# A NEW GENUS AND SPECIES OF ENCYRTIDAE (HYMENOPTERA: CHALCIDOIDEA) FROM PERU

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#### RESUMEN

Nuevo género y nueva especie de Encyrtidae (Hymenoptera: Chalcidoideae) de Perú. Se describe el género *Cheilopsis* con una sola especie *inca* sobre la base de un ejemplar hembra. Su posición tribal permanece incierta, encontrándose entre la de los géneros de Cerapterocerini (morfología de cabeza, mandíbulas y antenas) y la de los géneros de Cheiloneurini (morfología de tórax, alas y abdomen).

### Introduction

I am undecided about the tribal position of this new genus, described here from the female of a single new species, namely Cheilopsis inca, and it appears to form an interesting and distinct link between the genera of the Cerapterocerini and the Cheiloneurini, two closely related encyrtine tribes. In Cheilopsis the structure of the head, mandibles and antennae are chracteristic of the Ceraperocerini, and C. inca resembles the species of genera such as Anicetus Howard and Paraceraptrocerus Girault in these characters. On the other hand, the distinct structure of the thorax, wings and abdomen, the presence of a tuft

of bristles on the scutellum, and a metallic coloured band covered with silvery-white setae across the mesoscutum, are diagnostic of Cheiloneurus Westwood, Prochiloneurus Silvestri and other genera of the Cheiloneurini. On the basis of the above mentioned characters and our present interpretation of the tribal classification of the Encyrtidae (see Trjapitzin, 1973). Cheilopsis is probably placed equally well in either of the two mentioned tribes; or, on a balance of characters, rather in the Cheiloneurini. But because of our limited understanding of the higher classification of the encyrtids at present and our incomplete knowledge of the genera of this group of insects, it seems best to leave the tribal placement of Cheilopsis in abeyance.

The combination of the characters of the head and thorax mentioned above, as well as those given in the generic description below, distinguish the new genus from all other encyrtid genera known to me, including those recorded from the Neotropical region. *Cheilopsis* does not key out in Noyes' recent (1980) review of the genera of Neotropical Encyrtidae.

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## CHEILOPSIS gen. nov.

Type-species: Cheilopsis inca spec. nov.

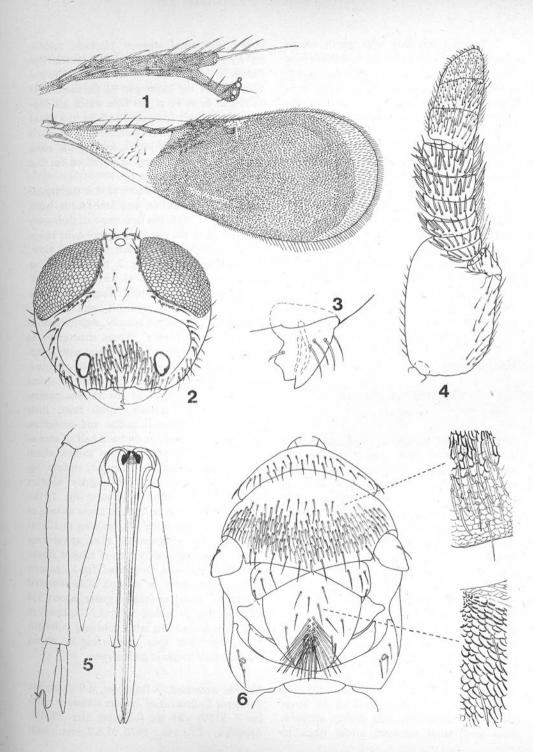
Cheilopsis in described with reference to certain genera of the Cheiloneurini and Cerapterocerini.

Female. Length: about 1,5 mm. Colour: integument mostly non metallic in colour except for the mesoscutum which has a broad, highly metallic, transverse band across the entire segment, the area marked by this band densely covered with silvery-white setae; fore wing largely infuscated, the discal infuscation more or less uniform and enclosed near the hyaline apex of the wing by a curved band of darker colour (Fig. 1), much as in Anicetus and Paraceraptrocerus; hind wing hyaline.

Head much the same as in some genera of the Cerapterocerini; in dorsal view (the held perpendicular), about four occiput times as wide as its median length, the hind margin concave, the anterior margin gently rounded, the frontofacial carina not visible in this position; head, if tilted backwards, with the frontofacial carina visible as a more or less straight, transverse ledge just in front of the eyes; frontovertex narrow, parallel sided, united with the occiput acutely, sloping from a level anterior to median ocellus strongly downward to meet the face in a trasverse. entire carina; ocelli in an acute-angled triangle; head, in anterior viwe, with disregard to the curvature, wider than high, the eyes hardly bulging at the sides, face impressed, forming a rather deep concavity below the frontofacial carina, the latter semicircular, extending from

above (just below the eyes) downwards along either side of the face to near the mouth: scrobes not differentiated from the surface of the facial concavity, the latter with a large, well developed, convex prominence between the antennal sockets; antennal sockets placed close to mouth margin, more than twice their greatest diamenter apart; head, in profile, subtriangular, the temples angulate, appearing as two ridges on either side of the face behind the eyes. Antenna characteristic of the Cerapterocerini, broad and largely compressed laterally, as in fig. 4; scape subrectangular, laminate, the upper edge thickened and somewhat folded, but no flat with the surface smooth and polished as in some genera; inner surface of scape slightly concave; pedicel small. conical not produced ventrally, much as in Leurocerus Crawford and Homosemion Annecke, flagellum fairly strongly compressed laterally, the funicle six-segmented, the club with three segments, the flagellar shape and setation as in fig. 4, Maxillary palpi four-segmented, the labial three-segmented; mandible tridentate as in. fig. 3. Sculpture of frontovertex finely cellulate-reticulate, the cells small, the integument appearing rather smooth under low magnification; facial concavity smooth, polished, the sculpture not differentiated; frontovertex with a row of small punctations extending along each inner eye margin, each punction giving rise to a fine seta; frontovertex otherwise sparsely and unevenly setose; facial concavity devoid of setae except for the prominence between the toruli which is densely setose, the setae stronger than those on the remainer of the head; eyes sparsely and finely pubescent.

