Four new species of the genus *Lophoscutus* Kormilev, 1951, from Latin America
(Hemiptera: Phymatidae, Macrocephalinae)

BY

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In America *Phymatidae* are represented by two subfamilies: *Phymatinae* and *Macrocephalinae*. The latter has three genera: an archaic genus *Extraneza* Barber, 1939, recorded only once in Puerto Rico, *Macrocephalus Swederus, 1787*, and *Lophoscutus* Kormilev, 1951. The last one is the largest genus in the subfamily and more primitive than *Macrocephalus*. It is distributed in the tropics, only two of its species are recorded from more moderate zone, Southern States of the United States of America: *Lophoscutus prehensilis* (Fabricius), 1803, and *L. uhleri* (Handlirsch), 1898.

In the last 30 years entomologists from the United States of America have collected more intensively in the Central America, from Mexico to Panama, less so intensively in the large islands of the Caribians, so the number of known species of *Lophoscutus* has grown constantly and is growing still.

All measurements in this paper were taken by micromillimeter eyepiece, 25 units = 1 mm. Length of abdomen was taken from the fore border of connexivum II to the tip of abdomen.

**MACROCEPHALINAE**

*Lophoscutus* Kormilev, 1951

*Lophoscutus woolleyi*, new species Fig. 1.

**FEMALE:** Ovate; head, fore lobe of pronotum, corium, fore coxae and all femora, with sharp granulation; connexivum, pleurae and venter with finer granulation; hind lobe of pronotum and scutellum on fore half, roughly punctured; scutellum on hind half finely punctured.

*Head* longer on median line, or from the tips of jugae to hind border of head than it width across eyes 27(31):20; preocular portion narrower than postocular 14:17; ocelli nearer to eyes than to hind border of head 5:7. Clypeus with a row of fine granules. Antennae thin and short, 1 1/2 x as long as width of head across eyes 32:20; relative length and width of antennal segments I to IV are: 8(4.5):5(4):7(3):12:6.5. Relative length of labial segments I to III are: 15:13:8.

*Pronotum* shorter than its maximum width across lateral angles 42:58; fore border deeply sinuate; anterior angles acute, long and parallel; lateral borders of fore lobe crenulate, diverging backward; antero-lateral borders of hind lobe finely rounded posteriorly; lateral angles rounded; postero-lateral borders sinuate; posterior border convex medially. Carinae thin, granulate at base, reaching hind angles.

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**Scutellum** longer than its basal or maximum width 88:(40)50; lateral borders evenly convex, rounded; median carina slightly enlarged and depressed at basal 1/7 of its length, then roofforming at 1/3 of its length; apical portion thin and reaching tip of scutellum.

**Hemelytra.** Corium visible until hind border of connexivum III; disk densely granulate.

**Abdomen** ovate, longer than its maximum width across connexivum III 90:82; lateral borders rounded, postero-exterior angles not protruding; disks of connexiva densely granulate; connexiva III and IV almost as long as wide.

**Legs.** Fore remora longer than its maximum width 38:23.

**Color:** head, pronotum and scutellum greyish-ochraceous; connexiva, ventral side of the body and legs, pale yellow.

**Measurements:** total length 6.72 mm.; width of pronotum 2.32 mm.; width of abdomen 3.28 mm.

**Holotype** ♀, MEXICO, Jalisco, 8.3 mi S of Autlan on Hwy 80. 8.VII.1984; J.B. WOOLLEY collector. Deposited at the National Museum of Natural History, Washington, D.C.

**Paratype:** ♀, collected with holotype; KORMILEV collection.

It is a pleasure to dedicate this species to its collector Mr. J.B. WOOLLEY.

**Lophoscutus woolleyi** n.sp. is related to L. prehensilis (F.), 1803, having similar sharp punctures on the scutellum, but is larger, head is relatively shorter, and by color which is greyish ochraceous.

**Lophoscutus arnaudi,** new species Fig. 2.

**Female.** Ovate; head, antennal segments I to IV, fore lobe of pronotum, connexiva and femora, with fine, white granulation; scutellum and corium, with sparse, scattered, fine, setigerous granulation; hind lobe of pronotum and scutellum, with fine, dense punctures, which are larger at base of scutellum and on pronotum between carenae.

