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## The Genus *Eurystethus* Mayr, with the Descriptions of New Species (Heteroptera, Pentatomidae, Discocephalinae)

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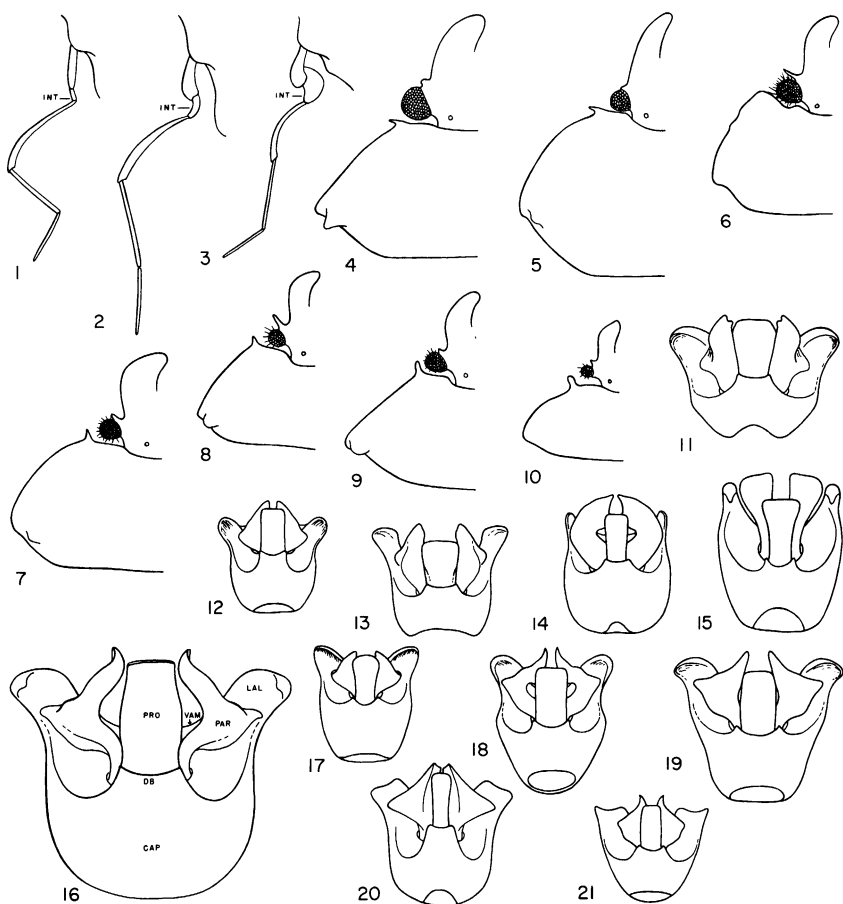
During the past several years I have accumulated a splendid collection of specimens belonging to the Neotropical genus *Eurystethus* Mayr. Some of these have been in the collections of the American Museum, some have been borrowed from other museums, others have been procured through purchase or gift. All have been carefully compared with Mayr's type specimen of *E. nigropunctatus*. They show such distinct differences in build that describing them as new species is warranted. Only two valid species of this genus have previously been described, namely, Mayr's original *nigropunctatus* and my own *ellipsoidalis*. In 1880 Distant established a species *Eurystethus signoreti*, but Bergroth in 1918 removed it from *Eurystethus* and placed it in the genus *Opophylax* where it belongs.

The study of numerous specimens has revealed some very interesting and useful information concerning the morphology of *Eurystethus* which was not used by either Mayr or Bergroth, the only two authors who have written at length on this genus.

All species possess a mesosternum that is broadly hexagonal, somewhat wider than long, which causes the mesocoxae to be placed farther apart

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FIGS. 1-3. Side view of rostrum. 1. *E. (Eurystethus) nigropunctatus*. 2. *E. (Hispidisoma) variegatus*. 3. *E. (Hispidisoma) sacculatus*.

FIGS. 4-10. Lateral half of head and pronotum. 4. *E. (Eurystethus) macroconus*. 5. *E. (Eurystethus) ellipsoidalis*. 6. *E. (Hispidisoma) nigroviridis*. 7. *E. (Hispidisoma) variegatus*. 8. *E. (Hispidisoma) sacculatus*. 9. *E. (Hispidisoma) fulvescens*. 10. *E. (Hispidisoma) microlobatus*.

FIGS. 11-21. Dorsal aspect of pygofer. 11. *E. (Eurystethus) ornatus*. 12. *E. (Eurystethus) parvulus*. 13. *E. (Eurystethus) spurculus*. 14. *E. (Eurystethus) ovalis*. 15. *E. (Eurystethus) pallescens*. 16. *E. (Hispidisoma) nigrocomis*. 17. *E. (Hispidisoma) nigroviridis*. 18. *E. (Hispidisoma) sacculatus*. 19. *E. (Hispidisoma) variegatus*. 20. *E. (Hispidisoma) fulvescens*. 21. *E. (Hispidisoma) microlobatus*.

