

REDUVIIDAE (HETEROPTERA) COLLECTED BY FOGGING THE FOREST CANOPY IN PERU

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Abstract.—Species of Peiratinae, Salyavatinae, Stenopodainae, Hammacerinae, and Ectrichodiinae collected by fogging the forest canopy in Peru are discussed. A new species of Hammacerinae, *Homalocoris nermini*, and a new species of Ectrichodiinae, *Daraxa (Daraxa) crena*, are described.

Key Words: Peru, fogging, forest canopy, Homalocoris, Daraxa, Reduviidae

All of the 19 subfamilies of reduviids known from the Americas occur in the Neotropical Region, 10 of these ranging into the Nearctic. Specimens of seven subfamilies were collected by fogging the forest canopy, in Madre de Dios, Rio Tambopata Reserve, 30 kms SW of Puerto Maldonado, 290 m, 12°50'S, 069°, 17'W. This was part of a project sponsored by the Smithsonian Institution, Washington, D.C., with Terry Erwin as principal investigator.

Represented by one specimen only in these collections are the Ectrichodiinae (*Daraxa (Daraxa) crena*, n. sp.), Hammacerinae (*Homalocoris nermini*, n. sp.), Peiratinae (*Rasahus albomaculatus* (Mayr)), Salyavatinae (*Salyavata cornuta* Wygodzinsky) and a Stenopodainae nymph. The new species are described below. The Harpactorinae were represented by 63 specimens, the highest number, with four nymphs among them. The Emesinae were second with 41 specimens, including 15 nymphs. At World level, according to the number of species in the subfamily, the last two are the first and third largest (Maldonado 1990). The last two subfamilies will be treated in subsequent papers.

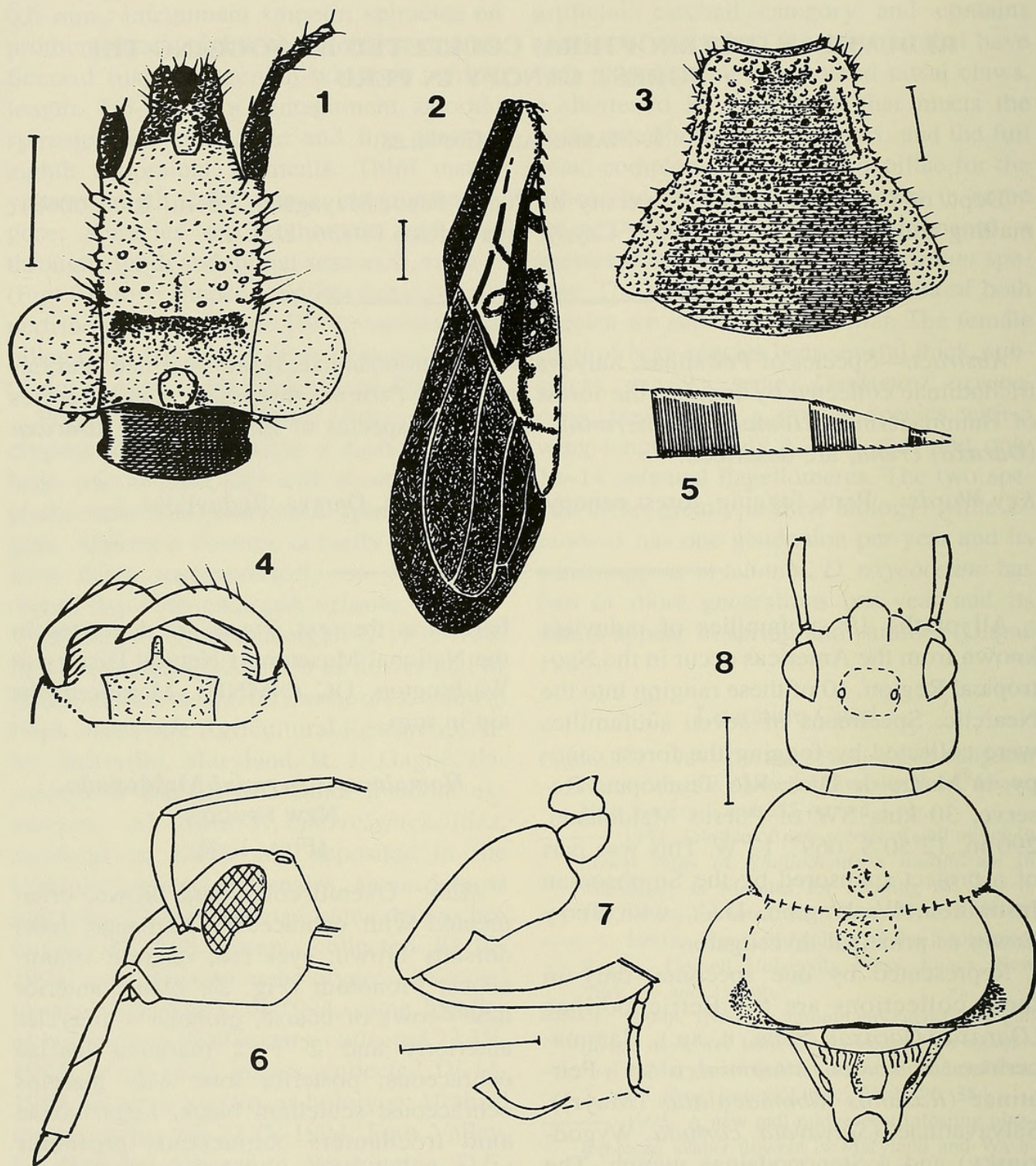
Setiferous tubercles are abbreviated s-tu-

