

To the study of Pimplinae (Hymenoptera: Ichneumonidae) of Costa Rica

К изучению подсемейства Pimplinae (Hymenoptera: Ichneumonidae) Коста-Рики

A.I. Khalaim
А.И. Халаим

División de Estudios de Postgrado e Investigación, UAM Agronomía y Ciencias, Universidad Autónoma de Tamaulipas, Cd. Victoria 87149, México.

Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St. Petersburg 199034, Russia; E-mail: hymenopt@zin.ru.

Отделение аспирантуры и научных исследований, Агрономический факультет, Автономный университет штата Тамаулипас, Сьюдад Виктория 87149, Мексика.

Зоологический институт РАН, Университетская наб. 1, Санкт-Петербург 199034, Россия.

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КЛЮЧЕВЫЕ СЛОВА: Ichneumonidae, Pimplinae, *Scambus*, *Tromatobia*, Коста-Рика, новый вид, таксономия.

ABSTRACT. *Scambus zunigai* sp.n. is described from Costa Rica. *Tromatobia notator* (F.) is recorded from this country for the first time.

РЕЗЮМЕ. *Scambus zunigai* sp.n. описан из Коста-Рики. *Tromatobia notator* (F.) впервые указана для этой страны.

Introduction

Pimplinae Wesmael, 1845 is a moderately large subfamily of Ichneumonidae which is well represented in all zoogeographical regions of the world [Yu et al., 2005]. It is usually the most extensively collected subfamily of the family Ichneumonidae, because it includes many common species. Descriptions and identification keys of the Pimplinae of Costa Rica were given in two books by Gauld [1991] and Gauld et al. [1998]. Now the Costa Rican fauna of this subfamily includes 185 species distributed in 27 genera, with two genera and the majority of species described in the above mentioned books. A new species of Pimplinae from Costa Rica, *Scambus zunigai* sp.n., is described below. Another one species, *Tromatobia notator* (F.), is recorded for this country for the first time. The holotype of the new species is deposited in INBio (Instituto Nacional de Biodiversidad Collection, Santo Domingo, Costa Rica).

Scambus zunigai Khalaim sp.n.

Fig. 1.

MATERIAL. Holotype: ♀, Costa Rica, Puntarenas Prov., Coto Brus, Z.P. Las Tablas, Mellizas, La Quijada del Diablo, 2050 m, Malaise trap, 13.ix–12.x.1996, coll. L. Angulo (L_S_317600_600700 #8583).

DESCRIPTION. **Female** (holotype). Body length 7.2 mm. Mandible subequally bidentate. Malar space very short, about 0.18 times as long as basal width of mandible. Lower face very slightly transverse, smooth, with very sparse and indistinct setiferous punctures. Head, in dorsal view, with genae evenly rounded behind eyes. Lateral ocellus separated from eye by 1.35 times its own maximum diameter. Flagellum of antenna with 23 segments. Mesoscutum rather densely and evenly pubescent. Propodeum, in profile, very long, weakly and evenly rounded, with shallow median longitudinal depression, dorsally smooth and inpunctate, laterally with indistinct setiferous punctures. Pleural carina absent, but its position indicated by a sharp groove. Submetapleural carina absent. Fore wing length 5.4 mm. Hind wing with nervellus intercepted in lower 0.3, distal abscissa of *Cu*1 distinct. First tergite of metasoma smooth, 1.4 times as long as posteriorly broad, with lateromedian carinae anterolaterally strong, converging towards centre of tergite, then evanescent, and with lateral longitudinal carina absent. Second tergite almost as long as posteriorly broad, with moderately developed anterolateral diagonal grooves which delineate central smooth area with a few sharp punctures and anterolateral unevenly rugulose matt corners, smooth and inpunctate in posterior 0.2, and uneven to irregularly rugulose laterally. Tergites 3–6 with very closely and coarsely punctate anterior impression, with lateromedian convexities and posterior 0.2 smooth, intervening area coarsely and moderately densely punctate; laterally punctures more shallow, often indistinct. Ovipositor 2.1 times length of hind tibia, evenly decurved and strongly compressed (Fig. 1), with nodus, and with very inconspicuous teeth on apex of lower valve, its sheath basally with very long, coarse pubescence.