Abbreviations: CAP, capsule; DB, dorsal border; INT, intercalary unit of rostrum; LAL, lateral apical lobe; PAR, paramere (clasper); PRO, proctiger; VAM, ventral apical margin.

from each other than each is distant from its respective metacoxa. This character thus places the genus in a tribal division of the Discocephalinae with the genera *Coriplatus* White, *Pelidnocoris* Stål, and *Abascantus* Stål.

The species fall into two categories, depending upon whether the dorsal surface of the body is matte (or semiglossy) or is provided with a dense cover of very short, stiff, erect bristles which give the individual a distinctly hispid appearance.

With the exception of one new species, the head is shorter than the median length of the pronotum, usually by only a small amount; in that one species it is slightly longer; in all cases, however, it is longer than wide between the eyes. The lateral margins are invariably sinuate in some degree or other, and the base of the margin, just before the eye, has a small rounded tubercle or denticle (figs. 4, 5) or a much longer, acute, subspinous process (figs. 6–10). The eyes are large, protuberant, in some cases subpedunculate, and in those species in which the dorsal surface is hispid, are setigerous. The ocelli are prominent and placed behind a line connecting the posterior margins of the eyes. The head is porrect and may be slightly exserted in some instances; its surface may be concave or flat depending upon whether or not the margins are broadly reflexed.

The antennae are five-segmented, invariably setose, and usually annulated with black and yellow (or black and orange) bands; in one new species all the segments are uniformly black; if the fourth segment is annulated, the yellow (orange) annulus may be centrally placed or may occupy a subbasal position. In this genus the basal segment does not exceed the apex of the head.

The rostrum (figs. 1–3) in all species has an intercalary unit between the two basal segments. In some species this intercalary unit is much enlarged, swollen, indeed even compressed-sacculate (fig. 3); in others it is small and insignificant (fig. 1). The basal segment is thicker in diameter than the remaining ones; it may become incrassate, and in one or two instances is distinctly clavate (fig. 3). The apex of the rostrum usually reaches the fifth abdominal sternite but may be much longer; in one case it is slightly shorter. It invariably exceeds the metacoxae.

The pronotum (figs. 4–10) may have its anterolateral margins straight (figs. 4, 9) or distinctly convex-arcuate (figs. 5, 7, 10); the over-all shape of the pronotum depends upon its dimensions and the straightness or degree of curvature of its anterolateral margins, and ranges from subhexagonal or subtrapezoidal to transversely oval, even subreniform, in outline. There is a transverse row of six tubercles or pustules across the

crest between the humeri; in some species these may be much reduced but in no case are lost altogether. Each anterior apical corner of the pronotum has a minute denticle, or cusp (figs. 4, 5, 7-9), or a ligulate lobule (fig. 10), except in one new species (fig. 6) in which such a cusp is absent. In one group of species the denticle is directed laterally (figs. 4, 5); in another it is directed obliquely anteriorly (figs. 7-10).

The scutellum is narrowly triangular, averaging about one-third longer than wide across the base; the frena end past the middle so that the postfrenal portion is shorter than the parafranal portion; the margins of the narrower postfrenal portion may be subparallel, in which case the apex is usually broadly rounded or subtruncate, or the margins may gradually converge so that the apex is more narrowly rounded, in some instances subangular; the lateral margins of the apex may or may not be reflexed. In no instance does the apex exceed the apical margin of the sixth abdominal tergite, a character that distinguishes *Eurystethus* from its close allies *Coriplatus*, *Pelidnocoris*, and *Abascantus*, genera in which the scutellum reaches the end of the abdomen. In *Eurystethus* the disc of the parafranal portion has a pair (1+1) of large tubercles or humps. In some species these may be low and obtuse, with a wide, shallow saddle between them, while in others they may be developed into high, acute cones separated by a deep valley. In some species there is a median umbo or obtuse elevation at the base of the postfrenal lobe.

