

KEY TO THE GROUP OF NEOTROPICAL WASP-MIMETIC
HARPACTORINE GENERA AND THE DESCRIPTION OF A
NEW SPECIES (HEMIPTERA: REDUVIIDAE)

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Abstract.—*Neotropiconyttus heminigra* is described from Peru and a key to the neotropical wasp-mimetic harpactorine genera is given.

Key Words: *Neotropiconyttus heminigra*, Reduviidae, Harpactorinae, wasp-mimetic genera, key, Peru

A few genera of Harpactorinae resemble bees (*Notocyrtus* Burmeister, 1837 and *Coilopus* Elkins, 1969) or wasps, especially ichneumonids. Although this is somewhat an artificial way of grouping genera, it helps to sort out specimens quickly from unidentified material. The wasp-mimetic genera keyed below have elongate, delicate bodies, the hemelytra exceed the tip of the abdomen by $\frac{1}{4}$ or $\frac{1}{3}$ their total length and are wider posteriorly than width of pronotum; the cubital cell is narrow, at least 4 times as long as wide, with sides subparallel, and the third antennal segment is much more than twice as long as second. *Neotropiconyttus* species differ from the other wasp-mimetic genera by having short, relatively stout bodies and the abdomen narrowed basally. They closely resemble braconids. The other genera of this group somewhat resemble ichneumonid wasps, even though their abdomens are not flattened laterally. The Ethiopian wasp-mimetic *Harpagocoris* is closely related to the New World genera. Members of this genus lack a postantennal spine, the hind tibiae are not thickened or pilose, the third antennal segment is less than twice as long

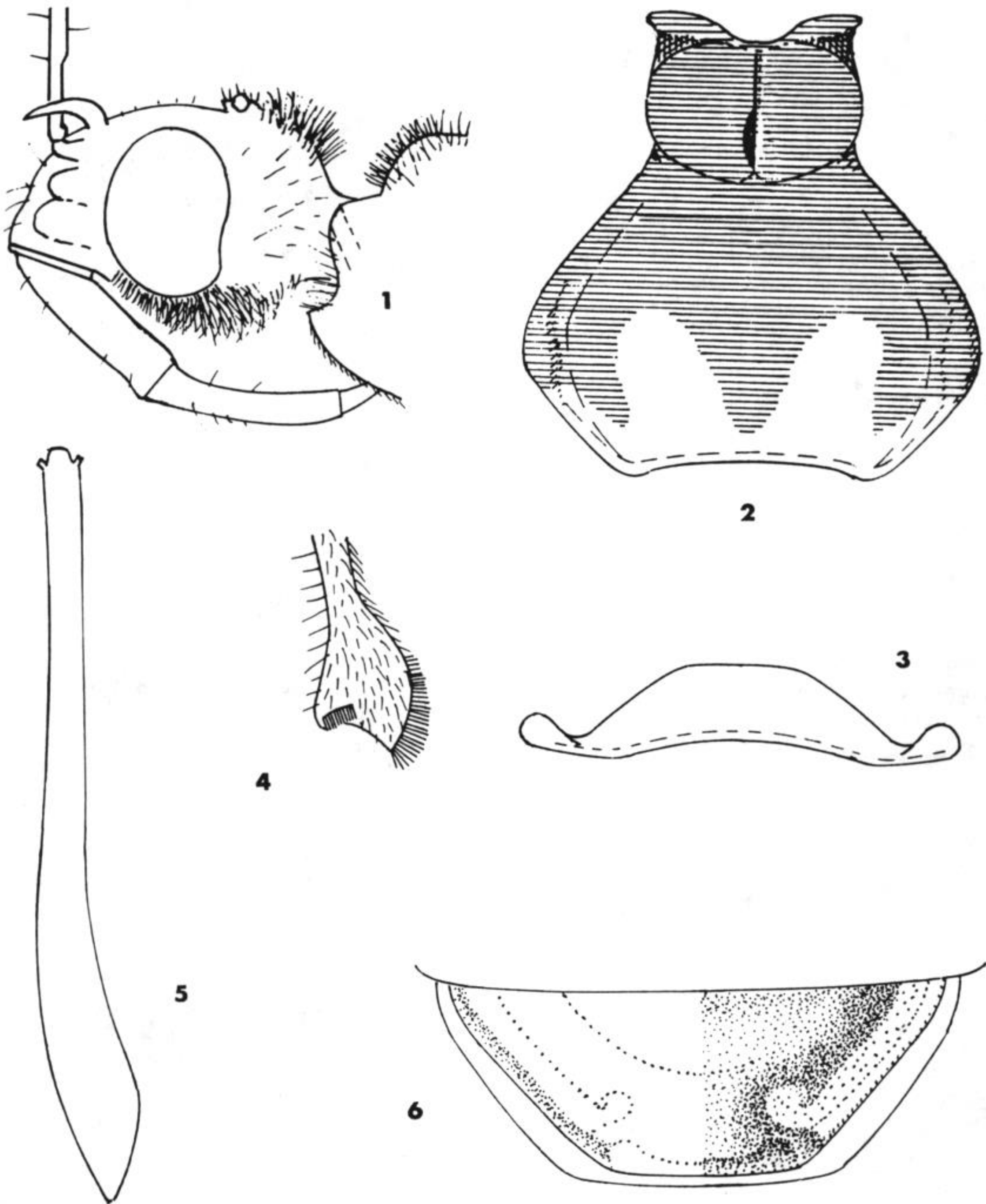
as the second and several are brightly colored.

