico and Nicaragua, and this species is currently considered a synonym of *C. amazona*. Based on these reported locality data, it is possible that *C. multiplex* is a junior synonym of *C. detecta*.

Cyclocephala munda Kirsch, 1870

Cyclocephala munda Kirsch, 1870: 355–356 [original combination].

Types. Lectotype ♂ at MTD (Endrődi 1966).

Distribution. BRAZIL: Amazonas. COLOMBIA: Boyacá, Cundinamarca. FRENCH GUIANA: Cayenne. PERU: Loreto, Pasco. SURINAME.

References. Kirsch 1870, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Dechambre and Endrődi 1984, Endrődi 1964, 1966, 1985a, Ratcliffe 1992b, Restrepo et al. 2003, García-Robledo et al. 2005, Ponchel 2011, Krajcik 2005, 2012, López-García et al. 2015, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala mustacha Ratcliffe, 2003

Cyclocephala mustacha Ratcliffe, 2003: 64, 68, 74, 78, 168–170 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2003).

Distribution. PANAMA: Panamá.

References. Ratcliffe 2003, Krajcik 2005, 2012.

Cyclocephala mutata Harold, 1869

Cyclocephala mutata Harold, 1869a: 124 [original combination, new replacement name for *Cyclocephala frontalis* Burmeister, 1847].

Cyclocephala sanguinicollis ab. *mutata* Harold [new infrasubspecific status by Endrődi 1966: 301].

Cyclocephala mutata Harold [revalidated species status by Ratcliffe 2002a: 30].

syn. *Cyclocephala frontalis* Burmeister, 1847: 50 [original combination, homonym of *Cyclocephala frontalis* Chevrolat 1844].

Cyclocephala mutata Harold [new replacement name by Harold 1869a: 124].

syn. *Cyclocephala laevicauda* Arrow, 1902: 138–139 [original combination].

Homochromina laevicauda (Arrow) [new combination by Casey 1915: 165].

Cyclocephala laevicauda Arrow [revised combination by Arrow 1937b: 8, 11].

Cyclocephala sanguinicollis ab. *laevicauda* Arrow [new infrasubspecific status by Endrődi 1966: 301].

Cyclocephala mutata Harold [synonymy by Ratcliffe 2002a: 30].
syn. *Cyclocephala pseudoisabellina* Endrődi, 1980: 38 [original combination].
Cyclocephala mutata Harold [synonymy by Ratcliffe 2003: 171].
syn. *Cyclocephala vitracelis* Dechambre 1999: 21–22 [original combination].
Cyclocephala mutata Harold [synonymy by Ratcliffe 2003: 171].

Types. Holotype ♂ of *C. vitracelis* at MNHN (Dechambre 1999). Holotype ♀ of *C. pseudoisabellina* in André Gaudaíre-Thore Collection (Sens, France) (Endrődi 1980). Lectotype ♂ of *C. frontalis* at MNHN (Dechambre 1991b). Type of *C. laevicauda* at BMNH (Endrődi 1966). Endrődi (1966) mentioned a specimen of *C. mutata* at MNHN could be important for the nomenclatural stability of this species, but he noted that this specimen was not a type.

Distribution. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. GUATEMALA: Alta Verapaz, Escuintla, San Marcos, Suchitepéquez, Zacapa. HONDURAS: Atlántida, La Paz, Lempira, Ocotepeque, Olancho, Yoro. MEXICO: Chiapas, Hidalgo, Veracruz, Yucatán. NICARAGUA: Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Former Canal Zone, Panamá.

References. Burmeister 1847, Harold 1869a, Bates 1888, Casey 1915, Arrow 1902, 1937b, Blackwelder 1944, Endrődi 1966, 1980, 1985a, Dechambre 1991b, 1999, Ratcliffe 2002a, 2003, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, García-López et al. 2013, Ratcliffe et al. 2013.

Remarks. *C. mutata* is listed as occurring in Colombia (Cauca) by Gasca-Álvarez and Deloya (2016), citing the data of Endrődi (1966). Endrődi (1966) considered this taxa as an “ab.” (infrasubspecific entity) of *C. sanguinicollis*. The Endrődi (1966) data from Colombia may refer to *C. sanguinicollis* and should be reevaluated.

Cyclocephala nana Dechambre, 1999

Cyclocephala nana Dechambre, 1999: 14 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. BOLIVIA: Cochabamba.
References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala nicolasi Dupuis, 2018

Cyclocephala nicolasi Dupuis, 2018: 9–12 [original combination].

Types. Holotype ♂ at FDPC (Dupuis 2018).
Distribution. PERU: Junín (Dupuis 2018).
References. Dupuis 2018.

Cyclocephala nigerrima Bates, 1888

Cyclocephala nigerrima Bates, 1888: 310–311 [original combination].

Types. Type ♂ at BMNH (Endrődi 1966).

Distribution. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Puntarenas, San José. PANAMA: Chiriquí.

References. Bates 1888, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Goldwasser 1987, 2000, Croat 1997, Ratcliffe 1992a, 2002a, 2003, García-Robledo et al. 2004, 2005, Krajcik 2005, 2012, Breeschoten et al. 2013, García-López et al. 2013.

Cyclocephala nigra (Endrődi, 1979)

Mimeoma nigra Endrődi, 1979: 216–217 [original combination].
Cyclocephala nigra (Endrődi) [new combination by Moore et al. 2015: 898].

Types. Holotype ♂ at USNM (Endrődi 1979).

Distribution. DOMINICAN REPUBLIC: Dajabón.

References. Endrődi 1979, 1985a, Krajcik 2005, 2012, Ratcliffe and Cave 2015, Moore et al. 2015.

Cyclocephala nigritarsis Ratcliffe, 1992

Cyclocephala nigritarsis Ratcliffe, 1992a: 222–224 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992a).

Distribution. COSTA RICA: Alajuela, Guanacaste, Heredia, Limón, San José. PANAMA: Coclé, Colón, Former Canal Zone, Panamá.

References. Ratcliffe 1992a, 2002a, 2003, Krajcik 2005, 2012, García-López et al. 2013.

Cyclocephala nigrobasalis Höhne, 1923

Cyclocephala nigrobasalis Höhne, 1923b: 370 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Minas Gerais. COLOMBIA: Chocó, Cundinamarca. VENEZUELA: Mérida.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1999, Krajcik 2005, 2012, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala nigropicta Dechambre & Endrődi, 1983

Cyclocephala nigropicta Dechambre & Endrődi, 1983: 83–84 [original combination].

Types. Holotype ♂ at MNHN (Dechambre and Endrődi 1983).

Distribution. ECUADOR: Cotopaxi, Santo Domingo de los Colorados.

References. Dechambre and Endrődi 1983, Ratcliffe 1989, Dechambre 1999, Dupuis 1999, Krajcik 2005, 2012.

Cyclocephala niguasa Dechambre & Endrődi, 1984

Cyclocephala niguasa Dechambre & Endrődi, 1984: 171 [original combination].

Types. Holotype ♂ at MNHN (Dechambre and Endrődi 1984).

Distribution. ECUADOR: Cotopaxi, Los Ríos, Pichincha.

References. Dechambre and Endrődi 1984, Krajcik 2005, 2012.

Cyclocephala nike Ratcliffe, 1992

Cyclocephala nike Ratcliffe, 1992a: 224–226 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992a).

Distribution. COSTA RICA: Puntarenas. PANAMA: Chiriquí.

References. Ratcliffe 1992a, 2002a, 2003, Krajcik 2005, 2012.

Cyclocephala nodanotherwon Ratcliffe, 1992

Cyclocephala nodanotherwon Ratcliffe, 1992b: 184 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992b).

Distribution. BRAZIL: Amazonas.

References. Ratcliffe 1992b, Krajcik 2005, 2012.

Cyclocephala notata (Illiger, 1806)

Melolontha notata Illiger, 1806: 235–236 [original combination, new replacement name for *Melolontha signata* Olivier].

Cyclocephala notata (Illiger) [new combination by Burmeister 1847: 55].

syn. *Cyclocephala insularis* Laporte, 1840: 125 [original combination].

Cyclocephala notata (Illiger) [synonymy by Burmeister 1847: 55].

syn. *Melolontha signata* Olivier, 1789: 28–29 [original combination, homonym of *Melolontha signata* Fabricius].

Melolontha notata Illiger, 1806: 235–236 [new replacement name for *Melolontha signata* Olivier].

Types. Lectotype ♂ of *M. notata* at ZMHB (Endrődi 1966). The type of *C. signata* is missing (Endrődi 1966). Endrődi (1966) did not determine where the type material of *C. insularis* is deposited.

Distribution. CUBA: Camagüey, Guantánamo, Holguin, Santiago de Cuba. DOMINICAN REPUBLIC: Azua, Baoruco, Barahona, Dajabón, Distrito Nacional, Hato Mayor, Independencia, La Altagracia, La Romana, La Vega, Monseñor Nouel, Monte Cristi, Monte Plata, Pedernales, Peravia, Puerto Plata, Salcedo, Samana, San Cristóbal, San Jose Ocoa, San Juan, San Pedro de Macorís, Santiago, Santo Domingo, Valverde. HAITI: Artibonite, Centre, Grand Anse, Nord-Ouest, Ouest, Sud. JAMAICA: St. James, St. Thomas, Trelawny.

References. Olivier 1789, Illiger 1806, Laporte 1840, Sturm 1843, Burmeister 1847, Harold 1869b, Leng and Mutchler 1914, 1917, Chapin 1932, Arrow 1937b, Blackwelder 1944, Howden 1970, Pike et al. 1976, Endrődi 1966, 1985a, Fernández García 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe and Cave 2015.

Cyclocephala obscura Endrődi ,1966

Cyclocephala obscura Endrődi, 1966: 85, 137, 269–270 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba. PERU: Madre de Dios.

References. Endrődi 1966, 1985a, Dechambre 1999, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala occipitalis Fairmaire, 1892

Cyclocephala occipitalis Fairmaire, 1892: 244–245 [original combination].

Types. Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. ARGENTINA: La Rioja. BRAZIL: Bahia, Rio Grande do Sul, Santa Catarina.

References. Fairmaire 1892, Bertkau 1893, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Marques and Gil-Santana 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe 2014.

Cyclocephala ocellata Burmeister, 1847

Cyclocephala ocellata Burmeister, 1847: 40 [original combination].
syn. *Albridarollia ocellata* Bolívar y Pieltain, 1963: 183 [original combination]. *Cyclocephala ocellata* Burmeister (synonymy by Endrődi 1966: 61, 272].

Types. Lectotype ♂ of *C. ocellata* at MNHN (Dechambre 1991b)**.** Holotype ♂ of *A. ocellata* at MACN (Antonio Martínez Collection) (Bolívar y Pieltain et al. 1963).

Distribution. BRAZIL: Amazonas. COLOMBIA: Antioquia. ECUADOR: Morona-Santiago. FRENCH GUIANA: Kourou, St.-Élie. PERU: Cusco, Ucayali.

References. Burmeister 1847, Harold 1869b, Arrow 1911, 1937b, Blackwelder 1944, Bolívar y Pieltain et al. 1963, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Dechambre 1979a, 1991b, Ratcliffe 1992b, Restrepo et al. 2003, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Yepes-Rodriguez et al. 2013, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. *Cyclocephala ocellata* was originally described from Mexico (Burmeister 1847). These data were erroneous, and *C. ocellata* is considered a South American species (Endrődi 1966). Endrődi (1964) redescribed *C. ocellata* but did not mention Burmeister's type material. A lectotype was later designated (Dechambre 1991b). *Albridarollia ocellata* was described as a separate species (Bolívar y Pieltain et al. 1963). Endrődi (1966) treated the genus *Albridarollia* as a synonym of *Cyclocephala* but did not clearly establish that *C. ocellata* and *A. ocellata* are subjective synonyms.

Cyclocephala ochracea Prell, 1937

Cyclocephala ochracea Prell, 1937b: 495 [original combination].

Types. Endrődi (1966) did not find the type material of *C. ochracea* and speculated that it would be at ZMHB (Prell Collection).

Distribution. ARGENTINA: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Formosa, Jujuy, Salta, Santiago del Estero, Tucumán. BOLIVIA: Beni, Cochabamba, La Paz, Santa Cruz. COLOMBIA. PARAGUAY: Paraguarí. URUGUAY: Rivera, Tacuarembó.

References. Prell 1937b, Blackwelder 1944, Pike et al. 1976, Saenz and Morelli 1984, Endrődi 1964, 1966, 1967b, 1969a, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala octopunctata Burmeister, 1847

Cyclocephala octopunctata Burmeister, 1847: 65–66 [original combination].

Types. Lectotype ♀ at MNHN (Dechambre 1991b). Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba, Santa Cruz. BRAZIL: Goiás, Mato Grosso, Rio de Janeiro, Santa Catarina. FRENCH GUIANA: Cayenne. PERU: Madre de Dios, Pasco.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Howden and Endrődi 1966, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Dechambre 1991b, Joly 2000a, Cavalcante et al. 2009, Krajcik 2005, 2012, Moore and Jameson 2013, Ratcliffe et al. 2015, Costa et al. 2017.

Cyclocephala ohausiana Höhne, 1923

Cyclocephala ohausiana Höhne, 1923b: 362–363 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Goiás, Mato Grosso, Minas Gerais, São Paulo.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Gottsberger 1986, 1988, 1989, 1992, Gottsberger and Silberbauer-Gottsberger 1988, 2006, Krajcik 2005, 2012, Costa et al. 2017.

Cyclocephala olivieri Arrow, 1911

Cyclocephala olivieri Arrow, 1911: 171 [original combination, new replacement name for *Cyclocephala nigrocephala* Schönherr].

syn. *Melolontha melanocephala* Olivier, 1789: 42 [original combination, junior homonym of *Melolontha melanocephala* Fabricius].

Melolontha nigrocephala Schönherr, 1817: 190 [original combination, new replacement name for *Melolontha melanocephala* Olivier].

syn. *Melolontha nigrocephala* Schönherr, 1817: 190 [original combination, new replacement name for *Melolontha melanocephala* Olivier and junior homonym of *Melolontha nigrocephala* (DeGeer)].

Cyclocephala nigrocephala (Schönherr) [new combination by Burmeister 1847: 58].

Cyclocephala olivieri Arrow [new replacement name by Arrow 1911: 171].

Types. Type material for this species was not found, and Endrődi's (1966) description was based upon Burmeister specimens.

Distribution. ARGENTINA: Formosa, Tucumán. BOLIVIA: Beni. BRAZIL: Pernambuco. COLOMBIA: Cundinamarca. PARAGUAY: Asunción. SURINAME. TRINIDAD AND TOBAGO: Trinidad. URUGUAY: Canelones, Florida, Maldonado, Montevideo, Paysandú, Rocha. VENEZUELA: Apure, Capital District, Bolívar.

References. Olivier 1789, Schönherr 1817, Burmeister 1847, Harold 1869b, Arrow 1911, 1937b, Blackwelder 1944, Pike et al. 1976, Dechambre and Endrődi 1984, Saenz and Morelli 1984, Dechambre and Endrődi 1984, Endrődi 1966, 1985a, Dechambre 1999, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala ovulum Bates, 1888

Cyclocephala ovulum Bates, 1888: 306–307 [original combination].

Ochrosidia (*Ochrosidia*) *ovulum* (Bates) [new combination and new subgeneric classification by Casey 1915: 158].

Cyclocephala ovulum Bates [revised combination and removal of subgeneric classification by Arrow 1937b: 8, 14].

Cyclocephala testacea ab. *ovulum* Bates [new infrasubspecific status by Endrődi 1966: 318].

Cyclocephala ovulum Bates [revalidated species status by Ratcliffe 2003: 180].

Types. Endrődi (1966) did not discuss the type material of this species or report its housing institution.

Distribution. ARGENTINA. BRAZIL: Amazonas. COLOMBIA: Amazonas, Atlántico, Chocó, Cundinamarca, Guainía. COSTA RICA: Alajuela, Cartago, Guanacaste, Limón, Puntarenas, San José. ECUADOR: Napo. EL SALVADOR: Ahuachapán, La Libertad, Morazán, San Miguel. FRENCH GUIANA: Cayenne, Campoi, St.-Georges, St-Laurent du Maroni. GUATEMALA: Baja Verapaz, El Progreso, Suchitepéquez, Zacapa. GUYANA. HONDURAS: Atlántida, Choluteca, Comayagua, El Paraíso, Francisco Morazán, La Paz, Olancho, Valle, Yoro. MEXICO: Chiapas, Guerrero, Jalisco, Morelos, Nayarit, Oaxaca, Puebla, Sinaloa, Veracruz. NICARAGUA: Chontales, León, Managua, RAA Norte. PANAMA: Bocas del Toro, Chiriquí, Coclé, Colón, Former Canal Zone, Panamá, Veraguas. PARAGUAY: Alto Paraná.

References. Bates 1888, Casey 1915, Bodkin 1919, Arrow 1937b, Blackwelder 1944, Hayward 1946, Gruner 1971, Endrődi 1966, 1969a, 1985a, Maes 1987, Morón et al. 1988, Thomas 1993, Deloya and Morón 1994, Navarrete-Heredia et al. 2001, Ratcliffe 2002a, 2003, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Gómez and Morón 2010, Neita-Moreno 2011, Krajcik 2005, 2012, Moore and Jameson 2013, Otavo et al. 2013, Ratcliffe et al. 2013, García-Atencia and Martínez-Hernández 2015, López-García et al. 2015, Gasca-Álvarez and Deloya 2016, Romero-López and Morón 2017.

Cyclocephala pan Ratcliffe, 1992

Cyclocephala pan Ratcliffe, 1992a: 226–227 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992a).

Distribution. COSTA RICA: Alajuela, Guanacaste, Heredia, Limón. GUATEMALA: Izabal, Santa Rosa. PANAMA: Bocas del Toro, Colón, Panamá, San Blas.

References. Ratcliffe 1992a, 2002a, 2003, Krajcik 2005, 2012, García-López et al. 2013, Ratcliffe et al. 2013.

Cyclocephala panthera Dechambre, 1979

Cyclocephala panthera Dechambre, 1979a: 164–165 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979a).

Distribution. BRAZIL: Distrito Federal, Pará. PERU.

References. Dechambre 1979a, Endrődi 1985a, Ratcliffe 1992b, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala paraflora Martínez, 1978

Cyclocephala paraflora Martínez, 1978b: 12–15 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1978a).

Distribution. BRAZIL: Roraima. COLOMBIA: Amazonas. FRENCH GUIANA: St.-Élie. PERU.

References. Martínez 1978b, Endrődi 1985a, Dechambre 1979a, 1992, 1999, Krajcik 2005, 2012, Otavo et al. 2013, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala paraguayensis marginella Endrődi, 1966

Cyclocephala paraguayensis marginella Endrődi, 1966: 129, 278–279 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).

Distribution. BRAZIL: Pernambuco, Rio Grande do Norte.

References. Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala paraguayensis paraguayensis Arrow, 1903

Cyclocephala paraguayensis Arrow, 1903: 257 [original combination].

Types. Endrődi (1966) did not discuss the type material of this species or report its housing institution.

Distribution. ARGENTINA: Entre Ríos, Misiones, Santa Fe. BOLIVIA: Cochabamba, Santa Cruz. BRAZIL: Amazonas, Bahia, Goiás, Mato Grosso, Paraná, Pernambuco, Piauí, Rio Grande do Norte, Rio Grande do Sul, Santa Catarina, São Paulo. COLOMBIA: Cundinamarca. ECUADOR. PARAGUAY: Asunción, Cordillera, Guairá, Paraguarí. PERU: Quispicanchi. URUGUAY.

References. Seidlitz 1904, Arrow 1903, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Gottsberger 1986, 1989, Restrepo et al. 2003, Riehs 2005, 2006, Costa and Iannuzzi 2010, Grossi et al. 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Albuquerque et al. 2014, 2016, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. *Cyclocephala paraguayensis* was recorded from Honduras (Endrődi 1966, 1985a). Further studies have not encountered *C. paraguayensis* in Honduras, and this species is probably restricted to South America (Ratcliffe and Cave 2006).

Cyclocephala parallela (Casey, 1915)

Ochrosidia (*Ochrosidia*) *parallela* Casey, 1915: 144 [original combination].
Cyclocephala parallela (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8 14].
Cyclocephala borealis Arrow [synonymy by Saylor 1945: 385].
Cyclocephala parallela (Casey) [revalidated species status by Endrődi 1966: 279].

Types. Types at USNM (Endrődi 1966).

Distribution. UNITED STATES: Florida, Georgia, North Carolina, South Carolina.

References. Casey 1915, Leng 1920, Arrow 1937b, Saylor 1945, Kirk 1970, Woodruff 1973, Pike et al. 1976, Reinert 1979, Gordon and Anderson 1981, Endrődi 1966, 1985a, Boucias et al. 1986, Cherry and Boucias 1989, Cherry et al. 1990, Hardy 1991, Raid and Cherry 1992, Cherry and Coale 1994, Stansly et al. 1994, Cherry and Klein 1997, Peck and Thomas 1998, Harpootlian 2001, Cappaert and Smitley 2002, Buss 2006, Jackson and Klein 2006, Frank 2008, Smith 2003, 2009, Krajcik 2005, 2012, Cherry 1984a, b, 1985, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, Gyawaly et al. 2016, Ratcliffe and Cave 2017.

Remarks. Endrődi (1966, 1985a) reported a no-data specimen of *C. parallela* from Mexico. This record is likely based on a misidentification and *C. parallela* is restricted to the southeastern United States (Ratcliffe et al. 2013). The data points listed outside of Florida for *C. parallela* should be reevaluated, as some authors have hypothesized that this species is endemic to Florida (Peck and Thomas 1998, Harpootlian 2001).

Cyclocephala pardolocarnoi Dechambre, 1995

Cyclocephala pardolocarnoi Dechambre, 1995: 12–13 [original combination].

Types. Holotype ♂ at "Museo de Ciencias Naturales, Cali (Colombie)" (Dechambre 1995).

Distribution. COLOMBIA: Amazonas, Chocó, Quindío, Sucre, Tolima, Valle del Cauca. PANAMA: Bocas del Toro, Former Canal Zone, Panamá.

References. Dechambre 1995, Ratcliffe 2002a, 2003, Neita-Moreno et al. 2006, Neita-Moreno 2011, Krajcik 2005, 2012, Pardo-Locarno 2013, Gasca-Álvarez and Deloya 2016.

Cyclocephala pasadenae (Casey, 1915)

Ochrosidia (*Ochrosidia*) *pasadenae* Casey, 1915: 148 [original combination].
Cyclocephala pasadenae (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 14].
syn. *Ochrosidia* (*Ochrosidia*) *arizonica* Casey, 1915: 149 [original combination].
Cyclocephala arizonica (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8].
Cyclocephala pasadenae (Casey) [synonymy by Saylor 1945: 385].
syn. *Ochrosidia* (*Ochrosidia*) *facilis* Casey, 1915: 150 [original combination].
Cyclocephala facilis (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 10].
Cyclocephala pasadenae (Casey) [synonymy by Saylor 1945: 385].
syn. *Ochrosidia* (*Ochrosidia*) *melina* Casey 1915: 149 [original combination].
Cyclocephala melina (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 13].
Cyclocephala pasadenae (Casey) [synonymy by Saylor 1945: 385].
syn. *Ochrosidia* (*Ochrosidia*) *ovulata* Casey, 1915: 151 [original combination].
Cyclocephala ovulata (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 14].
Cyclocephala pasadenae (Casey) [synonymy by Saylor 1945: 385].
syn. *Ochrosidia* (*Ochrosidia*) *pusilla* Casey, 1915: 150 [original combination].
Cyclocephala melina var. *pusilla* [new combination, removal of subgeneric classification, and new infrasubspecific status by Arrow 1937b: 8, 13].
Cyclocephala pasadenae (Casey) [synonymy by Saylor 1945: 385].
syn. *Ochrosidia* (*Ochrosidia*) *validiceps* Casey 1915: 148 [original combination].
Cyclocephala validiceps (Casey) [new combination and removal of subgeneric classification by Arrow 1937b: 8, 16].
Cyclocephala pasadenae (Casey) [synonymy by Saylor 1945: 385].