The morphology of the pygofers (figs. 11-21) is rather similar for all species. In general, the capsule is somewhat ovate, the central portion of the dorsal border is slightly produced and has a weakly sinuate apical margin, while the lateral portions of the border are strongly concave and leave the genital cup widely open so that its contents are completely visible; the lateral apical lobes (fig. 16, LAL) are stout, do not have a basal quasi-articulation, are usually somewhat divergent, gradually curve upward with obtusely rounded (in one species subtruncate), reflexed apices and do not surpass the parameres; the ventral apical margin between the lobes (fig. 16, VAM) is slightly reflexed and variously sinuate; the proctiger (fig. 16, PRO) is invariably correct, somewhat depressed-cylindrical, in some cases slightly dilated near its middle, or in some others near its apex, with the anal orifice opening posteriorly and visible from that aspect; the parameres are stout, usually glabrous, lie more or less horizontally, exceed the ventral apical margin and the lateral apical lobes, and vary in shape from a boomerang pattern (fig. 16, PAR) to a broad triangular form (fig. 20), their apical portions are usually declivous, either divergent or convergent, and in a few species are contiguous.

The plates of the female genital valves number four, in contrast with only two visible ones in *Coriplatus*, *Pelidnocoris*, and *Abascantus*.

## SYSTEMATICS

### GENUS EURYSTETHUS MAYR

*Eurystethus* MAYR, 1864, p. 907; 1866, p. 38, pl. 1, figs. 4a, b, c. STÅL, 1872, p. 10. LETHIERRY AND SEVERIN, 1893, p. 88. KIRKALDY, 1909, p. 219. BERGROTH, 1918, p. 299.

TYPE SPECIES: *Eurystethus nigropunctatus* Mayr.

DIAGNOSIS: Depressed ovate to elliptical; mesosternum hexagonal, wider than long; scutellum not reaching apex of abdomen; rostrum with intercalary unit between two basal segments; pronotum and scutellum with elevated pustules or tubercles; head usually slightly shorter than median length of pronotum; plates of female genital valves, four.

GENERIC CHARACTERS: Above somewhat depressed, semiglossy, or matte, or hispid, surface somewhat uneven; pronotum with six transhumeral tubercles or small pustules; humeral angles obtusely rounded; base of scutellum with pair (1 + 1) of larger tubercles, or conical humps; beneath glossy, rather flat; median rostral furrow well developed.

Head oblong to elliptical, flat, or concave, anteocular margins in some species ampliate, apex in most species entire; small obtuse denticle, or longer spinous process just before each eye; juga longer than tylus and overlapping apically. Ocelli twice as far apart as distant from eyes, lying behind line drawn across posterior margins of eyes. Eyes either smooth or distinctly setigerous. Antennae setose, five-segmented, basal segment not exceeding apex of head, segments in most species annulated black and yellow or black and orange.

Pronotum (figs. 4–10) varying in shape according to curvature of anterolateral margins, about two and one-half times as wide as long medially; transhumeral crest with six low, obtuse tubercles or pustules which in some species are obsolescent and difficult to discern; anterolateral margins in some species distinctly explanate, terminating just before humeri, leaving small obtuse notch there, margins straight or convex-arcuate. Scutellum narrowly triangular, about one-third longer than wide at base, frena ending distinctly past middle, postfrenal lobe narrowed, apex varied, in some instances its margins reflexed, not surpassing sixth abdominal tergite, basal portion of disc with pair (1 + 1) of large tubercles. Hemelytra reaching or slightly surpassing apex of abdomen, costal margins weakly ampliate opposite third abdominal segment, subreflexed near base; membrane in most species brown, veins

colorless, conspicuously reticulate. Connexivum exposed, segmental angles rectilinear, not produced.

Bucculae weakly elevated, uniform in height, in most species slightly constricted near middle; buccular canal moderately deep, rather narrow. Rostrum long, reaching at least middle of abdominal disc, segment I distinctly thicker than others (in some cases distinctly incrassate), followed by short intercalary unit; segment II arcuate, usually attaining metacoxae, shorter than lengths of segments III and IV combined. Mesosternum mildly tumid, median sulcus between halves obsolescent. Metasternum flat, hexagonal, somewhat wider than long. Mesocoxae farther apart from each other than each is distant from its respective metacoxa. Basal margin of seventh abdominal sternite in male produced forward into obtusely rounded arc. Median abdominal furrow well developed.

Pygofer rather small, usually depressed, genital cup widely open, contents completely visible from above; lateral apical lobes not surpassing apices of parameres; proctiger porrect without median flexure, anal orifice opening posteriorly and visible from that aspect.

Plates of female genital valves number four.

Species not exceeding 13.0 mm. in length.