**Head** cylindrical, longer on median line, or from the tips of jugae to hind border of head than its width across eyes 20(23):18; clypeus narrow, with a row of fine granules, placed in a nake depression; preocular portion of head much shorter than postocular 6:12; ocelli equidistant from eyes and hind border of head 6:6. Antennae short, less than twice as long as width of head across eyes 30:18; relative length and width of antennal segments I to IV are: 10(4):5(4):5(4):12(7). Relative length of labial segments I to III are: 13:10:7.

**Pronotum** shorter on median line than its maximum width across lateral angles 36:47.5; anterior angles small, acute, directed forward; anterior border sinuate and smooth, without granulation; lateral angles subrectangular and angularly rounded; postero-lateral borders firstly convex then sinuate; hind border convex medially. Fore disk convex, with dispersed, fine granulation; hind disk punctured between carinae; between carinae and lateral borders punctures are finer; carinae raised on fore half, reaching hind angles.

**Scutellum** longer than its basal or maximum width at connexivum IV 70:(32)42. Median carina sharp, slightly enlarged and depressed at base. Disk with very fine punctures, larger at base, and with setigerous granulation, mostly on posterior half.

**Hemelytra.** Corium reaching 1/2 of connexivum V, granulate.

**Abdomen** shorter than its maximum width across segment IV 70:75. Connexivum with fine, white granulation, partially setigerous.

**Pleurae** granulate; fore border of propleuron crenulate.

**Venter** with dense, white granulation, which is setigerous on genital segments.
FOUR NEW SPECIES OF THE GENUS «LOPHOSCUTUS»...

Figs. 1-2.—1) Lophoscutus woolleyi, n.sp., ♀, dorsal aspect; 2) Lophoscutus aranudi, n.sp., ♀, dorsal aspect.

Legs. Fore femora longer than their maxium width 31:13.

Color: orange; head, antennae, propleurae and fore coxae, lighter; lateral borders of pronotum, basal depression of scutellar carina and exteribr borders of connexiva II to VII are whitish.

Measurements: total length 5.00 mm.; width of pronotum 1.90 mm.; width of abdomen 3.00 mm.

Holotype: ♀, MEXICO, Baja California, 25 mi S of Santa Rosalia; 25.VII.1938; MICHELBACHER & ROSA collectors; with a label; "Macrocephalus n.sp. Det. HH. WELSH". Deposited at the California Academy of Sciences, San Francisco. 1 nymph V instar collected with holotype.

It is a pleasure to dedicate this nice species to Dr. PAUL H. ARNAUD, Jr., Acting Chairman of Entomology, by whose kind offices I got a privilege to study this interesting species.

Lophoscutus aranudi n.sp. is related to L. michelbacheri Kormilev, 1984, also from Baja California, but differs from it by: head relatively shorter, antennae also shorter; granulation mostly white, without setae; setigerous granulation scarce; pronotum relatively longer and narrower; scutellum longer and narrower, and by color.
Lophoscutus rideri, new species Fig. 3.

**MALE.** Elongate ovate; head from above and behind eyes, antennal segment I, fore lobe of pronotum medially, scutellum, with exception of base, and corium, with very fine, white granulation; connexivum II with a row of white granules; hind lobe of pronotum and scutellum finely punctured.

*Head* longer on median line, or from the tips of jugae to hind border of head than its width across eyes 24(27):18.5; ocelli less distant from eyes from hind border of head 4:7. Antennae short, 1½ x as long as width of head across eyes 1.51:1; relative length and width of antennal segments I to IV are: 7(3.5):3(3):6(2.5):14(7). Relative length of labial segments I to III are: 13:9:6.

*Pronotum* shorter on median line, or from the tips of anterior angles than its maximum width across lateral angles 34(37):50. Anterior border sinuate; anterior angles acute, slightly diverging; lateral borders of fore lobe almost straight, finely crenulate, diverging; antero-lateral borders of hind lobe slightly convex; lateral angles angularly rounded and slightly incised behind tip; postero-lateral borders sinuate near posterior angles; the latter minute; posterior border rounded. Fore disk with a double row of fine, white granules medially; interlobal depression sharply marked; hind disk 3 x longitudinally depressed; carenae enlarged and granulate at base, then very fine, reaching hind angles.

