

A NEW SPECIES OF *CARVALHYGIA* (HETEROPTERA: COREIDAE) FROM THE PHILIPPINE REPUBLIC¹

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ABSTRACT: A new species, *Carvalhygia camarinesa*, from the Philippine Republic is described in the tribe Colpurini (Coreidae). The habitus and drawings of the male genital capsule and female genital plates are illustrated. A key to the species of *Carvalhygia* is included.

Brailovsky (1995) erected the genus *Carvalhygia*, which is known only from the Philippine Republic, and mentioned certain characters to distinguish it from other genera of Colpurini. This genus is characterized by a postocular tubercle being extremely reduced to absent, eyes that are globose and slightly protuberant, paratergite IX that is thick and folded downward, frontal angles of pronotum that usually are rounded and not exposed, and the hind femur that frequently is armed.

Brailovsky (1995) included three species in *Carvalhygia*: *C. carvalhoi* Brailovsky, *C. milzae* Brailovsky, and *C. nigra* Brailovsky. Here we describe a fourth species collected in the Philippine Republic and include a revised key to the four species.

Carvalhygia camarinesa, NEW SPECIES

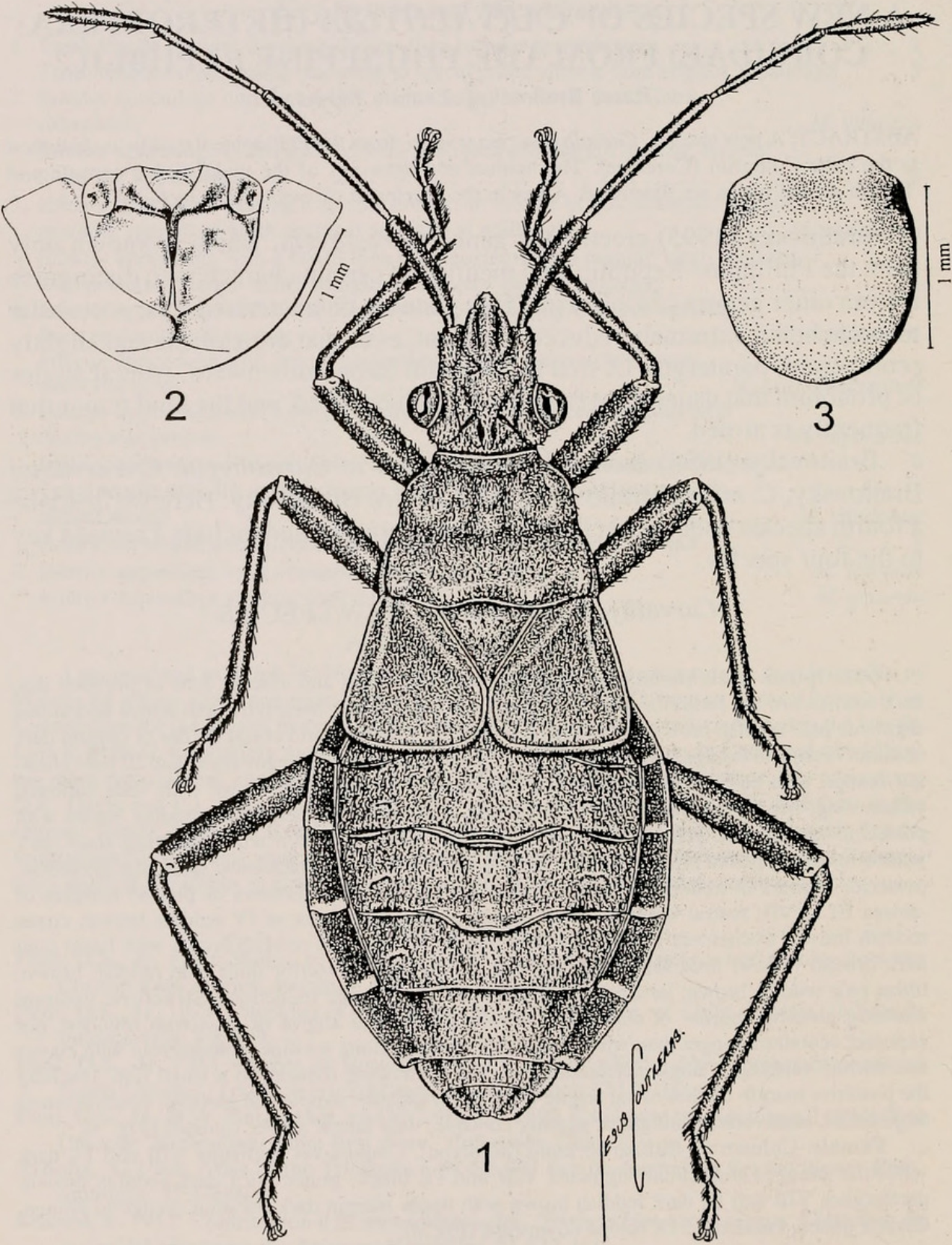
(Figs. 1-3)