Types. The type material of all of these Casey species are at USNM (Endrődi 1966).

Distribution. MEXICO: Baja California, Baja California Sur, Chihuahua, Coahuila, Durango, Hidalgo, Jalisco, Nuevo León, San Luis Potosí, Sonora, Tamaulipas, Zacatecas. UNITED STATES: Arizona, Arkansas, California, Colorado, Hawaii, Iowa, Kansas, Missouri, Nebraska, Nevada, New Mexico, Oklahoma, South Dakota, Texas, Utah.

References. Casey 1915, Leng 1920, Arrow 1937b, Saylor 1945, 1948, Werner and Butler 1965, Ritcher 1944, 1966, Howden and Endrődi 1966, Martínez 1969, Pike et al. 1976, Endrődi 1966, 1985a, Miller 1985, Gerhardt and Stanghellini 1971, Stone 1986, Bueno et al. 1988, Hardy 1991, Ratcliffe 1991, Cokendolpher 1993, Blanco-Montero and Ward 1995, Merchant and Crocker 1996, Poole and Gentili 1996, Ratcliffe and Morón 1997, Koppenhöfer and Kaya 1997, 1998, Potter 1998, Bauernfeind et al. 1999, Bauernfeind 2001, Koppenhöfer and Fuzy 2003b, Riley and Wolfe 2003, Yildrim and Hoy 2003, Ansari et al. 2004, Cranshaw 2004, Rogers and Potter 2004b, Koppenhöfer et al. 1999, 2000a, 2002a, b, 2004, Koppenhöfer and Grewal 2005, Grewal et al. 2005, Blanco-Montero and Hernandez 1995, 2006, Ratcliffe and Paulsen 2008, Jameson et al. 2009, Morales-Rodriguez and Peck 2009, Smith 2003, 2009, Bélair et al. 2010, Holmstrup et al. 2010, Mashtoly et al. 2010, Negrisoli et al. 2010, Krajcik 2005, 2012, Perera et al. 2012, Breeschoten et al. 2013, de Coninck et al. 2013, Ratcliffe et al. 2013, Hussaini 2014, Li and Bouwer 2014, Christians et al. 2016, Gyawaly et al. 2016, Wu et al. 2017, Ratcliffe and Cave 2017.

Cyclocephala perconfusa Dechambre, 1992

Cyclocephala perconfusa Dechambre, 1992: 64–65 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. ECUADOR: Cañar, Cotopaxi, Pichincha, Santo Domingo de los Tsáchilas.

References. Dechambre 1992, Ratcliffe 1992b, Krajcik 2005, 2012.

Cyclocephala pereirai (Martínez, 1960)

Eremophygus pereirai Martínez, 1960b: 131–133 [original combination].
Cyclocephala pereirai (Martínez) [new combination by Martínez 1975b: 264].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1960b).

Distribution. ARGENTINA: Jujuy, Río Negro.

References. Pike et al. 1976, Martínez 1960b, 1975b, 1978a, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala perforata Arrow, 1913

Cyclocephala perforata Arrow, 1913: 465 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. BRAZIL: Mato Grosso, Pará. FRENCH GUIANA: Kourou, Mana, St.-Élie, St.-Georges, St.-Laurent du Maroni.

References. Arrow 1913, 1937b, Blackwelder 1944, Gruner 1971, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1979a, 1992, Dupuis 2008, 2014, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013.

Cyclocephala perplexa Ratcliffe, 2008

Cyclocephala perplexa Ratcliffe, 2008: 237–238 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2008).

Distribution. BOLIVIA: La Paz.

References. Ratcliffe 2008, Krajcik 2012.

Cyclocephala peruana Endrődi, 1966

Cyclocephala peruana Endrődi, 1966: 78, 136, 282–283 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).

Distribution. PERU: Loreto, Madre de Dios, Pasco.

References. Pike et al. 1976, Endrődi 1966, 1985a, Ratcliffe 1992b, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala pichinchana Dechambre, 1992

Cyclocephala pichinchana Dechambre, 1992: 61–62 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. ECUADOR: Cotopaxi, Pichincha, Santo Domingo de los Tsáchilas.

References. Dechambre 1992, Krajcik 2005, 2012.

Cyclocephala picipes (Olivier, 1789)

Melolontha picipes Olivier, 1789: 80–81 [original combination].
Cyclocephala picipes (Olivier) [new combination by Burmeister 1847: 522].

Types. Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. BRAZIL: Amazonas, Mato Grosso, Pará. FRENCH GUIANA: St.-Laurent du Maroni.

References. Olivier 1789, Burmeister 1847, Reiche 1859, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Dechambre 1980, Webber 1981, Endrődi 1966, 1985a, Ratcliffe 1992b, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala picta Burmeister, 1847

Cyclocephala picta Burmeister, 1847: 68 [original combination].
Stigmalia picta (Burmeister) [new combination by Casey 1915: 123].
Cyclocephala picta Burmeister [revised combination by Arrow 1937b: 8, 14].
syn. *Cyclocephala forsteri mexicoi* Endrődi, 1966: 203 [original combination].
Cyclocephala picta Burmeister [synonymy by Ratcliffe et al. 2013: 213].

Types. Lectotype ♀ of *C. picta* at MLUH (Endrődi 1966). Holotype ♂ of *C. forsteri mexicoi* at ZMHB (Endrődi 1966).

Distribution. GUATEMALA: Huehuetenango. MEXICO: Chiapas, Hidalgo, Jalisco, Michoacán, Oaxaca, Puebla, Veracruz, Yucatán.

References. Burmeister 1847, Harold 1869b, H. W. Bates 1888, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Morón 1977a, Endrődi 1964, 1966, 1967b, 1985a, Dechambre 1979a, 1982, 1992, Thomas 1993, Ratcliffe and Morón 1997, García-Luna et al. 2002, Luna et al. 2007, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, Deloya et al. 2016.

Cyclocephala pilosa Dupuis, 2006

Cyclocephala pilosa Dupuis, 2006: 309–310 [original combination].

Types. Holotype ♂ at FDPC (Dupuis 2006).

Distribution. PERU: Huánuco.

References. Dupuis 2006, Krajcik 2012, Ratcliffe et al. 2015.

Cyclocephala pokornyi Dupuis, 2014

Cyclocephala pokornyi Dupuis, 2014: 49–51 [original combination].

Types. Holotype ♂ in Pokorny Collection (Prague, Czech Republic).

Distribution. PERU: Pasco.

References. Dupuis 2014.

Cyclocephala pompanoni Dechambre, 1979

Cyclocephala pompanoni Dechambre, 1979a: 165–166 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979a).

Distribution. BRAZIL: Pará.

References. Dechambre 1979a, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala poncheli Dechambre & Duranton, 2005

Cyclocephala poncheli Dechambre & Duranton, 2005: 69–76 [original combination].

Types. Holotype ♂ at MNHN (Dechambre and Duranton 2005).

Distribution. FRENCH GUIANA: Kourou, Roura, St.-Élie.

References. Dechambre and Duranton 2005, Ponchel 2011, Krajcik 2012.

Cyclocephala porioni Dechambre, 1979

Cyclocephala porioni Dechambre, 1979b: 317–318 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979b).

Distribution. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. ECUADOR: Napo. HONDURAS: Lempira. NICARAGUA: Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Colón, Darien Former Canal Zone, Panamá.

References. Endrődi 1966, 1985a, Dechambre 1979b, 1992, Maes 1994, Ratcliffe 1992a, 2002a, 2003, Malý 2006, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Dupuis 2008, 2014, García-López et al. 2013.

Remarks. Malý (2006) hypothesized that *C. porioni* is restricted to South America and that previous Central American records of *C. porioni* may refer to *C. hartmannorum*.

Cyclocephala prelli Endrődi, 1967

Cyclocephala prelli Endrődi, 1967b: 86–87 [original combination, new replacement name for *Cyclocephala vittoscutellaris* Endrődi 1966].

syn. *Cyclocephala vittoscutellaris* Endrődi, 1966: 335–336 [original combination, junior homonym of *C. vittoscutellaris* Prell].

Cyclocephala prelli Endrődi 1967b [new replacement name by Endrődi 1967b: 86–87].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. BRAZIL: Mato Grosso. COLOMBIA: Antioquia, Boyacá, Santander.

References. Pike et al. 1976, Endrődi 1966, 1967b, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. Endrődi (1966) applied the name *C. vittoscutellaris* to his description of this species. Endrődi (1967b) later remarked that there were two different "*vittoscutellaris*" species. Endrődi (1967b) thought his 1966 description should be considered a new species description (attributed to him) with the name *C. vittoscutellaris* Endrődi being a junior homonym. This retroactive "new" species description was not labeled as being intentionally new, and may be invalid.

Cyclocephala prolongata Arrow, 1902

Cyclocephala prolongata Arrow, 1902: 140 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. BELIZE: Cayo, Orange Walk, Stann Creek, Toledo. COLOMBIA: Antioquia, Chocó, Cundinamarca, Huila, Magdalena, Tolima. COSTA RICA: Heredia, Limón, Puntarenas. GUATEMALA: Alta Verapaz, Izabal, Petén. HONDURAS: Atlántida, Colón, Comayagua, Cortés, Francisco Morazán, Gracias a Dios, Islas de la Bahía, Santa Bárbara, Yoro. MEXICO: Chiapas, Guerrero, Nayarit. NICARAGUA: Río San Juan. PANAMA: Bocas del Toro, Former Canal Zone, Panamá. PERU.

References. Arrow 1902, 1937b, Blackwelder 1944, Bolívar y Pieltain et al. 1963, Pike et al. 1976, Martínez and Martínez 1981, Endrődi 1966, 1985a, Morón et al. 1985, Thomas 1993, Delgado and Castañeda 1994, Dechambre 1995, Ratcliffe and Morón 1997, Ratcliffe 1992a, 2002a, 2003, Restrepo et al. 2003, Ratcliffe and Cave 2006, Núñez-Avellaneda and Neita-Moreno 2009, Neita-Moreno 2011, Krajcik 2005, 2012, Yepes-Rodriguez et al. 2013, Deloya et al. 2014a, Ratcliffe et al. 2013, 2015, Gasca-Álvarez and Deloya 2016, Romero-López and Morón 2017.

Cyclocephala proxima Dechambre, 1997

Cyclocephala proxima Dechambre, 1997: 14, 24–25 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1997).

Distribution. COLOMBIA: Valle del Cauca. ECUADOR: Cañar, Cotopaxi, Napo, Pichincha, Santo Domingo de los Tsáchilas.

References. Dechambre 1997, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala pseudoconfusa Ratcliffe, 1992

Cyclocephala pseudoconfusa Ratcliffe, 1992b: 185 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992b).
Distribution. BRAZIL: Amazonas.
References. Ratcliffe 1992b, Krajcik 2005, 2012.

Cyclocephala pseudomelanocephala Dupuis, 1996

Cyclocephala pseudomelanocephala Dupuis, 1996: 257 [original combination].

Types. Holotype ♂ at MNHN (Dupuis 1996).
Distribution. BOLIVIA: Cochabamba, La Paz. ECUADOR: Loja. PERU: Cusco.
References. Dupuis 1996, Krajcik 2005, 2012.

Cyclocephala puberula LeConte, 1863

Cyclocephala puberula LeConte, 1863: 80 [original combination].
Ochrosidia (*Ochrosidia*) *puberula* (LeConte) [new combination by Casey 1915: 147].
Cyclocephala puberula LeConte [revised combination by Arrow 1937b: 8, 14].

Types. Type at MCZ (Endrődi 1966).
Distribution. UNITED STATES: Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina.
References. LeConte 1863, Gerstaecker 1865, Harold 1869b, Horn 1871, Henshaw 1885, Casey 1915, Leng 1920, Arrow 1937b, Brimley 1938, Saylor 1945, Kirk 1970, Woodruff 1973, Pike et al. 1976, Endrődi 1966, 1985a, Hardy 1991, Poole and Gentili 1996, Peck and Thomas 1998, Harpootlian 2001, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe and Cave 2017.

Cyclocephala pugnax Arrow, 1914

Cyclocephala pugnax Arrow, 1914: 274–275 [original combination].

Types. Type at BMNH (Endrődi 1966).
Distribution. BOLIVIA: Cochabamba, La Paz, Santa Cruz. BRAZIL: Amazonas, Mato Grosso do Sul, Pará. COLOMBIA: Amazonas. FRENCH GUIANA: St.-Laurent du Maroni. GUYANA. PERU: Junín, Loreto, Madre de Dios. SURINAME.

References. Arrow 1914, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Ratcliffe 1992b, Santos Fava et al. 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Otavo et al. 2013, Ponchel 2011, 2015, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala pulchra Dechambre, 1999

Cyclocephala pulchra Dechambre, 1999: 16–17 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. COLOMBIA: Valle del Cauca.
References. Dechambre 1999, Restrepo et al. 2003, Krajcik 2005, 2012.

Cyclocephala puncticollis Endrődi, 1966

Cyclocephala puncticollis Endrődi, 1966: 75, 290 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).
Distribution. ECUADOR.
References. Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala putrida Burmeister, 1847

Cyclocephala putrida Burmeister, 1847: 51–52 [original combination].
syn. *Cyclocephala tippmanni* Endrődi, 1963: 329–331 [original combination].
Cyclocephala putrida Burmeister [synonymy by Endrődi 1964: 466].

Types. Lectotype ♀ of *C. putrida* at MNHN (Dechambre 1991b). Invalid neotype of *C. putrida* at HNHM (Endrődi Collection) (Endrődi 1966). Endrődi (1963) did not clearly designate a holotype for *C. tippmanni*, and the type material of this species is not discussed in later works (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires, Catamarca, Chaco, Córdoba, Entre Ríos, Mendoza, Salta, Santa Fe, Santiago del Estero, Tucumán. BOLIVIA: Cochabamba, Oruro, Santa Cruz. BRAZIL: Goiás, Mato Grosso, Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Santa Catarina, São Paulo. CHILE: Bío Bío. FRENCH GUIANA: Cayenne. GUYANA: Upper Demerara-Berbice. PARAGUAY: Alto Paraná, Asunción. URUGUAY: Montevideo, Paysandú, Soriano, Tacuarembó. VENEZUELA: Apure.

References. Burmeister 1847, Harold 1869b, Frenzel 1891, Bosq 1936, Arrow 1937b, Blackwelder 1944, Martínez 1968c, Pike et al. 1976, Vidal et al. 1979, Saenz and Morelli 1984, Endrődi 1963, 1966, 1969a, 1985a, Wiersema 1987, Morelli 1989, Dechambre 1980, 1991b, Dupuis 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Cherman et al. 2013, Barrantes and Castelo 2014, Maia et al. 2014.

Cyclocephala pygidialis Joly, 2000

Cyclocephala pygidialis Joly, 2000b: 521–526 [original combination].

Types. Holotype ♂ at MIZA (Joly 2000b).

Distribution. VENEZUELA: Guárico, Monagas.

References. Joly 2000b, Krajcik 2005, 2012.

Cyclocephala pygidiata Dupuis, 1999

Cyclocephala pygidiata Dupuis, 1999: 183–184 [original combination].

Types. Holotype ♂ at MNHN (Dupuis 1999).

Distribution. COLOMBIA: Antioquia, Caldas, Chocó, Tolima, Valle del Cauca.

References. Dupuis 1999, Joly 2010, Krajcik 2005, 2012, Yepes-Rodriguez et al. 2013, Gasca-Álvarez and Deloya 2016.

Cyclocephala quadripunctata Höhne, 1923

Cyclocephala quadripunctata Höhne, 1923b: 348–349 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Santa Cruz. BRAZIL: Espírito Santo. COLOMBIA: Cauca, Chocó. ECUADOR: Guayas, Los Ríos, Morona Santiago, Napo, Pastaza. PANAMA: Darien, Former Canal Zone. PERU: Madre de Dios. VENEZUELA.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Ervik et al. 1999, Ratcliffe 1992a, b, 2002a, 2003, 2008, Restrepo et al. 2003, Núñez-Avellaneda and Neita-Moreno 2009, Neita-Moreno 2011, Krajcik 2005, 2012, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala quatuordecimpunctata Mannerheim, 1829

Cyclocephala quatuordecimpunctata Mannerheim, 1829: 52–53 [original combination].

Types. Lectotype ♀ at ZMH (Endrődi 1966).

Distribution. BRAZIL: Goiás, Mato Grosso, Minas Gerais, São Paulo.

References. Mannerheim 1829, Dejean 1833, 1836b, Laporte 1840, Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Howden and Endrődi 1966, Pike et al. 1976, Endrődi 1966, 1969b, 1985a, Gottsberger 1986, 1988, 1989, 1992, 1999, Silberbauer-Gottsberger et al. 1997, 2001, Lunau 2002, Gottsberger and Silberbauer-Gottsberger 1988, 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, Paulino-Neto 2014.

Cyclocephala quercina Burmeister, 1847

Cyclocephala quercina Burmeister, 1847: 54–55 [original combination].

syn. *Cyclocephala obesa* Burmeister 1847: 59–60 [original combination].

Cyclocephala quercina Burmeister [synonymy by Dechambre and Duranton 2005: 67–68].

Types. Lectotype ♂ of *C. quercina* at MNHN (Dechambre 1991b). Lectotype ♀ of *C. obesa* at MLUH (Endrődi 1966).

Distribution. ECUADOR: Guayas. FRENCH GUIANA: Cayenne. GUYANA: Essequibo Islands-West Demerara, Pomeroon-Supenaam, Potaro-Siparuni. TRINIDAD AND TOBAGO: Trinidad. VENEZUELA: Monagas.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Arrow 1937b, Blackwelder 1944, Martínez 1969, Pike et al. 1976, Endrődi 1966, 1985a, Poole and Gentili 1996, Dechambre 1991b, 1999, Dechambre and Duranton 2005, Ponchel 2006, 2011, Krajcik 2005, 2012, Breeschoten et al. 2013.

Remarks. Endrődi (1966, 1985a) reported specimens of *C. obesa* (= *C. quercina*) from Honduras (Islas de la Bahia), Costa Rica (Limón), and the United States (Arizona). These are the only records of *C. quercina* from these countries, and they are considered spurious or erroneous (Ratcliffe 2003). *Cyclocephala quercina* is a South American species (Ratcliffe 2003).

Cyclocephala quisqueya Joly, 1998

Cyclocephala quisqueya Joly, 1998: 50–54 [original combination].

Types. Holotype ♂ at USNM (Joly 1998).

Distribution. DOMINICAN REPUBLIC: Duarte, Elías Piña, La Vega, Monseñor Nouel, Puerto Plata, San Cristóbal, San Juan, Santiago.

References. Joly 1998, Krajcik 2005, 2012, Ratcliffe and Cave 2015.

Cyclocephala rangelana Chapin, 1935

Cyclocephala rangelana Chapin, 1935a: 75 [original combination].
syn. *Cyclocephala vidua* Endrődi, 1966: 130, 331–332 [original combination].
Cyclocephala rangelana Chapin [synonymy by Ratcliffe and Cave 2015: 107].

Types. Type of *C. rangelana* at USNM (Endrődi 1966). Holotype ♀ at *C. vidua* at BMNH (Endrődi 1966).

Distribution. CUBA: Artemisa, Guantánamo, Pinar del Río. DOMINICAN REPUBLIC: Azua, Barahona, Distrito Nacional, Duarte, La Vega, Monseñor Nouel, Pedernales, Samana, Santiago, La Romana. HAITI: Grand Anse, Nippes, Ouest, Sud.

References. Chapin 1935a, Arrow 1937a, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Joly 1995b, Krajcik 2005, 2012, Ratcliffe and Cave 2015.

Cyclocephala ratcliffei Endrődi, 1977

Cyclocephala ratcliffei Endrődi, 1977b: 321 [original combination, new replacement name for *Cyclocephala pereirai* Endrődi].
syn. *Cyclocephala pereirai* Endrődi, 1969b: 31–32 [original combination, junior homonym of *Cyclocephala pereirai* (Martínez)].
Cyclocephala ratcliffei Endrődi [new replacement name by Endrődi 1977b: 321].

Types. Holotype ♂ of *C. pereirai* at "Pereira Collection in Sao Paulo" (Endrődi 1969b). This is possibly referring to MZSP.

Distribution. BRAZIL: Mato Grosso, São Paulo.

References. Endrődi 1969b, Pike et al. 1976, Endrődi 1977b, 1985a, Krajcik 2005, 2012.

Cyclocephala recta Dupuis, 2008

Cyclocephala recta Dupuis, 2008: 117–122 [original combination].

Types. Holotype ♂ at FDPC (Dupuis 2008).

Distribution. COLOMBIA: Boyacá.

References. Dupuis 2008, Krajcik 2012, Dupuis 2014, Gasca-Álvarez and Deloya 2016.

Cyclocephala robusta LeConte ,1863

Cyclocephala robusta LeConte, 1863: 79 [original combination].
Cyclocephala nigricollis Burmeister [synonymy by Horn 1871: 336].

Cyclocephala robusta LeConte [revalidated species status by Saylor 1945: 384].
Cyclocephala nigricollis Burmeister [synonymy by Endrődi 1964: 466].
Cyclocephala robusta LeConte [revalidated species status by Ratcliffe and Hoffman 2011].
syn. *Cyclocephala nigricollis* Burmeister, 1847: 54 [original combination].
Ochrosidia nigricollis (Burmeister) [new combination by Buchanan 1927: 167].
Cyclocephala robusta LeConte [synonymy by Saylor 1945: 384].
Cyclocephala nigricollis Burmeister [new status by Endrődi 1964: 466].
Cyclocephala nigricollis Burmeister [*nomen dubium* by Ratcliffe and Hoffman 2011: 136].
syn. *Cyclocephala subvittata* Brown, 1930: 5 [original combination].
Cyclocephala robusta LeConte [synonymy by Sanderson 1940: 380].
syn. *Ochrosidia knobelae* Brown, 1934: 23–24 [original combination].
Cyclocephala knobelae (Brown) [new combination by Arrow 1937b: 8, 11].
Cyclocephala robusta LeConte [synonymy by Ratcliffe and Cave 2017: 91].

Types. Lectotype ♂ of *C. nigricollis* at MNHN (Dechambre 1991b). Invalid ♂ neotype of *C. nigricollis* at HNHM (Endrődi Collection) (Endrődi 1966, see discussion in Dechambre 1991b and Ratcliffe and Hoffman 2011). Type of *C. robusta* at MCZ (Endrődi 1966). Holotype ♂ of *C. subvittata* at CNC (Brown 1930). Types of *O. knobelae* at LEMQ (Endrődi 1966).

Distribution. UNITED STATES: Alabama, Arkansas, Georgia, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, South Carolina, Tennesee, Texas, Virginia.

References. Burmeister 1847, Melsheimer et al. 1853, LeConte 1863, Gerstaecker 1865, Horn 1871, Henshaw 1885, Leng 1920, Buchanan 1927, Brown 1930, 1934, Leng and Mutchler 1933, Arrow 1937b, Brimley 1938, Sanderson 1940, Blackwelder 1944, Saylor 1945, Kirk 1970, Pike et al. 1976, 1977, Endrődi 1964, 1966, 1985a, Hardy 1991, Dechambre 1991b, Poole and Gentili 1996, Harpootlian 2001, Riley and Wolfe 2003, Smith 2003, 2009, Ratcliffe and Hoffman 2011, Krajcik 2005, 2012, Ratcliffe and Cave 2017.

Cyclocephala rogerpauli Moore, Branham, & Cave, new replacement name

Cyclocephala nigra Dechambre, 1999: 15–16 [original combination, homonym of *C. nigra* (Endrődi)].

Types. Holotype ♂ at MNHN (Dechambre 1999).

Distribution. COLOMBIA: Sucre.