The new species described below was found among a small lot of Reduviidae from Peru collected by the junior author. The holotype is deposited in the National Museum of Natural History in Washington, D.C. All measurements are in mm.

DESCRIPTION

Neotropiconyttus heminigra Maldonado
and Lozada
Figs. 1-6

Female.—*Coloration:* black: head, antennae, rostrum, anterior lobe of pronotum, pronotum laterally, anterior half of posterior lobe of pronotum, thoracic sterna, middle and posterior coxae, upper half of penultimate and antepenultimate abdominal segments, genital segment, round spot on disc of scutellum, last two abdominal terga. Reddish black: basal portions of femora, apical annulus on middle and hind femora, hind trochanter, tarsi. Brown: anterior coxa, costal margin to pterostigma, first and second trochanters, apical external angle of co-



Figs. 1-6. *Neotropiconyttus heminigra* n. sp., female 1. head, lateral; 2. pronotum, dorsal; 3. base of pronotum, caudal view; 4. apex of protibia; 5. profemur, dorsal; 6. eighth tergum, caudal view.

rium. Very pale brown: fore tibiae above, below with irregular darker brownish areas. Ivory white: middle section of middle and hind femora, caudal half of posterior lobe of pronotum (Fig. 2). Reddish yellow: basal half of pterostigma. Reddish orange: abdominal sterna and lower half of penultimate and antepenultimate abdominal sterna. Pilosity—slightly pilose: first and second antennal segments, tibiae above, hemelytra except membrane, abdomen ventrally, rostrum, setae fine and vertical; moderately pilose: fore and middle tibiae externally (actually dorsally); densely pilose: head, thorax especially in front, fore and middle femora, tibiae ventrally, posterior femur on basal ventral half, posterior tibia, coxae and trochanters ventrally; legs with scarcer long fine setae and more abundant thicker and shorter sensory hairs, the fine setae as long or longer than thickness of corresponding segments; mesosternum with a longitudinal median patch of white scale-like setae.

Head.—Shiny, smooth; length 1.80, width across eyes 1.50; interocular space narrowing toward base, narrowest in front of ocelli, width at midlength 0.80; ocellar elevation short, transverse, immediately behind interocular suture, 0.85 wide to outside margin of ocelli, ocelli 0.60 apart, postantennal spine set basad of projected anterior margin of eye, curved cephalad, surpassing antennal base, 0.40 long. First antennal segment 3.75 long, straight, others missing; rostral segments: I, 1.10; II, 0.85; III, 0.40; I the thickest; neck shiny, about 0.30 long. Pronotum: collar very short medially, well developed laterally (Fig. 2), sharply produced laterad, about 0.35 below surface of anterior lobe; surface of anterior and posterior lobes at same level; anterior lobe—length 0.70, greatest width 1.20, slightly bigibbous, median sulcus deeper posteriorly; posterior lobe—length 1.40, greatest width 2.25, lateral margins slightly convex, posterior margin straight above scutellum then angularly bent to humeral angles; humeral angles rounded, slightly humped, well above level