#### KEY TO THE SUBGENERA OF *Eurystethus*

- Dorsal surface matte, or semiglossy, non-hispid; eyes not, or only very obscurely, setigerous; anteocular margin of head with small basal tubercle, or denticle, sinus before it shallow, obtuse; anterior apical denticles of pronotum small, acute, directed laterally; basal rostral segment uniformly thick, intercalary unit small, insignificant . . . . . subgenus *Eurystethus* Mayr
- Dorsal surface distinctly hispid, densely covered with short, erect, stiff setae; eyes distinctly setigerous; anteocular margin of head with basal spinous process, or prominent denticle, sinus before it deep, narrowly rounded or rectilinear; anterior apical denticles (when present) of pronotum directed obliquely anteriorly; basal rostral segment incrassate or clavate, intercalary unit prominently enlarged, swollen, or sacculate . . . . subgenus *Hispidisoma*, new subgenus

#### SUBGENUS *EURYSTETHUS* MAYR

TYPE SPECIES: *Eurystethus nigropunctatus* Mayr.

DIAGNOSIS: Dorsal surface non-hispid, eyes not setigerous, intercalary unit of rostrum small, not distended; extreme anterolateral margins of pronotum without fringe of setae.

SUBGENERIC CHARACTERS: Dorsal surface not covered with dense coat of stiff, short setae; eyes not at all setigerous, or provided with only two or three very obscure setae; anteocular process nodular, or in form of small, acute denticle, not elongated into acute spine; anterior apical

denticles of pronotum small, acutely triangular, directed laterally; antero-lateral pronotal margins either straight or feebly convex-arcuate (*ellipsoidalis* Ruckes excepted), hardly explanate; rostrum not reaching sixth abdominal sternite, basal segment more or less uniformly thick, intercalary unit small, inconspicuous; metasternum only slightly wider than long.

#### KEY TO THE SPECIES OF THE SUBGENUS *Eurystethus*

1. Yellow (or orange) antennal annuli very narrow; segment IV entirely black ..... 2
- Yellow (or orange) antennal annuli broad; segment IV with conspicuous broad yellow (or orange) annulus ..... 3
- 2(1). Basal tubercles of scutellum elevated into high, stout, acute cones, their crests distinctly exceeding level of pronotum; humeral tubercles directed somewhat posteriorly; connexival segments without broad black band on each side of sutures; pronotal disc flavescent, cicatrices concolorous; femora with narrow, antepical, piceous annulus ..... *macroconus*, new species
- Crests of basal scutellar tubercles barely surpassing level of pronotal surface, their crests obtusely rounded; humeral tubercles obtuse, not directed posteriorly; connexival segments with broad black band on each side of sutures; pronotal disc pale yellow, or ivory yellow, cicatrices bright orange; femora black, only bases and apices flavescent ..... *ornatus*, new species
- 3(1). Form elliptical, about twice as long as wide, not less than 12.0 mm. in length; anterolateral pronotal margins convex-arcuate, but not distinctly explanate; pronotum transversely subelliptical; pronotum and scutellum with percurrent, broad, median, pale band; apex of rostrum not quite reaching fifth abdominal sternite; color tending to be olivaceous ..... *ellipsoidalis* Ruckes
- Form ovate, broadly or narrowly so, less than 12.0 mm. in length; pronotum subtrapezoidal, or suboval; anterolateral pronotal margins straight or only feebly convex-arcuate; pronotum and scutellum without percurrent pale band; apex of rostrum reaching or surpassing fifth abdominal sternite ..... 4
- 4(3). Anterolateral pronotal margins straight; pronotum subtrapezoidal .... 5
- Anterolateral pronotal margins feebly convex-arcuate; pronotum transversely suboval ..... 6
- 5(4). Connexivum alternated, segmental sutures broadly banded with black punctures; lateral portions of abdominal venter densely nigropunctate; length, 11.0 mm. .... *nigropunctatus* Mayr
- Connexivum not alternated, variegated red and yellow with scattered fuscous punctures; lateral portions of abdominal venter sparingly ferruginopunctate; length, 6.5 mm. .... *parvulus*, new species
- 6(4). Connexivum alternated, margins of segmental sutures with broad black bands ..... 7
- Connexivum mottled, or transversely streaked, segmental sutures without

- conspicuous broad black bands ..... 8
- 7(6). Apex of head broadly rounded, disc flat; antennal segment II shorter than I, about half of length of III; margins of scutellar apex not reflexed; hemelytral membranes almost colorless, dusted with fine sooty particles, veins inconspicuous ..... *spurculus*, new species
- Apex of head narrowly rounded, subangular, margins reflexed, disc concave; antennal segment II shorter than I, subequal to III; margins of scutellar apex reflexed; hemelytral membranes rich sepia, veins colorless, conspicuous ..... *ovalis*, new species
- 8(6). Form narrowly ovate, subelliptical; anteocular denticles obsolescent, not surpassing bases of eyes; apex of head narrowly rounded, subangular, entire; ground color pale ivory yellow, punctures ferruginous to pale brown; antennae filiform, reaching middle of scutellum, segment II distinctly longer than I, subequal to or slightly longer than III ..... *pallescens*, new species
- Form broadly ovate, head with apex broadly rounded, with minute median notch; anteocular denticles prominent, acutely triangular, slightly exceeding bases of eyes; ground color sordid testaceous, punctures fuscous or darker; antennae stout, barely exceeding base of scutellum, segment II distinctly shorter than I, and shorter than III ..... *sordidus*, new species

The following species are described in the order in which they appear in the foregoing key. This does not imply that they are in their natural phyletic sequence.