References. Dechambre 1999, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Remarks. Moore et al. (2015) synonymized the genus *Mimeoma* within *Cyclocephala*. This created a case of homonymy between *C. nigra* Dechambre and *C. nigra* (Endrődi) that went undetected at the time. Endrődi's (1979) name has priority over Dechambre's (1999) name. To rectify this homonym and to honor its original describer, we propose the *nomen novum Cyclocephala rogerpauli* as a **new replacement name** for the species described by Dechambre (1999).

Cyclocephala rogezi Dechambre, 1992

Cyclocephala rogezi Dechambre, 1992: 70 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).
Distribution. COLOMBIA: Chocó, Cauca, Valle del Cauca. PANAMA: Panamá.
References. Dechambre 1992, Ratcliffe 2003, Restrepo et al. 2003, Krajcik 2005, 2012, Yepes-Rodriguez et al. 2013, Gasca-Álvarez and Deloya 2016.

Cyclocephala rondoniana Ratcliffe, 1992

Cyclocephala rondoniana Ratcliffe, 1992b: 185–187 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992b).
Distribution. BRAZIL: Amazonas, Rondônia. FRENCH GUIANA.
References. Ratcliffe 1992b, Küchmeister et al. 1998, Silberbauer-Gottsberger et al. 2001, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala rorulenta Höhne, 1923

Cyclocephala rorulenta Höhne, 1923b: 349–351 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).
Distribution. BRAZIL: Rio de Janeiro, Rio Grande do Sul, Santa Catarina. VENEZUELA.
References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Ratcliffe 1992c, Krajcik 2005, 2012.

Cyclocephala rotundipenis Dupuis, 2009

Cyclocephala rotundipenis Dupuis, 2009: 29–32 [original combination].

Types. Holotype ♂ at FDPC (Dupuis 2009).
Distribution. COLOMBIA: Casanare.
References. Dupuis 2009, Krajcik 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala rubescens Bates, 1891

Cyclocephala rubescens Bates, 1891: 31 [original combination].

Types. Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. COLOMBIA: Antioquia. ECUADOR: Loja, Pichincha.

References. Bates 1891, Bertkau 1892, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1964, 1966, 1967b, 1985a, Krajcik 2005, 2012, Breeschoten et al. 2013, Moore and Jameson 2013, Yepes-Rodriguez et al. 2013, Gasca-Álvarez and Deloya 2016.

Remarks. *Cyclocephala rubescens* was reported from Panama (Croat 1997), but has not been recorded there since (Ratcliffe 2003).

Cyclocephala rufa Endrődi, 1967

Cyclocephala rufa Endrődi, 1967b: 83–84 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1967b).

Distribution. COLOMBIA. VENEZUELA.

References. Pike et al. 1976, Endrődi 1967b, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala rufescens Endrődi, 1967

Cyclocephala rufescens Endrődi, 1967b: 86 [original combination].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1967b).

Distribution. ECUADOR.

References. Pike et al. 1976, Endrődi 1967b, 1975b, 1985a, Krajcik 2005, 2012.

Cyclocephala ruficollis Burmeister, 1847

Cyclocephala ruficollis Burmeister, 1847: 57 [original combination].

Types. Lectotype ♀ at MLUH (Endrődi 1966).

Distribution. COLOMBIA: Antioquia, Atlántico, Cesar, Chocó, Cundinamarca, Meta, Santander, Tolima, Valle del Cauca.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Posada Ochoa 1989, Pardo-Locarno et al. 1995, Restrepo et al. 2003, Krajcik 2005, 2012, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala rufonigra Demay, 1838

Cyclocephala rufonigra Demay, 1838: 23 [original combination].

Distribution. GUYANA.

References. Demay 1838, Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Remarks. The identity of *C. rufonigra* is ambiguous. No additional specimens identified as *C. rufonigra* have been reported since this species' original description, and the type material is apparently lost (Endrődi 1966, 1985a).

Cyclocephala rufovaria Arrow, 1911

Cyclocephala rufovaria Arrow, 1911: 173 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. BRAZIL. COLOMBIA: Amazonas. ECUADOR. FRENCH GUIANA. PERU.

References. Arrow 1911, 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Dupuis 2006, Ponchel 2006, 2011, Krajcik 2005, 2012, Otavo et al. 2013, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala rustica (Olivier, 1789)

Melolontha rustica Olivier, 1789: 27 [original combination].

Cyclocephala rustica (Olivier) [new combination by Burmeister 1847: 70].

syn. *Cyclocephala rustica municipalis* Höhne, 1923b: 365 [original combination].

Cyclocephala rustica var. *municipalis* Höhne [new infrasubspecific status by Arrow 1937b: 15].

Cyclocephala rustica municipalis Höhne [revalidated subspecies status by Endrődi 1985a: 35].

Cyclocephala rustica (Olivier) [synonymy by Ratcliffe et al. 2013: 597].

Types. Invalid neotype of *M. rustica* at HNHM (Endrődi Collection) (Endrődi 1966). Lectotype of *C. rustica municipalis* at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Amazonas, Bahia, Mato Grosso, Pará, São Paulo. COLOMBIA: Casanare, Cundinamarca, Meta. FRENCH GUIANA: Cayenne, Kourou, Régina. PERU. SURINAME. TRINDAD AND TOBAGO: Trinidad. VENEZUELA: Capital District, Carabobo.

References. Olivier 1789, Burmeister 1847, Harold 1869b, Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1963, 1966, 1985a, Pellmyr 1985, Ratcliffe and Morón 1997, Restrepo et al. 2003, Maia and Schlindwein 2006, Ponchel 2006, 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Moore and Jameson 2013, Gibernau 2015b, López-García et al. 2015, Ratcliffe et al. 2013, 2015, Gasca-Álvarez and Deloya 2016, Peck 2016.

Remarks. *Cyclocephala rustica* was reported from Veracruz, Mexico (Höhne 1923b, Endrődi 1966, 1985a, Ratcliffe and Morón 1997) and Guadeloupe (Olivier 1789, Endrődi 1966, 1985a). *Cyclocephala rustica* has not been recorded from these areas again and is likely a South American species (Ratcliffe et al. 2013, Ratcliffe and Cave 2015).

Cyclocephala saltini Ratcliffe, 2008

Cyclocephala saltini Ratcliffe, 2008: 238–240 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2008).

Distribution. PERU: Huánuco.

References. Ratcliffe 2008, Krajcik 2012, Ratcliffe et al. 2015.

Cyclocephala sanguinicollis Burmeister, 1847

Cyclocephala sanguinicollis Burmeister ,1847: 49–50 [original combination].
Homochromina sanguinicollis (Burmeister, 1847) [new combination by Casey 1915: 165].
Cyclocephala sanguinicollis Burmeister [revised combination by Arrow 1937b: 8, 15].
syn. *Homochromina divisa* Casey, 1915: 163 [original combination].
Cyclocephala divisa (Casey) [new combination by Arrow 1937b: 8, 10].
Cyclocephala sanguinicollis Burmeister [synonymy by Endrődi 1966: 301].
syn. *Homochromina politicauda* Casey, 1915: 164 [original combination].
Cyclocephala politicauda (Casey) [new combination by Arrow 1937b: 8, 14].
Cyclocephala sanguinicollis Burmeister [synonymy by Endrődi 1966: 301].

Types. Lectotype ♀ of *C. sanguinicollis* at MLUH (Endrődi 1966). The types of *H. divisa* and *H. politicauda* are at USNM (Endrődi 1966).

Distribution. BELIZE: Toledo. BRAZIL. COLOMBIA: Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Limón, Puntarenas, San José. ECUADOR: Bolívar, Cañar. GUATEMALA: Alta Verapaz, Baja Verapaz, Huehuetenango, Izabal, San Marcos, Zacapa. HONDURAS: Atlántida, Colón, Comayagua, Cortés, El Paraíso, La Paz, Lempira, Olancho, Santa Bárbara, Yoro. MEXICO: Chiapas, Hidalgo, Nayarit, Oaxaca, Puebla, San Luis Potosí, Tabasco, Veracruz, Yucatán. NICARAGUA: Jinotega, Matagalpa, Río San Juan. PANAMA: Chiriquí. VENEZUELA: Carabobo, Vargas.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Anonymous 1879, Bates 1888, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1967b, 1985a, Morón et al. 1985, Thomas 1993, Lobo and Morón 1993, Morón 1979, 1994, Ratcliffe and Morón 1997, Sanchez Soto 1997, Abarca and Quesada 1997, Vargas and Abarca 1998, Carrillo-Ruiz and Morón 2003, Ratcliffe 2003, Restrepo et al. 2003, Ratcliffe and Cave 2006, Smith 2003, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, Gasca-Álvarez and Deloya 2016.

Remarks. The South American and Panamanian records for *C. sanguinicollis* are potentially based on erroneous identifications of a similar species (possibly *C. mutata*). These data need to be reevaluated (Ratcliffe et al. 2013).

Cyclocephala santaritae Ratcliffe, 1992

Cyclocephala santaritae Ratcliffe, 1992a: 229–230 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992a).

Distribution. COLOMBIA: Amazonas, Chocó. ECUADOR: Napo. PANAMA: Colón, Panamá, San Blas.

References. Ratcliffe 1992a, 2002a, 2003, 2008, Núñez-Avellaneda and Neita-Moreno 2009, Neita-Moreno 2011, Krajcik 2005, 2012, Moore and Jameson 2013, Otavo et al. 2013, Gasca-Álvarez and Deloya 2016.

Cyclocephala sarahae Ratcliffe, 1992

Cyclocephala sarahae Ratcliffe, 1992b: 187–189 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992b).

Distribution. BRAZIL: Amazonas.

References. Ratcliffe 1992b, Joly 2009, Krajcik 2005, 2012.

Cyclocephala sardadebiae Dechambre & Duranton, 2005

Cyclocephala sardadebiae Dechambre & Duranton, 2005: 68–69 [original combination].

Types. Holotype ♂ at MNHN (Dechambre and Duranton 2005).

Distribution. FRENCH GUIANA: Kourou, Maripasoula, Régina, Roura, Saül, St.-Élie, St.-Laurent du Maroni, St.-Georges.

References. Dechambre and Duranton 2005, Ponchel 2011, Krajcik 2012.

Cyclocephala sarpedon Ratcliffe, 1992

Cyclocephala sarpedon Ratcliffe, 1992b: 188 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992b).

Distribution. BRAZIL: Amazonas, Mato Grosso, Rondônia. SURINAME: Sipaliwini. VENEZUELA: Aragua.

References. Ratcliffe 1992b, Küchmeister et al. 1998, Silberbauer-Gottsberger et al. 2001, Krajcik 2005, 2012.

Cyclocephala scarabaeina (Gyllenhal, 1817)

Melolontha scarabaeina Gyllenhal, 1817b: 103–104 [original combination].
Peltonotus scarabaeinus (Gyllenhal) [new combination by Burmeister 1847: 75].
Cyclocephala scarabaeina (Gyllenhal) [new combination by Burmeister 1847: 521].

Types. Lectotype ♂ at UUZM (Endrődi 1966, see also Wallin 2001).

Distribution. PERU: Madre de Dios.

References. Gyllenhal 1817b, Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Wallin 2001, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Remarks. The type locality of *C. scarabaeina* is "India orientalis" (Gyllenhal 1817b, Burmeister 1847). These data are erroneous, and *C. scarabaeina* is only known from Peru (Endrődi 1966, 1985a, Ratcliffe et al. 2015).

Cyclocephala schmitzorum Ratcliffe, 1992

Cyclocephala schmitzorum Ratcliffe, 1992b: 189 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992b).

Distribution. BRAZIL: Amazonas, Rondônia. SURINAME: Sipaliwini.

References. Ratcliffe 1992b, Krajcik 2005, 2012.

Cyclocephala seditiosa LeConte, 1863

Cyclocephala seditiosa LeConte, 1863: 79 [original combination].
Ochrosidia (*Ochrosidia*) *seditiosa* (LeConte) [new combination and new subgeneric classification by Casey 1915: 142, 158].
Cyclocephala seditiosa LeConte [revised combination and removal of subgeneric classification by Arrow 1937b: 8, 15].

Types. Type at MCZ (Endrődi 1966).

Distribution. UNITED STATES: Alabama, Florida, Mississippi.

References. LeConte 1863, Gerstaecker 1865, Harold 1869b, Horn 1871, Henshaw 1885, Casey 1915, Arrow 1937b, Blackwelder 1944, Saylor 1945, Richmond 1962, Howden and Endrődi 1966, Pike et al. 1976, Gordon and Anderson 1981, Endrődi 1966, 1969b, 1985a, Hardy 1991, Poole and Gentili 1996, Peck and Thomas 1998, Harpootlian 2001, Buss 2006, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe and Cave 2017.

Cyclocephala sexpunctata Laporte, 1840

Cyclocephala sexpunctata Laporte, 1840: 125 [original combination].
syn. *Cyclocephala pubescens* Erichson, 1847a: 96 [original combination].
Cyclocephala sexpunctata Laporte [synonymy by Endrődi 1966: 306].
syn. *Cyclocephala pubescens spermophila* Ohaus, 1910: 671 [original combination].
Cyclocephala pubescens var. *spermophila* Ohaus [new infrasubspecific status by Arrow 1937b: 15].
Cyclocephala sexpunctata var. *spermophila* Ohaus [new infrasubspecific status by Endrődi 1966: 306].
Cyclocephala sexpunctata ab. *spermophila* Ohaus [revised infrasubspecific status by Endrődi 1985a: 82].
syn. *Cyclocephala pubescens nigripes* Höhne, 1923b: 372–373 [original combination].
Cyclocephala pubescens var. *nigripes* Höhne [new infrasubspecific status by Arrow 1937b: 15].
Cyclocephala sexpunctata ab. *nigripes* Höhne [revised infrasubspecific status by Endrődi 1966: 306].
syn. *Cyclocephala lucida* Burmeister, 1847: 67 [original combination].
Stigmalia lucida (Burmeister) [new combination by Casey 1915: 120].
Cyclocephala sexpunctata Laporte [synonymy by Endrődi 1964: 466].
Cyclocephala sexpunctata ab. *lucida* Burmeister [new infrasubspecific status by Endrődi 1966: 306].
syn. *Stigmalia circulifer* Casey, 1915: 121 [original combination].
Cyclocephala lucida Burmeister [synonymy by Arrow 1937b: 12].
Cyclocephala sexpunctata Laporte [synonymy by Endrődi 1966: 306].
syn. *Stigmalia costaricana* Casey, 1915: 121 [original combination].
Cyclocephala costaricana (Casey) [new combination by Arrow 1937b: 8, 9].
Cyclocephala sexpunctata Laporte [synonymy by Endrődi 1966: 306].
syn. *Stigmalia discoidalis* Casey, 1915: 120 [original combination].
Cyclocephala lucida var. *discoidalis* (Casey) [new combination and new infrasubspecific status by Arrow 1937b: 12].
Cyclocephala sexpunctata Laporte [synonymy by Endrődi 1966: 306].
syn. *Stigmalia triangulifer* Casey, 1915: 120 [original combination].
Cyclocephala lucida Burmeister [synonymy by Arrow 1937b: 12].
Cyclocephala sexpunctata Laporte [synonymy by Endrődi 1966: 306].

Types. Type ♂ of *C. sexpunctata* at MNHN (Endrődi 1966). Lectotype ♂ of *C. pubescens* at ZMHB (Endrődi 1966). Lectotype ♂ of *C. lucida* at MLUH (Endrődi 1966). Lectotype ♂ of *C. pubescens nigripes* at ZMHB (Endrődi 1966). Types of *C. pubescens spermophila* at SDEI (Endrődi 1966). Types of the Casey synonyms at USNM (Endrődi 1966).

Distribution. BOLIVIA. BRAZIL. COLOMBIA: Antioquia, Boyacá, Cauca, Cundinamarca, Meta, Santander, Tolima, Valle de Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Puntarenas, San José. ECUADOR. FRENCH GUIANA: Cayenne. GUATEMALA: Alta Verapaz, Baja Verapaz, Escuintla, Huehuetenango, Izabal, Quetzaltenango, Quiché, San Marcos, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Colón, Comayagua, Cortés, El Paraíso, La Paz, Lempira, Olancho, Santa Bárbara, Yoro. MEXICO: Chiapas, Colima, Estado de México, Guerrero, Hidalgo, Jalisco, Oaxaca, Puebla, Veracruz. NICARAGUA: Jinotega, Matagalpa, Río San Juan. PANAMA: Bocas del Toro, Chiriquí, Coclé, Panamá. PERU: Madre de Dios. VENEZUELA: Capital District, Mérida.

References. Laporte 1840, Erichson 1847a, Marschall 1857, Reiche 1859, Harold 1869b, Bates 1888, Ohaus 1910, Casey 1915, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Martínez 1967, 1978b, Dechambre 1992, Endrődi 1964, 1966, 1985a, Valerio 1988, Goldwasser 1987, 2000, Young 1992, Seres and Ramírez 1995, Croat 1997, Morón 1997, Ratcliffe and Morón 1997, Gibernau et al. 1999, Silberbauer-Gottsberger et al. 2001, Ratcliffe 1992a, 2002a, 2003, Restrepo et al. 2003, García-Robledo et al. 2005, Young and Le Tirant 2005, Neita-Moreno and Gaigl 2008, Útima and Vallejo 2008, Ponchel 2011, Moore and Jameson 2013, Breeschoten et al. 2013, Deloya et al. 2014a, López-García et al. 2015, Moore et al. 2015, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016, Villalobos-Moreno et al. 2016.

Cyclocephala setosa Burmeister, 1847

Cyclocephala setosa Burmeister, 1847: 38–39 [original combination].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. BRAZIL: Minas Gerais, São Paulo.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Martínez 1954, Pike et al. 1976, Endrődi 1966, 1985a, Ratcliffe 1992a, Joly 2010, Krajcik 2005, 2012.

Cyclocephala signaticollis Burmeister, 1847

Cyclocephala signaticollis Burmeister, 1847: 63–64 [original combination].

Types. Lectotype ♀ at MNHN (Dechambre 1991b). Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires, Córdoba, Entre Ríos, La Pampa, Misiones, Santa Fe. AUSTRALIA: New South Wales. BOLIVIA: Cochabamba, La Paz, Santa Cruz. BRAZIL: Paraná, Rio Grande do Sul, Santa Catarina, São Paulo. COLOMBIA: Cauca, Valle del Cauca. FRENCH GUIANA: Mana. URUGUAY: Canelones, Maldonado, Montevideo, Paysandú, San José. VENEZUELA: Mérida.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Frenzel 1891, Tremoleras 1910, Arrow 1937b, Blackwelder 1944, Carne 1956, 1957, Gavotto 1964, Martínez 1968c, San Martín 1968, Britton 1970, Pike et al. 1976, Saenz and Morelli 1984, Endrődi 1966, 1985a, Dennis and Knutson 1988, Dechambre 1991b, Morelli 1989, 1991, Anonymous 1993, Thomas 1993, Manetti et al. 1994, 1996, Padin et al. 1996, Mondino et al. 1997, Castelo and Capurro 2000, Reboredo and Camino 2000, Restrepo et al. 2003, Castelo and Lazzari 2004, Ghys and Favero 2004, Mauco and Favero 2004, Berón and Diaz 2005, Camino and Reboredo 2005, Castelo et al. 2006, Jackson and Klein 2006, Consolo et al. 2010, Castelo and Corley 2010, Grossi et al. 2011, Krajcik 2005, 2012, Camino and Achinelly 2012, Groba and Castelo 2012, Castelo and Crespo 2012, Nussembaum and Lecuona 2012, Breeschoten et al. 2013, Martínez et al. 2013, Crespo and Castelo 2008, 2009, 2010, 2012, 2013, Ratcliffe et al. 2013, Barrantes and Castelo 2014, Crespo et al. 2011, 2015, Gasca-Álvarez and Deloya 2016, Beehag et al. 2016, Ramírez and Alonso 2016.

Remarks. *Cyclocephala signaticollis* was reported from Mexico based on a single specimen (Endrődi 1966, 1985a). No further specimens of *C. signaticollis* have been reported from Mexico, and it is likely that this species is restricted to South America (Ratcliffe et al. 2013), except for Australia where it is adventive.

Cyclocephala signatoides Höhne, 1923

Cyclocephala signatoides Höhne, 1923b: 346–348 [original combination].
Mimeoma signatoides (Höhne) [new combination by Arrow 1937b: 5].
Cyclocephala signatoides Höhne [revised combination by Moore et al. 2015: 898].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba. BRAZIL: Amazonas, Bahia. COLOMBIA: Meta. ECUADOR. FRENCH GUIANA: Cayenne, St.-Laurent du Maroni, St.-Georges. GUAYANA. PERU: Cusco. VENEZUELA.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Gruner 1971, Pike et al. 1976, Endrődi 1966, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, Breeschoten et al. 2013, Moore and Jameson 2013, Moore et al. 2015, Ratcliffe et al. 2013, 2015, Ratcliffe and Cave 2015, Gasca-Álvarez and Deloya 2016.

Remarks. Some authors reported *C. signatoides* from Cuba and Mexico (Höhne 1923b, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a). These data are erroneous, and *C. signatoides* is a South American species (Ratcliffe et al. 2013, Ratcliffe and Cave 2015).

Cyclocephala similis Dechambre, 1980

Cyclocephala similis Dechambre, 1980: 47–49 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1980).
Distribution. FRENCH GUIANA: Saül.
References. Dechambre 1980, Endrődi 1985a, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala simillima Dechambre, 1999

Cyclocephala simillima Dechambre, 1999: 17 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).
Distribution. VENEZUELA: Bolívar.
References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala simulatrix Höhne, 1923

Cyclocephala simulatrix Höhne, 1923b: 372 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).
Distribution. BOLIVIA: La Paz. BRAZIL: Amazonas, Pará. FRENCH GUIANA: Kourou, St.-Georges. PARAGUAY. PERU: Madre de Dios, Mariscal Ramón Castilla, Pasco, San Martín. TRINIDAD AND TOBAGO: Trinidad.
References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Gruner 1971, Pike et al. 1976, Dechambre 1979a, Endrődi 1966, 1985a, Silberbauer-Gottsberger et al. 2001, Andreazze and da Silva Motta 2002, Gibernau and Barabé 2002, Krajcik 2005, 2012, Breeschoten et al. 2013, Ponchel 2006, 2011, 2015, Ratcliffe et al. 2015.
Remarks. A single specimen of *C. simulatrix* was reported from Costa Rica (Endrődi 1966, 1985a). No further specimens have been reported from Costa Rica or Panama and it is likely that *C. simulatrix* is restricted to South America (Ratcliffe 2003).

Cyclocephala sinaloae Howden & Endrődi, 1966

Cyclocephala sinaloae Howden & Endrődi, 1966: 298–299 [original combination].

Types. Holotype ♂ at CNC (Howden and Endrődi 1966).
Distribution. MEXICO: Baja California, Durango, Jalisco, Nayarit, Sinaloa, Sonora.
References. Howden and Endrődi 1966, Pike et al. 1976, Endrődi 1985a, Ratcliffe and Morón 1997, Navarrete-Heredia et al. 2001, García et al. 2009, Smith 2003, 2009, Krajcik 2005, 2012, Lugo-García et al. 2012, Lugo et al. 2013, Morón et al. 2014.

Cyclocephala sinuosa Höhne, 1923

Cyclocephala sinuosa Höhne, 1923b: 369–370 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. COLOMBIA: Meta.

References. Höhne 1923b, Arrow 1937b, Martínez 1967, Blackwelder 1944, Pike et al. 1976, Endrődi 1964, 1966, 1985a, Restrepo et al. 2003, Breeschoten et al. 2013, Gasca-Álvarez and Deloya 2016.

Cyclocephala spangleri Joly, 2000

Cyclocephala spangleri Joly, 2000a: 333–338 [original combination].

Types. Holotype ♂ at USNM (Joly 2000a).

