

## Nomenclatural Act

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# *Rhoptromeris haywardi* (Blanchard, 1947) is not *Rhoptromeris* Förster, 1869: new combination in *Leptopilina* Förster, 1869 (Hymenoptera: Cynipoidea: Figitidae: Eucoilinae)

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**Abstract.** *Rhoptromeris haywardi* (Blanchard, 1947) is reviewed and the new combination *Leptopilina haywardi* (Blanchard, 1947) is proposed. *Leptopilina haywardi* **comb. nov.** is redescribed and illustrated. *Leptopilina* Förster, 1869 is cited for the first time for Uruguay and Tephritidae (Diptera) is reported for the first time as its host.

**Keywords:** New combination, redescription, new host.

Förster (1869) proposed *Rhoptromeris* (Eucoilinae); the genus has a worldwide distribution, mainly in the Afrotropical and Palearctic regions (van Noort et al. 2015; Buffington et al. 2020). Currently *Rhoptromeris* has about 50 valid species that attack Chloropidae (Diptera) on grasses and fungi (Quinlan 1978; Nordlander & Grijpma 1991; Costa Baião & Forshage 2018; Buffington et al. 2020); the genus is easily recognized by the presence of complete lateral bridges of the pronotal plate, closing the lateral fovea, a character shared only with members of Trichoplastini (Nordlander 1978; van Noort et al. 2015; Costa Baião & Forshage 2018).

*Rhoptromeris haywardi* was originally described in *Eucoila* Westwood, 1833 by Blanchard in 1947, which designates two specimens as cotypes these correspond to syntypes according to article 73.2.1 of the ICZN (ICZN 1999). Subsequently, De Santis (1967) made the transfer to *Rhoptromeris*. This species is characterized by having pronotal plate with incomplete lateral bridges and open lateral fovea; characters that indicate that it is not a member of Trichoplastini and, therefore, it is not a *Rhoptromeris*. In addition, *R. haywardi* is only species of *Rhoptromeris* cited for the Neotropical region, with reported presence in Argentina and Uruguay; it is also the only one that has Tephritidae (Diptera) reported as a host (Turica & Mallo 1961; De Santis 1967; Garcia et al. 2020). So to which genus does this species belong?

We compared *R. haywardi* with *Ganaspis* Förster, 1869, *Trybliographa* Förster, 1869, and *Leptopilina* Förster 1869, because many of the species included in these genera behave as parasitoids of frugivorous dipterous of families Drosophilidae and Tephritidae. *Rhoptromeris haywardi* presents the following combination of characters: head narrows ventrally, triangle-shaped in frontal view (semicircular in frontal view in *Ganaspis* and usually rounded in frontal view in *Trybliographa*); dorsal margin of pronotal plate straight (slightly emarginated in *Ganaspis* and never straight in *Trybliographa*); laterals bars of scutellum short (long in *Trybliographa* and in short or long in *Ganaspis*); lateral depression of scutellum undefined (well defined in *Ganaspis* and defined in *Trybliographa*); marginal cell of forewing closed (open or partiality open in *Trybliographa* and, in *Ganaspis*, can also be closed); metapleural ridges well defined (metapleura smooth in *Ganaspis*; ridges 1 and 3 present, ridge 2 absent in *Trybliographa*); petiole enlarged posteriorly and the broad posterior rim with sculptural

patterns (without posterior rim in *Ganaspis* and *Trybliographa*); base of syntergum with a hairy ring more or less reduced only ventrally, interrupted dorsally (dense hair ring and usually complete dorsally in *Ganaspis*; always complete dorsally in *Trybliographa*). This combination of characters corresponds to *Leptopilina*. Therefore, we propose the new combination *Leptopilina haywardi* (Blanchard, 1947) that is, in this way, reported for the first time for Uruguay.

There are 41 species described species of *Leptopilina* worldwide (Buffington et al. 2020), and those that have a known host mainly attack frugivorous drosophila flies (Diptera: Drosophilidae) (Lue et al. 2016).

For Argentina there are reports of only two species of *Leptopilina*: *Leptopilina bouldardi* (Barbotin, Carton & Kelner-Pillault, 1979), and *Leptopilina clavipes* (Hartig, 1841), both associated with *Drosophila suzukii* (Matsumura, 1931) (Lue et al. 2017; Garrido et al. 2018; Gallardo et al. 2022). *Leptopilina bouldardi* also behaves as a parasitoid of *D. melanogaster* (Meigen, 1830) and *Zaprionus indianus* (Gupta, 1970) (Marchiori et al. 2003; Cuch-Arguimbau et al. 2013; García Cancino et al. 2015; Wollmann et al. 2016; Knoll et al. 2017). Thus *Leptopilina haywardi* **comb. nov.** is the only known species of *Leptopilina* that has as host dipterous Tephritidae.