**Eurystethus (Eurystethus) macroconus**, new species

Figure 4

DIAGNOSIS: Basal tubercles of scutellum large, acutely conical, their crests surpassing dorsal surface of pronotum by about half of their height, their lateral faces densely nigropunctate; antennal segment IV usually entirely black, in some cases with very obscure, narrow, pale, basal annulus.

SPECIFIC CHARACTERS: Ovate; above matte, non-hispid; head, pronotum, and broad central portion of scutellum creamy yellow, with sparsely and irregularly distributed ferruginous and fuscous punctures; hemelytra grayish yellow, with finer and denser fuscous punctures; cluster of piceous punctures behind each of the six transhumeral tubercles; lateral surface of each scutellar tubercle with dense, congested, piceous punctures; beneath glossy, yellow-fulvous to ochraceous, punctures coarser than above; propleuron with large patch of piceous punctures entad of smooth, flavescent margin.

Head oval, about half again as long as wide between eyes; anteocular tubercles minute, obtuse, not exceeding bases of eyes, sinuses before them



shallow, obtuse; margins subparallel, broadly and feebly reflexed, then gradually converging to somewhat narrowed apex; punctures ferruginous, unevenly distributed, more abundant apically. Antennae surpassing bases of scutellar tubercles, piceous with apices of segments II and III and basal third of V ivory yellow, segment IV almost always totally black, in a few cases with very obscure, narrow, basal, pale annulus; segmental ratios: 30/40/40/60/50, i.e., segment II longer than I and equal to III.

Pronotum trapeziform, more than two and one-half times as wide as long; anterior margin shallowly excavated centrally, anterior apical denticles acute, minute, directed laterally; anterolateral margins carinate, reflexed, straight, strongly convergent anteriorly; transhumeral crest with row of six tubercles, the central pair of which are higher than those directly adjacent, humeral tubercles prominent, subconical, directed slightly posteriorly; no particular punctured design evident except for the six clusters of piceous punctures behind tubercles. Scutellum half again as long as wide at base, with pair (1+1) of very large basal, conical, acute tubercles with deep V-shaped saddle between them, their apices rising at least three times as high as the central pair of transhumeral tubercles; apex subtruncately rounded, lateral margins strongly elevated and reflexed, producing a pinched appearance, under surfaces of reflexed portions piceous. Hemelytra very densely punctured, punctures most numerous toward base, with pale discal spot, followed by fuscous one, at apical end of main vein of corium; membranes slightly exceeding apex of abdomen, medium dark brown, veins colorless. Connexivum narrowly exposed, flavescent, punctures fuscous, a few aggregated along segmental sutures but not producing a distinct alternating pattern.

Venter ochraceous or yellowish fulvous, glossy, sterna and median portion of abdomen impunctate, thoracic pleura and lateral portions of abdomen coarsely, congestedly fuscopunctate. Bucculae subparallel, slightly elevated posteriorly, bordered with row of fuscous punctures, small fuscous dash at base of head below each eye. Rostrum attaining middle of fifth abdominal sternite, basal segment rather uniform in diameter, intercalary unit recognizable but small. Mesosternum fulvous with flavescent median line. Metasternum flavescent, slightly wider than long, rather flat. Legs sordid flavescent; femora with scattered fuscous spots and anteapical fuscous annulus; tibiae with two rows of staggered piceous spots; tarsi piceous, middle segment paler. Median abdominal furrow broad, shallow, extending to middle of sixth sternite.

Basal plates of female genitalia roundly triangular, fuscopunctate, their inner margins contiguous for most of their length, apical margins somewhat arcuate.

This species averages 11.0 mm. in length; 6.5 mm. in width across humeri.

**TYPE MATERIAL:** Holotype, female; Hyutanahan, Rio Purus, Brazil; April, 1922; S. M. Klages, collector; deposited in the Carnegie Museum, Pittsburgh. Paratypes, two females, one, same data as for holotype; deposited in the American Museum of Natural History; one, lower Amazon, near Santarem, Brazil; June 21-30, 1927; deposited in the Naturhistorisches Museum, Vienna.