Distribution. VENEZUELA: Apure, Guárico.

References. Joly 2000a, Krajcik 2005, 2012.

Cyclocephala sparsa Arrow, 1902

Cyclocephala sparsa Arrow, 1902: 141 [original combination].
syn. *Cyclocephala landini* Endrődi, 1964: 445–447 [original combination].
Cyclocephala sparsa Arrow [synonymy by Ratcliffe and Delgado-Castillo 1990: 47].
syn. *Cyclocephala virkkii* Howden & Endrődi, 1966: 301 [original combination].
Cyclocephala sparsa Arrow [synonymy by Ratcliffe and Delgado-Castillo 1990: 47].

Types. Type of *C. sparsa* at BMNH (Endrődi 1966). Holotype ♂ of *C. landini* at USNM (Endrődi 1964). Holotype ♂ of *C. virkkii* at CNC (Howden and Endrődi 1966).

Distribution. BELIZE: Cayo, Orange Walk. COSTA RICA: Cartago, Guanacaste, Heredia, Limón, San José. EL SALVADOR: Ahuachapán, Cabañas, Morazán, San Salvador. GUATEMALA: Alta Verapaz, Izabal, Jalapa, Jutiapa, Petén. HONDURAS: Atlántida, Cortés, Lempira, Olancho, Santa Bárbara, Yoro. MEXICO: Campeche, Chiapas, Estado de México, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Quintana Roo, Veracruz, Yucatán. PANAMA: Former Canal Zone, Panamá.

References. Arrow 1902, 1937b, Blackwelder 1944, Howden and Endrődi 1966, Martínez 1975b, Pike et al. 1976, Morón 1979, Endrődi 1964, 1966, 1985a, Bawa et al. 1985a, b, Schatz 1985, 1987, Ratcliffe and Delgado-Castillo 1990, Murray 1993, Thomas 1993, Lobo and Morón 1993, Kress and Beach 1994, Ratcliffe and Morón 1997, Morón et al. 1996, 1998, Joly 2000a, Ratcliffe 1992a, 2002a, 2003, Ratcliffe and Cave 2006, Smith 2003, 2009, Krajcik 2005, 2012, García-López et al. 2013, Ratcliffe et al. 2013, Deloya et al. 2014a, 2016.

Cyclocephala spilopyga Erichson, 1847

Cyclocephala spilopyga Erichson, 1847a: 96 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba, La Paz, Santa Cruz. BRAZIL: São Paulo. COLOMBIA: Antioquia, Huila, Tolima, Santander, Valle del Cauca. ECUADOR: Morona-Santiago, Napo. PERU: Cusco.

References. Erichson 1847a, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Dupuis 1999, Restrepo et al. 2003, Joly 2010, Krajcik 2005, 2012, Yepes-Rodriguez et al. 2013, Ratcliffe et al. 2015, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala stictica Burmeister, 1847

Cyclocephala stictica Burmeister, 1847: 66–67 [original combination].

Cyclocephala (*Cyclocephala*) *stictica* Burmeister [new subgeneric classification by Casey 1915: 138].

Cyclocephala stictica Burmeister [removal of subgeneric classification by Arrow 1937b: 8, 16].

syn. *Cyclocephala stictica bilineata* Höhne, 1923b: 357 [original combination].

Cyclocephala stictica var. *bilineata* Höhne [new infrasubspecific status by Arrow 1937b: 16].

Cyclocephala stictica ab. *bilineata* Höhne [revised infrasubspecific status by Endrődi 1966: 314].

Cyclocephala stictica Burmeister [synonymy by Ratcliffe 2002a: 31].

syn. *Cyclocephala microspila* Bates, 1888: 301 [original combination].

Cyclocephala stictica Burmeister [synonymy by Endrődi 1966: 314].

syn. *Cyclocephala sexnotata* Burmeister, 1847: 67 [original combination].

Cyclocephala stictica Burmeister [synonymy by Endrődi 1964: 466].

Types. Lectotype ♂ of *C. stictica* and lectotype ♂ of *C. sexnotata* at MLUH (Endrődi 1966). Type of *C. microspila* at BMNH (Endrődi 1966). Lectotype of *C. stictica bilineata* at ZMHB (Endrődi 1966).

Distribution. BELIZE: Cayo, Orange Walk, Stann Creek, Toledo. BOLIVIA: Cochabamba, Santa Cruz. BRAZIL: Bahia, Mato Grosso, Santa Catarina. COLOMBIA: Amazonas, Antioquia, Bolívar, Caquetá, Cauca, Chocó, Meta, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. ECUADOR: Cañar, Guayas. EL SALVADOR: Cabañas, Chalatenango, La Libertad, Morazán, San Vicente. FRENCH GUIANA: Cayenne. GUATEMALA: Alta Verapaz, Baja Verapaz, Chiquimula, Huehuetenango, Izabal, Petén, Quiché, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Comayagua, Copán, Cortés, El Paraíso, Francisco Morazán, Gracias a Dios, Lempira, Ocotepeque, Olancho, Santa Bárbara, Yoro. MEXICO: Chiapas, Estado de México, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Puebla, San Luis Potosí, Tabasco, Tamaulipas, Veracruz. NICARAGUA: Granada, Jinotega, Managua, Matagalpa, RAA Norte, Río San Juan (Endrődi 1966,). PANAMA: Chiriquí, Coclé, Colón, Darien, Former Canal Zone, Panamá, San Blas, Veraguas. PERU. VENEZUELA.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Anonymous 1879, Bates 1888, Casey 1915, Höhne 1923b, Arrow 1937b, Blackwelder 1944, Barrera 1969, Pike et al. 1976, Dechambre 1979a, Bullock 1981, Endrődi 1964, 1966, 1985a, Villalta 1988, Thomas 1993, Lobo and Morón 1993, Maes et al. 1997, Morón 1994, 1997, Ratcliffe and Morón 1997, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Pardo-Locarno et al. 2003, 2005a, Ratcliffe and Cave 2006, Núñez-Avellaneda and Rojas-Robles 2008, Neita-Moreno 2011, Ponchel 2011, Krajcik 2005, 2012, Morón and Márquez 2012, Breeschoten et al. 2013, García-López et al. 2013, Pardo-Locarno 2013, Yepes-Rodriguez et al. 2013, Deloya et al. 2014a, Ratcliffe et al. 2013, 2015, Gasca-Álvarez and Deloya 2016, Romero-López and Morón 2017.

Cyclocephala stockwelli Ratcliffe, 2003

Cyclocephala stockwelli Ratcliffe, 2003: 61, 71, 75, 78, 210–212 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2003).

Distribution. COSTA RICA: Heredia, Puntarenas. PANAMA: Panamá.

References. Ratcliffe 2003, Krajcik 2005, 2012, García-López et al. 2013.

Cyclocephala striata Endrődi, 1963

Cyclocephala striata Endrődi, 1963: 326–328 [original combination].
syn. *Cyclocephala fusiformis* Chapin, 1932: 287 [original combination]. *Cyclocephala striata* Endrődi [synonymy by Ratcliffe and Cave 2015: 109].
syn. *Cyclocephala striata hatiensis* Endrődi 1963: 328 [original combination]. *Cyclocephala striata* Endrődi [synonymy by Ratcliffe and Cave 2015: 109].

Types. Type of *C. fusiformis* at USNM (Endrődi 1966). Holotype ♂ of *C. striata striata* at ZSMC (Endrődi 1966). Holotype of *C. striata hatiensis* at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. CUBA: Isla de la Juventad. DOMINICAN REPUBLIC: Barahona, Distrito Nacional, Duarte, El Seibo, Hato Mayor, Independencia, La Altagracia, La Vega, María Trinidad Sánchez, Monseñor Nouel, Monte Plata, Pedernales, Peravia, Puerto Plata, Salcedo, Samana, San Cristóbal, San José de Ocoa, San Juan, Santiago, Valverde. HAITI: Grand Anse, Ouest. JAMAICA: Portland, St. Mary.

References. Chapin 1932, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1963, 1966, 1985a, Krajcik 2005, 2012, Ratcliffe and Cave 2015

Remarks. *Cyclocephala striata* was reported from Brazil (Santa Catarina) (Endrődi 1963, 1966, 1985a). *Cyclocephala striata* has not been reported from Brazil since its original description and these data could be erroneous (Ratcliffe and Cave 2015).

Cyclocephala subsignata Burmeister, 1847

Cyclocephala subsignata Burmeister, 1847: 52 [original combination].

Types. Lectotype ♀ at MNHN (Dechambre 1991b). Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. BRAZIL: Pará. FRENCH GUIANA: Apatou, Cayenne, St.-Élie, St.-Laurent du Maroni. GUYANA: Upper Demerara-Berbice. SURINAME.

References. Burmeister 1847, Harold 1869b, Bodkin 1919, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1979a, 1991b, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala supernana Dechambre, 1999

Cyclocephala supernana Dechambre, 1999: 17–18 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).

Distribution. VENEZUELA: Amazonas.

References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala suturalis Ohaus, 1911

Cyclocephala suturalis Ohaus, 1911: 560–561 [original combination].

Types. Type at SDEI (Endrődi 1966).

Distribution. ARGENTINA: Misiones. BRAZIL: Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, São Paulo. PARAGUAY. VENEZUELA: Carabobo.

References. Ohaus 1911, Arrow 1937b, Blackwelder 1944, Guimarães 1944, Lima 1953, Martínez 1957, Pike et al. 1976, Dechambre 1979a, 1980, Endrődi 1966, 1985a, Grossi et al. 2011, Krajcik 2005, 2012, Breeschoten et al. 2013.

Cyclocephala sylviae Dechambre, 1995

Cyclocephala sylviae Dechambre, 1995: 13 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1995).

Distribution. BOLIVIA: La Paz, Santa Cruz.

References. Dechambre 1995, Krajcik 2005, 2012.

Cyclocephala tarsalis Dechambre, 1979

Cyclocephala tarsalis Dechambre, 1979a: 166–167 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979a).

Distribution. BRAZIL: Pará. FRENCH GUIANA.

References. Dechambre 1979a, 1980, Endrődi 1985a, Ratcliffe 1992b, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala testacea Burmeister, 1847

Cyclocephala testacea Burmeister, 1847: 57–58 [original combination].

Types. Endrődi (1966) could not find the type material of this species, but he did not designate a neotype.

Distribution. ARGENTINA: Córdoba, La Rioja, Mendoza, Misiones, Salta, Santiago del Estero, Tucumán. BOLIVIA: Chuquisaca, Santa Cruz. BRAZIL: Acre, Amazonas, Ceará, Espírito Santo, Maranhão, Mato Grosso, Pará, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo. COLOMBIA: Antioquia, Casanare, Cundinamarca. ECUADOR: Napo. FRENCH GUIANA: Cayenne, St.-Laurent du Maroni. GUYANA: Potaro-Siparuni, Upper Demerara-Berbice. PARAGUAY: Alto Paraná, Concepción, Cordillera, Gran Asunción. PERU: Loreto. SURINAME: Paramaribo. URUGUAY: Canelones, Montevideo, Treinta y Tres. VENEZUELA: Aragua, Zulia.

References. Burmeister 1847, Harold 1869a, Arrow 1937b, Martorell 1939, Martorell and Salas 1939, Blackwelder 1944, Pike et al. 1976, Saenz and Morelli 1984, Endrődi 1966, 1985a, Morelli and Alzugaray 1994, Poole and Gentili 1996, Andreazze and Fonseca 1998, Riley and Wolfe 2003, Restrepo et al. 2003, Smith 2003, 2009, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, López-García et al. 2015, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. Endrődi (1966, 1985a) considered *C. ovulum* Bates to be an "aberration" of *C. testacea* and reported these species' label data together for nearly all specimens. The distribution data for *C. testacea* in South America will need to be further evaluated.

Cyclocephala tetrica Burmeister, 1847

Cyclocephala tetrica Burmeister, 1847: 55 [original combination].

Types. Invalid neotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. JAMAICA: Clarendon, Hanover, Kingston, Manchester, Portland, St. Andrew, St. Catherine, St. Elizabeth, St. James, St. Mary, St. Thomas, Trelawny, Westmoreland.

References. Burmeister 1847, Harold 1869b, Leng and Mutchler 1914, Arrow 1937b, Blackwelder 1944, Howden 1970, Pike et al. 1976, Endrődi 1966, 1969b, 1985a, Hagstrum and Subramanyam 2009, Krajcik 2005, 2012, Ratcliffe and Cave 2015.

Cyclocephala tidula Dechambre, 1999

Cyclocephala tidula Dechambre, 1999: 18–19 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).

Distribution. VENEZUELA: Bolívar.

References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala toulgoeti Dechambre, 1992

Cyclocephala toulgoeti Dechambre, 1992: 60 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. FRENCH GUIANA: Cayenne, Mana, Saül, St.-Élie, St.-Laurent du Maroni **References.** Dechambre 1992, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala tridentata (Fabricius, 1801)

Melolontha tridentata Fabricius, 1801: 170–171 [original combination].
Cyclocephala tridentata (Fabricius) [new combination by Burmeister 1847: 47].
syn. *Cyclocephala annamariae* Dutrillaux & Chalumeau, 2013: 64–65 [original combination in Dutrillaux et al. 2013].
Cyclocephala tridentata Fabricius [synonymy by Ratcliffe and Cave 2015: 113].
syn. *Cyclocephala tridentata dominicensis* Cartwright & Chalumeau, 1978: 25 [original combination].
Cyclocephala dominicensis Cartwright & Chalumeau [new species status by Dutrillaux et al. 2013: 64].
Cyclocephala tridentata (Fabricius) [synonymy by Ratcliffe and Cave 2015: 113].
syn. *Melolontha bilíturata* Gyllenhal, 1817b: 105–106 [original combination].
Cyclocephala tridentata (Fabricius) [synonymy by Burmeister 1847: 48].

Types. Lectotype ♀ of *M. tridentata* deposited at ZMUK, now housed at ZMUC (Endrődi 1966). Chalumeau (1982) did not consider the lectotype valid because

Endrődi selected a specimen from Martinique rather than Guadeloupe, the type locality. Therefore, Chalumeau designated a neotype deposited at ZMUC.Holotype ♂ of *C. annamariae* at IREC (Dutrillaux et al. 2013). Holotype ♂ of *C. tridentata dominicensis* in the Fortuné Chalumeau Collection (Cartwright and Chalumeau 1978). The type material of *M. biliturata* was not reported by Endrődi (1966), and it is not with the other Gyllenhal *Melolontha* types at UUZM (Wallin 2001).

Distribution. BARBADOS. COLOMBIA: Cauca. DOMINICA: St. David, St. George, St. John, St. Joseph, St. Luke, St. Mark, St. Patrick, St. Paul. GRENADA: St. Andrew. GUADELOUPE: Basse-Terre, Grande-Terre. MARTINIQUE: Fort-de-France, La Trinité, Le Marin, Saint-Pierre. MONTSERRAT: Saint Georges. ST. LUCIA: Anse la Raye, Castries, Choiseul, Dauphin, Dennery, Micoud, Praslin, Soufrière, Vieux Fort. SURINAME.

References. Voet 1769, Fabricius 1801, Gyllenhal 1817b, Dejean 1821, 1833, Burmeister 1847, Harold 1869b, Leng and Mutchler 1914, 1917, Dash 1922, Arrow 1937b, Blackwelder 1944, Paulian 1947, Zimsen 1964, Pike et al. 1976, Chalumeau and Gruner 1977, Cartwright and Chalumeau 1978, Chalumeau 1982, Endrődi 1966, 1985a, Dechambre 1980, 1992, Marquet and Roguet 2003, Restrepo et al. 2003, Krajcik 2005, 2012, Giannoulis et al. 2012, Breeschoten et al. 2013, Dutrillaux et al. 2007, 2013, 2014, Ratcliffe and Cave 2015, Gasca-Álvarez and Deloya 2016, Peck 2009, 2016.

Remarks. The identification of the specimens from Colombia and Suriname need to be critically evaluated (Endrődi 1966, 1985a, Ratcliffe and Cave 2015). Chalumeau (1982) reported four specimens of *C. tridentata* from Puerto Rico, though major faunistic studies did not find additional specimens from Puerto Rico (Ratcliffe and Cave 2015).

Cyclocephala tronchonii Martínez, 1975

Cyclocephala tronchonii Martínez, 1975b: 264–270 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1975b).

Distribution. PERU: Huánuco.

References. Martínez 1975b, Pike et al. 1976, Endrődi 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala tucumana Bréthes, 1905

Cyclocephala tucumana Bréthes, 1905: 330–331 [original combination].

Types. Endrődi (1966) did not examine the type material of this species and speculated that the material would be found in Buenos Aires.

Distribution. ARGENTINA: Jujuy, Salta, Santa Fe, Tucumán. BOLIVIA: Cochabamba. BRAZIL: Mato Grosso do Sul, Rio Grande do Sul, Paraná. PARAGUAY. URUGUAY: Montevideo.

References. Bréthes 1905, Seidlitz 1905, Schrottky 1913, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012, Breeschoten et al. 2013, Lima Nogueira et al. 2013, Cherman et al. 2013.

Cyclocephala tutilina Burmeister, 1847

Cyclocephala tutilina Burmeister, 1847: 68 [original combination].
syn. *Cyclocephala venezuelae* Arrow, 1911: 171–172 [original combination].
Cyclocephala tutilina Burmeister [synonymy by Endrődi 1966: 323].

Types. Lectotype ♂ of *C. tutilina* at MLUH (Endrődi 1966). Type of *C. venezuelae* at BMNH (Endrődi 1966).

Distribution. BRAZIL. COLOMBIA: Antioquia, Cauca, Chocó, Santander, Tolima. ECUADOR. VENEZUELA: Aragua, Capital District, Carabobo, Mérida.

References. Burmeister 1847, Reiche 1859, Harold 1869b, Ohaus 1910, Arrow 1911, 1937b, Anonymous 1940, Blackwelder 1944, Martínez 1967, Pike et al. 1976, Endrődi 1966, 1967b, 1985a, Seres and Ramírez 1995, Neita-Moreno 2011, Pardo-Locarno et al. 2005a, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, Moore and Jameson 2013, Ratcliffe et al. 2013, Yepes-Rodriguez et al. 2013, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. Endrődi (1966, 1985a) reported *C. tutilina* from Mexico and Honduras. The validity of these Central American records was questioned by Ratcliffe (2003), and other recent data for Honduras and Nicaragua were based on erroneous identifications (Ratcliffe and Cave 2006, Ratcliffe et al. 2013). *Cyclocephala tutilina* is likely restricted to South America.

Cyclocephala tylifera Höhne, 1923

Cyclocephala tylifera Höhne, 1923b: 370–371 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Cochabamba, La Paz. BRAZIL: Amazonas, Mato Grosso. COLOMBIA: Cauca, Boyacá. FRENCH GUIANA: Kourou, St.-Laurent du Maroni. GUYANA. PERU: Callao, Huánuco, Junín, Madre de Dios. SURINAME: Marowijne.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Gruner 1971, Pike et al. 1976, Endrődi 1966, 1985a, Dechambre 1995, Silberbauer-Gottsberger 2001, Gibernau and Barabé 2002, Restrepo et al. 2003, Krajcik 2005, 2012, Ponchel 2006, 2011, 2015, Ratcliffe et al. 2015, Gasca-Álvarez 2013, Gasca-Álvarez and Deloya 2016.

Cyclocephala unamas Ratcliffe, 2003

Cyclocephala unamas Ratcliffe, 2003: 61, 67, 71, 78, 212–214 [original combination].

Types. Holotype ♂ at MNCR (originally deposited at INBio) (Ratcliffe 2003).

Distribution. COSTA RICA: Cartago, San José.

References. Ratcliffe 2003, Krajcik 2005, 2012.

Cyclocephala undata (Olivier, 1789)

Melolontha undata Olivier, 1789: 80 [original combination].
Cyclocephala undata (Olivier) [new combination by Burmeister 1847: 61].
syn. *Cyclocephala rubicunda* Burmeister, 1847: 61–62 [original combination].
Cyclocephala undata (Olivier) [synonymy by Endrődi 1966: 325].
syn. *Melolontha spilophthalma* Herbst, 1790: 163–164 [original combination].
Cyclocephala undata (Olivier) [synonymy by Burmeister 1847: 61].

Types. Invalid ♂ neotype of *M. undata* at HNHM (Endrődi Collection) (Endrődi 1966). Lectotype ♂ of *C. rubicunda* at MNHN (Dechambre 1991b). Endrődi (1966) did not comment on the *M. spilophthalma* type material.

Distribution. BRAZIL: Amazonas, Mato Grosso. FRENCH GUIANA: Cayenne, St.-Laurent du Maroni. GUYANA. SURINAME: Paramaribo.

References. Olivier 1789, Herbst 1790, Burmeister 1847, Harold 1869b, Arrow 1937b, Pike et al. 1976, Endrődi 1966, 1967b, 1969b, 1985a, Dechambre 1991b, Ratcliffe 1992b, Webber and Gottsberger 1993, Küchmeister et al. 1998, Gottsberger et al. 1998, Gottsberger 1999, Silberbauer-Gottsberger 2001, Ponchel 2006, 2011, Krajcik 2005, 2012, Moore and Jameson 2013, Costa et al. 2017.

Cyclocephala unidentata Endrődi, 1980

Cyclocephala unidentata Endrődi, 1980: 37–38 [original combination].

Types. Holotype ♀ in André Gaudaíre-Thore Collection (Sens, France) (Endrődi 1980).

Distribution. FRENCH GUIANA. VENEZUELA.

References. Endrődi 1980, 1985a, Ponchel 2011, Krajcik 2005, 2012.

Cyclocephala variabilis Burmeister, 1847

Cyclocephala variabilis Burmeister, 1847: 44–45 [original combination].

Cyclocephala (*Cyclocephala*) *variabilis* Burmeister [new subgeneric classification by Casey 1915: 138].

Cyclocephala variabilis Burmeister [removal of subgeneric classification by Arrow 1937b: 8, 16].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires. BOLIVIA: Cochabamba, Santa Cruz. BRAZIL: Amazonas, Bahia, Goiás, Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, São Paulo. COLOMBIA: Cauca, Boyacá. ECUADOR: Morona-Santiago. FRENCH GUIANA: Cayenne. PANAMA: Darien, Former Canal Zone. URUGUAY: Rocha. VENEZUELA: Capital District.

References. Burmeister 1847, Harold 1869b, Casey 1915, Luederwaldt 1915, Monte 1933, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Saenz and Morelli 1984, Endrődi 1963, 1966, 1985a, Gottsberger 1986, Andreazze and Fonseca 1994, Ratcliffe and Morón 1997, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Smith 2003, 2009, Grossi et al. 2011, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe et al. 2013, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. *Cyclocephala variabilis* was reported from Mexico (Endrődi 1966, Ratcliffe and Morón 1997). Major faunistic studies did not record any further specimens, and this species likely does not occur in Mexico (Ratcliffe et al. 2013).

Cyclocephala varians Burmeister, 1847

Cyclocephala varians Burmeister, 1847: 64 [original combination].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. COLOMBIA: Cundinamarca, Meta, Tolima. FRENCH GUIANA: Kourou, Sinnamary.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Gibernau et al. 2003, Krajcik 2005, 2012, Ponchel 2006, 2011, 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala variipenis Dechambre, 1999

Cyclocephala variipenis Dechambre, 1999: 19–20 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1999).

Distribution. BOLIVIA: La Paz.

References. Dechambre 1999, Krajcik 2005, 2012.

Cyclocephala variolosa Burmeister, 1847

Cyclocephala variolosa Burmeister, 1847: 70 [original combination].
syn. *Surutoides mirabilis* Endrődi, 1981: 198–199 [original combination].
Cyclocephala variolosa Burmeister [synonymy by Dechambre 1991a: 282].

Types. Lectotype ♂ of *C. variolosa* at MLUH (Endrődi 1966). Holotype ♂ of *S. mirabilis* at ZMHB (Endrődi 1981).

