

First record of *Camarochilus confusus* (Heteroptera: Pachynomidae) from Argentina, the second pachynomid and first Pachynominae registered for the country

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Primer registro de *Camarochilus confusus* (Heteroptera: Pachynomidae) de la Argentina, el segundo pachynomido y la primera especie de Pachynominae conocida del país

RESUMEN. El trabajo de campo en dos áreas protegidas del noreste argentino (P.N. El Impenetrable en la provincia del Chaco, y el P.N. Río Pilcomayo en la provincia de Formosa) para estudiar la fauna de Heteroptera, resultó en el descubrimiento de un macho de *Camarochilus confusus* Harris 1930 que se colectó barriendo la vegetación. Esta especie pertenece a la subfamilia Pachynominae, y representa el primer registro de la subfamilia en Argentina. *Aphelonotus simplicus* Uhler 1894 (Aphelonotinae), también fue colectado en trampas de luz, lo que confirma su presencia en las ecorregiones del Chaco en Argentina.

PALABRAS CLAVE. *Aphelonotus simplicus*. Chaco. Formosa. Hemiptera. Reduvidae.

ABSTRACT. Fieldwork in two protected areas from northeastern Argentina (P.N. El Impenetrable in Chaco Province, and the P.N. Río Pilcomayo in Formosa Province) exploring the Heteroptera fauna, resulted in the discovery of a *Camarochilus confusus* Harris 1930 male that was collected by sweeping the vegetation. The species belongs to the subfamily Pachynominae, representing the first record of the group in the country. *Aphelonotus simplicus* Uhler 1894 (Aphelonotinae), was also collected using light traps, confirming its occurrence in the Chaco ecoregions in Argentina.

KEYWORDS. *Aphelonotus simplicus*. Chaco. Formosa. Hemiptera. Reduvidae.

Pachynomidae is a small family of Heteroptera, currently considered as the sister group of the diverse Reduviidae, forming the superfamily Reduvidae (Weirauch et al., 2019; Schuh & Weirauch, 2020).

The family comprises five genera and 31 described species. The genus *Aphelonotus* Uhler, the only genus included in the subfamily Aphelonotinae, has its highest species diversity in the Neotropics, with 14 species distributed in the tropics (Schuh et al., 2015; Kment & Redei, 2020). The remaining four genera belong to the Pachynominae, with *Pachynomus* Stål, *Punctius* Stål, and *Camarochiloides* Chen, Liu, Li, & Cai restricted to the Old World, whereas *Camarochilus*

Harris is known from the Neotropical Region (Weirauch et al., 2020). Specimens of this family are rarely found, and most specimens have been collected using light traps while minor fraction with leaf-litter extraction techniques, pit-fall or Malaise traps (Schuh & Weirauch, 2020; Weirauch et al., 2020).

Pachynomids are ground-dwelling predators, their biology is unknown, and the immatures remain mostly undocumented, except for some species of *Aphelonotus* (Schuh et al., 2015; Schuh & Weirauch, 2020).

Up to now, the only species recorded from Argentina was *Aphelonotus simplicus* Uhler 1894

(<https://biodar.unlp.edu.ar/cimicomorpha/es/info/21433.html>) recorded to date in two protected areas: Parque Nacional Río Pilcomayo and Parque Nacional Chaco, in Formosa and Chaco provinces, respectively (Carpintero, 1998; Melo et al., 2011; Melo et al., 2022).

The authors have studied the diversity of Heteroptera in northeastern protected areas in Argentina for the past 20 years (Melo et al., 2004, 2011, 2017; Dellapé et al., 2015). During late spring and summer, fieldwork in two National Parks (P.N. El Impenetrable in Chaco Province, and the P.N. Río Pilcomayo in Formosa Province) was carried out, where pachynomid specimens identified as *Aphelonotus simplus* Uhler 1894 and *Camarochilus confusus* Harris 1930, where collected. This last species constitutes the second species of the family and the first Pachynominae registered in Argentina.

The subfamily-level characters, lack of ocelli and the corium and membrane separated along a straight line (Fig. 1 a, b), allow to easily differentiate the species from *A. simplus* that shows ocelli and a sinuous line between the corium and the membrane.