***Eurystethus (Eurystethus) ornatus*, new species**

Figure 11

**DIAGNOSIS:** Cicatrices orange; pronotum and scutellum each with six prominent black spots, or clusters of black punctures; reflexed margins of scutellar apex black, impunctate; connexivum conspicuously alternated black and ivory.

**SPECIFIC CHARACTERS:** Broadly ovate; above matte, non-hispid; ground color ivory yellow, with at least 12 conspicuous black spots on pronotum and scutellum combined; cicatrices bright orange; embolium ivory yellow, corium more sordid; punctures very fine, ferruginous or slightly darker, sparse on head, pronotum, and scutellum, much denser on hemelytra; connexivum moderately exposed, segmental sutures broadly banded with black; beneath glossy ochraceous, punctures coarser than above, unevenly distributed; femora and tibiae largely black.

Head oval, about one-fourth longer than wide between eyes; antocular tubercles small, obtuse, sinuses before them shallow, obtuse, margins then subparallel, hardly ampliate, broadly, shallowly reflexed, apex moderately rounded, entire; punctures fine, ferruginous, sparsely distributed. Antennae black, almost attaining middle of scutellum, apices of segments II and III and base of V narrowly yellow, or orange, segment IV entirely black, in some specimens with very obscure, pale, basal annulus; segmental ratios: 30/40/35/60/50, i.e., segment II longer than I and slightly longer than III.

Pronotum trapezoidal, almost three times as wide as long; anterolateral margins essentially straight, carinate, narrowly explanate, subreflexed; anterior margin shallowly excavated centrally to receive head, anterior apical denticles small, acute, directed laterally; six transhumeral tubercles evident but not conspicuous, uniform in height, each capped with large punctured black patch which extends to posterior margin of pronotum; small black spot on anterior margin behind each ocellus, two larger black, punctured spots behind cicatrices; remaining punctures fine, ferruginous, rather sparsely distributed. Scutellum one-third longer

than wide at base; apex truncate, or truncately rounded, reaching basal margin of sixth abdominal segment, its margins reflexed, black, impunctate, basal tubercles low, obtuse, only slightly exceeding height of pronotum, saddle between them shallow, rather wide; basal angles, a large irregular elongated patch on each basal tubercle, and loose cluster of punctures at base of postfrenal lobe, black; under surfaces of reflexed margins of apex black; remaining punctures ferruginous, sparsely distributed. Hemelytra finely, rather densely, somewhat unevenly ferruginopunctate, with some larger fuscous punctures at base of embolium; corium with dusky discal spot at end of main vein; membranes blotched with pale brown; veins colorless. Connexivum moderately exposed, segmental sutures broadly banded with black, intervening areas ivory, with few, obsolescent, ferruginous punctures.

Venter bright ochraceous, glossy. Rostrum fulvous to ochraceous, attaining apical margin of fifth abdominal sternite, segment I uniform in diameter, intercalary unit small, inconspicuous. Central portion of venter impunctate. Mesosternum mildly tumid, fulvous to castaneous, barely sulcate between halves, median line ivory. Metasternum hexagonal, little wider than long, ochraceous, rather flat. Mesocoxae slightly farther apart from each other than each is distant from its respective metacoxa. Legs contrastingly colored black and ivory, coxae, trochanters, narrow bases of femora, and knees ivory, major portion of femora black; tibiae sordid ivory, their upper surfaces provided with coalesced black spots, in some specimens almost entirely black; tarsi infuscated. Ventral punctures fuscous or darker, few on head and metapleura; those on propleura and mesopleura dense, congested, those on lateral portions of abdomen coarser, more widely spaced. Transverse margins of abdominal sutures ferruginous, terminating laterally in short black dash which joins a similar short black dash on basal portion of extreme lateral margin of each segment to form a 7-shaped figure at lateral incisures.

Pygofer (fig. 11) depressed, short, broad; lateral apical lobes stubby, about as long as capsule, strongly reflexed, somewhat divergent, apically obtusely rounded, dorsal surfaces concave; ventral apical margin between lobes abruptly reflexed, median portion produced into triangular, apically incised projection; submarginal impression shallow; proctiger stout, subcylindrical, somewhat depressed, distinctly dilating toward apical end; parameres stout, thick, somewhat wedge-shaped, apical halves declivous, extreme apical margin narrowed, having small, obtuse notch.

Basal plates of female genital valves roundly triangular, somewhat fan-shaped, piceous, with ivory margins, vaguely punctured, longitudinally rugulose.

This species averages 11.0 mm. in length; 7.0 mm. in width across humeri.

