

***Carinichremylus* gen. nov.**
(Hymenoptera: Braconidae: Pambolinae) from Peru

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A new genus of the subfamily Pambolinae (Braconidae) is reported from Peru (*Carinichremylus* gen. nov.; type species: *Carinichremylus peleopodae* spec. nov.), illustrated and described. The type species has been reared from a *Peleopoda* spec. (Lepidoptera: Oecophoridae). The new genus is closely related to the Australian genus *Chremylomorpha* Belokobylskij, 1986.

Introduction

Dr G. Delvare (Montpellier) kindly handed over to me a series of Braconidae reared from a *Peleopoda* spec. (Lepidoptera: Oecophoridae) in Peru. It proved to be a new genus belonging to the subfamily Pambolinae Marshall, 1885, the tribe Chremylini Hellén, 1957 and the subtribe Cedriina Belokobylskij, 1993 (for the taxonomy of the group, see van Achterberg, 1995). It is the first known Neotropical member of the subtribe Cedriina (up to now an Indo-Australian group, mainly known from the Australian continent). The new genus is closely related to the monotypic genus *Chremylomorpha* Belokobylskij, 1986, from Australia. It shares with this genus the truncately protruding antero-lateral corners of the first metasomal tergite (fig. 10), and the absence of vein 1-SR+M of fore wing (fig. 1). The new genus differs from it by the costate second and third metasomal tergites (with the following tergites retracted under it; figs 6, 10), the slender third antennal segment (fig. 5), the pair of deep subpronope (fig. 9), the presence of laterope (fig. 6), the antero-lateral depression of the propodeum (fig. 6) and of the second tergite, the antero-dorsally strongly protruding propodeal areola (fig. 6), the lack of granulation of the mesoscutum, scutellum, and mesopleuron, the extremely long vein 2-SR of fore wing, the unsclerotised vein 2-1A and CU1b of fore wing (fig. 1), the lateral crease of the second and third tergites (fig. 6), the open marginal cell of fore wing (fig. 1), and the laterally depressed mesoscutum with a median carina anteriorly and a wide elliptical depression posteriorly (fig. 9).

The new genus is a gregarious parasitoid of an oecophorid species. The only other member of the subtribe of which the biology is known is the Indo-Australian genus *Cedria* Wilkinson, 1934, which is a gregarious idiobiont ectoparasitoid of Pyralidae and Tortricidae, and in which the female exhibits maternal care for her larvae.

For the recognition of the subfamily Pambolinae, see van Achterberg (1993, 1997), for a key to the subtribes and genera of the tribe Chremylini, see van Achterberg (1995), and for the terminology used in this paper, see van Achterberg (1988).

Descriptions

Subfamily Pambolinae Marshall, 1885

Carinichremylus gen. nov.

Type species: *Carinichremylus peleopodae* spec. nov.

Etymology: named after the related genus *Chremylus* Haliday, 1833, with the preposition "carina" (Latin for "keel"). Gender: masculine.

Diagnosis.— Third antennal segment slender and somewhat longer than fourth segment and much longer than pedicellus (fig. 5); distance between antennal sockets more than twice diameter of antennal socket in dorsal view (fig. 4); head strongly narrowed posteriorly (fig. 4), convex dorsally and strongly narrowed ventrally (fig. 2); subpronope deep (fig. 9); mesoscutum depressed laterally, with a median carina anteriorly and a wide elliptical depression posteriorly (fig. 9); mesoscutum, scutellum, and mesopleuron largely smooth, without granulation; metanotum with median carina posteriorly; antero-lateral depression of propodeum deep (fig. 6); propodeal areola strongly protruding antero-dorsally (fig. 6); vein 1-SR+M and parastigma of fore wing absent (fig. 1); vein 2-SR of fore wing extremely long, much longer than vein m-cu (fig. 1); vein 1-CU1 of fore wing normal, not oblique; first subdiscal cell of fore wing parallel-sided basally; vein 2-1A and CU1b of fore wing unsclerotised (fig. 1); marginal cell of fore wing open (fig. 1); vein cu-a of hind wing absent; antero-lateral corners of first metasomal tergite truncately protruding, angulate (fig. 10); laterope of first tergite present (fig. 6); second tergite depressed antero-laterally (fig. 10); second and third metasomal tergites costate and with lateral crease (figs 6, 10), following tergites retracted.

Biology.— Gregarious parasitoid of *Peleopoda* spec. (Oecophoridae).

Distribution.— Neotropical (one species).

Carinichremylus peleopodae spec. nov.