Distribution. BRAZIL: Espírito Santo, Paraná, Pernambuco, Rio de Janeiro, Santa Catarina, São Paulo.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1981, 1985a, Gottsberger and Amaral 1984, Dechambre 1991a, 1997, Weber et al. 2001, Riehs 2005, 2006, Weber 2008, Krajcik 2005, 2012, Gottsberger 1986, 2016.

Cyclocephala verticalis Burmeister, 1847

Cyclocephala verticalis Burmeister, 1847: 51 [original combination].
Cyclocephala sanguinicollis var. *verticalis* Burmeister [new infrasubspecific status by Arrow 1937b: 15].
Cyclocephala verticalis Burmeister [revalidated species status by Endrődi 1966: 329].

Types. Types at MLUH (Endrődi 1966).

Distribution. ARGENTINA. BOLIVIA: Cochabamba. BRAZIL: Acre, Amazonas, Mato Grosso, Mato Grosso do Sul, Pará, Paraná, Rio Grande do Norte, Roraima, Santa Catarina. COLOMBIA: Amazonas. ECUADOR. FRENCH GUIANA: Cayenne. GUYANA: Upper Takutu-Upper Essequibo. PERU: Huánuco, Loreto. SURINAME: Paramaribo. VENEZUELA: Barinas.

References. Burmeister 1847, Reiche 1859, Chevrolat 1865, Harold 1869b, Gundlach 1891, Arrow 1937b, Blackwelder 1944, Cramer et al. 1975, Prance and Arias 1975, Pike et al. 1976, Prance 1976, Prance and Anderson 1976, Endrődi 1966, 1980, 1985a, Wiersema 1987, Dechambre 1980, 1999, Fernández García 2006, Seymour and Matthews 2006, Puker et al. 2009, Rodrigues et al. 2010, 2011, Coutinho et al. 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Otavo et al. 2013, Maia et al. 2014, Ratcliffe et al. 2015, Gasca-Álvarez and Deloya 2016.

Remarks. The original description of *C. verticalis* was based on at least one specimen labeled from Cuba (Burmeister 1847). This Cuban locality has been reported by a few authors (Burmeister 1847, Chevrolat 1865, Blackwelder 1944), but *C. verticalis* does not occur in Cuba or the West Indies more broadly (Ratcliffe and Cave 2015).

Cyclocephala vestita Höhne, 1923

Cyclocephala vestita Höhne, 1923b: 359 [original combination].

Types. Types at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Acre, Amazonas, Bahia, Pernambuco, Rio de Janeiro. FRENCH GUIANA: Cayenne, Kourou, Sinnamary. GUYANA. PARAGUAY. SURINAME: Paramaribo.

References. Höhne 1923b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Cavalcante 2000, Joly 2000a, Gibernau et al. 2003, Marques and Gil-Santana 2009, Krajcik 2005, 2012, Maia et al. 2010, 2012, Breeschoten et al. 2013, Maia et al. 2014, Ponchel 2006, 2011, 2015, Albuquerque et al. 2016, Gottsberger 2016.

Cyclocephala vidanoi Dechambre, 1992

Cyclocephala vidanoi Dechambre, 1992: 66–67 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1992).

Distribution. COLOMBIA: Antioquia, Chocó. ECUADOR: Pichincha.

References. Dechambre 1992, Neita-Moreno 2011, Krajcik 2005, 2012, Gasca-Álvarez and Deloya 2016.

Cyclocephala villosa Blanchard, 1846

Cyclocephala villosa Blanchard, 1846: 192 [original combination].

Types. Invalid ♂ neotype at MNHN (Endrődi Collection) (Endrődi 1966).

Distribution. BOLIVIA: Santa Cruz. BRAZIL: Minas Gerais.

References. Blanchard 1846, Harold 1869b, Arrow 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Cyclocephala vincentiae Arrow, 1900

Cyclocephala vincentiae Arrow, 1900: 180–181 [original combination].

Types. Types at BMNH (Endrődi 1966).

Distribution. ST. VINCENT.

References. Arrow 1900, 1937b, Leng and Mutchler 1914, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Joly 2003, Krajcik 2005, 2012, Ratcliffe and Cave 2015, Peck 2010, 2016.

Cyclocephala vinosa Arrow, 1937

Cyclocephala vinosa Arrow, 1937a: 39–40 [original combination].

Types. Types at BMNH (Endrődi 1966).

Distribution. JAMAICA: Kingston, Manchester, Portland, St. Andrew, St. Thomas.

References. Arrow 1937a, b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1985a, Joly 1998, Krajcik 2005, 2012, Ratcliffe and Cave 2015.

Cyclocephala virgo Dechambre, 1999

Cyclocephala virgo Dechambre, 1999: 20–21 [original combination].

Types. Holotype ♀ at MNHN (Dechambre 1999).

Distribution. BRAZIL: Pará. FRENCH GUIANA: Régina, Saül, St.-Laurent du Maroni.

References. Dechambre 1999, Ponchel 2010, 2011, Krajcik 2005, 2012.

Cyclocephala viridis Dechambre, 1982

Cyclocephala viridis Dechambre, 1982: 2–3 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1982).

Distribution. BRAZIL: Amazonas. PERU. VENEZUELA.

References. Dechambre 1982, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Cyclocephala vittoscutellaris Prell, 1937

Cyclocephala vittoscutellaris Prell, 1937b: 496 [original combination].

Types. Holotype ♀ at ZMHB (Endrődi 1967b).

Distribution. BRAZIL: Mato Grosso. COLOMBIA: Boyacá,

References. Prell 1937b, Blackwelder 1944, Pike et al. 1976, Endrődi 1966, 1967b, 1985a, Restrepo et al. 2003, Krajcik 2005, 2012, López-García et al. 2015, Gasca-Álvarez and Deloya 2016.

Cyclocephala wandae Hardy, 1974

Cyclocephala wandae Hardy, 1974: 160–161 [original combination].

Types. Holotype ♂ at USNM (Hardy 1974).

Distribution. UNITED STATES: California.

References. Pike et al. 1976, Hardy 1974, 1991, Endrődi 1985a, Poole and Gentili 1996, Joly 2000a, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe and Cave 2017.

Cyclocephala weidneri Endrődi, 1964

Cyclocephala weidneri Endrődi, 1964: 462–464 [original combination].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1964).

Distribution. BRAZIL: Espírito Santo. COLOMBIA: Antioquia, Cauca, Chocó, Cundinamarca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. ECUADOR: Morona-Santiago, Pastaza. EL SALVADOR: Ahuachapán. GUATEMALA: Alta Verapaz, Baja Verapaz, Chimaltenango, El Progreso, Escuintla, Guatemala, Huehuetenango, Izabal, Jalapa, Jutiapa, Quetzaltenango, San Marcos, Sololá, Suchitepéquez, Zacapa. HONDURAS: Copán, Cortés, Lempira, Olancho, Yoro. MEXICO: Chiapas, Hidalgo, Oaxaca, Puebla, Veracruz. PANAMA: Bocas del Toro, Chiriquí, Former Canal Zone. PERU: Cusco, Junín. VENEZUELA: Aragua, Mérida.

References. Pike et al. 1976, Dechambre 1979a, Endrődi 1964, 1966, 1985a, Ratcliffe and Morón 1997, Morón-Ríos and Morón 2001, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Pardo-Locarno et al. 2005a, Ratcliffe and Cave 2006, Neita-Moreno and Gaigl 2008, Múñoz-Hernández et al. 2008, Krajcik 2005, 2012, Moore 2012, Breeschoten et al. 2013, García-López et al. 2013, Ratcliffe et al. 2013, Yepes-Rodriguez et al. 2013, López-García et al. 2015, Gasca-Álvarez and Deloya 2016, Dupuis 2018.

Cyclocephala williami Ratcliffe, 1992

Cyclocephala williami Ratcliffe, 1992a: 230–232 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992a).

Distribution. COSTA RICA: Alajuela, Guanacaste, Limón, Puntarenas.

References. Ratcliffe 1992a, 2003, Krajcik 2005, 2012, García-López et al. 2013.

Cyclocephala zischkai Martíne,z 1965

Cyclocephala zischkai Martínez, 1965a: 70–74 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1965a).

Distribution. BOLIVIA: Cochabamba.

References. Martínez 1965a, 1975b, Pike et al. 1976, Endrődi 1985a, Krajcik 2005, 2012.

Cyclocephala zodion Ratcliffe, 1992

Cyclocephala zodion Ratcliffe, 1992a: 232–234 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1992a).

Distribution. COSTA RICA: Heredia, Limón. PANAMA: Bocas del Toro, Coclé, Panamá.

References. Ratcliffe 1992a, 2002a, 2003, Krajcik 2005, 2012, García-López et al. 2013.

Cyclocephala zurstrasseni Endrődi, 1964

Cyclocephala zurstrasseni Endrődi, 1964: 459–461 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1964).

Distribution. PERU: Cusco, Huánuco, Madre de Dios.

References. Pike et al. 1976, Endrődi 1964, 1966, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Genus *DYSCINETUS* Harold, 1869

Dyscinetus Harold, 1869a: 123 [original usage, new replacement name for preoccupied genus name *Chalepus* MacLeay, 1819: 149].

syn. *Palechus* Casey, 1915: 174 [original usage]. Proposed as a subgenus. Type species: *Palechus histrio* Casey, by original designation.

Dyscinetus Harold [synonymy by Saylor 1945: 380].

Type species. *Melolontha geminata* Fabricius, 1801, by monotypy.

Keys. Dawson 1922 (Nebraska, USA), Chapin 1932 (Cuba), Saylor 1945 (USA), Paulian 1947 (French Antilles), Arnett 1968 (USA), Endrődi 1966, 1985a, Morón 1979 (Veracruz, Mexico), Gordon and Anderson 1981 (larvae and adults, Florida, United States), Ratcliffe 1985, Maes 1994 (Nicaragua), Morón and Zaragoza 1976 (Estado de México, Mexico), Morón et al. 1985 (Chiapas, Mexico), Morón et al. 1988 (Jalisco, Mexico), Ratcliffe 1991 (Nebraska, USA), Jameson et al. 2002, Ratcliffe 2003 (Costa Rica and Panama), Villegas-Urbano 2004 (larvae, Colombia), Ratcliffe and Cave 2006 (Honduras, Nicaragua, and El Salvador), Ratcliffe and Paulsen 2008 (Nebraska, USA), Gasca-Álvarez and Amat-García 2010 (Colombia), Joly and Escalona 2010 (Venezuela), Neita-Moreno and Yepes 2011 (larvae), Ratcliffe et al. 2013 (Guatemala, Belize, and Mexico), Pardo-Locarno 2013 (Valle del Cauca, Colombia), Cherman et al. 2013 (larvae, Rio Grande do Sul, Brazil), Ratcliffe and Cave 2015 (West Indies), Ratcliffe and Cave 2017 (USA and Canada).

Valid taxa. 21 species.

Dyscinetus australis **Joly & Escalona, 2002**

Dyscinetus australis Joly & Escalona, 2002b: 199, 201, 202–205 [original combination].

Types. Holotype ♂ at CMNC (Henry and Anne Howden Collection) (Joly and Escalona 2002b).

Distribution. ARGENTINA: Buenos Aires, Neuquén, Río Negro.

References. Joly and Escalona 2002b, Krajcik 2005, 2012.

Dyscinetus dubius **(Olivier, 1789)**

Melolontha dubia Olivier, 1789: 32 [original combination].
Dyscinetus dubius (Olivier) [new combination by Bates 1891: 32].
Dyscinetus (*Palechus*) *dubius* (Olivier) [new subgeneric classification by Casey 1915: 174].
Dyscinetus dubius (Olivier) [removal of subgeneric classification by Arrow 1937b: 17].
syn. *Geotrupes lugubris* Quensel, 1806: 21 [original combination].
Melolontha geminata Fabricius [synonymy by Schönherr 1817: 187].
syn. *Dyscinetus frater* Bates, 1888: 312 [original combination].
Dyscinetus dubius (Olivier) [synonymy by Endrődi 1966: 387].
syn. *Dyscinetus* (*Dyscinetus*) *obtusus* Casey, 1915: 170 [original combination].
Dyscinetus frater Bates [synonymy by Chapin 1932: 295].
syn. *Melolontha geminata* Fabricius, 1801: 166–167 [original combination].
Chalepus geminatus (Fabricius) [new combination by MacLeay 1819: 149–150].
Cyclocephala geminata (Fabricius) [new combination by Laporte 1840: 124].
Chalepus geminatus (Fabricius) [revised combination by Burmeister 1847: 78–79].
Dyscinetus geminatus (Fabricius) [new combination by Harold 1869a: 123].
Dyscinetus dubius (Olivier) [synonymy by Prell 1937a: 187].

Types. Type material of *M. dubia* is apparently missing (Endrődi 1966). Lectotype ♂ of *M. geminata* deposited at ZMUK, now housed at ZMUC (Endrődi 1966). Endrődi (1966) did not find the type material of *G. lugubris*. Lectotype ♂ of *D. frater* at BMNH (Endrődi 1966). Type of *D. obtusus* at USNM (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires, Entre Ríos, Misiones. BELIZE: Cayo. BOLIVIA: Beni, Chuquisaca, Cochabamba, La Paz, Santa Cruz. BRAZIL: Acre, Amazonas, Bahia, Espírito Santo, Goiás, Mato Grosso, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Santa Catarina, São Paulo. CHILE. COLOMBIA: Amazonas, Antioquia, Atlántico, Boyacá, Caquetá, Cauca, Casanare, Chocó, Córdoba, Cundinamarca, Huila, Meta, Risaralda, Santander, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José. CUBA: Camagüey, Ciego de Ávila, Isla de la Juventud, Matanzas, Pinar del Río, Sancti Spíritus. ECUADOR: Guayas. EL SALVADOR: Ahuachapán, Cabañas, Cuscatlán, La Libertad, San Miguel, San Salvador, Santa Ana. FRENCH GUIANA: Cayenne, St.-Laurent du

Maroni. GUATEMALA: Alta Verapaz, Baja Verapaz, Chiquimula, Escuintla, Guatemala, Huehuetenango, Izabal, Petén, Quetzaltenango, Retalhuleu, San Marcos, Santa Rosa, Suchitepéquez, Zacapa. GUYANA: Demerara-Mahaica, Mahaica-Berbice. HONDURAS: Atlántida, Choluteca, Mayagua, Cortés, El Paraíso, Francisco Morazán, Gracias a Dios, La Paz, Olancho. MEXICO: Campeche, Chiapas, Distrito Federal, Guerrero, Jalisco, Nayarit, Oaxaca, Quintana Roo, San Luis Potosí, Sinaloa, Tabasco, Tamaulipas, Tlaxcala, Veracruz. NICARAGUA: Carazo, Granada, Managua, Masaya, RAA Sur, Río San Juan, Rivas. PANAMA: Bocas del Toro, Panama Canal Zone, Chiriquí, Coclé, Colón, Darien, Panamá, San Blas. PARAGUAY: Central, Cordillera, Guaíra, Paraguarí. PERU. SURINAME: Paramaribo District. TRINIDAD AND TOBAGO: Trinidad. VENEZUELA: Amazonas, Apure, Aragua, Bolívar, Carabobo, Delta Amacuro, Falcón, Guárico, Mérida, Monagas, Portuguesa, Táchira, Trujillo, Zulia.

References. Olivier 1789, Fabricius 1801, Quensel 1806, Schönherr 1817, MacLeay 1819, Dejean 1821, 1833, 1836b, Latreille 1829, Laporte 1840, Sturm 1843, Burmeister 1847, Erichson 1848a, Reiche 1859, Fauvel 1861, Harold 1869a, Bates 1888, 1891, Ohaus 1900, Casey 1915, Cleare 1925, 1930, Chapin 1932, Squire 1932, 1933, Dash 1934, Prell 1937a, Arrow 1937b, Anonymous 1900, 1940, Blackwelder 1944, Guimarães 1944, Wiehe 1951, Figueroa-P. 1952, Lima 1953, Roze 1955, Gibson and Carrillo 1959, Van Dinther 1960, Zimsen 1964, Endrődi 1966, 1973a, 1985a, Dechambre 1979a, Morón 1979, Remillet 1988, Aguilera et al. 1993, Thomas 1993, Lobo and Morón 1993, Maes 1987, 1994, Ratcliffe and Morón 1997, Sanchez Soto 1998, Andreazze and Fonseca 1998, Ratcliffe 1986, 2002a, 2003, Restrepo-Giraldo et al. 2003, Pardo-Locarno et al. 1995, 2005a, Riehs 2005, Fernández García 2006, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Marques and Gil-Santana 2009, Gasca-Álvarez and Amat-García 2010, Joly and Escalona 2010, Ponchel 2011, Neita-Moreno and Yepes 2011, Neita-Moreno 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Pardo-Locarno 2013, Otavo et al. 2013, García-López et al. 2013, Ratcliffe et al. 2013, Deloya et al. 2014a, Ratcliffe et al. 2013, 2015, Ratcliffe and Cave 2015, García-Atencia and Martínez-Hernández 2015, López-García et al. 2015, Albuquerque et al. 2016.

Dyscinetus dytiscoides Arrow, 1911

Dyscinetus dytiscoides Arrow, 1911: 168 [original combination].
Chalepides dytiscoides (Arrow) [new combination by Endrődi 1967a: 411].
Dyscinetus dytiscoides Arrow [revised combination by Joly and Escalona 2002a: 40].

Types. Type at BMNH (Endrődi 1966).

Distribution. BOLIVIA: Beni. COLOMBIA: Antioquia, Chocó. PERU: Loreto. VENEZUELA: Amazonas, Apure, Barinas, Delta Amacuro, Falcón, Monagas, Yaracuy, Zulia.

References. Arrow 1911, 1937b, Roze 1955, Endrődi 1966, 1967a, 1985a, Lachaume 1992, Dechambre 1999, Restrepo-Giraldo et al. 2003, Gasca-Álvarez and Amat-García 2010, Joly and Escalona 2002a, 2010, Neita-Moreno 2011, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Dyscinetus fimosus (Herbst, 1789)

Scarabaeus fimosus Herbst, 1789: 248–249 [original combination].
Geotrupes fimosus (Herbst) [new combination by Schönherr 1806: 22].
Chalepus fimosus (Herbst) [new combination by Burmeister 1847: 80].
Dyscinetus fimosus (Herbst) [new combination by Harold 1869a: 123].

Types. Endrődi (1966) was unable to find type material of this species, and the species was completely unknown to him.

Distribution. SURINAME. VENEZUELA: Aragua, Miranda.

References. Herbst 1789, Schönherr 1806, Burmeister 1847, Harold 1869a, Roze 1955, Endrődi 1966, Krajcik 2005, 2012.

Dyscinetus gagates (Burmeister, 1847)

Chalepus gagates Burmeister, 1847: 81 [original combination].
Dyscinetus gagates (Burmeister) [new combination by Harold 1869a: 123].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires. BOLIVIA: Beni. BRAZIL: Paraná, Rio Grande do Sul, São Paulo.

References. Dejean 1833, 1836b, Burmeister 1847, Reiche 1859, Harold 1869a, Arrow 1937b, Bacigalupo 1939, López Cristóbal 1941, Bosq 1945, Mendheim 1953, Moore 1958, Endrődi 1966, 1985a, Balut 1970, Abrahão and Amante 1970, Mauco and Favero 2004, Riehs 2005, Dupuis 2006, Soave et al. 2006, Krajcik 2005, 2012, Breeschoten et al. 2013, Cherman et al. 2013, Salgado-Neto et al. 2016.

Remarks. Ratcliffe et al. (2013) did not record *D. gagates* from Mexico, Guatemala, or Belize. The data from Mexico previously reported for *D. gagates* may be erroneous (Endrődi 1966, 1985a).

Dyscinetus imitator Ratcliffe, 1986

Dyscinetus imitator Ratcliffe, 1986: 75–78 [original combination].

Types. Holotype ♂ at UCDC (Ratcliffe 1986).

Distribution. CAYMAN ISLANDS: Cayman Brac, Grand Cayman. CUBA: Camagüey, La Habana, Isla de la Juventud, Mayabeque, Pinar del Río, Santiago de Cuba.

References. Ratcliffe 1986, Askew 1994, Krajcik 2005, 2012, Ratcliffe and Cave 2010, 2015.

Dyscinetus laevicollis Arrow, 1937

Dyscinetus laevicollis Arrow, 1937a: 41 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. DOMINICAN REPUBLIC: Barahona, Distrito Nacional, Hato Mayor, La Altagracia, La Romana, La Vega, Monseñor Nouel, Monte Cristi, Monte Plata, Puerto Plata, Samana, Santo Domingo, Valverde. HAITI: Centre, Ouest. JAMAICA: St. Andrew, St. Elizabeth, Trelawny, Westmoreland. MEXICO: Aguascalientes, Chihuahua, Durango, Jalisco, Sonora, Tabasco. PUERTO RICO: Mayagüez. TURKS AND CAICOS ISLANDS: Middle Caicos, North Caicos. UNITED STATES: Arizona, New Mexico.

References. Arrow 1937a, b, Blackwelder 1944, Howden 1970, Chalumeau 1982, Endrődi 1966, 1985a, Ratcliffe 1986, Ratcliffe and Morón 1997, Navarrete-Heredia et al. 2001, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe et al. 2013, Ratcliffe and Cave 2015, Ratcliffe and Cave 2017.

Dyscinetus laevipunctatus Bates, 1888

Dyscinetus laevipunctatus Bates, 1888: 311–312 [original combination].

Dyscinetus (*Palechus*) *laevipunctatus* Bates [new subgeneric classification by Casey 1915: 174].

Dyscinetus laevipunctatus Bates [removal of subgeneric classification by Chapin 1932: 295].

syn. *Dyscinetus* (*Palechus*) *histrio* Casey, 1915: 174 [original combination].

Dyscinetus laevipunctatus Bates [synonymy by Chapin 1932: 295].

Types. Type of *D. laevipunctatus* at BMNH (Endrődi 1966). Type of *D. histrio* at USNM (Endrődi 1966).

Distribution. BELIZE: Cayo, Stann Creek, Toledo. BRAZIL. COLOMBIA: Caldas, Meta, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Guanacaste, Heredia, Limón, Puntarenas. EL SALVADOR: Ahuachapán, La Libertad, San Salvador. GUATEMALA: Alta Verapaz, Baja Verapaz, Escuintla, Guatemala, Huehuetenango, Izabal, Jalapa, Petén, San Marcos, Santa Rosa, Suchitepéquez, Zacapa. HONDURAS: Atlántida, Choluteca, Colón, Comayagua, Copán, Cortés, Francisco Morazán, Gracias a Dios, Santa Bárbara, Yoro. MEXICO: Campeche, Chiapas, Coahuila, Colima, Distrito Federal, Guerrero, Jalisco, Michoacán, Nayarit, Nuevo León, Oaxaca, Puebla, Quintana Roo, San Luis Potosí, Sinaloa, Tabasco, Tamaulipas, Veracruz, Yucatán.

NICARAGUA: Chontales, Granada, León, Managua, Masaya, RAA Sur, Río San Juan. PANAMA: Former Canal Zone.

References. Bates 1888, Casey 1915, Chapin 1932, Arrow 1937b, Blackwelder 1944, Figueroa-P. 1952, Gibson and Carrillo 1959, Endrődi 1966, 1985a, Ratcliffe 1986, Maes 1987, 1994, Morón et al. 1985, 1988, Thomas 1993, Ratcliffe and Morón 1997, Sanchez Soto 1998, Navarrete-Heredia et al. 2001, Ratcliffe 2002a, 2003, Restrepo-Giraldo et al. 2003, Fernández García 2006, Ratcliffe and Cave 2006, Pacheco F. et al. 2008, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012, Moore 2012, Ratcliffe et al. 2013, Deloya et al. 2014a, 2016, García-Rivera and Contreras-Ramos 2015.