TYPE MATERIAL: Holotype, male; Uberaba, Minas Gerais, Brazil; January 12, 1932; *ex* collection H. Ruckes; deposited in the American Museum of Natural History. Allotype, female; Rebouças, São Paulo, Brazil; October 10, 1945; M. Alm, collector; deposited in the United States National Museum of the Smithsonian Institution. Paratypes (five), same data as for allotype; one male, one female, deposited in the American Museum of Natural History; two males, one female, deposited in the United States National Museum.

DISTRIBUTION: Brazil: Minas Gerais, Uberaba; São Paulo, Rebouças.

REMARKS: This species is the most colorful in the genus and is readily recognized by its orange cicatrices and numerous conspicuous black patches on pronotum and scutellum.

*Eurystethus (Eurystethus) ellipsoidalis* Ruckes

Figure 5

*Eurystethus ellipsoidalis* RUCKES, 1958, p. 1, fig. 1.

DIAGNOSIS: Elliptical; olivaceous; pronotum and scutellum with percurrent, broad, median, pale band.

SPECIFIC CHARACTERS: Given in detail in original description.

TYPE MATERIAL: Holotype, female, Barro Colorado Island, Canal Zone, Panama; June 2, 1957; Dr. Franz Schrader, collector; deposited in the American Museum of Natural History. Paratype, female; same data as for holotype.

DISTRIBUTION: Panama: Canal Zone.

REMARKS: This species is the largest and most elongated in the genus; its total length to the end of the hemelytral membranes is 13.0 mm., and its width is about 7.5 mm. across the humeri.

*Eurystethus (Eurystethus) nigropunctatus* Mayr

Figure 1

*Eurystethus nigropunctatus* MAYR, 1864, p. 908; 1866, p. 40, pl. 1, figs. 4a, b, c. STÅL, 1872, p. 10. LETHIERRY AND SEVERIN, 1893, p. 88. KIRKALDY, 1909, p. 219.

DIAGNOSIS: Anteocular denticles with a few black punctures; numerous red flecks and capillary markings on pronotum and scutellum; lateral portions of venter densely, strongly nigropunctate; anteocular margins of head somewhat ampliate, apex rather broadly rounded, with small median notch.

SPECIFIC CHARACTERS: Mayr's description is detailed, and the reader is

referred to it. Only the characters of the male genitalia are omitted.

Pygofer, in dorsal aspect, somewhat broadly oval-rectangular, with rounded corners; central portion of dorsal border of capsule feebly produced over base of proctiger; lateral apical lobes stubby, slightly reflexed, divergent, apically truncately rounded; proctiger cylindrical, not depressed; parameres stout, in dorsal aspect somewhat convex, subtriangular, apices slightly produced, weakly declivous, produced a short distance beyond lateral apical lobes.

TYPE MATERIAL: Holotype, male; Brazil, no date; deposited in the Naturhistorisches Museum, Vienna.

DISTRIBUTION: Brazil.

REMARKS: The type specimen is the only example of this species that I have seen. Unfortunately, during its examination, I failed to make drawings of the male genitalia; the above description of the component parts are collated from manuscript notes. The primary recognition character is found in the heavily punctured lateral portions of the abdomen.

***Eurystethus (Eurystethus) parvulus*, new species**

Figure 12

DIAGNOSIS: Not exceeding 7.5 mm. in length; dorsum pale flavescent suffused with reddish tones, punctures mostly ferruginous; anterolateral margins of pronotum straight, narrowly reflexed.

SPECIFIC CHARACTERS: Ovate; small for the genus (male, 7.0 mm. in length); above matte, non-hispid, pale flavescent, extensively suffused with reddish tints; majority of punctures ferruginous, fine, quite dense, somewhat unevenly distributed, especially on hemelytra; connexivum with prominent reddish blotches and smaller piceous markings; beneath glossy, ochraceous, punctures fuscous and ferruginous, fuscous ones restricted to clusters on thoracic pleura.

Head slightly exserted, oblong, half again as long as wide between eyes; anteocular tubercles small, obtuse, sinuses before them shallow, obtuse, margins from there onward subparallel, hardly ampliate, apex evenly rounded, entire; disc vaguely concave, irregularly suffused with pale red tints, punctures ferruginous, somewhat congested. Antennae reaching basal tubercles of scutellum, annulated black and yellow, pale annulus of segment IV subbasal; segmental ratios: 30/25/35/50/50, i.e., segment II shorter than either I or III.

