

SHORT COMMUNICATION

Refining the Taxonomic Catalog of the Brazilian Fauna: some species of Darwin wasps (Hymenoptera: Ichneumonidae) erroneously reported for Brazil

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ABSTRACT. To correct errors in previous catalogs and update the Brazilian fauna, thirty-five species of Darwin wasps erroneously reported for Brazil are removed from the Taxonomic Catalog of the Brazilian Fauna, belonging to the following subfamilies: Anomaloninae (2 species), Banchinae (1), Campopleginae (8), Cremastinae (2), Cryptinae (8), Phygadeuontinae (3), Pimplinae (8), Tersilochinae (2), and Tryphoninae (1). Most species were incorrectly cataloged due to an incorrect interpretation of the species list created by Costa Lima in 1962, which mentions species occurring in neighboring countries but does not confirm their presence in Brazil. Thus, the Brazilian fauna of Ichneumonidae currently corresponds to 234 genera and 1,038 species.

KEY WORDS. Biodiversity, CTFB, Ichneumonoidea, inventory, parasitoid wasps.

Darwin wasps (Hymenoptera: Ichneumonidae) are parasitoid wasps considered one of the largest families in the animal kingdom and natural enemies of a broad range of holometabolous insects and spiders (Broad et al. 2018, Klopstein et al. 2019). According to Yu et al. (2016), there are about 25,000 known species of Ichneumonidae worldwide, with about 4,420 in the Neotropical region. In Brazil, to date, 1,073 species were recorded, distributed in 240 genera and 28 subfamilies (Fernandes et al. 2024).

During the compilation of data for the species list organized under the framework of the Taxonomic Catalog of the Brazilian Fauna, “Catálogo Taxonômico da Fauna do Brasil (CTFB)”, between the years 2014–2015, some errors, such as homonyms, were found (Fernandes 2015, Araujo and Vivallo 2015). Now, while compiling the distribution of species from Brazilian states, some species erroneously recorded from Brazil were found. Therefore, in order to provide an updated count of the actual number of species present in this country, we are rectifying these errors and excluding the

species mentioned below from the list of species previously documented in Brazil, and consequently, from the Taxonomic Catalog of the Brazilian Fauna (Fernandes et al. 2024).

List of Darwin wasp species erroneously reported for Brazil

Anomaloninae

1. *Ophionellus imitatorius* (Blanchard, 1942)
2. *Podogaster cactorum* Cushman, 1927

Banchinae

3. *Meniscomorpha lopezi* (Blanchard, 1935)

Campopleginae

4. *Campoletis argentifrons* (Cresson, 1864)
5. *Campoletis curvicauda* (López Cristóbal, 1947)
6. *Campoplex daritis* Schrottky, 1911
7. *Hyposoter christenseni* (Blanchard, 1946)
8. *Hyposoter fugitivus* (Say, 1835)
9. *Hyposoter rubraniger* (López Cristóbal, 1947)
10. *Venturia bergi* (Brèthes, 1922)
11. *Venturia pastranai* (Blanchard, 1946)

Cremastinae

12. *Hanauella armillata* Enderlein, 1921
13. *Temelucha platensis* (Brèthes, 1917)

Cryptinae

14. *Baryceros euclidis* (Blanchard, 1936)
15. *Basileucus venturii* (Schrottky, 1902)
16. *Diapetimorpha brethesi* (Schrottky, 1902)
17. *Neocryptopteryx metriurus* (Spinola, 1851)
18. *Neocryptopteryx orientalis* Blanchard, 1947
19. *Oecetiplex borsani* (Blanchard, 1941)
20. *Polycryptus giacomelli* Schrottky, 1911
21. *Xiphonychidion horsti* (Brèthes, 1916)

Phygadeuontinae

22. *Chirotica bruchii* (Brèthes, 1904)
23. *Isdromas lycaenae* (Howard, 1889)
24. *Mastrus pastranai* (Millan & De Santis, 1958)

Pimplinae

25. *Apechthis bazani* (Blanchard, 1936)
26. *Calliephialtes argentinus* Blanchard, 1936
27. *Clistopyga lopezrichinii* (Blanchard, 1941)
28. *Itopectis niobe* (Schrottky, 1902)
29. *Neotheronia bicincta* (Cresson, 1865)
30. *Pimpla fuscipes* Brullé, 1846
31. *Scambus holmbergi* (Brèthes, 1904)
32. *Tromatobia huebrichi* (Brèthes, 1913)

Tersilochinae

33. *Stethantyx argentinensis* (Blanchard, 1945)
34. *Stethantyx parkeri* (Blanchard, 1945)

Tryphoninae

35. *Netelia oeceticola* (Blanchard, 1941)

Remarks

Hanauella armillata was described by Enderlein (1921) based on a female collected in Nov–Dec, 1906 by M. de Mathan. The collection location indicated in the article is “Brasilien, Pebas” (Enderlein 1921, p. 7). However, the Peruvian District of Pebas is one of the four districts that form the Province of Mariscal Ramón Castilla, located in the Department of Loreto, belonging to the Loreto Region, Peru (3°19'11”S, 71°51'41”W). According to Papavero (1971, 1973), Mathan collected from the late 1800s to early 1900s in several cities along the Amazon River, leaving Brazil and going into Peru, passing through Pebas. In this way, he probably added “Brasilien” to the label, as he did not realize that he had already left Brazilian territory towards Peru.

The other 34 species listed herein can be associated to a single error in the literature. The catalogs of Yu et al. (2005, 2012, 2016) list these species as occurring in Brazil based on

Costa Lima (1962). However, in some cases Costa Lima provided lists of species from Brazil and its neighboring countries more or less indiscriminately, e.g. “[...] Below, in alphabetical order, is a list of species found in Brazil and neighboring countries, whose ethology is partially known” (Costa Lima 1962: 34; translation and italics by the present authors). Or, in another section, “[...] Below is a list of species whose hosts are known” (Costa Lima 1962: 44), without specifying whether these species were recorded from Brazilian territory, indicating that they are from neighboring countries (mainly Uruguay and Argentina) and that they could potentially be present in the Brazilian fauna. Hence, these species were erroneously listed in the catalogs of Yu et al. (2005, 2012, 2016) and erroneously replicated in Fernandes et al. (2024).

Nevertheless, the species analyzed by Costa Lima, with an indication of Brazilian locality, or material sent to him for identification by Brazilian collectors, were considered valid records from this country. Thus, in addition to the 35 species, six genera are also removed from the CTFB, they are: *Hyposoter* Förster, 1869 (Campopleginae), *Hanauella* Enderlein, 1921 (Cremastinae), *Oecetiplex* Porter, 1987 and *Xiphonychidion* Porter, 1963 (Cryptinae), *Mastrus* Förster, 1869 (Phygadeuontinae) and *Tromatobia* Förster, 1869 (Pimplinae). Therefore, with the corrections made here, the current Brazilian Ichneumonidae fauna comprises 234 genera and 1,038 species.

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