The genus *Camarochilus* was studied by Weirauch et al. (2020) where a key to identified male specimens of the genus is given. The genus comprises ten species distributed from Honduras in Central America (*C. medius* Weirauch, Forero & Schuh 2020) to Minas Gerais in southeastern Brazil (*C. confusus*). The record from Argentina extends considerably the known distribution of both genus and species toward the south.

Camarochilus confusus can be easily recognized by its large size (over 9 mm), the brown, castaneus, and pale yellow coloration pattern of the body, and the strongly asymmetrical pygophore with the right protuberance long and conical (Fig. 1 a, c).

We examined one male, Chaco, P.N. El Impenetrable, Pastizal de Simbol, 25.076460 S 61.056435 W, 4-XI-2021, A. Serrano col. This specimen was collected sweeping the vegetation with an entomological net.

Material examined of *A. simplus*: 2 females, Chaco, P.N. El Impenetrable, Estación de Campo El Teuco, -25.064561 -60.9464903, trampa de luz, 10-XII-2021, Melo, M.C. col.; 4 males 10 females, Formosa, P.N. Río Pilcomayo, Laguna Blanca, -25.173665 -58.129756, 14-II-2022, trampa de luz, Melo, Olivera, Cheli & Dellapé cols.; 1 male 1 female, same data, 15-II-2022, Melo, M.C. col.

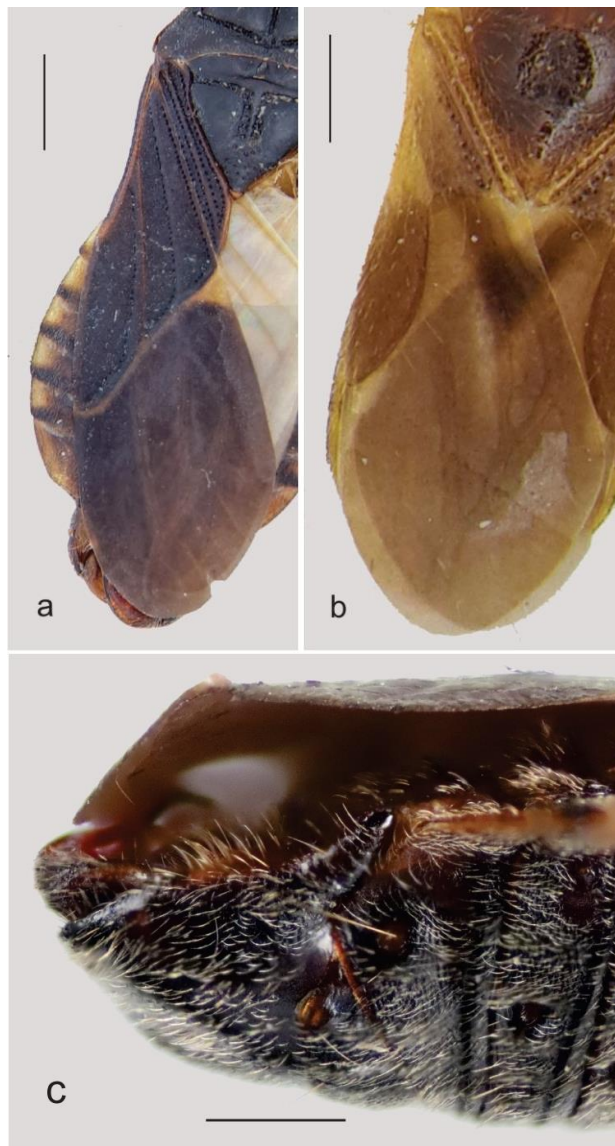


Fig. 1. *Camarochilus confusus*. a. Hemelytra. c. Pygophore, right view. *Aphelonotus simplus*. b. Hemelytra. Scale bars: a=1 mm, b-c=0.5 mm.

All the specimens are available in the Entomological collection of the Museo de La Plata, Buenos Aires.

According to the classification of ecoregions the Argentinean pachynomids are registered from the humid and dry Chaco.

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