

Rhabdorrhynchus echii (Brahm, 1790), a “forgotten” name (Coleoptera, Curculionidae, Lixinae)

Massimo Meregalli¹, Miguel Angel Alonso-Zarazaga²

1 Department of Life Sciences and Systems Biology, University of Torino, Via Accademia Albertina 13, 10123 Torino, Italy **2** Departamento de Biodiversidad y Biología Evolutiva, Museo Nacional de Ciencias Naturales (CSIC), José Gutiérrez Abascal, 2, E-28006 Madrid, Spain

Corresponding author: Massimo Meregalli (massimo.meregalli@unito.it)

Academic editor: L. Penev | Received 10 September 2012 | Accepted 12 November 2012 | Published 16 November 2012

Citation: Meregalli M, Alonso-Zarazaga MA (2012) *Rhabdorrhynchus echii* (Brahm, 1790), a “forgotten” name (Coleoptera, Curculionidae, Lixinae). ZooKeys 243: 95–99. doi: 10.3897/zookeys.243.3976

Abstract

The application of the name *Curculio echii* Brahm, 1790 is discussed. Based on the description it is evident that it should be applied to a German species of the genus *Rhabdorrhynchus*, and that it has priority over the name currently applied to the species, *R. seriegranosus* Chevrolat, 1873. The new combination *Rhabdorrhynchus echii* (Brahm, 1790) is proposed. As there is a lack of any type material of *C. echii* a neotype is designated. Based on the study of the type specimen, *R. seriegranosus* is restored as a valid species.

Keywords

Neotype, new combination, nomenclature, European fauna, Palearctic weevils

Introduction

In the course of the preparation of the Catalogue of the Palearctic Coleoptera: Lixinae: Cleonini several nomenclatural questions had to be resolved, and several previously undetected cases of priority came to light. Some of these concerned taxa seldom, if ever, cited in the literature. However, in some cases the “lost” names were applied to taxa more broadly known.

Brahm (1790) published an “Insect Calendar”, in which he mentioned, month by month, the species that he had seen or collected in the surroundings of Mainz (Germany). In most cases he referred them to previously named taxa, but some of the

species were described as new. One of these is *Curculio echii* Brahm, 1790: 175. The description is rather accurate, cites the plant where Brahm collected one specimen (*Echium vulgare* L.) and emphasizes its key traits. This description allows identification of *C. echii* as belonging to the genus *Rhabdorrhynchus* Motschulsky, 1860. Only one species of the genus is known to occur in Germany, thus the application of the name is undisputed. The comb. n. *Rhabdorrhynchus echii* (Brahm, 1790) is here proposed, based on *Curculio echii* Brahm, 1790: 175.

However, even though this was the first name to have been assigned to this species, it was born under an unlucky star, and it soon became forgotten. The name *Curculio echii*, published as it was in a book that did not have any influence in nomenclature, was not used in subsequent works. It was occasionally cited in nomenclatural checklists, both older ones (Sherborn 1902) and recent on-line name indexes (i.e., ION 2012), but it was never positively applied to any taxon and no transfer to other genera was ever proposed.

In 1795 Herbst described *Curculio varius* Herbst, 1795, from Europe. Regardless to the fact that this name is a junior homonym of *Curculio varius* Fabricius, 1775, and several other senior homonyms, it was continuously applied to the central European species, firstly (Schoenherr 1826) as *Pachycerus varius*, and subsequently, after publication of Chevrolat (1873), as *Rhabdorrhynchus varius*. Chevrolat (1873) also described *Rhabdorrhynchus seriegranosus* Chevrolat, 1873, from Algeria. This name was placed under synonymy of *Rhabdorrhynchus varius* by Faust (1904).

Throughout the 20th century the species, in Faust's concept, was named *Rhabdorrhynchus varius* (Csiki 1934, as in all other papers which cited the species, including Ter-Minasyan 1988). It ranges in central-southern Europe, northern Africa and western Asia. Eventually, Alonso-Zarazaga and Lyal (1999) discovered the homonymy of *Curculio varius* Herbst, 1795 and its only synonym, *R. seriegranosus* Chevrolat, 1873, became the valid name and it was applied to specimens from Europe, Northern Africa and Western Asia.

