

**A NEW SPECIES OF PHILIPPINE ANUSOIDEA GIRAULT (1926)
PARASITIZING PSEUDOCOCCUS CITRICULUS GREEN
(HYMENOPTERA: ENCYRTIDAE;
HOMOPTERA: PSEUDOCOCCIDAE)¹**

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Anusoidea luzonica n. sp. is described and *Pseudococcus citriculus* Green indicated a host. Distribution of ANUSOIDEA and the host spectrum are briefly discussed.

Material submitted for identification to Professor Paul DeBach's IBP Project of biological control of scale insects, University of California, Riverside, by Sr. C. S. Celino, Bureau of Plant Industry, Lipa Experiment Station, reveals the presence of a new species of *Anusoidea* attacking *Pseudococcus citriculus* in the Philippines. Discovery of *A. luzonica* n. sp. represents the first record of this genus in the Philippines and the second time *Pseudococcus* has been identified as a host.

ANUSOIDEA LUZONICA Gordh, *new species* (Fig. 1-5)

FEMALE: Body length 5 mm. Head orange with bright red ocelli; central portion of mesoscutum dusky, remainder of mesosoma tan; gaster dusky; ventral margin of antennal scape, dorsal and ventral margin of flagellomeres dark, nearly black; club tan, progressively lighter distally; central portion of forewing disc infuscated, hindwing hyaline; forecoxa proximo-laterally, midcoxa mesally dusky; remaining leg segments uniformly tan.

Head in dorsal aspect 3 times as wide as median length; vertex with short bristles at inner margin of compound eyes; frontovertex, at narrowest, nearly 1/5 head width; ocelli forming acute triangle anterior of vertex; lateral ocellus less than single diameter from inner margin of compound eye. Frontal aspect of head (Fig. 1) slightly longer than wide; compound eye height over 2 times malar space length; toruli at ventral margin of head, separated by twice diameter of single torulus; interantennal carina "V" shaped, disunct, with margin between carina and torulus setose; scrobe absent. Antenna 11-segmented (Fig. 2), laterally compressed, rendering it leaf-like; all segments with uniform vestiture of setae; flagellomeres widening distally such that 3rd flagellomere widest, subsequent segments progressively narrower; club compact, bearing numerous longitudinal carinae. Head smooth, without conspicuous sculpture. Maxillary palp 4-segmented; labial palp 3-segmented; mandible bidentate.

Mesosoma slightly longer than wide; pronotum dorsally rugose, laterally setose, shagreened; mesoscutum rugose, with uniform covering of setae, setae along anterior margin and scuto-scutellar suture dark and thick, remainder pale and thin; axilla,

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mesoscutellum rugose, setose; setae at posterior margin of mesoscutellum 2 times larger than axillary setae; tegula rugose with a few dark setae; mesonotum asetose, striolate; propodeum eleutely shagreened with small, pale setae laterally. Tibial spur of mesothoracic leg (Fig. 5) $2/3$ length of middle basitarsus; basitarsus longer than remaining tarsomeres. Forewing (Fig. 3) $2-1/2$ times longer than wide, spiculate; submarginal vein 2 times longer than marginal vein, postmarginal vein absent; stigma $1/3$ marginal vein. Hindwing (Fig. 4) $3-1/2$ times longer than wide; submarginal, marginal vein subequal.

Gaster ovoid, glabrous, subequal in size to mesosoma; paratergites conspicuous; tergites each with a few pale, short indistinct setae; sternites 1 and 2 with comparatively long, thin setae; 3 and 4 with short, thin setae; remaining sternites glabrous. Ovipositor as long as middle basitarsus and tarsomere 2 combined, not projecting beyond apex of gaster.

MALE: Unknown.

COMPARATIVE COMMENTS

Despite Girault's (1926) vague description of *Anusoidea*, the genus represents one of the most distinctive of all anagryine encyrtids. Females of *A. luzonica* differ from *A. aureiscutellum* Girault in that the latter has flagellomere 1 largest while the mesosoma and legs are predominantly mauvish. *A. luzonica* differs from *A. comperei* Timberlake in that females of the latter species have maxillary and labial palps 2-segmented, the face bears shallow punctations, the antenna and entire mesosoma except axilla are dark. Girault (1927) described *A. varia* but I have been unable to obtain specimens for comparison. However, the original description indicates predominantly purple legs, presence of a postmarginal vein, and elongate stigma. These characters are sufficient to distinguish *A. varia* from *A. luzonica*. The habitus of the Philippine species compares in every other respect with other members of ANUSOIDEA.