Description.-Male (holotype). Dorsal coloration. Head and anterior lobe of pronotal disc dark reddish brown; posterior lobe of pronotal disc, scutellum, hemelytra, and dorsal abdominal segments pale reddish brown; anterolateral border of pronotum and costal border of corium dark chestnut orange to orange; antennal segment I pale reddish brown, segments II and III pale chestnut orange with basal joints yellow, and segment IV dark reddish brown with wide subbasal yellow ring; hemelytral membrane dark yellow; connexival segments pale reddish brown with posterior margin dark yellow. **Ventral coloration.** Reddish brown with following areas dark yellow to dark chestnut orange: anterior and posterior lobes of metathoracic spiracular peritreme, posterior borders of abdominal sterna V and VI, and posterior borders of pleural margins of sterna III to VII; rostral segments dark orange yellow with apex of IV reddish brown; coxae reddish brown; trochanters yellow; fore and middle femora pale reddish brown with basal joint dark orange yellow; hind femur dark orange yellow with posterior third pale reddish brown; tibiae pale reddish brown; tarsi pale reddish brown with orange reflections. **Structure:** Rostrum reaching posterior border of abdominal sternite IV; frontal angles of pronotum rounded, not exposed; scutellum longer than wide; hemelytra meeting along midline, coleopteroid with clavus and corium forming a single coriaceous pad, and membrane reduced to a small flap, reaching the posterior margin of abdominal tergite III. Genital capsule: simple and globose; posteroventral edge entire, transversely straight or slightly concave, with lateral angles rounded (Fig. 3).

Female.-Coloration. Similar to male (holotype). Connexival segments VIII and IX dark chestnut orange; abdominal segments VIII and IX black; gonocoxa I dark reddish brown; paratergites VIII and IX dark reddish brown with upper margin dark chestnut orange to orange. Genital plates: Paratergite IX folded downward (Fig. 2).

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Figures 1-3. *Carvalhygia camarinesa* NEW SPECIES. 1. Dorsal view. 2. Female genital plates. 3. Male genital capsule, caudal view.

Variation.-1. Rostrum reaching middle or posterior third of abdominal sternite IV. 2. Posterior borders of abdominal sterna V and VI dark or pale reddish brown.

Measurements.-Male (female). Head length: 1.96 mm (2.04 mm); width across eyes: 1.84 mm (1.92 mm); interocular space: 1.00 mm (1.00 mm); preocular distance: 1.20 mm (1.24 mm); antennal segment lengths: I, 1.56 mm (1.60 mm); II, 2.08 mm (2.28 mm); III, 1.56 mm (1.60 mm); 1.48 mm (1.44 mm). Pronotal length: 1.72 mm (1.96 mm); maximum width of anterior lobe: 1.96 mm (2.04 mm); maximum width of posterior lobe: 2.32 mm (2.44 mm). Scutellar length: 0.86 mm (1.12 mm); width: 0.84 mm (1.00 mm). Total body length: 9.60 mm (10.50 mm).

Type material. **Holotype:** male, Philippine Republic, Camarines Sur, Mt. Isarog, 1600 m, 21-V-1963, H. M. Torrevillas. Deposited in Bernice P. Bishop Museum, Honolulu, Hawaii. **Paratypes:** 1 male, 8 females, Philippine Republic, Camarines Sur, Mt. Isarog, 750-1600 m, 21-22-V-1963, H. M. Torrevillas. Deposited in Bernice P. Bishop Museum, Honolulu, Hawaii, and National Insect Collection (CNIN), Instituto de Biología, UNAM, México.

Discussion.-*Carvalhygia camarinesa* new species, is characterized by the hemelytral membrane that is dark yellow, extremely reduced, and reaching the posterior margin of abdominal tergite III; the frontal angles of the pronotum that are obtuse and not exposed; and the pleural margins of abdominal sterna III to VII that are reddish brown with the posterior borders dark yellow. It most closely resembles *C. nigra* in which the hemelytral membrane is similar, but the frontal angles of *C. nigra* are produced as small conical teeth and the pleural margin is yellow and tinged with chestnut orange.

Etymology.-Named for Camarines, the type locality in the Philippine Republic.

Key to *Carvalhygia* Species

1. Hemelytral membrane dark brown with inner portion creamy yellow. *Carvalhygia carvalhoi* Brailovsky
- 1a. Hemelytral membrane entirely yellow or creamy yellow 2
2. Hemelytral membrane reaching posterior third of abdominal tergite IV *Carvalhygia milzae* Brailovsky
- 2a. Hemelytral membrane extremely reduced, reaching only posterior third of abdominal tergite III 3
3. Frontal angles of the pronotum obtuse, rounded, not exposed; pleural margin of abdominal sterna III - VII reddish brown with posterior border dark yellow; hind femur ventrally armed *Carvalhygia camarinesa* NEW SPECIES
- 3a. Frontal angles of the pronotum produced anteriorly as short conical teeth; pleural margin of abdominal sterna III - VII yellow, tinged with chestnut orange; hind femur unarmed *Carvalhygia nigra* Brailovsky

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