However, *R. echii* is the first available name to be applied to the taxon and must be used as the correct name for this species. *R. seriegranosus* was seldom used since 1999 and article 23.9.1.2 ICZN cannot be applied.

It should be added that the taxonomy of the genus was never thoroughly revised, and there is still uncertainty regarding the validity of some species and their range. The type specimen of *Rhabdorrhynchus seriegranosus*, recently examined by one of the authors (M.M.), differs quite significantly from the European taxon (Figs 1–4), and attribution of specimens from the southern Mediterranean coasts to the central European species, as originally proposed by Faust (1904) and never subsequently discussed, seems questionable. The synonymy *Rhabdorrhynchus echii* (Brahm, 1790) = *Rhabdorrhynchus seriegranosus* Chevrolat, 1873 is here rejected and *R. seriegranosus* is restored as a valid species.

This act also allows maintenance as valid the first epithet attributed to the Algerian *Rhabdorrhynchus*. Two more species were in fact subsequently described from Algeria, namely, *R. curvirostris* Solari, 1950 and *R. longicollis* Solari, 1950, both based on a

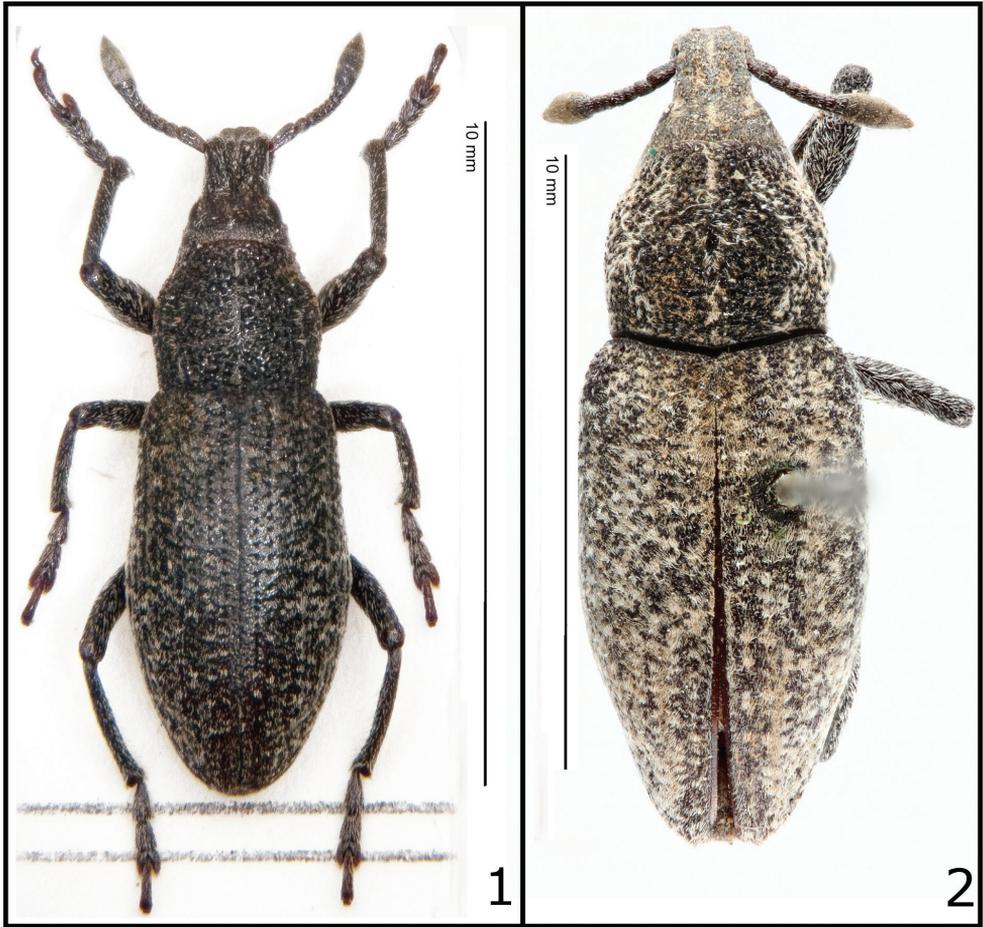


Figure 1–2. **1** *Rhabdorrhynchus echii* (Brahm, 1790). Neotype, dorsal view **2** *Rhabdorrhynchus seriegranosus* Chevrolat, 1873. Type specimen, dorsal view. Conserved at the Stockholm Museum of Natural History, Chevrolat collection.

single specimen, never recollected anywhere else and thus apparently endemic to the country – which is at least unlikely. The status of these species, and their relations with *R. seriegranosus* and the other north-african taxa of the genus, were never discussed after their description.

