

Scientific Note

First record of *Copiphora longicauda* Serville, 1831 (Orthoptera: Tettigoniidae: Conocephalinae: Cophiphorini) in Brazil and new behavioral data

Diego M. M. Mendes^{1✉}, Jomara C. Oliveira²

¹Instituto Nacional de Pesquisas da Amazônia, INPA, Programa de Pós-graduação em Entomologia, Caixa Postal 2223, 69080-971 Manaus, Amazonas, Brazil. ²Grupo de Pesquisa em Ecologia e Biologia de Peixes, Instituto de Desenvolvimento Sustentável Mamirauá, Caixa Postal 38. 69553-225 Tefé, Amazonas, Brasil.

✉Corresponding author: diego.mello.mendes@gmail.com

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Abstract. *Copiphora longicauda* Serville, 1831 is a species of Amazonian katydid described for French Guiana and with records for Colombia, Peru and Suriname. In this contribution, the record of this species is made for the first time to Brazil, with inclusion of natural history and a map with the geographical records.

Keywords: Brazilian Amazon, Cone-head katydid, Terra Firme Rainforest.

Copiphora (Serville, 1831) is one of the 56 Neotropical genera of Copiphorini (Karny, 1911), member of the subfamily Conocephalinae (Cigliano et al. 2019). *Copiphora* comprises 27 species, and it is easily distinguished from other katydids by the slanting head shape and larger sized body (Karny 1912). *Copiphora longicauda* Serville, 1831 have been registered in several countries in South America (Colombia, Peru, French Guiana and Suriname), but there are still no records for Brazil (Cigliano et al. 2019, Montealegre 1997, Naskrecki 2012). This paper aims to describe the first record of *C. longicauda*, to provide a distribution map and behavioral notes observed during field activities.

The studied specimens are deposited in the Coleção de Invertebrados of the Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Amazonas, Brazil. Specimens were collected in nocturnal periods in the states of Amazonas and Rondônia, Brazil. Specimens were examined under a Nikon SMZ460 stereomicroscope. Photographs in lateral view were taken from live specimens using a Nikon D7100 digital camera, with a 60 mm 2:8 lens. Illustrations were made using Adobe Illustrator CS6 and Adobe Photoshop CS6 and the map was elaborated with SimpleMappr (Shorthouse 2010).

Copiphora longicauda Serville, 1831

Copiphora conspersa Stål, 1874.

Copiphora licornis Pictet, 1888.

Diagnosis. Fastigium triangular, acuminate, with two globular lateral projections in frontal view, straight in lateral view (Figs. 1A-C). Fastigium orange and head light green with several white spots (Figs. 1A-C). Cerci of male with spine on apical region. Subgenital plate narrow, with short styli. Female ovipositor very long, the length is equivalent to body length plus the tegmina (Fig. 1A).

Geographical records. Colombia: Chocó and Valle del Cauca; Brazil (new record): Amazonas and Rondônia; French Guiana: Cayenne; Peru: Alto Amazonas; Suriname: Sipaliwini (Fig. 2).

Specimens examined. BRASIL, Amazonas, Tefé, Estrada da EMADE, km 20, Comunidade Bom Jesus, 06°07'29"S / 68°02'41"W, 28.x.2016, coleta manual, D.M.M. Mendes & J.C. Oliveira leg. (1♂ and 1♀); BRASIL, Amazonas, Tefé, Estrada da EMADE, km 20, Comunidade Bom Jesus, 06°07'29"S / 68°02'41"W, 22.xii.2018, coleta manual, D.M.M. Mendes & J.C. Oliveira leg. (Nymph ♀); BRASIL, Amazonas, Manaus, Reserva Florestal Adolfo Ducke, 18.xii.2010 (1♀); BRASIL, Rondônia, Porto

Velho, Estação Ecológica Serra dos Três Irmãos, 09°0'9"S / 64°32'40"W, 20-21.viii.2016, coleta manual, D.M.M. Mendes, F.F. Xavier F°, A.A. Agudelo & J.A.Rafael leg. (1♂ and 1♀).

Behavioral notes. Adult and immature specimens were collected in Terra Firme Rainforest, both in forest edge areas and in areas of dense vegetation. The specimens were approximately at 1-2 m high on vegetation. In Tefé, immature specimens were observed feeding on leaves of *Conceveiba* sp. (Euphorbiaceae) (Fig. 1D), a plant commonly found on the edges of forests. This relationship between katydids and *Conceveiba* Aubl. is a behavior already registered for other species, as *Paraxiphidium iriodes* Mendes & Oliveira, 2019 and various species of Meconematinae (Mendes et al. 2017, Mendes et al. 2018, Mendes & Oliveira, 2019).