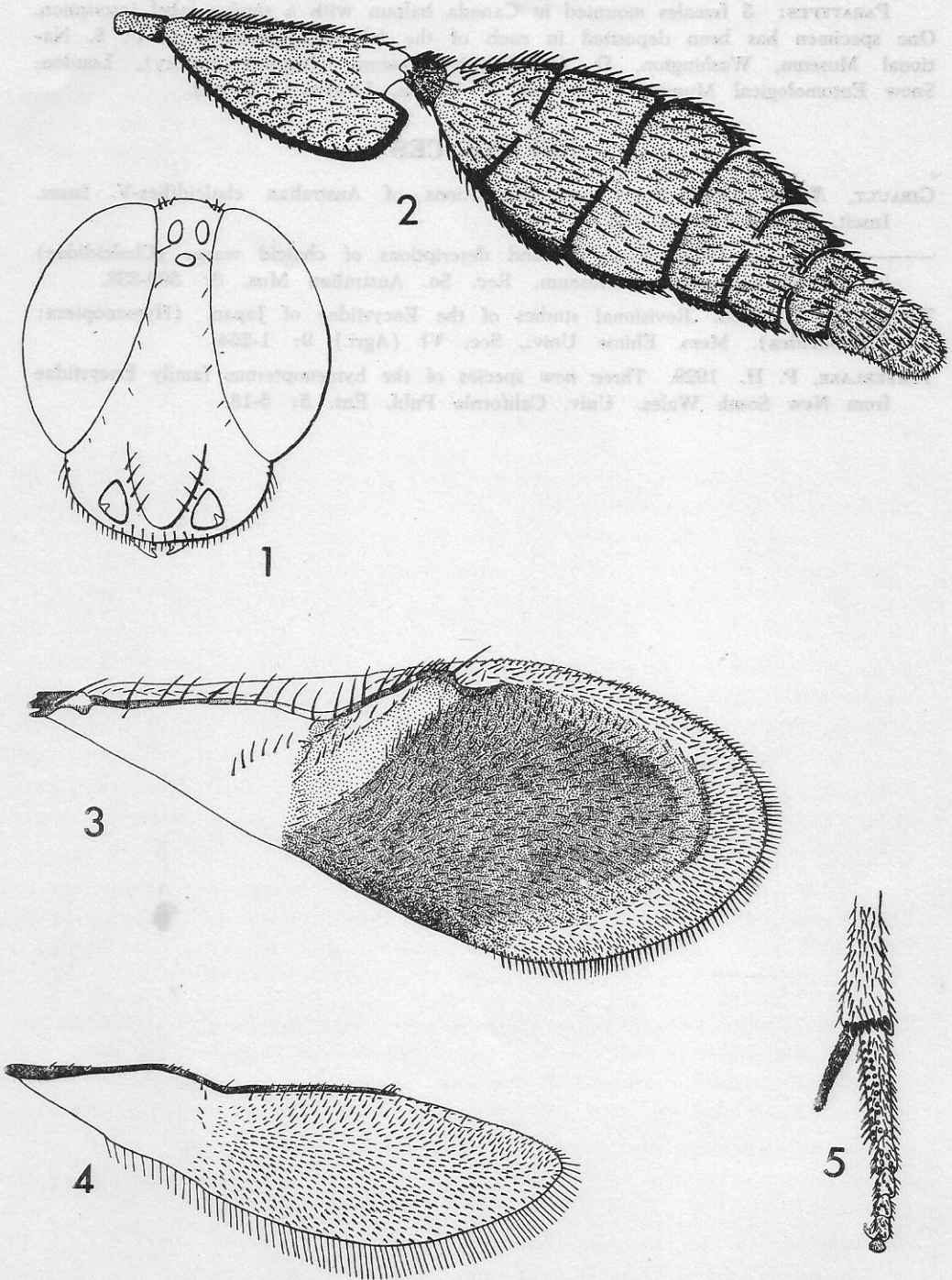
A. aureiscutellum, *A. varia*, and *A. comperei* are Australian species and have not been recovered elsewhere. The presence of *A. luzonica* in the Philippines suggests a wider distribution of the genus than believed earlier.

Girault did not indicate the hosts for his species, but Compere recovered the holotype of *A. comperei* from undetermined mealybugs, and reared additional material on *Pseudococcus gahani* Green. Tachikawa (1963) has indicated that *Anusoidea* is parasitic on Pseudococcidae, and recovery of *A. luzonica* from *P. citriculus* supports his findings.

MATERIAL EXAMINED: 4 females collected by C. S. Celino near Lipa City, August 1971.

TYPE LOCALITY: Lipa City, Batangas, Philippines.

HOLOTYPE: Female mounted in Canada balsam with label inscribed "A. luzonica, Lipa City, Luzon, Philippines. August 1971. Host: *Pseudococcus citriculus* Green." Deposited in the Department of Entomology, University of California, Riverside, California.



Figs. 1-5. Female *Anusoidea luzonica*, n. sp. (x 20); (1) head, anterior aspect; (2) left antenna inner aspect; (3) right forewing; (4) right hindwing; (5) right mesothoracic tibio-tarsal complex posterior aspect.

PARATYPES: 3 females mounted in Canada balsam with a similar label inscription. One specimen has been deposited in each of the following institutions: U. S. National Museum, Washington, D. C.; British Museum (Natural History), London; Snow Entomological Museum, University of Kansas, Lawrence, Kansas.

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