It is evident that a typification of *Curculio echii* Brahm is required. Nikolaus Joseph Brahm (1751–1821) was a German zoologist, but there is no information about the fate of his collection, which was never cited in the literature. Horn et al. (1990) do not even report the name. Thus we consider the type specimen of *Curculio echii* to be lost.

We hereby designate a neotype of *Curculio echii* Brahm, using a specimen from southern Germany. This act is done with the intent to fix once and for all the meaning of the name and to stabilize nomenclature (under Art. 75.3 of the International Code of Zoological Nomenclature), with particular regard to the central European taxon.

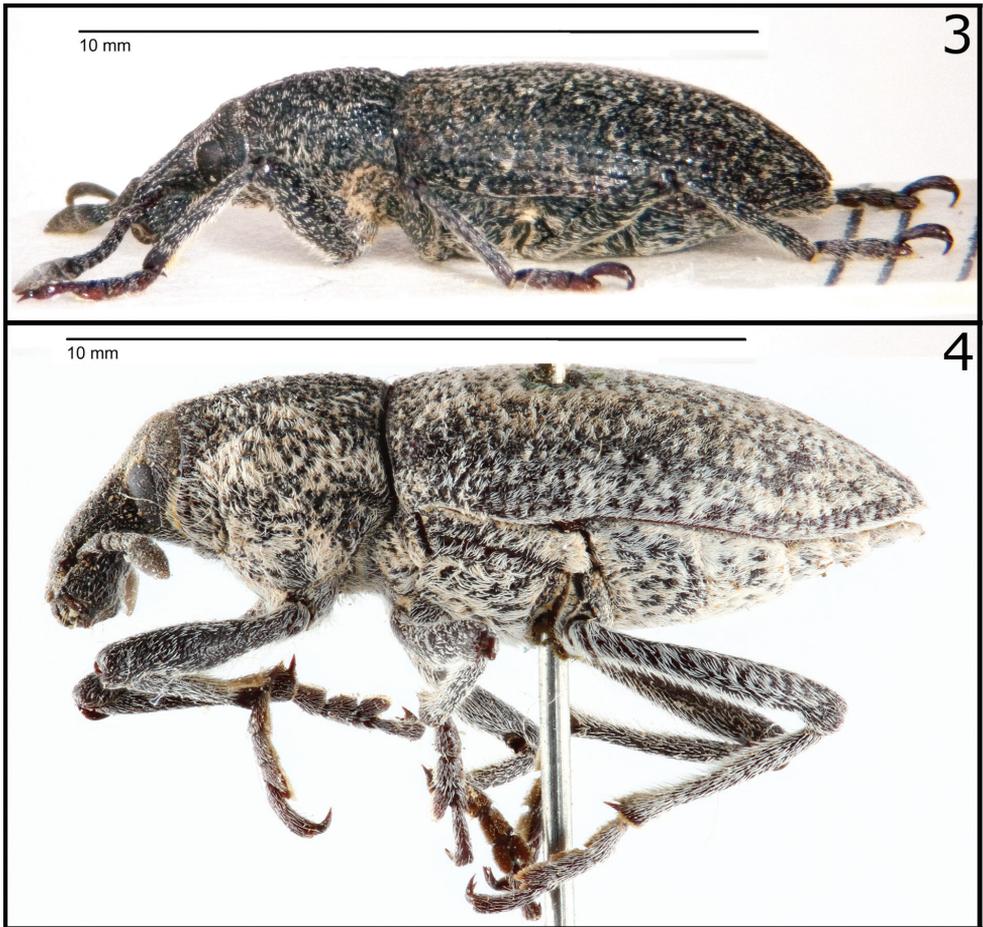


Figure 3–4. **3** *Rhabdorrhynchus echii* (Brahm, 1790). Neotype, lateral view **4** *Rhabdorrhynchus seriegranosus* Chevrolat, 1873. Type specimen. Same specimen as Fig. 2.