Remarks. Casey (1915) reported *D. histrio* (= *D. laevipunctatus*) from the nonspecific locality "Amazon Valley". This locality has been interpreted as being either erroneous or possibly Brazilian (Endrődi 1966, Ratcliffe 2003).

Dyscinetus martinezi Joly & Escalona, 2002

Dyscinetus martinezi Joly & Escalona, 2002b: 197–202 [original combination].

Types. Holotype ♂ at CMNC (Henry and Anne Howden Collection) (Joly and Escalona 2002b).

Distribution. ARGENTINA: Salta.

References. Joly and Escalona 2002b, Krajcik 2005, 2012.

Dyscinetus mendax Joly & Escalona, 2010

Dyscinetus mendax Joly & Escalona, 2010: 207, 227–230 [original combination].

Types. Holotype ♂ at MIZA (Joly and Escalona 2010).

Distribution. BOLIVIA: Beni, Santa Cruz. BRAZIL: Acre, Amazonas, Mato Grosso, Pará, Rio de Janeiro, Rondônia. COLOMBIA: Antioquia. ECUADOR: Los Ríos. FRENCH GUIANA: Cayenne. MARTINIQUE: Le Marin. PERU: Loreto, Madre de Dios. SURINAME: Marowijne. TRINIDAD AND TOBAGO: Trinidad. VENEZUELA: Amazonas, Apure, Aragua, Bolívar, Carabobo, Cojedes, Delta Amacuro, Distrito Federal, Falcón, Guárico, Miranda, Monagas, Táchira.

References. Joly and Escalona 2010, Krajcik 2012, Ratcliffe and Cave 2015.

Dyscinetus minor Chapin, 1935

Dyscinetus minor Chapin, 1935a: 74 [original combination].
Dyscinetus laevipunctatus minor Chapin [new subspecies status by Endrődi 1985a: 168].
Dyscinetus minor Chapin [revalidated species status by Ratcliffe and Cave 2015: 121, 129–130].

Types. Type at USNM (Endrődi 1966).

Distribution. CUBA: Artemisa, Cienfuegos, Isla de la Juventud, La Habana, Pinar del Río.

References. Chapin 1935a, Bruner et al. 1975, Endrődi 1966, 1985a, Fernández García 2006, Krajcik 2005, 2012, Ratcliffe and Cave 2015.

Dyscinetus morator (Fabricius, 1798)

Scarabaeus morator Fabricius, 1798: 24 [original combination].
Geotrupes morator (Fabricius) [new combination by Schönherr 1806: 22].
Heteronychus morator (Fabricius) [new combination by Burmeister 1847: 97].
Dyscinetus morator (Fabricius) [new combination by Arrow 1937b: 17].
syn. *Dyscinetus* (*Dyscinetus*) *bitumorosus* Casey, 1915: 171 [original combination].
Dyscinetus bitumorosus Casey [removal of subgeneric classification by Arrow 1937b: 17].
Dyscinetus morator (Fabricius) [synonymy by Endrődi 1966: 393].
syn. *Dyscinetus* (*Dyscinetus*) *borealis* Casey, 1915: 171 [original combination].
Dyscinetus morator (Fabricius) [synonymy by Arrow 1937b: 18].
syn. *Dyscinetus* (*Dyscinetus*) *trachypygus discedens* Casey, 1915: 171 [original combination].
Dyscinetus morator (Fabricius) [synonymy by Arrow 1937b: 18].
syn. *Chalepus trachypygus* Burmeister, 1847: 79 [original combination].
Dyscinetus trachypygus (Burmeister) [new combination by Harold 1869a: 123].
Dyscinetus morator (Fabricius) [synonymy by Prell 1937a: 186].

Types. Lectotype ♂ of *S. morator* deposited at ZMUK, now housed at ZMUC (Endrődi 1966). Lectotype ♂ of *C. trachypygus* at MLUH (Endrődi 1966). Types of the Casey synonyms at USNM (Endrődi 1966).

Distribution. BAHAMAS: Andros, Eleuthera, Great Exuma, Rum Cay, San Salvador. CANADA: Ontario. MEXICO: Coahuila, San Luis Potosí, Tamaulipas, Veracruz. UNITED STATES: Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Missouri, Mississippi, Nebraska, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia.

References. Burmeister 1847, Melsheimer et al. 1853, Reiche 1859, Harold 1869b, Crotch 1873, Popenoe 1876, Schwarz 1878, Henshaw 1885, Smith 1910, King 1914, Casey 1915, Smyth 1915, 1916, Scammell 1917, Leng 1920, Dawson 1922, Leonard 1923, Phillips and Fox 1924, Blatchley 1930, Arrow 1937b, Sanderson 1940, Montgomery and Amos 1940, McAtee 1940, Blackwelder 1944, Saylor 1945, Blackwelder and Blackwelder 1948, Brower 1958, Richmond 1962, Zimsen 1964, Frost 1964, 1966, Moss and Funk 1965, Carrillo-S. et al. 1966, Fincher et al. 1969, Roth et al. 1972, Pfeiffer and Axtell 1980, Endrődi 1966, 1985a, Morrill 1979, Anonymous 1953, 1956, 1971, 1980, Gordon and

Anderson 1981, Foster et al. 1986, Buckingham and Bennett 1989, Staines 1984, 1990, Price and Kring 1991, Forschler and Gardner 1991, Hardy 1991, Crocker et al. 1992, Poole and Gentili 1996, Peck and Thomas 1998, Flanders et al. 2000, Ratcliffe 1991, 2002b, Riley and Wolfe 2003, Shockley and Cline 2004, Buss 2006, Ratcliffe and Paulsen 2008, Smith 2003, 2009, Krajcik 2005, 2012, Ratcliffe et al. 2013, Woodruff 1970, 1973, 2013, Ratcliffe and Cave 2008, 2015, Chong and Hinson 2015, Ratcliffe, but Cave 2017.

Remarks. *Dyscinetus morator* was recorded from Brazil (Riehs 2005) and these data may need to be reevaluated. Records of *D. morator* from Cuba (Gundlach 1891, Leng and Mutchler 1914, Blackwelder 1944, Ratcliffe and Cave 2008), Puerto Rico (Smyth 1915, 1916), and Guatemala (Casey 1915, Endrődi 1966, 1985a) were not verified by major faunistic studies (Ratcliffe et al. 2013, Ratcliffe and Cave 2015).

Dyscinetus olivaceus Höhne, 1923

Dyscinetus olivaceus Höhne, 1923a: 252–253 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Beni. BRAZIL: Acre, Pará. COLOMBIA: Antioquia, Boyacá, Santander. FRENCH GUIANA: Cayenne, Roura. PERU: Loreto. SURINAME. TRINIDAD AND TOBAGO: Trinidad. VENEZUELA: Carabobo, Zulia.

References. Höhne 1923a, Arrow 1937b, Blackwelder 1944, Gruner 1971, ICA 1977, Remillet et al. 1982, Endrődi 1966, 1973a, 1985a, Remillet 1988, Pardo-Locarno et al. 1995, Restrepo-Giraldo et al. 2003, Gasca-Álvarez and Amat-García 2010, Joly and Escalona 2010, Touroult et al. 2010, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, López-García et al. 2015, Ratcliffe et al. 2015.

Dyscinetus ornaticaudus Ratcliffe, 1986

Dyscinetus ornaticaudus Ratcliffe, 1986: 77, 78–79 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 1986).

Distribution. COLOMBIA: Nariño.

References. Ratcliffe 1986, Restrepo-Giraldo et al. 2003, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012.

Dyscinetus paradytis (Ponchel & Dechambre, 2003)

Chalepides paradytis Ponchel & Dechambre, 2003: 267 [original combination].
Dyscinetus paradytis (Ponchel & Dechambre) [new combination by Joly and Escalona 2010: 206, 212].

Types. Holotype ♂ at MNHN (Ponchel and Dechambre 2003).

Distribution. BOLIVIA: Beni. BRAZIL: Mato Grosso. COLOMBIA: Caquetá. PERU: Loreto. VENEZUELA: Amazonas, Bolívar, Delta Amacuro, Guárico.

References. Ponchel and Dechambre 2003, Joly and Escalona 2010, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Dyscinetus picipes (Burmeister, 1847)

Chalepus picipes Burmeister 1847: 79–80 [original combination].
Dyscinetus picipes (Burmeister) [new combination by Harold 1869a: 123].
Dyscinetus (*Dyscinetus*) *picipes* (Burmeister) [new subgeneric classification by Casey 1915: 169].
Dyscinetus picipes (Burmeister) [removal of subgeneric classification by Arrow 1937b: 18].
syn. *Chalepus geminatus* Jacquelin du Val, 1857: 54 [original combination].
Chalepus picipes Burmeister [synonymy by Chevrolat 1865: 31].
syn. *Chalepus obsoletus* LeConte, 1854: 222 [original combination].
Dyscinetus obsoletus (LeConte) [new combination by Harold 1869a: 123].
Dyscinetus picipes (Burmeister) [synonymy by Saylor 1945: 380].
syn. *Dyscinetus* (*Dyscinetus*) *ebeninus* Casey, 1915: 169 [original combination].
Dyscinetus picipes (Burmeister) [synonymy by Chapin 1932: 293].
Dyscinetus puncticauda Casey [synonymy by Arrow 1937b: 18].
Dyscinetus picipes (Burmeister) [synonymy by Blackwelder 1944: 253].
syn. *Dyscinetus* (*Dyscinetus*) *laevissimus* Casey, 1915: 167 [original combination].
Dyscinetus obsoletus (LeConte) [synonymy by Arrow 1937b: 18].
Dyscinetus picipes (Burmeister) [synonymy Saylor 1945: 380].
syn. *Dyscinetus* (*Dyscinetus*) *obsidianus* Casey, 1915: 168 [original combination].
Dyscinetus obsidianus Casey [removal of subgeneric classification by Arrow 1937b: 18].
Dyscinetus picipes (Burmeister) [synonymy by Endrődi 1966: 395].
syn. *Dyscinetus* (*Dyscinetus*) *obsoletus gilanus* Casey, 1915: 168 [original combination].
Dyscinetus obsoletus var. *gilanus* Casey [new infrasubspecific status by Blackwelder 1944: 253].
Dyscinetus picipes (Burmeister) [synonymy by Saylor 1945: 380].
syn. *Dyscinetus picipes* Bates, 1888: 312 [original combination, homonym of *Dyscinetus picipes* (Burmeister)].
Dyscinetus picipes (Burmeister) [synonymy by Chapin 1932: 293].
Dyscinetus punctipes Saylor, 1945: 380 [new replacement name for *Dyscinetus picipes* Bates].
syn. *Dyscinetus picipes puertoricensis* Chalumeau, 1982: 342 [original combination].
Dyscinetus picipes (Burmeister) [synonymy by Ratcliffe and Cave 2015: 132].
syn. *Dyscinetus puncticauda* Casey, 1909: 282–283 [original combination].

Dyscinetus picipes (Burmeister) [synonymy by Chapin 1932: 293].
syn. *Dyscinetus* (*Dyscinetus*) *subquadratus* Casey, 1915: 166 [original combination].
Dyscinetus picipes (Burmeister) [synonymy by Chapin 1932: 293].
Dyscinetus puncticauda Casey [synonymy by Arrow 1937b: 18].
Dyscinetus picipes (Burmeister) [synonymy by Blackwelder 1944: 253].

Types. Endrődi (1966) commented that he doubted the *D. picipes* specimens in the Burmeister Collection at MLUH were the types. Chalumeau (1982) later designated a *Chalepus picipes* Burmeister lectotype ♂ at MLUH. Endrődi (1966) did not examine the types of *C. geminatus.* Type of *C. obsoletus* at MCZ (Endrődi 1966). Type of *D. picipes* Bates at BMNH (Endrődi 1966). The types of the Casey synonyms are at USNM (Endrődi 1966).

Distribution. ANTIGUA AND BARBUDA: Barbuda. BAHAMAS: Great Inagua. CUBA: Artemisa, Camagüey, Ciego de Ávila, Cienfuegos, Granma, Guantánamo, Holguin, Isla de a Juventud, La Habana, Matanzas, Mayabeque, Pinar del Río, Sancti Spíritus, Santiago de Cuba, Villa Clara. DOMINICAN REPUBLIC: La Vega, San Pedro de Macorís, Santo Domingo. GUADELOUPE: Gourbeyre, Marie-Galante, Pointe-à-Pitre, Saint-Claude, Trois-Rivières. HAITI: Ouest. MARTINIQUE. MEXICO: Aguascalientes, Coahuila, Distrito Federal, Durango, Estado de México, Guerrero, Hidalgo, Jalisco, Michoacán, Nayarit, Nuevo León, Puebla, Querétaro, San Luis Potosí, Sinaloa, Tabasco, Tamaulipas, Veracruz. PUERTO RICO: Adjuntas, Aibonito, Añasco, Arecibo, Barceloneta, Bayamón, Cabo Rojo, Carolina, Cayey, Comerio, Dorado, Fajardo, Guánica, Hormigueros, Humacao, Lajas, Loiza, Mayagüez, Orocovis, Ponce, Río Grande, San Germán, San Juan, San Sebastián, Toa Baja, Vega Baja, Yabucoa, Yauco. UNITED STATES: Arizona, Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, New Mexico, Oklahoma, South Dakota, Texas.

References. Sturm 1843, Burmeister 1847, LeConte 1854, Jacquelin du Val 1857, Harold 1869a, Chevrolat 1865, Crotch 1873, Stahl 1882, Henshaw 1885, Bates 1888, Fleutiaux and Sallé 1889, Gundlach 1891, Casey 1909, 1915, Leng and Mutchler 1914, 1917, Leng 1920, Dawson 1922, Stahl and Scaramuzza 1929, Chapin 1932, Arrow 1937b, Blackwelder 1944, Saylor 1945, Paulian 1947, Blackwelder and Blackwelder 1948, Wolcott 1936, 1937, 1948, Barry 1951, Gibson and Carrillo 1959, Van Dinther 1960, Ritcher and Baker 1974, Bruner et al. 1975, Gruner 1975, Kirk and Balsbaugh 1975, Morón and Zaragoza 1976, Chalumeau and Gruner 1977, Martínez 1978b, Chalumeau 1982, Endrődi 1966, 1985a, Maes 1987, 1994, Hardy 1991, Morón et al. 1996, Poole and Gentili 1996, Ratcliffe and Morón 1997, González et al. 1998, Dechambre 1999, Navarrete-Heredia et al. 2001, Ratcliffe 1991, 2002b, Riley and Wolfe 2003, Fernández García 2006, Ratcliffe and Paulsen 2008, Smith 2003, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Lugo et al. 2013, Ratcliffe et al. 2013, Ratcliffe and Cave 2008, 2015, 2017.

Remarks. *Dyscinetus picipes* was reported from Nicaragua (Maes 1987, 1994), but major faunistic studies did not find additional specimens (Ratcliffe and Cave 2006).

Dyscinetus plicatus (Burmeister, 1847)

Chalepus plicatus Burmeister, 1847: 80–81 [original combination].
Dyscinetus plicatus (Burmeister) [new combination by Harold 1869a: 123].

Types. Endrődi (1966) did not find any type material of this species.

Distribution. BRAZIL: Mato Grosso, Paraná, São Paulo.

References. Burmeister 1847, Harold 1869a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Gottsberger 1989, Grossi et al. 2011, Krajcik 2005, 2012.

Dyscinetus questeli Chalumeau, 1982

Dyscinetus questeli Chalumeau, 1982: 340–341 [original combination].

Types. Holotype ♂ of *D. questeli* at USNM (Chalumeau 1982).

Distribution. GUADELOUPE: Gourbeyre, Marie-Galante, Petit-Bourg, Sainte-Anne, Saint-Claude, Saint-Louis, Sainte-Rose, Trois-Rivières.

References. Chalumeau 1982, Krajcik 2005, 2012, Ratcliffe and Cave 2015, Peck 2016.

Dyscinetus rugifrons (Burmeister, 1847)

Chalepus rugifrons Burmeister, 1847: 80 [original combination].
Dyscinetus rugifrons (Burmeister) [new combination by Harold 1869a: 123].
 syn. *Chalepus planatus* Burmeister 1847: 80 [original combination].
 Dyscinetus planatus (Burmeister) [new combination by Harold 1869a: 123].
 Dyscinetus rugifrons (Burmeister) [synonymy by Endrődi 1966: 396].
 syn. *Euetheola sinyaevi* Prokofiev, 2012: 8–10 [original combination].
 Dyscinetus rugifrons (Burmeister) [synonymy by Prokofiev 2013: 131].

Types. Lectotype ♂ of *C. rugifrons* and lectotype ♂ of *C. planatus* both at MLUH (Endrődi 1966). Holotype ♂ of *E. sinyaevi* at IEE (Prokofiev 2012).

Distribution. ARGENTINA: Buenos Aires, Chaco, Córdoba, Entre Ríos, Formosa, Jujuy, Misiones, Santa Fe, Tucumán. BOLIVIA: Cochabamba, Santa Cruz. BRAZIL: Bahia, Espírito Santo, Minas Gerais, Goiás, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, São Paulo. PARAGUAY: Guairá, Itapúa. URUGUAY: Canelones, Montevideo. VENEZUELA: Bolívar.

References. Burmeister 1847, Reiche 1859, Harold 1869a, Steinheil 1874, Ohaus 1900, 1909, Tremoleras 1910, Luederwaldt 1915, Bosq 1936, Arrow 1937b, Anonymous 1900, 1940, Blackwelder 1944, Guimarães 1944, Guérin 1953, Silveira Guido 1965, Perkins 1974, Vidal et al. 1979, Endrődi 1966, 1969a, 1985a, Dennis and Knutson 1988, Costilla 1991, Lachaume 1992, Dechambre 1999, Vincini et al. 2000, Mauco and Favero 2004, Riehs 2005, Soave et al. 2006, Vitorino et al. 2008, Marques and Gil-Santana 2009, Joly and Escalona 2002b, 2010, Berón and Favero 2010, Krajcik 2005, 2012, Breeschoten et al. 2013, Cherman et al. 2013, Prokofiev 2012, 2013, 2014, Albuquerque et al. 2016.

Dyscinetus sculptus Dupuis, 2006

Dyscinetus sculptus Dupuis, 2006: 310–312 [original combination].

Types. Holotype ♂ at FDPC (Dupuis 2006).
Distribution. BOLIVIA: Santa Cruz.
References. Dupuis 2006, Krajcik 2012.

Dyscinetus subsericeus (Burmeister, 1847)

Chalepus subsericeus Burmeister, 1847: 81 [original combination].
Dyscinetus subsericeus (Burmeister) [new combination by Harold 1869a: 123].

Types. Lectotype ♂ at MLUH (Endrődi 1966).
Distribution. BRAZIL.
References. Burmeister 1847, Harold 1869a, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Krajcik 2005, 2012.

Genus *ERIOSCELIS* Burmeister, 1847

Erioscelis Burmeister, 1847: 72–73 [original usage].

Type species. *Apogonia emarginata* Mannerheim, 1829, by monotypy.
Keys. Saylor 1946, Endrődi 1966, 1985a, Ratcliffe 1985, Maes 1994 (Nicaragua), Jameson et al. 2002, Ratcliffe 2003 (Costa Rica and Panama), Ratcliffe and Cave 2006 (Honduras, Nicaragua, and El Salvador), Gasca-Álvarez and Amat-García 2010 (Colombia).
Valid taxa. 5 species.

Erioscelis columbica Endrődi, 1966

Erioscelis columbica Endrődi, 1966: 410, 413–414 [original combination].

Types. Holotype ♂ at HNHM (Endrődi collection) (Endrődi 1966).
Distribution. COSTA RICA: Heredia, Limón. COLOMBIA: Chocó, Cundinamarca, Meta. NICARAGUA: Jinotega, RAA Norte. PANAMA: Bocas del Toro, Colón, Darien, Panamá.

References. Endrődi 1966, 1985a, Young 1986, 1988a, 1988b, 1990, Maes et al. 1997, Beath 1998, 1999, Grayum 1996, Croat 1997, Morón 1997, Ratcliffe 2002a, 2003, Ratcliffe and Cave 2006, Gasca-Álvarez and Amat-García 2010, Neita-Moreno 2011, Krajcik 2005, 2012, Moore 2012, Moore and Jameson 2013.

Erioscelis emarginata (Mannerheim, 1829)

Apogonia emarginata Mannerheim, 1829: 54–55 [original combination].
Erioscelis emarginata (Mannerheim) [new combination by Burmeister 1847: 73].

Types. Type at ZMH (Endrődi 1966).

Distribution. ARGENTINA: Misiones. BRAZIL: Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, São Paulo, Santa Catarina. ECUADOR. FRENCH GUIANA: Cayenne. PARAGUAY: Concepción.

References. Mannerheim 1829, Dejean 1821, 1833, 1836b, Burmeister 1847, Harold 1869b, Schrottky 1908, 1910, Strand 1912, Luederwaldt 1915, 1916, Arrow 1937b, Ogloblin 1941, Blackwelder 1944, Saylor 1946, Martínez 1968a, Gruner 1971, Gottsberger and Amaral 1984, Endrődi 1966, 1985a, Gottsberger and Silberbauer-Gottsberger 1991, Weber et al. 2001, Riehs 2005, Weber 2008, Dötterl et al. 2012, Krajcik 2005, 2012, Breeschoten et al. 2013, Gottsberger et al. 2013, Moore and Jameson 2013, Maia et al. 2014, Pereira et al. 2014, Maldonado et al. 2015, Gottsberger 1986, 1990, 2016.

Erioscelis peruana Saylor, 1946

Erioscelis peruana Saylor, 1946: 63–65 [original combination].

Types. Holotype ♂ at CAS (Saylor Collection) (Endrődi 1966).

Distribution. PERU: Ucayali.

References. Saylor 1946, Endrődi 1966, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2015.

Erioscelis proba (Sharp, 1877)

Cyclocephala proba Sharp, 1877: 135–136 [original combination].
Erioscelis proba (Sharp) [new combination by Endrődi 1966: 410, 412].
syn. *Dyscinetus curtus* Kirsch, 1873: 345–346 [original combination].
Erioscelis proba (Sharp) [synonymy and *nomen oblitum* by Endrődi 1966: 412].
syn. *Erioscelis obtusa* Prell, 1914: 197–198 [original combination].
Erioscelis proba (Sharp) [synonymy by Endrődi 1966: 412].

Types. Lectotype ♂ *E. proba* at MNHN (Endrődi 1966). Type of *D. curtus* at MTD (Endrődi 1966). Holotype of *E. obtusa* at ZMHB (Endrődi 1966).

Distribution. ARGENTINA: Salta. BOLIVIA: Cochabamba, La Paz. BRAZIL: Amazonas. COLOMBIA. ECUADOR: Pastaza. FRENCH GUIANA: Kourou, Sinnamary. PERU: Junín, Pasco.

References. Kirsch 1873, Sharp 1877, Bates 1888, Prell 1914, Höhne 1921, Arrow 1937b, Blackwelder 1944, Saylor 1946, Martínez 1964, Pike et al. 1976, Endrődi 1966, 1985a, Maes 1994, Gibernau et al. 2003, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012, Breeschoten et al. 2013, Moore and Jameson 2013, Ponchel 2006, 2011, 2015, Ratcliffe et al. 2015, Gibernau 2015a, b.

Remarks. *Erioscelis proba* was reported from Nicaragua (Bates 1888, Maes 1994), but major faunistic studies did not find further specimens (Ratcliffe and Cave 2006).

Erioscelis sobrina Höhne, 1921

Erioscelis sobrina Höhne, 1921: 108–109 [original combination].

Types. Lectotype ♂ at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Pernambuco. COLOMBIA. PANAMA: Panamá. VENEZUELA: Carabobo.

References. Höhne 1921, Arrow 1937b, Blackwelder 1944, Roze 1955, Endrődi 1966, 1985a, Ratcliffe 2003, Krajcik 2005, 2012.

Genus *HARPOSCELES* Burmeister, 1847

Harposceles Burmeister, 1847: 22, 34 [original usage].