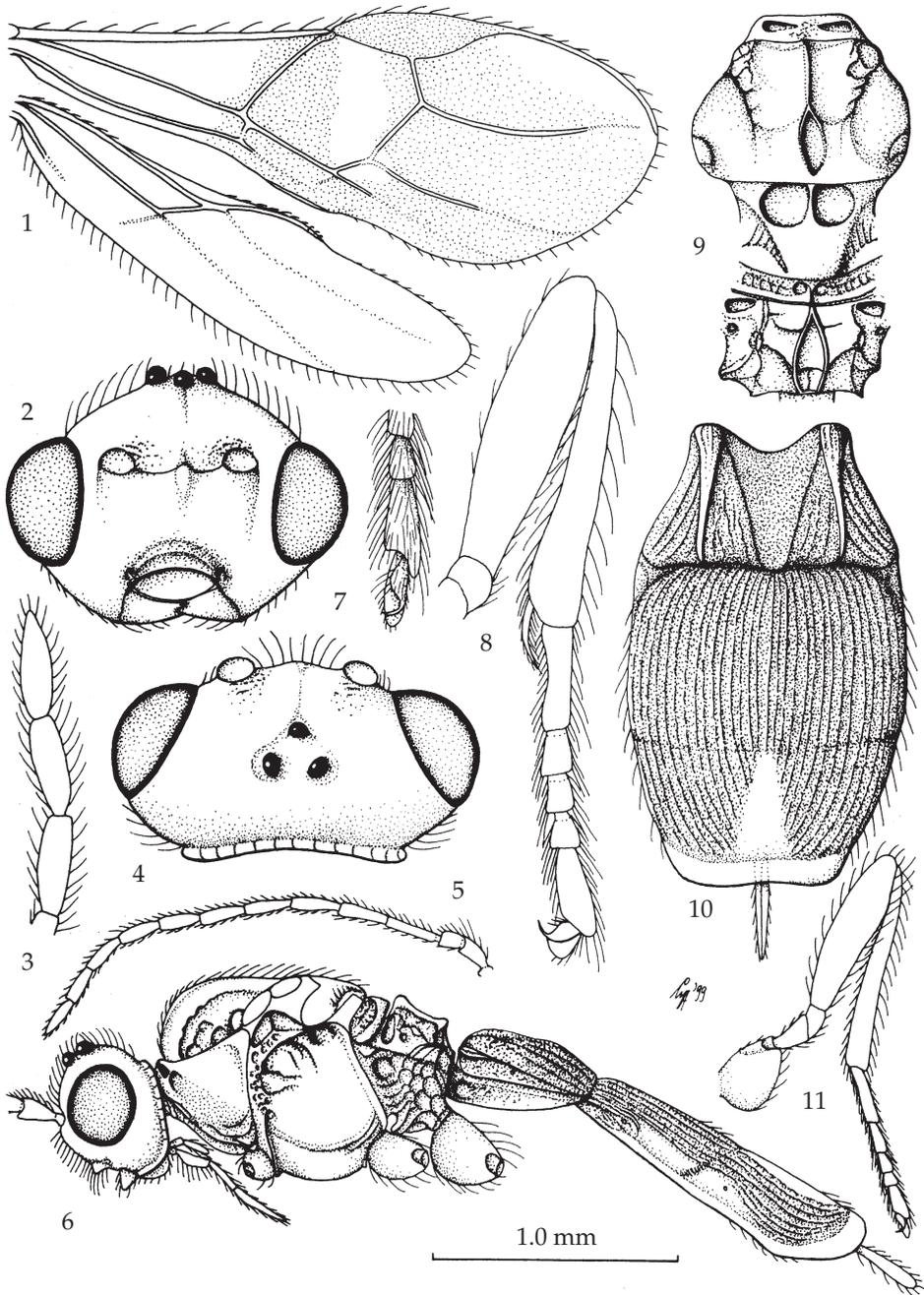
(figs 1-11)

Material.— Holotype, ♀ (RMNH), "Perou, Palmawasi, 14543035", "ex *Peleopoda* sp. [= Oecophoridae], 21.v.1997, Gasani leg.". Paratypes (5 ♀ ♀; RMNH, CIRAD-CA, MNHN): same data as holotype.

Holotype, ♀, length of body 2.7 mm, of fore wing 2.2 mm.