bercles in the text. Types are deposited in the National Museum of Natural History at Washington, DC (NMNH). Measurements are in mm.

Homalocoris nermini Maldonado, NEW SPECIES (Figs. 1–4)

Male: Overall color dark brown, ornamented with ochraceous. Antennae, head dorsally brown; eyes red; rostrum stramineous. Pronotum (Fig. 3): black; anterior lobe—rows of coarse, globular s-tubercles anteriorly and 2 + 2 marginal fasciae ochraceous; posterior lobe with margins ochraceous; scutellum black. Legs: coxae and trochanters ochraceous; profemur black dorsally, tibia and first two tarsal segments ochraceous, femur underneath, third tarsal segment black; middle leg blackish brown, femur slightly darker above, tarsal segments stramineous, third segment black apically; hind leg ochraceous, femora with basal, midlength and apical black annuli. Fore wing (Fig. 2): clavus and membrane blackish, corium stramineous with extensive, blackish ornamentation, veins of membrane ochraceous.

Abdominal sterna and hemelytra smooth,



Figs. 1-8. 1-4, *Homalocoris nermini*, male holotype. 1, Head, dorsal view. 2, Hemelytron, dorsal view. 3, Pronotum, dorsal view. 4, Male genitalia, external, dorsal view. 5-8, *Daraxa (Daraxa) crena*, male holotype. 5, First three connexival segments, dorsal. 6, Head, lateral view. 7, Fore leg, frontal view. 8, Head, pronotum, and scutellum, dorsal view. All scale lines equivalent to 1.00.

sterna with abundant, moderately long decumbent setae. Remaining parts of body densely covered with s-tubercles with moderately large globular bases, the setae longer than the corresponding base except on disc of pronotum where setae are shorter.

Head (Fig. 1): Length 2.87, width across eyes 2.37; eyes almost pedunculate, slightly upraised thus surpassing level of vertex, not reaching ventral surface, width 0.62; interocular space 1.00, anteocular space to apex of antennophore 0.62, minute postocular re-

gion; ocellar callus small, anterior to level of posterior margin of eyes. Jugae divergent, thick as seen from above, slightly deflexed and flattened ventrally, slightly surpassing base of clypeus. Antenna: length of segments I, 0.62; II, 5.50, formed by numerous short, pseudosegments, III and IV partially broken. Rostral segments: lengths I, 1.37; II, 1.12; III, 0.75, slightly curved, sparsely setose. Pronotum (Fig. 3): anterior lobe width 2.75, length 1.62; posterior lobe humeral width 4.12, length 2.12, humeral angles rounded. Mesoscutellum 0.31 long, scutellum length 1.62, width 0.62, prongs or spines of scutellum apart by a basal width. Legs: lengths of femora 3.75, 3.75, 8.12, fore and middle incrassate; tibiae 3.12, 3.50, 7.25, spongy fossa on apex of anterior; tarsi 1.12, 1.12, 2.00, straight, slender. Fore wings (Fig. 2): length 11.87, almost reaching abdominal apex, width 3.75. External genitalia as in Fig. 4. Total length of body 20.50 mm.

Holotype.—Male, PERU, Madre de Dios, Rio Tambopata, 30 kms SW of Puerto Maldonado, fogging forest canopy, 14 September 1984. Terry Erwin et al. collectors, in NMNH.