of posterior margin (Fig. 3). Scutellum wider than long (0.9:0.5), with a V-shaped carina. Legs: coxae slightly elongate, lengths 0.50, 0.50, 0.70; femora thickened basally, thickest part 1.5 times as thick as apex, apex with short lateral truncate projections (Fig. 5); base of fore and last femora incurved as seen from above; fore and middle tibiae slightly thickened apically, with a small lateral projection, a "comb," and a dense pad of sensory hairs ending in a short *fossula spongiosa* (Fig. 4) that surpasses apex of segment; hind tibia of equal thickness throughout, the dense pilosity of the middle third gives the impression that it is thicker; tarsi slightly thickening towards apex, apparently two-segmented because the first is very short; claws notched basally. Dimensions of legs—trochanters (measured laterally to both ends): 0.50, 0.50, 0.60; femora: 3.30, 2.60, 3.70, postbasal thickness of femora: 0.40, 0.36, 0.35, apical thickness of femora: 0.25, 0.20, 0.20; tibiae: 3.1, 3.00, 4.40; tarsi: 0.50, 0.40, 0.50. Abdomen slightly compressed laterally thus deeper than wide, greatest depth at fourth and fifth segments (2.10), notably thinner basally (1.20) and apically; connexivum narrow, 0.20–0.30 wide at fourth and fifth segments, each apical angle slightly produced apicad. Genital segment as in Fig. 6. Overall length 12.20.

Holotype female, PERU, PA, Prov. Oxapampa, Iscozacín, 13 VIII 1987, at 250 m. P. Lozada collector; in the National Museum of Natural History, Washington, D.C. The trivial name refers to the coloration that is part dark or black (*heminigra*) and part of some other color.

DISCUSSION

The genus also includes *Neotropiconyttus dama* (Burmeister) 1837:105, from Brasil and *N. alboannulatus* (Stål) 1855:189, from Colombia. All species have a whitish-yellow annulus on middle of the meso- and metafemora. They can be separated by their coloration as follows:

	<i>N. dama</i>	<i>N. alboan- nulatus</i>	<i>N. heminigra</i>
overall pronotum	black	black	black
hind lobe pronotum	black	black	black & ivory white
mesosternum	black*	black	black, with row of scalelike setae
mesopleura	red	black	black
protrochanter	red	black	black
hemelytra	black	black	half & half very pale & dark brown
abdomen	yellow	half & half deep red & black	mostly red, apex black

* row, if present, not mentioned in original description.

KEY TO THE NEOTROPICAL WASP-MIMETIC HARPACTORINE GENERA

1. Posterior lobe of pronotum elevated on disc, elevation spined posteriorly; anterior trochanter usually with a conspicuous spine *Acanthischium* Amyot & Serville
- Posterior lobe of pronotum without such a discal elevation; trochanter never spined 2
2. Head twice as long as wide across eyes, glabrous; basal half of profemora moderately thickened and curved *Myocoris* Burmeister
- Head at most 1.3 times as long as wide, usually no longer than wide, pilose; profemora thickened basally or not 3
3. Fore femur clearly thicker basally than apically 4
- Fore femur of uniform thickness 5
4. Postantennal spine short, curved forward; lobes of anterior disk of pronotum slightly elevated; hind tibia basally thickened and thickly pilose *Neotropiconyttus* Kirkaldy
- Postantennal spine absent; lobes of anterior disk not elevated; hind tibiae slender, glabrous *Hiranetis* Spinola
5. Postantennal spine straight, semivertical; head

1.3 times as long as wide across eyes, sparsely pilose, height behind eyes 1.2 times height of eye; fore tibia straight *Graptocleptes* Stål

- Postantennal spine curved; head as long as wide across eyes, densely pilose, height behind eyes 1.5 times height of eye; fore tibia curved apically *Xystonyttus* Kirkaldy

All species of the above genera lack a plica on the mesopleura. Those of *Acanthischium* lack a postantennal spine. The head is glabrous in the species of *Acanthischium* and *Myocoris* and densely pilose in those of *Neotropiconyttus* and *Hiranetis*. Species of *Xystonyttus* and *Myocoris* have the fore trochanters tumescent and covered with short pile.

Elkins (1961:21) keyed the species in *Acanthischium*. *Hiranetis braconiformis* (Burmeister) and a few other species have yellowish or straw-colored hemelytra with a median, transverse, black band and an apical black area. This pattern also occurs in a few species of *Repipta*, South American *Zelus*, and the Ethiopian *Harpagocoris*. *Repipta* species have postantennal spines and in *Zelus* the profemora are as long or longer than the metafemora and without postantennal spine.

LITERATURE CITED

- Burmeister, H. 1837. Some account of the genus *Myocoris*, of the family Reduviini. Transactions of the Entomological Society of London 2: 102–107 (dated 1835).
- Elkins, J. C. 1961. A new species of *Acanthischium* Amyot & Serville, with a key to the species. Proceedings of the Entomological Society of Washington 63: 20–21.
- . 1969. A new genus of hemipteran wasp mimics (Reduviidae: Hemiptera). Journal of the Kansas Entomological Society 42: 456–461.
- Stål, C. 1855. Nya Hemiptera. Ofversigt Kongliga Vetenskaps-Akademiens Foerhandlingar 12: 181–192.