*Leptopilina haywardi* **comb. nov.**, is similar to *Leptopilina heterotoma* (Thomson, 1862) and *Leptopilina pacifica* Novkovic & Kimura, 2011, by a large scutellar plate rhomboid-shaped (a true rhombus-shaped in *L. heterotoma* and teardrop-shaped in *L. pacifica*). It differs from both species by presenting the following combination of characters: head, meso and metasoma reddish to light brown (black or dark brown in *L. heterotoma* and reddish brown to dark brown in *L. pacifica*); female antenna semiclavate (clavate in *L. heterotoma* and *L. pacifica*), with placoidal sensillas present on F5-F11 (present on F6-F11 in *L. heterotoma* and on F5 or F7-F11 in *L. pacifica*); foveas at base of scutellum oval (semi-squares in *L. heterotoma* and *L. pacifica*); dorsal surface of scutellum areolate (punctate-reticulate or reticulate-rugose in *L. heterotoma* and reticulate in *L. pacifica*); metapleura with ridges 1 and 2 fully developed and ridge 3 extending beyond half of metapleura (3 ridges fully developed in *L. heterotoma* and ridges 1 and 2 fully development and ridge 3 short in *L. pacifica*); middle area of propodeum with scattered hair, laterals densely haired (entire surface

densely hairy in *L. heterotoma*), propodeal carinae straight in lateral view (S-shaped in *L. pacifica*) and, base of syntergum with hair ring more or less reduced ventrally, interrupted dorsally (dense ventrally in *L. heterotoma* and *L. pacifica*).

We compared genera and species using specialized bibliographic (Blanchard 1947; Nordlander 1980; Quinlan 1978; 1988; Novkovic et al. 2011; Lue et al. 2016; Costa Baião & Forshage 2018) and material of reference deposited at the entomological collection of the Museo de La Plata (MLP), Buenos Aires, Argentina. Morphological terminology follows Novkovic et al. (2011), Lue et al. (2016), Costa Baião & Forshage (2018) for taxonomic characters, and Harris (1979) for surface sculpturing. The material studied is deposited at MLP.

*Leptopilina haywardi* (Blanchard, 1947) **Comb. nov.**

*Eucoila haywardi* Blanchard, 1947: 11 (original description)

*Rhoptromeris haywardi*; in De Santis 1967: 97 (generic transfer), new synonym (this work)

**Redescription. Female.** Head, meso and metasoma reddish to light brown (Fig. 1A). Antennae and legs yellowish. Head narrows ventrally, triangle-shaped in frontal view. Malar sulcus present. Posterior margin of genae without carinate. Compounds eyes glabrous. Ocellar hair patches absent. Occiput and vertex smooth. Female antennae (Fig. 1A) with 13 segments; semiclavate, F1-F4 similar in length; placoidal sensilla present on F5-11. Pronotal plate (Fig. 1B) with incomplete lateral bridges and open lateral fovea. Dorsal margin of pronotal plate straight. Medial bridge of pronotal plate broader. Pronotal ridges absent. Mesoscutum entirely smooth, shiny. Notauli absent. Laterals bars of

scutellum short and smooth. Foveas at base of scutellum oval, wider than long. Scutellar plate large (Fig. 1D), rhomboid-shaped in dorsal view, exposing about half of scutellum. Dorsal surface of scutellum areolate (Fig. 1D) and posterior margin rounded. Metapleural ridges well defined (Fig. 1C); ridges 1 and 2 fully developed, ridge 3 extending beyond half of metapleura. Propodeum long (Fig. 1D), with dense pubescence on lateral area; middle area with scattered hair. Propodeal carina straight in lateral view, in posterodorsal view almost parallel. Petiole enlarged posteriorly, with broad posterior rim longitudinally striate. Forewing hyaline, marginal cell closed. Base of syntergum with a hairy ring more or less reduced ventrally, interrupted dorsally.