Type species. *Harposceles paradoxus* Burmeister 1847, by monotypy.

Keys. Endrődi 1966, 1985a, Ratcliffe 1985, Jameson et al. 2002.

Valid taxa. 1 species.

Harposceles paradoxus Burmeister, 1847

Harposceles paradoxus Burmeister, 1847: 35 [original combination].

Types. Lectotype ♂ at MNHN (Endrődi and Dechambre 1976).

Distribution. BRAZIL: Amazonas, Rondônia. ECUADOR: Sucumbíos. FRENCH GUIANA: Cayenne, Roura, St.-Laurent du Maroni. PERU: Loreto, Madre de Dios, San Martín. SURINAME: Brokopondo.

References. Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Endrődi and Dechambre 1976, Dechambre 1979a, Endrődi 1966, 1985a, Couturier and Kahn 1992, Lachaume 1992, Andreazze 2001, Andreazze and da Silva Motta 2002, Touroult et al. 2010, Ponchel 2011, Krajcik 2005, 2012, Saltin and Ratcliffe 2012, Breeschoten et al. 2013, Ratcliffe et al. 2015, Hielkema 2017.

Remarks. Endrődi and Dechambre (1976) reported *H. paradoxus* from Cali (Valle del Cauca Department), Colombia. Saltin and Ratcliffe (2012) considered these data as likely erroneous.

Genus *PELTONOTUS* Burmeister, 1847

Peltonotus Burmeister, 1847: 75 [original usage].

Type species. *Peltonotus morio* Burmeister, 1847, by monotypy.

Keys. Arrow 1910, 1917, Paulian 1958, Jameson and Wada 2004, 2009, Jameson and Jákl 2010 (Sumatra), Jameson and Drumont 2013.

Valid taxa. 25 species.

Peltonotus adelphosimilis Jameson & Wada, 2004

Peltonotus adelphosimilis Jameson & Wada, 2004: 11, 12, 14–16 [original combination].

Types. Holotype ♂ at WADA (Jameson and Wada 2004).

Distribution. INDONESIA: West Kalimantan.

References. Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus animus Jameson & Wada, 2009

Peltonotus animus Jameson & Wada, 2009: 4–6 [original combination].

Types. Holotype ♂ at WADA (Jameson and Wada 2009).

Distribution. INDONESIA: West Sumatra.

References. Jameson and Wada 2009, Jameson and Jákl 2010, Krajcik 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus brunnipennis Benderitter, 1934

Peltonotus brunnipennis Benderitter, 1934: 255–256 [original combination].

Types. Holotype ♂ at MNHN (Jameson and Wada 2004).
Distribution. MALAYSIA: Sabah, Sarawak.
References. Benderitter 1934, Machatschke 1972, Jameson and Wada 2004, 2009, Krajcik 2005, 2012.

Peltonotus cybele Jameson & Wada, 2009

Peltonotus cybele Jameson & Wada, 2009: 6–8 [original combination].

Types. Holotype ♀ at WADA (Jameson and Wada 2009).
Distribution. INDONESIA: West Sumatra.
References. Jameson and Wada 2009, Jameson and Jákl 2010, Krajcik 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus deltamentum Jameson & Wada, 2004

Peltonotus deltamentum Jameson & Wada, 2004: 9, 18–19 [original combination].

Types. Holotype ♂ at WADA (Jameson and Wada 2004).
Distribution. INDONESIA: West Kalimantan.
References. Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus favonius Jameson & Wada, 2009

Peltonotus favonius Jameson & Wada, 2009: 8–11 [original combination].

Types. Holotype ♂ at NSMT (Jameson and Wada 2009).
Distribution. MYANMAR: Kachin. VIETNAM: Lâm Đồng.
References. Jameson and Wada 2009, Krajcik 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus fujiokai Jameson & Wada, 2004

Peltonotus fujiokai Jameson & Wada, 2004: 10, 12, 19–21 [original combination].

Types. Holotype ♂ at WADA (Jameson and Wada 2004).
Distribution. INDONESIA: West Kalimantan. MALAYSIA: Sabah.
References. Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Jameson and Drumont 2013.

Peltonotus gracilipodus Jameson & Wada, 2004

Peltonotus gracilipodus Jameson & Wada, 2004: 10, 11, 21–23 [original combination].

Types. Holotype ♂ at WADA (Jameson and Wada 2004).

Distribution. INDONESIA: North Sumatra, West Sumatra.

References. Jameson and Wada 2004, 2009, Jameson and Jákl 2010, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus karubei Muramoto, 2000

Peltonotus karubei Muramoto, 2000: 9–11 [original combination].

Types. Holotype ♂ at Muramoto Collection (Jameson and Wada 2004).

Distribution. VIETNAM: Lâm Đồng.

References. Muramoto 2000, Jameson and Wada 2004, 2009, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus kyojinus Jameson & Wada, 2004

Peltonotus kyojinus Jameson & Wada, 2004: 12, 25–26 [original combination].

Types. Holotype ♂ at FUJI (Jameson and Wada 2004).

Distribution. INDONESIA: West Kalimantan.

References. Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Jameson and Drumont 2013.

Peltonotus malayensis Arrow, 1910

Peltonotus malayensis Arrow, 1910: 155–156 [original combination].

Types. Lectotype ♀ at BMNH (Jameson and Wada 2004).

Distribution. BRUNEI: Temburong. INDONESIA: West Kalimantan. MALAYSIA: Sarawak.

References. Arrow 1910, Ohaus 1918, 1934b, Machatschke 1972, Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus morio Burmeister, 1847

Peltonotus morio Burmeister, 1847: 75 [original combination].
syn. *Peltonotus morio sawaii* Miyake, 2000: 112–113 [original combination]. *Peltonotus morio* Burmeister [synonymy by Jameson and Wada 2004: 29].

Types. Neotype ♂ of *P. morio* at RIEB (Jameson and Wada 2004). Holotype of *P. morio sawaii* was missing from RIEB (Jameson and Wada 2004).

Distribution. BHUTAN. INDIA: Assam, Manipur, Meghalaya, Sikkim, West Bengal. MYANMAR: Chin, Lumbini, Tanintharyi. NEPAL: Gandaki, Narayani. THAILAND: Chiang Mai. VIETNAM: Lào Cai.

References. Burmeister 1847, Harold 1869b, Seidlitz 1905, Arrow 1910, 1917, Lucas 1918b, Ohaus 1934b, Abdullah and Roohi 1969, Machatschke 1972, Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Moore 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Remarks. *Peltonotus morio* has been reported from Bangladesh (Abdullah and Roohi 1969, Jameson and Wada 2004), but these records need to be confirmed.

Peltonotus mushiyaus Jameson & Wada, 2009

Peltonotus mushiyaus Jameson & Wada, 2009: 11–12 [original combination].

Types. Holotype ♀ at NSMT (Jameson and Wada 2009).

Distribution. MALAYSIA: Sabah.

References. Jameson and Wada 2009, Krajcik 2012, Jameson and Drumont 2013.

Peltonotus nasutus Arrow, 1910

Peltonotus nasutus Arrow, 1910: 155 [original combination].

Types. Lectotype ♂ at BMNH (Jameson and Wada 2004).

Distribution. CAMBODIA: Pailin, Pursat, Ratanakiri. CHINA: Guangxi, Guizhou, Yunnan. LAOS: Attapeu, Bokeo, Champasak, Luang Namtha, Vientiane, Xiangkhouang. MYANMAR: Rakhine. THAILAND: Chiang Mai, Chiang Rai, Chumphon, Kanchanaburi, Loei, Mae Hong Son, Nakhon Ratchasima, Nan, Prachuap Khiri Khan, Tak. VIETNAM.

References. Fairmaire 1904, Arrow 1910, 1917, Ohaus 1918, 1934b, Abdullah and Roohi 1969, Machatschke 1972, 1974, Jameson and Wada 2004, 2009, Grimm 2009, Danell 2010, Jameson and Drumont 2013, Krajcik 2005, 2012, Breeschoten et al. 2013, Sima and Srivastava 2014a, 2014b, 2016, Sites 2017.

Remarks. *Peltonotus nasutus* may occur in Bangladesh and Nepal, but these records may also refer to misidentified *P. morio* (Ohaus 1918, Abdullah and Roohi 1969, Machatschke 1972, 1974, Jameson and Wada 2004). *Peltonotus nasutus* was reported from Rajasthan state, India (Sima and Srivastava 2014a, 2014b, 2016). These data should be re-evaluated as they would represent a significant western extension of the known range of *Peltonotus*.

Peltonotus nethis Jameson & Wada, 2004

Peltonotus nethis Jameson & Wada, 2004: 11, 33–34 [original combination].

Types. Holotype ♀ at ZMHB (Jameson and Wada 2004).

Distribution. MALAYSIA: Sabah.

References. Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Jameson and Drumont 2013.

Peltonotus podocrassus Jameson & Wada, 2004

Peltonotus podocrassus Jameson & Wada, 2004: 10, 11, 34–37 [original combination].

Types. Holotype ♂ at UNSM (Jameson and Wada 2004).

Distribution. MALAYSIA: Pahang, Perak.

References. Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus pruinosus Arrow, 1910

Peltonotus pruinosus Arrow, 1910: 156–157 [original combination].

Types. Holotype ♀ at BMNH (Jameson and Wada 2004).

Distribution. INDIA: Assam.

References. Arrow 1910, 1917, Ohaus 1918, 1934b, Machatschke 1972, Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Jameson and Drumont 2013.

Peltonotus rubripennis Miyake & Yamaya, 1994

Peltonotus rubripennis Miyake & Yamaya, 1994: 42–43 [original combination].

Types. Holotype ♀ at Yamaya Collection (Nigata, Japan) (Jameson and Wada 2004).

Distribution. MALAYSIA: Sabah, Sarawak.

References. Miyake and Yamaya 1994, Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus silvanus Jameson & Wada, 2004

Peltonotus silvanus Jameson & Wada, 2004: 10, 12, 40–42 [original combination].

Types. Holotype ♂ at FUJI (Jameson and Wada 2004).

Distribution. INDONESIA: West Kalimantan. MALAYSIA: Sarawak.

References. Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus similis Arrow, 1931

Peltonotus similis Arrow, 1931: 612 [original combination].

syn. *Peltonotus sakaii* Miyake and Yamaya, 1994: 39–42 [original combination]. *Peltonotus similis* Arrow [synonymy by Jameson and Wada 2004: 42].

Types. Lectotype ♂ of *P. similis* at BMNH (Jameson and Wada 2004). Holotype of *P. sakaii* at NSMT (Jameson and Wada 2004).

Distribution. MALAYSIA: Sabah, Sarawak.

References. Arrow 1931, Ohaus 1934b, Machatschke 1972, Miyake and Yamaya 1994, Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus sisyrus Jameson & Wada, 2004

Peltonotus sisyrus Jameson & Wada, 2004: 44–46 [original combination].

Types. Holotype ♂ at FUJI (Jameson and Wada 2004).

Distribution. INDONESIA: Aceh.

References. Jameson and Wada 2004, 2009, Jameson and Jákl 2010, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus suehirogarus Jameson & Wada, 2004

Peltonotus suehirogarus Jameson & Wada, 2004: 46–47 [original combination].

Types. Holotype ♀ at WADA (Jameson and Wada 2004).

Distribution. INDONESIA: West Kalimantan. MALAYSIA: Sarawak.

References. Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Jameson and Drumont 2013.

Peltonotus talangensis Jameson & Jákl, 2010

Peltonotus talangensis Jameson & Jákl, 2010: 143, 148–152 [original combination].

Types. Holotype ♂ at NMPC (Jameson and Jákl 2010).

Distribution. INDONESIA: West Sumatra.

References. Jameson and Jákl 2010, Krajcik 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Peltonotus tigerus Jameson & Wada, 2009

Peltonotus tigerus Jameson and Wada 2009: 12–14 [original combination].

Types. Holotype ♀ at QSBG (Jameson and Wada 2009).

Distribution. THAILAND: Phetchabun.

References. Jameson and Wada 2009, Krajcik 2012, Jameson and Drumont 2013.

Peltonotus vittatus Arrow, 1910

Peltonotus vittatus Arrow, 1910: 157 [original combination].

Types. Holotype ♀ at MNHN (Jameson and Wada 2004).

Distribution. MALAYSIA: Sabah, Sarawak.

References. Arrow 1910, Ohaus 1918, 1934b, Machatschke 1972, Jameson and Wada 2004, 2009, Krajcik 2005, 2012, Breeschoten et al. 2013, Jameson and Drumont 2013.

Genus *RUTELORCYTES* Arrow, 1908

Ruteloryctes Arrow, 1908: 335–336 [original usage].

Type species. *Ruteloryctes tristis* Arrow, 1908, by monotypy.

Keys. Janssens 1942, Paulian 1954 (Sub-Saharan Africa), Endrődi 1960 (Southern Africa), 1966, 1985a, Jameson et al. 2002.

Valid taxa. 2 species.

Ruteloryctes bis Dechambre, 2006

Ruteloryctes bis Dechambre, 2006b: 53–55 [original combination].

Types. Holotype ♂ at RPDC (Dechambre 2006b).
Distribution. CAMEROON: Centre Province.
References. Dechambre 2006b, Krajcik 2012.

Ruteloryctes morio (Fabricius, 1798)

Melolontha morio Fabricius, 1798: 131 [original combination].
Chalepus morio (Fabricius) [new combination by Hope 1837: 71].
Heteronychus morio (Fabricius) [new combination by Burmeister 1847: 95].
Ruteloryctes morio (Fabricius) [new combination by Prell 1937a: 188].
syn. *Ruteloryctes tristis* Arrow, 1908: 336 [original combination].
Ruteloryctes morio (Fabricius) [synonymy by Paulian 1954: 1123].
syn. *Melolontha hottentotta* Schönherr, 1817: 187 [original combination].
Heteronychus hottentotta (Schönherr) [new combination by Burmeister 1847: 95].
Ruteloryctes morio (Fabricius) [synonymy by Arrow 1937b: 20].

Types. Endrődi (1966) stated that there was a "type" at MNHN (Desfontaines Collection) without further details. Types of *R. tristis* and *M. hottentotta* were not reported on by Endrődi (1966). Arrow (1908) stated that he had specimens of *R. tristis* at the BMNH and in the Oberthür Collection. Prell (1937a) examined a female specimen of *M. morio* at ZMUK (now at ZMUC), and it is possible that this Fabrician specimen is still in that collection.

Distribution. ANGOLA. BÉNIN. CAMEROON. CHAD: Barh Köh. CÔTE D'IVOIRE: Zanzan. DEMOCRATIC REPUBLIC OF THE CONGO: Bandundu, Bas-Congo, Équateur, Orientale. GUINEA. GUINEA-BISSAU. NIGERIA: Cross River. SENEGAL: Kaolack, Tambacounda. SIERRA LEONE. THE GAMBIA.

References. Fabricius 1798, 1801, Schönherr 1817, Hope 1837, Burmeister 1847, Harold 1869b, Arrow 1908, 1937b, Prell 1937a, Janssens 1942, Burgeon 1947, Paulian 1954, Zimsen 1964, Endrődi 1966, 1971b, 1985a, Krell et al. 2003, Ervik and Knudsen 2003, Hirthe and Porembski 2003, Krajcik 2005, 2012, Breeschoten et al. 2013, Moore and Jameson 2013.

Genus *STENOCRATES* Burmeister, 1847

Stenocrates Burmeister, 1847: 83–84 [original usage].

Type species. *Scarabaeus laborator* Fabricius, subsequent designation by Casey 1915: 114.

Keys. Endrődi 1966, 1985a, Morón 1979 (Veracruz, Mexico), Morón et al. 1985 (Chiapas, Mexico), Morón et al. 1985 (Jalisco, Mexico), Jameson et al. 2002, Ratcliffe 2003 (Costa Rica and Panama), Ratcliffe and Cave 2006 (Honduras, Nicaragua, and El Salvador), Ratcliffe et al. 2013 (Mexico, Guatemala, and Belize), Ratcliffe and Cave 2015 (West Indies), Ratcliffe 2015 (catalog), Pardo-Locarno 2013 (Valle del Cauca, Colombia), Villalobos-Moreno et al. 2017 (Colombia), Dupuis 2017 (French Guiana).

Valid taxa. 52 species and subspecies

Stenocrates agricola Dechambre & Hardy, 2004

Stenocrates agricola Dechambre & Hardy, 2004: 210 [original combination].

Types. Holotype ♂ at CMNC (Henry and Anne Howden Collection) (Dechambre and Hardy 2004).

Distribution. ARGENTINA. PARAGUAY.

References. Dechambre and Hardy 2004, Krajcik 2012, Ratcliffe 2015.

Stenocrates amazonicus Ratcliffe, 1978

Stenocrates amazonicus Ratcliffe, 1978: 491–492 [original combination].

Types. Holotype ♂ at INPA (Ratcliffe 1978).

Distribution. BRAZIL: Amazonas. SURINAME.

References. Endrődi 1985a, Krajcik 2005, 2012, Ratcliffe 1978, 2015.

Stenocrates ariasi Ratcliffe, 1978

Stenocrates ariasi Ratcliffe, 1978: 492–492 [original combination].

Types. Holotype ♂ at INPA (Ratcliffe 1978).

Distribution. BOLIVIA: Amazonas. BRAZIL.

References. Endrődi 1985a, Krajcik 2005, 2012, Ratcliffe 1978, 2015.

Stenocrates batesi Dechambre, 1979

Stenocrates batesi Dechambre, 1979c: 61 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979c).

Distribution. BRAZIL: São Paulo. COLOMBIA. ECUADOR.

References. Dechambre 1979c, Endrődi 1985a, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates beckeri Howden, 1970

Stenocrates beckeri Howden, 1970: 9–10 [original combination].
syn. *Stenocrates davisorum* Endrődi, 1979: 217–218 [original combination].
Stenocrates beckeri Howden [synonymy by Ratcliffe and Cave 2015: 139].

Types. Holotype ♂ of *S. beckeri* at CNC (Howden 1970). Holotype ♂ of *S. davisorum* at USNM (Endrődi 1979).

Distribution. JAMAICA: Clarendon, Manchester, Portland, St. Catherine, Trelawny, Westmoreland.

References. Howden 1970, Endrődi 1979, 1985a, Krajcik 2005, 2012, Ratcliffe and Cave 2015, Ratcliffe 2015.

Stenocrates bicarinatus Robinson, 1947

Stenocrates bicarinatus Robinson, 1947: 233–234 [original combination].
syn. *Stenocrates difficilis* Endrődi, 1966: 417, 427 [original combination].
Stenocrates bicarinatus Robinson [synonymy by Ratcliffe 2003: 241].

Types. Holotype ♂ of *S. bicarinatus* at USNM (Mark Robinson Collection) (Robinson 1947). Holotype ♂ of *S. difficilis* at ZSMC (Endrődi 1966).

Distribution. BELIZE: Cayo, Orange Walk, Stann Creek, Toledo. BRAZIL: Pará. COLOMBIA: Cauca, Caquetá, Chocó, Santander, Valle del Cauca. EL SALVADOR: San Salvador. FRENCH GUIANA: St.-Élie. GUATEMALA: Alta Verapaz, Baja Verapaz, Guatemala, Huehuetenango, Izabal, Petén, Santa Rosa. HONDURAS: Atlántida, Comayagua, Cortés, Gracias a Dios, Olancho. MEXICO: Campeche, Chiapas, Guerrero, Jalisco, Oaxaca, Puebla, San Luis Potosí, Tabasco, Veracruz. NICARAGUA: Chontales, Granada, RAA Norte, RAA Sur, Río San Juan. PANAMA: Colón, Darien, Former Canal Zone, Panamá. SURINAME.

References. Robinson 1947, Endrődi 1966, 1969b, 1985a, Dechambre 1979a, Morón et al. 1985, Thomas 1993, Ratcliffe and Morón 1997, Maes et al. 1997, Ratcliffe 1978, 2002a, 2003, Restrepo et al. 2003, Dechambre and Hardy 2004, Pardo-Locarno et al. 2005a, Ratcliffe and Cave 2006, Gasca-Álvarez and Amat-García 2010, Neita-Moreno 2011, Ponchel 2011, Krajcik 2005, 2012, Pardo-Locarno 2013, Ratcliffe et al. 2013, López-García et al. 2015, Ratcliffe 2015, Dupuis 2017.

Stenocrates bolivianus Dechambre, 1979

Stenocrates bolivianus Dechambre, 1979c: 62 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979c).

Distribution. BOLIVIA. BRAZIL.

References. Dechambre 1979c, Krajcik 2005, 2012, Endrődi 1985a, Ratcliffe 2015.

Stenocrates bollei Dechambre, 1985

Stenocrates bollei Dechambre, 1985: 142 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1985).

Distribution. BRAZIL. VENEZUELA: Amazonas.

References. Dechambre 1985, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates caiporae Ratcliffe, 2014

Stenocrates caiporae Ratcliffe, 2014: 666–668 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2014).

Distribution. BRAZIL: Amazonas.

References. Ratcliffe 2014, 2015.

Stenocrates canuli Delgado, 1991

Stenocrates canuli Delgado, 1991: 103–106 [original combination].

Types. Holotype ♂ at MXAL (Delgado 1991).

Distribution. BELIZE: Belize, Orange Walk, Stann Creek, Toledo. EL SALVADOR: San Salvador. GUATEMALA: Alta Verapaz, Chiquimula, Izabal, Petén. HONDURAS: Atlántida, Comayagua, Gracias a Dios. MEXICO: Campeche, Chiapas, Oaxaca, Quintana Roo, Veracruz, Yucatán. NICARAGUA: Jinotega, RAA Sur.

References. Delgado 1991, Ratcliffe and Morón 1997, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Ratcliffe et al. 2013, Ratcliffe 2015.

Stenocrates carbo Prell, 1937

Stenocrates carbo Prell, 1937c: 9–10 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).

Distribution. BRAZIL: Amazonas. FRENCH GUIANA. PERU.

References. Prell 1937c, Blackwelder 1944, Dechambre 1979c, 1985, Endrődi 1966, 1985a, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe 2015, Ratcliffe et al. 2015, Dupuis 2017.

Stenocrates carinatus **Endrődi, 1966**

Stenocrates carinatus Endrődi, 1966: 417, 423 [original combination].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).
Distribution. BOLIVIA: Beni. BRAZIL: Rio de Janeiro.
References. Endrődi 1966, 1985a, Krajcik 2005, 2012.

Stenocrates celatus **Prell, 1937**

Stenocrates celatus Prell, 1937c: 10 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).
Distribution. BRAZIL: Mato Grosso, Santa Catarina. FRENCH GUIANA. GUYANA. PERU: Junín, Loreto.
References. Prell 1937c, Endrődi 1966, 1967c, 1985a, Krajcik 2005, 2012, Ratcliffe et al. 2013, Ratcliffe 2015.
Remarks. *Stenocrates celatus* was reported from Mexico and the United States (Arizona) (Endrődi 1966, 1985a). These data are erroneous, and *S. celatus* is a South American species (Ratcliffe et al. 2013). Dupuis (2017) does not list *S. celatus* as occurring in French Guiana.

Stenocrates clipeatus **Endrődi, 1966**

Stenocrates clipeatus Endrődi, 1966: 417, 424–425 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).
Distribution. BOLIVIA: Cochabamba. BRAZIL. COLOMBIA. FRENCH GUIANA. PERU: Loreto.
References. Dechambre 1979c, Endrődi 1966, 1969b, 1985a, Moragues 2010, Ponchel 2011, Krajcik 2005, 2012, Ratcliffe et al. 2015, Ratcliffe 2015.
Remarks. Dupuis (2017) does not list *S. clipeatus* as occurring in French Guiana.

Stenocrates cognatus **Endrődi, 1966**

Stenocrates cognatus Endrődi, 1966: 417, 425–426 [original combination].

Types. Holotype ♂ at NHMB (Frey Collection) (Endrődi 1966).
Distribution. COLOMBIA: Cundinamarca.