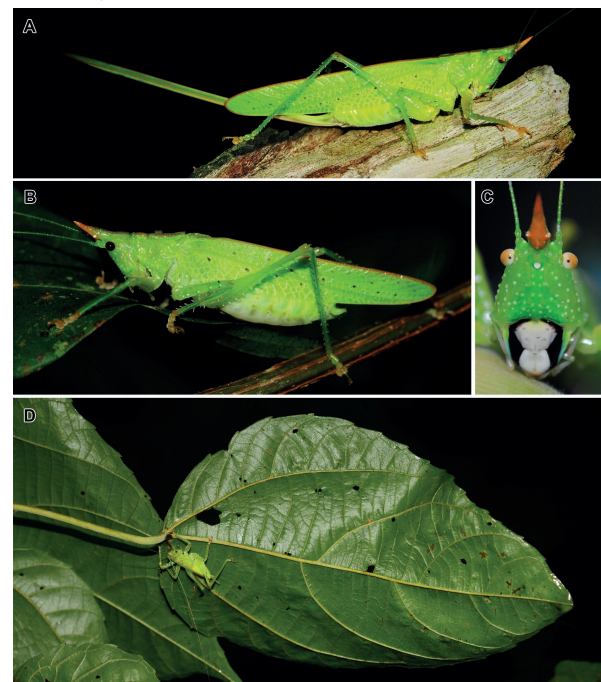


Figure 1. *Copiphora longicauda*: A: Male, in lateral view; B: Female, in lateral view; C: Head, dorsal view; D: Nymph feeding on extrafloral nectaries of *Conceveiba* sp. (Euphorbiaceae) in Tefé, Amazonas, Brazil.

Specimens examined. BRASIL, Amazonas, Tefé, E

Comments. This species has a wide distribution in the northern portion of South America, being the type locality more to the east (Cayenne: French Guiana) and other known distribution points more to the west, one in Peru (Alto Amazonas) and another in northwestern Colombia (Choco and Vale del Cauca) (Fig. 2). However, the interior of

the continent remained unregistered, with a gap of about 2.300 km between the nearest recording points (Peru – Suriname). With the new records made for the Brazilian Amazon, the distribution of the species becomes more comprehensive and it shows that the species is probably widely distributed within the Amazon biome.

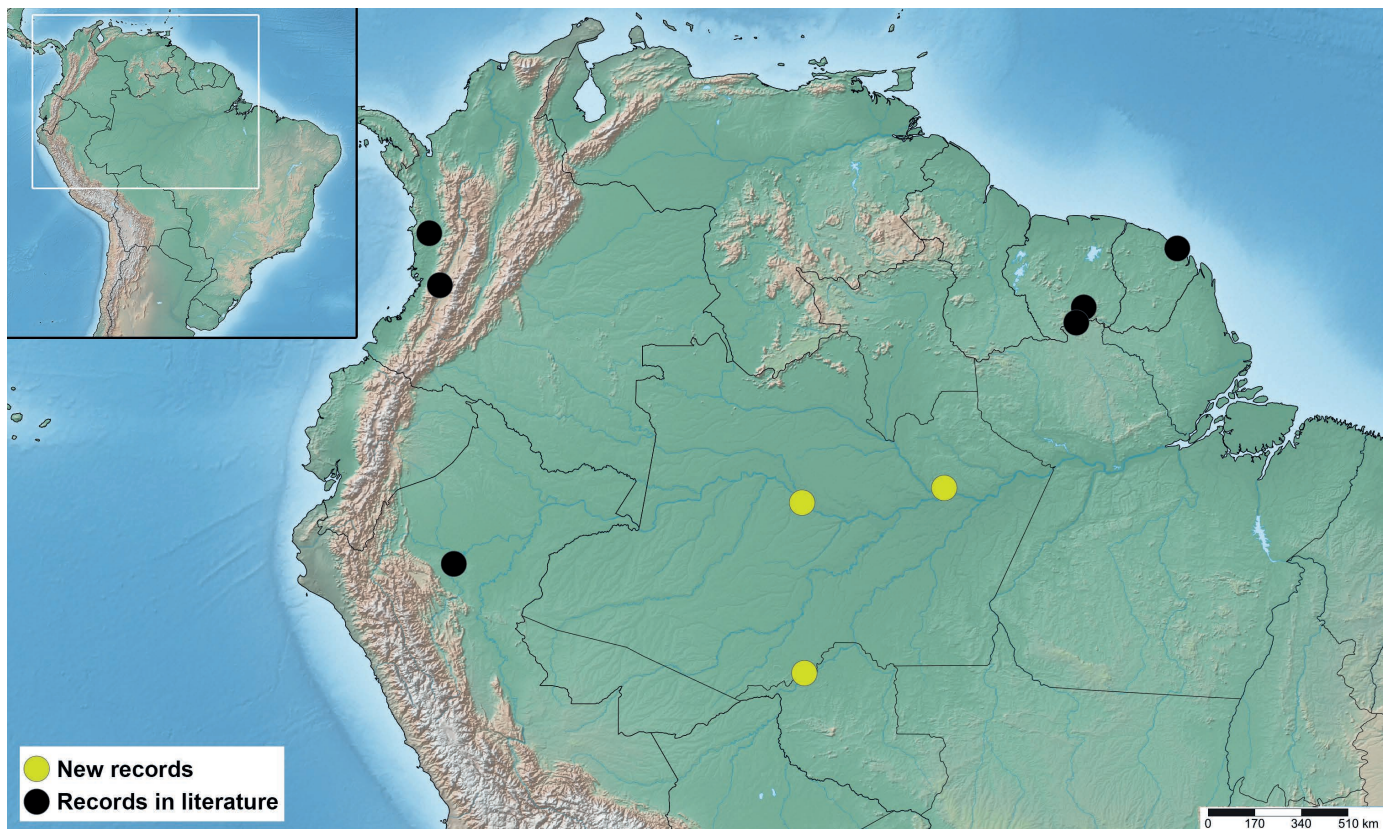


Figure 2. Geographical records of *Copiphora longicauda*.

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Authors' Contributions

DMMM and JCO collected, identified the species, prepared the figures and wrote the paper.

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