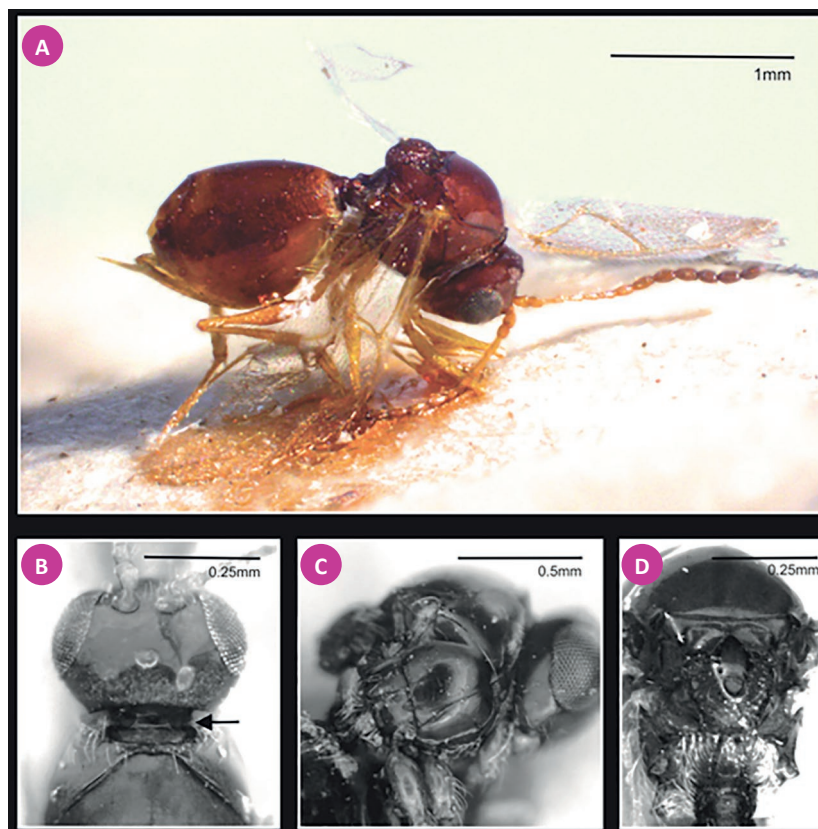
**Male.** Unknown.

**Biology.** Primary larval-pupal solitary koinobiont endoparasitoid of *Anastrepha fraterculus* (Wiedemann, 1830), *Anastrepha* sp. and *Ceratitis capitata* (Wiedemann, 1824) (Diptera, Tephritidae) (Turica & Mallo 1961; De Santis 1967; Garcia et al. 2020).

**Distribution.** Neotropical: Argentina (Entre Ríos, Tucumán, Salta and Jujuy) and Uruguay (Montevideo) (Blanchard 1947; Turica & Mallo 1961; De Santis 1967).

**Comments.** *Leptopilina haywardi* **comb. nov.**, is only known species of *Leptopilina* reported as parasitoid of Tephritidae (Turica & Mallo 1961; De Santis 1967; Garcia et al. 2020).

**Type material. Syntypes.** ARGENTINA. Entre Ríos, Concordia. 2 females, 10-XI-1936, s/*Anastrepha*, Ins. Pat. Vegetal, INTA (MLP). **Additional material:** ARGENTINA. Entre Ríos, Concordia. 5 females, VI-1936, s/*Anastrepha fraterculus* (MLP).



**Figure 1.** *Leptopilina haywardi* **comb. nov.** Female. A. Habitus. B. Pronotal plate, arrow indicated lateral bridges incomplete. C. Mesosoma in lateral view. D. Scutellum in dorsal view.

## Taxonomic Authorities

*Rhoptromeris* Förster, 1869; *Ganaspis* Förster, 1869; *Trybliographa* Förster, 1869 and *Leptopilina* Förster, 1869 in Förster 1869. *Eucoila haywardi* Blanchard 1947 in Blanchard 1947. *Rhoptromeris haywardi* (Blanchard, 1947) in De Santis 1967. *Leptopilina heterotoma* (Thomson, 1862) in Thomson 1862. *Leptopilina bouldardi* (Barbotin, Carton & Kelner-Pillault, 1979) in Barbotin et al. 1979. *Leptopilina clavipes* (Hartig, 1841) in Hartig 1841. *Leptopilina pacifica* Novkovic & Kimura,

2011 in Novkovic et al. 2011.

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## Authors' Contributions

The authors contributed equally to the work.

## Conflict of Interest Statement

We declare that there are no conflicts of interest.

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