A specimen conserved at the Staatliches Museum für Naturkunde, Stuttgart, Germany, collected in Baden-Württemberg, southern Germany – thus not far from Mainz – is appropriate to be used as the neotype of *R. echii*. An appropriate description for the central-European populations was given by Dieckmann (1983), under *R. varius* Herbst.

Curculio echii Brahm 1790. NEOTYPE (here designated): A male specimen so labeled: 1. Germany, Ba- / den-Württ. / Grißheim / 6.Aug.1994 / leg. Kasper // Rheinaue // Rhabdorhyn- / chus varius / Herbst / det. Kasper // *Curculio echii* Brahm 1790 / NEOTYPUS / 2012 Meregalli & Alonso-Z. des. [red]

The range of the species is here considered to include only the forms morphologically referable to *R. echii*, mainly present in Central and central-eastern Europe. The populations from southern Europe, northern Africa and Western Asia are referred to *R. seriegranosus*.

Acknowledgements

We wish to thank our friend Wolfgang Schawaller (Staatliches Museum für Naturkunde, Stuttgart) for the loan of the specimen of *Rhabdorrhynchus* used as the neotype, and Mike Morris (The Natural History Museum, London) for revising the English language.

References

- Alonso-Zarazaga MA, Lyal CHC (1999) A world catalogue of families and genera of Curculionioidea (Insecta: Coleoptera), (Excepting Scolytidae and Platypodidae). Entomopraxis SCP, Barcelona, 315 pp.
- Brahm NJ (1790) Insektenkalender für Sammler und Oekonomen. Erster Theil. Universitätsbuchhandlung, Mainz, 248 pp.
- Chevrolat LAA (1873) Mémoire sur les Cléonides. Mémoires de la Société Royale des Sciences de Liège, 2^e série 5: 1–118.
- Csiki E (1934) Curculionidae: Subfam. Cleoninae. In: Schenkling S (Ed) Coleopterorum Catalogus auspiciis et auxilio W. Junk. Volume 134, Junk, Berlin, 152 pp.
- Dieckmann L (1983) Beiträge zur Insektenfauna der DDR: Coleoptera – Curculionidae (Tanymericinae, Leptopiinae, Cleoninae, Tanyrhynchinae, Cossoninae, Raymondionyminae, Bagoinae, Tanysphyrinae). Beiträge zur Entomologie 33(2): 257–381.
- Faust J (1904) Revision der Gruppe Cléonides vrais. Deutsche Entomologische Zeitschrift 1: 177–284.
- Horn W, Kahle I, Friese G, Gaedike R (1990) Collectiones entomologicae. Ein Kompendium über den Verbleib entomologischer Sammlungen der Welt bis 1960. Teil I: A bis K. Akademie der Landwirtschaftswissenschaften der Deutschen Demokratischen Republik, Berlin, 220 pp.
- ION (2012) Index to Organism Names. Thomson Reuters. Available at <http://www.organism-names.com/> [Accessed September 5, 2012]
- Schoenherr CJ (1826) Curculionidum dispositio methodica cum generum characteribus, descriptionibus atque observationibus variis seu Prodrömus ad Synonymiae Insectorum. Partem IV. Lipsiae, Fleischer, 338 pp.
- Sherborn CD (1902) Index animalium sive index nominum quae ab A. D. MDCCLVIII generibus et speciebus animalium imposita sunt. Sectio prima. A Kalendis Ianuariis, MDCCLVIII usque ad finem Decembris, MDCCC. Typographico Academico, Cantabrigiae, 195 pp.
- Ter-Minasian ME (1988) Zhuki-dolgonosiki podsemejstva Cleoninae fauny SSSR. Kornevye dolgonosiki. [The weevils of the subfamily Cleoninae of the fauna of UdSSR. Roots weevils.] (Triba Cleonini). In: Skarlat OA (Ed) Opredeliteli po faune SSSR (izdavaemye Zoologicheskim Institutom Akademii Nauk SSSR), Nauka, Leningrad, Volume 155, 1–235.