*Scutellum* twice as long as its maximum width at connexivum V 66:33, narrower at base 27; median carena enlarged and depressed at basal ¼, then very fine, reaching hind border of scutellum.

*Hemelytra* reaching hind border of scutellum; corium reaching ½ of connexivum V.

*Abdomen* longer than its maximum width at connexivum III 62:53; connexivum reflexed.

*Propleurae* denticulate on fore border; mesopleurae granulate on lower border.

*Legs.* Fore femora longer than their maximum width 28:17.5.

*Color:* head brown on upper side, with pinkish strip behind eyes, yellow along lower border; pronotum yellow on fore lobe laterally, black medially; hind lobe yellow antero-laterally, brown elsewhere; scutellum pinkish-brown, base of median carina yellow; two (1+1) black spots laterad of base, transverse band and two (1+) spots near apex also black; corium brown, pinkish apically; connexivum yellow with black band across segments III and IV. Ventral side and legs yellow.

*Measurements:* total length 5.00 mm.; width of pronotum 2.00 mm.; width of abdomen 2.12 mm.

**Holotype** ♂, PUERTO RICO, Guanica forest, Hwy 334; 28.V.1986; E.G. RILEY & D.A. RIDER collectors. Deposited on indefinite loan to the National Museum of Natural History, Washington, D.C.

It is a pleasure to dedicate this species to its collector Dr. D.A. RIDER.

*Lophoscutus rideri,* n.sp., is related to *L. westwoodi* (Guérin), 1857, from Cuba, but is smaller, fore lobe of pronotum with longitudinal black strip medially (yellow in *westwoodi*); yellow spot at the base of scutellar carina smaller and narrower; tip of scutellum pinkish brown with 2 (1+1) black spots (black in *westwoodi*).

Lophoscutus paracrassimanus, new species Fig. 4.

**FEMALE.** Similar to *Lophoscutus crassimanus* (F.), 1803, but larger. The main difference is in the shape of pronotum, which is shorter and wider and fore lobe more or less flat (in *crassimanus* pronotum is longer and narrower, and fore lobe is gibbous, fig. 5). The main color of the body is ochraceous and yellow brown (in *crassimanus* it is orange and redbrown).
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Figs. 3-5.—3) Lophoscutus rideri, n.sp., ♂, dorsal aspect; 4) Lophoscutus paracrassimanus, n.sp., ♀, pronotum; 5) Lophoscutus crassimanus (F.), ♀, pronotum.


In crassimanus are: head 36(38):23; antennae: 9(4.5):5(4):7(3):22(7); labium: 23:16:8; pronotum 60(62):76; scutellum 105:42(54); abdomen 110:98; fore femora 58:25.

Color: head ochraceous, blackish behind eyes on upper side; fore lobe of pronotum ochraceous, hind lobe yellow brown, blackish at lateral angles; scutellum, corium ochraceous; connexiva ochraceous with black strip laterally; venter ochraceous medially, redbrown laterally; eyes greenish.

Measurements: total length 9.20 mm.; width of pronotum 3.60 mm.; width of abdomen 4.00 mm.

Material examined: *L. crassimanus* (F.) ♀, **PUERTO RICO**, Guanica forest, Hwy 333 near Playa Tamarindo, 27.V.1986; E.G. RILEY & D.A. RIDER collectors.

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**Resumen.**


En este trabajo el autor describe cuatro especies nuevas de la América Latina: *Lophoscutus arnaudi* n.sp. (México), *L. paracrassimanus*, n.sp. (Costa Rica), *L. rideri*, n.sp. (Puerto Rico) y *L. woolleyi*, n.sp. (México).

**Abstract.**

The author proposes four new taxa of the American Macrocephalinae (*Hemiptera: Phymatidae*): *Lophoscutus arnaudi*, n.sp., (México); *L. rideri* n.sp., (Puerto Rico); *L. paracrassimanus*, n.sp., (Costa Rica), and *L. woolleyi*, n.sp., (México).

**Bibliography.**

FABRICIUS, J.C., 1803.—*Systema Rhyngotorum*, Brunsvigae; VI+314 pp.


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