The black legs and the ochraceous clavus run *Homalocoris nermini* in Maldonado and Santiago Blay's key (1992) to couplet 5, together with *H. binotatus* Champion and *H. maculicollis* Stal. The relatively large size, the blackish, extensive, irregular ornamentation on the corium, and the ochraceous lateral margins of the pronotum separates *H. nermini* n. sp. from its congeners. The trivial name is in memory of Nermin Divovic, a 7-year old Sarajevan boy, an innocent victim of warfare.

***Daraxa (Daraxa) crena* Maldonado,
NEW SPECIES
(Figs. 5–8)**

Female: Overall color dark brown and black, ornamented with ochraceous. Head black, eyes gray, rostrum brown fading to stramineous after midlength of second segment, first two antennal segments brown,

remaining segments pale brown with gray intersegmental areas. Pronotum; anterior lobe black dorsally and laterally, polished, smooth; pleurae brown, prosternum gray, meso- and metasternum blackish, scutellum black. Leg (Fig. 7): coxae and trochanters stramineous; femora mostly blackish, anterior femora with small, postbasal and preapical ochraceous areas, middle and hind femora with more extensive postbasal stramineous areas; anterior and middle tarsi brown, hind with first and base of third segment stramineous. Fore wing mostly brown, humeral angle, base of pterostigma and outer apical angle of corium yellowish, inner margin of membrane inconspicuously grayish. Abdominal sterna ochraceous medially, black laterally; connexival segments (Fig. 5) above and below with basal half stramineous, apical half black.

Head (Figs. 6, 8): Length 0.93, width across eyes 1.12, interocular space 0.62, width of eye 0.25, dorsal length of eye 0.43, postocular space 0.37, eyes close to but not reaching upper margin of head, vertex slightly convex, frons sloping to tylus; ventrolaterally behind eyes slightly swollen, as wide as across eyes. Antennal segments: I, 0.75; II, 1.25; III, 0.62; IV, 0.50; V–VII, 0.25; VIII, 0.31; first two with fine setae about as long as diameter of corresponding segment, setae on III and IV slightly longer, last segments with scarce setae, 3 or 4 times as long as diameter of corresponding segment. Rostrum (Fig. 6): straight, glabrous, length of segments I, 0.62; II, 0.25; III, 0.2; gradually thickening to apex of II, III short, triangular. Collum 0.12. Pronotum (Fig. 8): smooth, glabrous, median sulcus of anterior lobe reduced to a shallow fovea before transverse constriction, length 0.75, width 1.68; posterior lobe length 0.75, humeral width 2.25, median sulcus reduced to a shallow fovea on anterior third, lateral and humeral areas slightly swollen, with a small depression before humeral angles; margins conspicuously rounded, transverse constriction crenulate to base of acetabula; basal margin shallowly biconcave above scutel-

lum. Mesopleuron smooth, metapleuron vertically corrugate. Legs: femora 1.75, 1.65, 2.18; tibiae 1.62, 1.68, 2.50; tarsi 0.62, 0.75, 0.87, femur of anterior leg incrassate, about as thick as length of eye on lateral view, ventral margin with a conspicuous notch (Fig. 7), unarmed, tibia slightly curved, swollen toward apex, spongy fossa on apical slanted face; middle leg with femora half as thick as fore (0.50:0.25), tibia straight, very slightly swollen apically; hind leg straight, femur 0.25 thick. Mesoscutum exposed, 0.31 long; scutellum 0.75 wide, 0.32 long, prongs incurved, apices apart by more than a prong basal width, S-curved carinae extending to apices of prongs. Hemelytra length 4.75, width 1.00. Connexivum exposed, margin of individual segments straight; abdominal sterna smooth ventrally, irregularly finely corrugate before connexivum, sutures obsolete, crenulate on lateral black areas only; spiracles small, round, close to anterior margin of corresponding sternum; length of abdomen 4.78, width 2.81.

Holotype.—Female, PERU, Madre de Dios, Rio Tambopata Reserve, 30 kms SW

of Puerto Maldonado, 290 m, 12 50 S, 069 17 W, 25 February 1984, fogging forest canopy, Terry Erwin et al. collectors; in NMNH.

Daraxa (*Daraxa*) contains 9 species (Carpintero 1980). *D. (D.) crena* n. sp. differs from these by the following characters: length 7.00, pronotum not pitted, anterior and posterior lobes of pronotum of equal length, not ornamented with red, and by the unique notch on the fore femur. The trivial name *crena* (Latin, *cren-*) means cut.

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