Figs 1 - 6.- Cheilopsis inca spec. nov., female paratype (T 3550 - 1). 1. Fore wing with venation enlarged. 2. Head, anterior view. 3. Mandible. 4. Antenna. 5. Ovipositor and middle tibia, drawn to the same scale. 6. Thorax, showing setation, and sculpture of mesoscutum and scutellum enlarged.



Thorax longer than wide, gently convex in profile; mesoscutum plainly wider than long, the scutellum about as long as wide, broadly rounded apically; axillae clearly raised above the level of the scutellum; mesonotal setation and sculpture as in fig. 6, the scutellum with a distinct tuft of semi-erect bristles. Legs not especially modified.

Fore wing structurally much as in *Cheiloneurus* and allies, about 2,5 times as long as broad, broadly rounded apically; marginal vein very long, much longer than the short postmarginal which is shorter than the stigmal vein; setation of fore wing as in fig. 1.

Abdomen longer than thorax, the gaster narrower than thorax, acutely pointed apically; cercal plates placed a little closer to base than to the apex of gaster; ovipositor and gonostyli well developed, slender, shaped as two stylets; distal sternite not reaching beyond the apex of gaster; paratergites absent.

Male. Unknown.

# Cheilopsis inca, spec. nov. (Figs. 1-6)

Female. Colour: frontovertex and sides of face dull brown with faint orange suffusions in parts, the frontovertex with a weak metallic green tinge in certain light; frontofacial carina outlined in blackish-brown, the facial concavity a little paler than the sides of face, yellowishbrown; antennal scape much the same as the sides of face, margined with blackish, the remainder of antenna brownish-black to black; pro- and mesonotum bright orange, except the posterior half or so of the mesoscutum wihich is brilliant metallic blue-green to blue, this area densely covered with silvery-white setae: tuft of bristles on scutellum blackish: metanotum sordid white to brownish; mesopleura brown, shiny, with a metallic lustre in parts; fore leg with coxa, trochanter, femur and tibia, off white to vellowish white, the inner surface of the distal half of the femur and basal half of the tibia darkly suffused; basal four tarsal segments sordid white to

brown, the distal segment blackish; middle leg with coxa brown to blackish-brown, the remainder of the leg off white to yelowish-white except the larger part of the femur and basal half or more of the tibia which are unevenly and darkly suffused, and for the distal tarsal segment which is blackish; hind leg much the same as middle leg except for the coxa which is also pale; wings as described for the genus and as illustrated in fig. 1.

Structurally as described for the genus; frontovertex more or less one-fourth head width; lateral ocelli less than one-half their own diameter from the eye margins, not quite twice their diameter apart; head, in frontal view. with dimensions as in fig. 2, the mandible as in fig. 3; antenna (fig. 4) with scape about 1.5 times as long as broad; funicle segments III-VI and all club segments with rhinaria: club somewhat oblique apically, slightly shorter than the entire funicle. Thorax structurally as in fig. 6; basal half of mesoscutum with sculptural cells elongate and longitudinally oriented. their margins thickened, the celles in apical part (the area marked by the metallic coloration) somewhat circular, much finer, their margins not thickend; axillae and scutellum with sculpture much as on basal half of mesoscutum except for the cells on axillae which are mainly transversely oriented; middle leg with basal tarsal segment slightly shorter than tibial spur. Fore wing as in fig. 1, the marginal vein more or less five times as long as postmarginal, the latter not reaching to a level at stigmal vein; marginal cilia along apical wing margin about one-half length of longest seteae on submarginal vein. Ovipositor (fig. 5), as seen through the derm in cleared slide-mounted specimens, about as long as gaster, about 1.4 times as long as middle tibia, 3,3-3,6 times as long as gonostyli, the latter subequal in length to middle tibial spur, protruding by about one-half their length at gastral apex.

Material examined. 9 Holotype, 6 9 paratypes (National Collection of Insects accession number T 3550) with the following data: PERU: Arequipa, 25. viii. 1970, J.S.Torres, with

Saissetia oleae (Oliver), S.coffeae (Walker) and Lecanium corni (Bouceh) on Guava. Holotype and 4 paratypes in National Collection of Insects, Plant Protection Research Institute, Pretoria; 1 paratype in British Museum (Natural History), London; 1 in Fundación Miguel Lillo, S.M. de Tucumán, Argentina.

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#### LITERATURE

- NOYES, J.S., 1980. A review of the genera of the Neotropical Encyrtidae (Hymenoptera: Chalcidoidea).- Bull. Br. Mus. nat. Hist. (Ent.) 41 (3): 107 - 253.
- TRJAPITZIN, V.A., 1973. Classification of the parasitic Hymenoptera of the family Encyrtidae (Chalcidoideae). Part II. Subfamily Encyrtinae Walker, 1837. Ent. Obozr. 52: 416 429. (tr. from Russian).