Body black. Scape and pedicel of antenna yellowish brown ventrally. Flagellum mostly dark brown, basally pale brown. Clypeus reddish dark brown. Palpi whitish. Extreme hind corner of pronotum and tegula white. Pterostigma pale brown. Legs predominantly whitish yellow. Hind femur with brownish longitudinal stripe on internal surface. Hind tibia

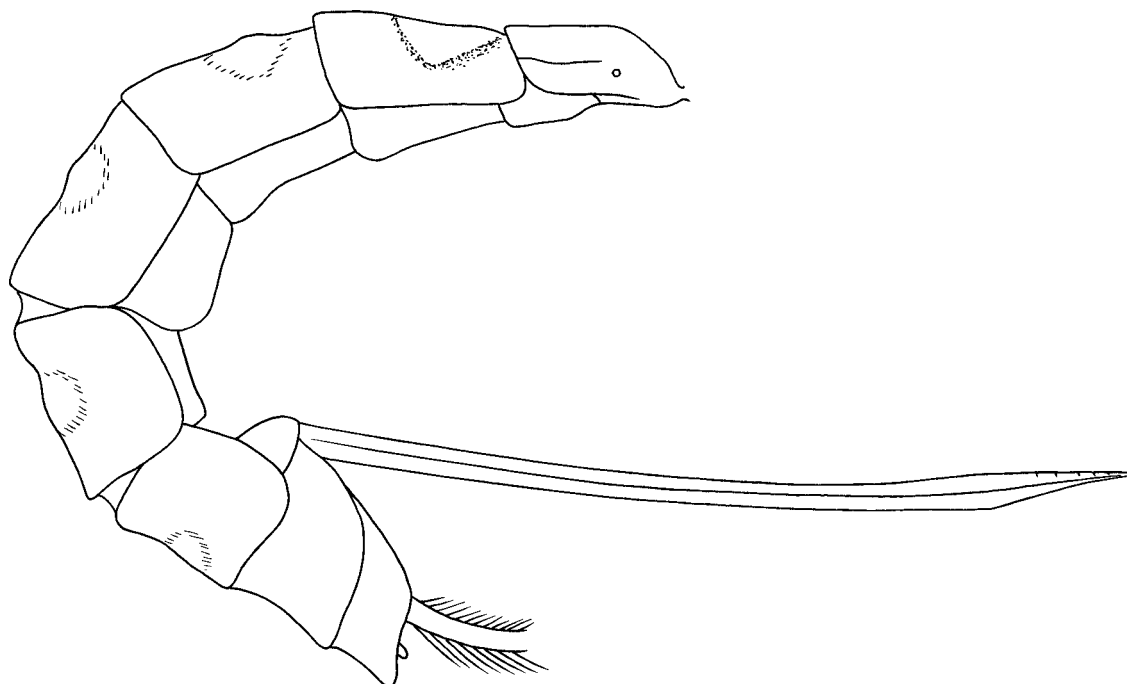


Fig. 1. *Scambus zunigai* Khalaim **sp.n.**, female (holotype), metasoma with ovipositor.

Рис. 1. *Scambus zunigai* Khalaim **sp.n.**, самка (голотип), метасома и яйцеклад.

with small subbasal brownish spot and narrowly infuscate apically. All tarsi with tarsomeres more or less infuscate apically.

Male. Unknown.

DIAGNOSIS. *Scambus zunigai* **sp.n.** resembles *S. emeritae* Gauld, 1991 and *S. erasi* Gauld, 1991 in that these three species have the black body, but the new species can be recognised by the whitish yellow hind femur (orange brown in two other species), the longer first and second tergites of metasoma, and the decurved strong ovipositor (Fig. 1). It also differs from *S. emeritae* by the sculpture of the second tergite, and from *S. erasi* by the shorter ovipositor.

ETYMOLOGY. This species is named in honour of Dr. Ronald Zúñiga, curator of the Hymenoptera collection in INBio, Costa Rica.

Tromatobia notator (Fabricius, 1804)

MATERIAL. "Arenal 94-96 Hymn. 4" [Costa Rica, Alajuela reg., volcano Arenal, 1994–1996], 1 ♀ (INBio).

DISTRIBUTION. South-East U.S.A. (Georgia, North Carolina, Florida), Mexico, Cuba, Puerto Rico, Costa Rica.

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References

- Gauld I.D. 1991. The Ichneumonidae of Costa Rica, 1. Introduction, keys to subfamilies, and keys to the species of the lower pimpliform subfamilies Rhyssinae, Poemeniinae, Acaenitinae and Cyloceriinae // Mem. Amer. Entomol. Inst. Vol.47. P.1–589.
- Gauld I.D., Ugalde Gómez J.A., Hanson P. 1998. Guía de los Pimplinae de Costa Rica (Hymenoptera: Ichneumonidae) // Revista de Biología Tropical. Vol.46. Suppl.1. P.1–189.
- Yu D.S., van Achterberg K., Horstmann K. 2005. World Ichneumonidea 2004. Taxonomy, Biology, Morphology and Distribution. CD/DVD. Taxapad, Vancouver, Canada. www.taxapad.com