References. Endrődi 1966, 1967c, 1985a, Restrepo et al. 2003, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012, Breeschoten et al. 2013, López-García et al. 2015, Ratcliffe 2015.

Stenocrates cultor cultor Burmeister, 1847

Stenocrates cultor Burmeister, 1847: 84–85 [original combination].

Types. Lectotype ♂ at MLUH (Endrődi 1966).

Distribution. ARGENTINA. BOLIVIA: La Paz, Santa Cruz. BRAZIL: Bahia, Espírito Santo, Mato Grosso, Pernambuco, Rio de Janeiro, Santa Catarina, São Paulo. ECUADOR: Pichincha. FRENCH GUIANA: Campoi. PARAGUAY: Alta Paraná. PERU. VENEZUELA: Carabobo.

References. Dejean 1833, 1836b, Burmeister 1847, Redtenbacher 1868, Harold 1869b, Arrow 1937b, Blackwelder 1944, Guimarães 1944, Gruner 1971, Endrődi 1966, 1969a, 1985a, Venzon and Pallini Filho 1995, Marques and Gil-Santana 2009, Ponchel 2011, Krajcik 2005, 2012, Ratcliffe et al. 2015, Dupuis 2017.

Remarks. *Stenocrates cultor* was reported from Honduras (Endrődi 1966, 1985a). Subsequent surveys of Central America have not found additional specimens (Ratcliffe and Cave 2006).

Stenocrates cultor inelegans Arrow, 1913

Stenocrates inelegans Arrow, 1913: 465–466 [original combination].

Stenocrates cultor inelegans Arrow [new subspecies status by Dupuis and Dechambre 1995: 61].

syn. *Stenocrates carbunculus* Prell, 1937c: 10 [original combination].

Stenocrates cultor inelegans Arrow [synonymy by Dupuis and Dechambre 1995: 59].

Types. Type of *S. inelegans* at BMNH (Endrődi 1966). Holotype ♂ of *S. carbunculus* at ZMHB (Endrődi 1966).

Distribution. BOLIVIA: Beni, Cochabamba. BRAZIL: Acre, Amazonas, Goiás Rondônia. COLOMBIA. SURINAME. VENEZUELA.

References. Arrow 1913, 1937b, Prell 1937c, Blackwelder 1944, Gruner 1971, Endrődi 1966, 1967c, 1973a, 1985a, Dupuis and Dechambre 1995, Andreazze and Fonseca 1998, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe 2015.

Remarks. Gruner (1971) reported *S. cultor inelegans* from French Guiana, but Dupuis (2017) does not list this subspecies as occurring there.

Stenocrates dubius Endrődi, 1966

Stenocrates dubius Endrődi, 1966: 418, 427–428 [original combination].

Types. Holotype ♂ at BMNH (Endrődi 1966).
Distribution. BOLIVIA: Cochabamba.
References. Endrődi 1966, 1967c, 1985a, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates duplicatus Endrődi, 1967

Stenocrates duplicatus Endrődi, 1967c: 6–8 [original combination].
syn. *Stenocrates frater* Dechambre, 2006a: 19 [original combination].
Stenocrates duplicatus Endrődi [synonymy by Ratcliffe et al. 2013: 257].

Types. Holotype ♂ of *S. duplicatus* at ZMHB (Endrődi 1967c). Holotype ♂ of *S. frater* at RPDC (Dechambre 2006a).
Distribution. ECUADOR: Guayas. GUATEMALA: Petén. MEXICO: Chiapas, Jalisco, Oaxaca, Veracruz.
References. Endrődi 1967c, 1985a, Morón et al. 1988, Thomas 1993, Ratcliffe and Morón 1997, Navarrete-Heredia et al. 2001, Dechambre 2006a, Krajcik 2005, 2012, Ratcliffe et al. 2013, Ratcliffe 2015, Dupuis 2017.
Remarks. *Stenocrates duplicatus* was reported from French Guiana (Moragues 2010), but these specimens were later determined to be a new species, *S. seag* Dupuis (Dupuis 2017).

Stenocrates eniocanoi Ratcliffe & Cave, 2013

Stenocrates eniocanoi Ratcliffe & Cave, 2013: 252, 258–260 [original combination in Ratcliffe et al. 2013].

Types. Holotype ♂ at UNSM (Ratcliffe et al. 2013).
Distribution. GUATEMALA: Petén. MEXICO: Chiapas.
References. Ratcliffe et al. 2013, Ratcliffe 2015.

Stenocrates haackae Ratcliffe, 1977

Stenocrates haackae Ratcliffe, 1977: 433– 444 [original combination].

Types. Holotype ♂ at INPA (Ratcliffe 1977).
Distribution. BRAZIL: Amazonas. ECUADOR.

References. Krajcik 2005, 2012, Ratcliffe 1977, 1978, 2014, 2015, Hielkema 2017.

Remarks. See Hielkema (2017) for a discussion on the correct spelling of "*haackae*".

Stenocrates hardyi Dechambre, 1985

Stenocrates hardyi Dechambre, 1985: 143 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1985).

Distribution. COSTA RICA: Alajuela, Heredia, Limón, Puntarenas. NICARAGUA: RAA Norte. PANAMA: Coclé, Colón, Former Canal Zone, Panamá.

References. Dechambre 1985, Maes et al. 1997, Ratcliffe and Cave 2006, Krajcik 2005, 2012, Ratcliffe 2002a, 2003, 2015.

Stenocrates hastatus Ratcliffe, 2015

Stenocrates hastatus Ratcliffe, 2015: 775–776 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2015).

Distribution. BRAZIL: Esprírito Santo, Rio de Janeiro.

References. Ratcliffe 2015.

Stenocrates hiekei Endrődi, 1967

Stenocrates hiekei Endrődi, 1967c: 4–5 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1967c).

Distribution. VENEZUELA: Carabobo.

References. Endrődi 1967c, 1985a, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates holomelanus (Germar, 1824)

Geotrupes holomelanus Germar, 1824: 116–117 [original combination].
Stenocrates holomelanus (Germar) [new combination by Burmeister 1847: 84].
syn. *Dyscinetus* (*Dyscinetus*) *parensis* Casey, 1915: 172 [original combination].
Stenocrates holomelanus (Germar) [synonymy by Arrow 1937b: 19].

Types. Endrődi (1966) did not find the type material of *G. holomelanus*. Type of *D. parensis* at USNM (Endrődi 1966).

Distribution. ARGENTINA: Buenos Aires, Chaco. BOLIVIA. BRAZIL: Acre, Amazonas, Bahia, Pará, São Paulo. COLOMBIA: Cundinamarca. ECUADOR: Morona Santiago. FRENCH GUIANA: Cayenne, Kourou, Sinnamary. PARAGUAY: Asunción. SURINAME.

References. Germar 1824, Burmeister 1847, Reiche 1859, Harold 1869b, Casey 1915, Arrow 1937b, Blackwelder 1944, Gruner 1971, Dechambre 1979a, 1985, Endrődi 1966, 1967c, 1969a, 1985a, Restrepo et al. 2003, Gasca-Álvarez and Amat-García 2010, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, Ratcliffe 2015, Albuquerque et al. 2016, Dupuis 2018.

Stenocrates howdeni Dechambre & Hardy, 2004

Stenocrates howdeni Dechambre & Hardy, 2004: 211[original combination].

Types. Holotype ♂ at CMNC (Dechambre and Hardy 2004).

Distribution. URUGUAY.

References. Dechambre and Hardy 2004, Krajcik 2012, Ratcliffe 2015.

Stenocrates impeditus Dechambre & Hardy, 2004

Stenocrates impeditus Dechambre and Hardy 2004: 212–213 [original combination].

Types. Holotype ♂ at CMNC (Dechambre and Hardy 2004).

Distribution. BRAZIL: Minas Gerais (Dechambre and Hardy 2004).

References. Dechambre and Hardy 2004, Krajcik 2012, Ratcliffe 2015.

Stenocrates laborator (Fabricius, 1775)

Scarabaeus laborator Fabricius: 18 [original combination].
Geotrupes laborator (Fabricius) [new combination by Eschscholtz 1822: 121].
Stenocrates laborator (Fabricius) [new combination by Burmeister 1847: 85].
syn. *Geotrupes globator* Thunberg, 1814: 400 [original combination].
Stenocrates laborator (Fabricius) [synonymy by Endrődi 1966: 430].
syn. *Geotrupes thoracicus* Eschscholtz, 1818: 453–454 [original combination].
Geotrupes laborator var. *thoracicus* Eschscholtz [new infrasubspecific status by Eschscholtz 1822: 121].
Stenocrates laborator var. *thoracicus* (Eschscholtz) [new combination by Arrow 1937b: 19].
Stenocrates laborator (Fabricius) [synonymy by Endrődi 1985a: 184].
syn. *Stenocrates australis* Endrődi, 1973b: 319 [original combination].
Stenocrates laborator (Fabricius) [synonymy by Ratcliffe 2015: 778].

Types. Type of *S. laborator* at BMNH (Endrődi 1966). The types of *G. globator* and *G. thoracicus* were not found by Endrődi (1966). Holotype ♂ of *S. laborator australis* at NHMB (Frey Collection) (Endrődi 1973b).

Distribution. ARGENTINA. BOLIVIA. BRAZIL: Acre, Amazonas, Espírito Santo, Mato Grosso, Rio de Janeiro, São Paulo. COLOMBIA: Valle del Cauca. PARAGUAY: Alto Paraná, Caaguazú, Itapúa. SURINAME.

References. Fabricius 1775, Olivier 1789, Thunberg 1814, Eschscholtz 1818, 1822, Dejean 1833, 1836b, Burmeister 1847, Harold 1869b, Bates 1888, Luederwaldt 1915, Arrow 1937b, Blackwelder 1944, Robinson 1947, Lima 1953, Zimsen 1964, Endrődi 1966, 1967c, 1973b, 1985a, Restrepo et al. 2003, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012, Ratcliffe et al. 2013, Ratcliffe 2015.

Remarks. *Stenocrates laborator* was reported from Mexico and Guatemala (Bates 1888, Arrow 1937b, Blackwelder 1944, Endrődi 1966, 1985a). These records are likely based on misidentifications, and *S. laborator* is a South American species (Ratcliffe et al. 2013).

Stenocrates laceyi Ratcliffe, 1978

Stenocrates laceyi Ratcliffe, 1978: 493–494 [original combination].

Types. Holotype ♂ at INPA (Ratcliffe 1978).

Distribution. BRAZIL: Amazonas.

References. Endrődi 1985a, Krajcik 2005, 2012, Ratcliffe 1978, 2015.

Stenocrates lachaumei Dechambre, 1985

Stenocrates lachaumei Dechambre, 1985: 143–144 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1985).

Distribution. BOLIVIA: Cochabamba, La Paz.

References. Dechambre 1985, Ratcliffe and Morón 1997, Krajcik 2005, 2012, Ratcliffe et al. 2013, Ratcliffe 2015.

Remarks. A specimen of *S. lachaumei* was reported from Veracruz, Mexico (Ratcliffe and Morón 1997, Ratcliffe et al. 2013). However, these data are considered either erroneous or the specimen was inadvertently transported there from South America (Ratcliffe et al. 2013).

Stenocrates laevicollis Kirsch, 1870

Stenocrates laevicollis Kirsch, 1870: 357–358 [original combination, pages incorrectly numbered].

Types. Lectotype ♀ at MTD (Endrődi 1966).

Distribution. BELIZE: Stann Creek. COLOMBIA: Antioquia, Boyacá, Capital District, Cundinamarca, Meta, Santander, Tolima, Valle del Cauca. COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas. ECUADOR: Morona Santiago. GUATEMALA: Alta Verapaz, Izabal. HONDURAS: Gracias a Dios, El Paraíso, Olancho. MEXICO: Chiapas, Hidalgo, Veracruz. NICARAGUA: Granada, Jinotega, RAA Norte, Río San Juan. PANAMA: Chiriquí, Panamá.

References. Kirsch 1870, Arrow 1937b, Blackwelder 1944, Dechambre 1985, Endrődi 1966, 1985a, Thomas 1993, Ratcliffe and Morón 1997, Maes et al. 1997, Ratcliffe 2002a, 2003, Restrepo et al. 2003, Ratcliffe and Cave 2006, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012, Ratcliffe et al. 2013, García-López et al. 2013, López-García et al. 2015, Ratcliffe 2015.

Stenocrates latus Dechambre, 1979

Stenocrates latus Dechambre, 1979c: 63 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979c).

Distribution. BRAZIL: Amazonas. COLOMBIA: Amazonas. ECUADOR.

References. Dechambre 1979c, Krajcik 2005, 2012, Endrődi 1985a, Ratcliffe 2015.

Stenocrates lecourti Dechambre, 2006

Stenocrates lecourti Dechambre, 2006a: [original combination].

Types. Holotype ♂ at RPDC (Dechambre 2006a).

Distribution. PANAMA.

References. Dechambre 2006a, Krajcik 2012, Ratcliffe 2015.

Stenocrates lichyi Dechambre, 1979

Stenocrates lichyi Dechambre, 1979c: 63–64 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979c).

Distribution. BRAZIL: Amazonas. VENEZUELA: Amazonas, Guárico.

References. Dechambre 1979c, Endrődi 1985a, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates ligneus Arrow, 1911

Stenocrates ligneus Arrow, 1911: 168 [original combination].

Types. Type at BMNH (Endrődi 1966).

Distribution. BRAZIL: Amazonas, Pará. COLOMBIA. PARAGUAY.

References. Arrow 1911, 1937b, Blackwelder 1944, Endrődi 1966, 1985a, Andreazze and Fonseca 1998, Dechambre and Hardy 2004, Ulmen et al. 2010, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates mahunkai Endrődi, 1973

Stenocrates mahunkai Endrődi, 1973a: 59–61 [original combination].

Types. Holotype ♂ at HNHM (Endrődi 1973a).

Distribution. BRAZIL: Amazonas. BOLIVIA: Beni. ECUADOR.

References. Dechambre 1985, Andreazze and da Silva Motta 2002, Endrődi 1973a, 1985a, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates mimeomus Ratcliffe, 2015

Stenocrates mimeomus Ratcliffe, 2015: 776–777 [original combination].

Types. Holotype ♂ at USNM (Ratcliffe 2015).

Distribution. PERU: Madre de Dios.

References. Ratcliffe 2015.

Stenocrates minutus Endrődi, 1966

Stenocrates minutus Endrődi, 1966: 415, 432–433 [original combination].

syn. *Stenocrates rabbanii* Ratcliffe, 1977: 432–433 [original combination].

Stenocrates mahunkai Endrődi [synonymy by Endrődi 1985a: 176].

Stenocrates minutus Endrődi [synonymy by Ratcliffe 2015: 778]

Types. Holotype ♂ of *S. minutus* at NHMB (Frey Collection) (Endrődi 1966). Holotype ♂ of *S. rabbanii* at INPA (Ratcliffe 1977).

Distribution. BOLIVIA: Beni. BRAZIL. ECUADOR. PERU: Loreto.

References. Endrődi 1966, 1973a, 1985a, Dechambre 1985, Krajcik 2005, 2012, Ratcliffe et al. 2015, Ratcliffe 1977, 2015.

Stenocrates mollis Endrődi, 1966

Stenocrates mollis Endrődi, 1966: 416, 433–434 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).

Distribution. BRAZIL. FRENCH GUIANA: Cayenne.

References. Endrődi 1966, 1967c, 1985a, Ponchel 2011, Krajcik 2005, 2012, Ratcliffe 2015, Dupuis 2017.

Stenocrates nasutus Dechambre, 1979

Stenocrates nasutus Dechambre, 1979c: 64 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1979c).

Distribution. FRENCH GUIANA. PERU: Amazonas.

References. Dechambre 1979c, Endrődi 1985a, Ponchel 2011, Krajcik 2005, 2012, Ratcliffe et al. 2015, Ratcliffe 2015, Dupuis 2017.

Stenocrates omissus Endrődi, 1966

Stenocrates omissus Endrődi, 1966: 416, 434–435 [original combination].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1966).

Distribution. BOLIVIA: Beni, La Paz. BRAZIL: Amazonas, Mato Grosso. COLOMBIA: Cundinamarca. ECUADOR. FRENCH GUIANA: Kourou. PERU: Junín, Madre de Dios. TRINDAD AND TOBAGO: Trinidad.

References. Dechambre 1979a, 1985, Endrődi 1966, 1973b, 1985a, Andreazze and da Silva Motto 2002, Restrepo et al. 2003, Gasca-Álvarez and Amat-García 2010, Ponchel 2011, Krajcik 2005, 2012, Breeschoten et al. 2013, López-García et al. 2015, Ratcliffe 2015, Dupuis 2017.

Stenocrates pereirai Endrődi, 1969

Stenocrates pereirai Endrődi, 1969b: 38–39 [original combination].

Types. Holotype ♂ at "Pereira Collection in Sao Paulo" (Endrődi 1969b). This is possibly referring to MZSP.

Distribution. BRAZIL: Mato Grosso, Rondônia.

References. Endrődi 1969b, 1985a, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates popei Endrődi, 1971

Stenocrates popei Endrődi, 1971a: 179–181 [original combination].
syn. *Stenocrates inpai* Ratcliffe, 1978: 491 [original combination].
Stenocrates popei Endrődi [synonymy by Ratcliffe 2015: 777].

Types. Holotype ♂ of *S. popei* at BMNH (Endrődi 1971a). Holotype ♂ of *S. inpai* at INPA (Ratcliffe 1978).

Distribution. BRAZIL: Amapá, Amazonas. FRENCH GUIANA. GUYANA. PERU. SURINAME.

References. Dechambre 1979a, Endrődi 1971a, 1985a, Moragues 2010, Ponchel 2011, Krajcik 2005, 2012, Ratcliffe 1978, 2015, Ratcliffe et al. 2015, Dupuis 2017.

Stenocrates porioni Dechambre, 1985

Stenocrates porioni Dechambre, 1985: 144 [original combination].

Types. Holotype ♂ at MNHN (Dechambre 1985).

Distribution. ARGENTINA: Salta. BOLIVIA: La Paz.

References. Dechambre 1985, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates pseudoligneus Dechambre & Hardy, 2004

Stenocrates pseudoligneus Dechambre & Hardy, 2004: 213 [original combination].

Types. Holotype ♂ at CMNC (Dechambre and Hardy 2004).

Distribution. BOLIVIA: Beni (Dechambre and Hardy 2004).

References. Dechambre and Hardy 2004, Krajcik 2012, Ratcliffe 2015.

Stenocrates rionegroensis Ratcliffe, 1978

Stenocrates rionegroensis Ratcliffe, 1978: 489–490 [original combination].

Types. Holotype ♂ at INPA (Ratcliffe 1978).

Distribution. BRAZIL: Amazonas.

References. Endrődi 1985a, Dechambre and Hardy 2004, Krajcik 2005, 2012, Ratcliffe 1978, 2015.

Stenocrates rufipennis (Fabricius, 1801)

Melolontha rufipennis Fabricius, 1801: 167 [original combination].
Stenocrates rufipennis (Fabricius) [new combination by Burmeister 1847: 86].
syn. *Stenocrates saucius* Burmeister, 1847: 85–86 [original combination].
Stenocrates rufipennis (Fabricius) [synonymy by Arrow 1937b: 19].

Types. Lectotype ♀ of *M. rufipennis* deposited at ZMUK, now housed at ZMUC (Endrődi 1966). Endrődi (1966) did not find the type material of *S. saucius*.

Distribution. ARGENTINA: Córdoba. BRAZIL: Amazonas, Pará. COLOMBIA: Putumayo. ECUADOR: Guayas. FRENCH GUIANA: Cayenne. GUYANA.

References. Fabricius 1801, Burmeister 1847, Harold 1869b, Arrow 1937b, Blackwelder 1944, Zimsen 1964, Dechambre 1979c, Endrődi 1966, 1985a, Andreazze and da Silva Motto 2002, Restrepo et al. 2003, Gasca-Álvarez and Amat-García 2010, Krajcik 2005, 2012, Ratcliffe 1977, 2015, Dupuis 2017.

Stenocrates rugulosus Endrődi, 1966

Stenocrates rugulosus Endrődi, 1966: 416, 436–437 [original combination].

Types. Holotype ♂ at ZMHB (Endrődi 1966).

Distribution. VENEZUELA: Capital District, Carabobo.

References. Endrődi 1966, 1985a, Dechambre 1985, Krajcik 2005, 2012, Ratcliffe 2015.

Stenocrates seag Dupuis, 2017

Stenocrates seag Dupuis, 2017: 55–58 [original combination].

Types. Holotype ♂ at MNHN (Dupuis 2017).

Distribution. FRENCH GUIANA.

References. Dupuis 2017.

Stenocrates serendipitus Ratcliffe, 2015

Stenocrates serendipitus Ratcliffe, 2015: 774–775 [original combination].

Types. Holotype ♂ at UNSM (Ratcliffe 2015).

Distribution. PERU: Loreto.

References. Ratcliffe 2015.

Stenocrates spinosus Ponchel & Dechambre, 2003

Stenocrates spinosus Ponchel & Dechambre, 2003: 268–270 [original combination].

Types. Holotype ♂ at MNHN (Ponchel and Dechambre 2003).

Distribution. BRAZIL. FRENCH GUIANA.

References. Ponchel and Dechambre 2003, Ponchel 2011, Krajcik 2005, 2012, Ratcliffe 2015, Dupuis 2017.

Stenocrates varzeaensis Ratcliffe, 1978

Stenocrates varzeaensis Ratcliffe, 1978: 490–491 [original combination].

Types. Holotype ♂ at INPA (Ratcliffe 1978).

Distribution. BRAZIL: Amazonas.

References. Dechambre 1979c, Endrődi 1985a, Krajcik 2005, 2012, Ratcliffe 1978, 2015.

Genus *SURUTU* Martínez, 1955

Surutu Martínez, 1955: 242–244 [original usage].

Type species. *Surutu dytiscoides* Martínez, 1955, by monotypy.

Keys. Endrődi 1966, 1975a, 1985a, Ratcliffe 1981, Jameson et al. 2002.

Valid taxa. 5 species.

Surutu dytiscoides Martínez, 1955

Surutu dytiscoides Martínez, 1955: 245–249 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1955).

Distribution. BOLIVIA: Cochabamba, Santa Cruz. COLOMBIA: Amazonas.

References. Martínez 1955, 1956, Ratcliffe 1981, Endrődi 1966, 1975a, 1985a, Krajcik 2005, 2012, Otavo et al. 2013.

Surutu fenni Ratcliffe, 1981

Surutu fenni Ratcliffe, 1981: 107–111 [original combination].

Types. Holotype ♂ at INPA (Ratcliffe 1981).
Distribution. BRAZIL: Amazonas.
References. Ratcliffe 1981, Andreazze 2001, Krajcik 2005, 2012.

Surutu hesperius Ratcliffe, 1981

Surutu hesperius Ratcliffe, 1981: 107, 111 [original combination].

Types. Holotype ♂ at INPA (Ratcliffe 1981).
Distribution. BRAZIL: Amazonas.
References. Ratcliffe 1981, Krajcik 2005, 2012.

Surutu schulzei Endrődi, 1975

Surutu schulzei Endrődi, 1975a: 155, 156–157 [original combination].

Types. Holotype ♂ at HNHM (Endrődi Collection) (Endrődi 1975a).
Distribution. BRAZIL: Mato Grosso.
References. Ratcliffe 1981, Endrődi 1975a, 1985a, Krajcik 2005, 2012.

Surutu seabrai D'Andretta & Martínez, 1956

Surutu seabrai D'Andretta & Martínez, 1956: 185–195 [original combination].

Types. Holotype ♂ at MACN (Antonio Martínez Collection) (Martínez 1956).
Distribution. BRAZIL: Amazonas, Pará.
References. D'Andretta and Martínez 1956, Endrődi 1975a, 1985a, Ratcliffe 1981, Andreazze 2001, Krajcik 2005, 2012, Breeschoten et al. 2013.

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