Head.— With conspicuous long ivory setae; antennal segments 12, third segment narrower than fourth segment, length of third, fourth and penultimate segments 5.0, 3.9, and 3.3 times their width, respectively (figs 3, 5); scapus slender, apically subtruncate; pedicellus medium-sized (fig. 5); length of maxillary palp 1.1 times height of head, and its apical segment long (fig. 6); maxillary and labial palpi with 4 and 2 segments, respectively; length of eye in dorsal view 2.7 times temple (fig. 4); temples directly narrowed posteriorly (fig. 4); OOL:diameter of ocellus:POL = 14:4:6; frons weakly convex, without distinct median groove, largely smooth, but superficially sculptured near antennal sockets (fig. 4); face strongly transverse, smooth, with long horizontally directed setae; vertex smooth; length of malar space 1.4 times basal width of mandible; labrum mainly flat, smooth, glabrous; clypeus largely smooth, distinctly depressed medially and ventrally (fig. 2).

Mesosoma.— Length of mesosoma 1.5 times its height; side of pronotum smooth dorsally, mainly granulate ventrally (fig. 6); precoxal sulcus indistinct, nearly complete,



Figs 1-11, *Carinichremylus peleopodae* gen. nov. & spec. nov., ♀, holotype. 1, wings; 2, head, frontal aspect; 3, apex of antenna; 4, head, dorsal aspect; 5, antenna; 6, habitus, lateral aspect; 7, outer hind claw; 8, fore leg; 9, mesosoma, dorsal aspect; 10, metasoma, dorsal aspect; 11, hind leg. 1, 5, 6, 11: scale-line (= 1.0 mm); 2, 4: 1.7 x; 3, 7, 8: 2.5 x; 9, 10: 1.1 x.

largely smooth (fig. 6); mesosternal suture deep, smooth; postpectal carina present ventrally, strong in front of bases of middle coxae; remainder of mesopleuron smooth, convex; pleural sulcus largely absent; metapleuron very coarsely reticulate (fig. 6); notauli not impressed, but marked by a wide depressed area anteriorly bordered by rugae (fig. 9); mesoscutum with conspicuous long setae; surface of propodeum very coarsely areolate, its median carina absent (fig. 9), and with a small tubercle laterally.

Wings.— Fore wing: r weakly oblique, longer than width of pterostigma, emerging medially from pterostigma (fig. 1); r:2-SR:3-SR+SR1 = 9:14:43; cu-a just postfurcal (fig. 1), short; SR1 distinctly curved, incomplete (fig. 1); CU1a at level of 2-CU1.

Legs.— Hind coxa smooth; length of femur, tibia and basitarsus of hind leg 3.8, 10.0 and 3.3 times their width, respectively; hind tibial spurs not well visible among setae; hind femur smooth, cylindrical; all telotarsi widened in dorsal view, slightly so in lateral view (figs 7, 8, 11); tarsi long and densely setose ventrally (fig. 11).

Metasoma.— Length of first tergite 0.5 times its apical width, its surface mainly granulate, distinctly striate laterally and widely concave medially, its dorsal carinae complete, and anteriorly widened and strongly elevated (fig. 10); second and third tergites flattened, smooth laterally and coarsely striate-costate dorsally, and granulate between sculpture, but third tergite with a smooth triangular area medially and with a wide apical flange (figs 6, 10); length of ovipositor sheath 0.16 times fore wing, apex of sheath without a spine.

Colour.— Dark brown or blackish; temple, face (but medially infusate), basal half of antenna and legs (except dark brown telotarsi, and main part of middle and hind femora and hind coxa) yellowish-brown; apical flange of third tergite brown; palpi and tegulae dark brown; pterostigma and veins more or less dark brown; membrane of fore wing brownish but part below pterostigma, basal quarter of wing and antero-apically subhyaline (fig. 1).

Acknowledgements and abbreviations

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References

- Achterberg, C. van, 1988. Revision of the subfamily Blacinae Foerster (Hymenoptera, Braconidae).— Zool. Verh. Leiden 249: 1-324, figs 1-1250.
- Achterberg, C. van, 1993. Illustrated key to the subfamilies of the Braconidae (Hymenoptera: Ichneumonidae).— Zool. Verh., Leiden 283: 1-189, 1-66, photos 1-140, plates 1-102.
- Achterberg, C. van, 1995. Generic revision of the subfamily Betylobraconinae (Hymenoptera: Braconidae) and other groups with modified fore tarsus.— Zool. Verh. Leiden 298: 1-242, figs 1-857.
- Achterberg, C. van, 1997. Braconidae. An illustrated key to all subfamilies.— ETI World Biodiversity Database CR-ROM Series.

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