ZooKeys 1237 • 2025



The parasitoid wasp genus *Dolichogenidea* is currently the second most speciose within the subfamily Microgastrinae (Hymenoptera: Braconidae). The fauna of the Neotropical region, with 23 species previously known, was studied and 102 new species are described, in addition to proposing a new genus synonymy (*Exoryza*) and 16 new species combinations. All taxa are diagnosed and described using a combination of morphology (dichotomous key and brief diagnostic descriptions), DNA barcodes, biology (host data and wasp cocoon strategy), and distribution data. Neither morphology, biology, nor molecular data alone were sufficient to unambiguously separate all taxa as all had limitations; however, when combined, they provided stronger support to species delimitation. Neotropical *Dolichogenidea* parasitized 11 Lepidoptera families, mainly Depressariidae (34% of all host data available), Gelechiidae (17%), Crambidae (14%), Tortricidae (10%), Thyrididae (8%) and Pyralidae (7%). Wasps seem to be mostly monophagous or oligophagous, with 56% parasitizing a single host species and 23% parasitizing two host species; usually with hosts belonging to one genus or related genera in the same Lepidoptera family. Most *Dolichogenidea* were distributed between 400–1,500 m, but a few were recorded at higher elevations (3,000 m in Costa Rica and 4,000–4,100 m in the Andes, South America).

I, M. Alex Smith, Daniel H.

A REVISION OF THE PARASITOID WASP GENUS DOLICHOGENIDEA VIERECK (HYMENOPTERA, BRACONIDAE) IN THE NEOTROPICAL REGION, WITH THE DESCRIPTION OF 102 NEW SPECIES

Jose L. Fernandez-Triana, Caroline Boudreault, James B. Whitfield, Amelie Höcherl, M. Alex Smith, Winnifred Hallwachs, Daniel H. Janzen



Dolichogenidea angelagonzalezae Fernandez-Triana & Boudreault, 2019



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