Pronotum trapezoidal, three times as wide as long; anterior margin slightly more than half of transhumeral diameter; anterolateral margins straight, narrowly and abruptly reflexed, strongly convergent anteriorly; anterior apical denticles acute, prominent, directed laterally; discal surface

uneven, shallow transverse furrow across middle behind cicatrices; transhumeral tubercles much reduced but evident; disc pale flavescent, anterior half suffused with pale reddish tints, punctures ferruginous, rather dense, small cluster of fuscous ones behind inner corner of each cicatrix. Scutellum slightly more than one-fourth longer than wide at base, apex evenly rounded, margins not reflexed, reaching middle of sixth abdominal tergite; basal tubercles low, obtuse, not exceeding height of two central transhumeral tubercles; basal half of disc suffused with pale reddish tints, punctures dark ferruginous, basal angles piceous; no particular punctured design evident. Hemelytra less densely punctured than elsewhere, punctures somewhat irregularly distributed, oblique cluster of fuscous ones across corium at end of main vein; embolium barely explanate opposite third abdominal segment, costal margin feebly reflexed toward base; membranes pale sepia, veins colorless. Connexivum moderately exposed, pale flavescent, with prominent red blotches adjacent to segmental sutures, with few ferruginous punctures between them.

Thoracic pleura with congested clusters of piceous punctures near lateral margins, other punctures ferruginous, sparingly scattered; each lateral fourth of abdomen with widely spaced, scattered, ferruginous punctures. Rostrum flavescent, reaching apical margin of fifth abdominal sternite, segment I uniform in diameter, intercalary unit small but distinct, second segment barely reaching metacoxae. Legs sordid flavescent, femora immaculate except for incomplete anteapical ferruginous annulus; tibiae with pale ferruginous spots on dorsal surface; tarsi uniformly flavescent. Median abdominal furrow wide, shallow, reaching sixth segment.

Pygofer (fig. 12) broadly ovate, slightly depressed; lateral apical lobes rather flat, divergent, strongly reflexed, apices obtusely rounded; ventral apical margins between lobes bisinuate, with median, obtuse, stubby, black lobule; submarginal impression very shallow, small; proctiger rather uniformly cylindrical, slightly depressed; parameres stout, triangular, apical ends somewhat declivous, convergent beneath proctiger and contiguous there.

Male specimen measures 7.0 mm. in length, 4.0 mm. in width across humeri.

**TYPE MATERIAL:** Holotype, male; lower Amazon near Santarem, Brazil; June 21-30, 1927; Zerny, collector; deposited in the Naturhistorisches Museum, Vienna.

**DISTRIBUTION:** Brazil.

**REMARKS:** This species is by far the smallest in the genus yet discovered. The male genitalia, except for size, are quite similar to those of

*E. nigropunctatus* Mayr, a character which, combined with the straight anterolateral pronotal margins and extensive suffusion of red tints, suggests that these two species are close affiliates.

***Eurystethus (Eurystethus) spurculus*, new species**

Figure 13

DIAGNOSIS: Anterolateral margins somewhat explanate, extreme edges with conspicuous piceous spots; sordid ochraceous, with no particular punctured design evident; connexivum distinctly alternated; antennal segment II half of the length of III.

SPECIFIC CHARACTERS: Above matte; sordid ochraceous densely overlain with fine ferruginous and fuscous punctures, some fuscous ones aggregating in irregular clusters and bands on pronotum and scutellum, without forming distinctive design; beneath sordid ochraceous, glossy, piceous and fuscous punctures restricted to lateral portions, those on thoracic pleura fine and congested, those on abdomen conspicuous and well spaced; each abdominal incisure with associated, square, black patch.

Head broadly oval, about one-third longer than wide between eyes; anteocular tubercles small, obtuse, barely surpassing bases of eyes, margins before tubercles obtusely sinuate, then slightly ampliate, not reflexed, disc flat, apex broadly rounded, without median notch. Antennae reaching onto basal third of scutellum, sordid orange, annulated with black, pale annulus of segment IV wide, centrally placed; segmental ratios: 25/15/30/40/40, i.e., segment II distinctly shorter than I, half of the length of III.

Pronotum subtrapezoidal, about two and one-half times as wide as long; anterolateral margins somewhat explanate, weakly convex-arcuate, shallowly reflexed; anterior apical denticles small, acute, directed laterally; discal surface slightly uneven, with shallow transverse furrow between cicatrices and transhumeral crest; four central transhumeral tubercles obsolete, only humeral ones evident; edges of anterolateral margins with row of large black spots; punctures fuscous and ferruginous, darker ones aggregated in small clusters, irregularly distributed. Scutellum half again as long as wide at base; apex narrowly rounded, its margins not reflexed; basal tubercles low, obtuse, barely elevated as high as pronotal crest, saddle between them very shallow; punctures for the most part fuscous, congested and coalesced on base of postfrenal lobe. Hemelytral punctures ferruginous, rather dense, unevenly distributed, those on embolium slightly darker, and somewhat larger toward base; membranes very pale tan, veins quite inconspicuous. Connexivum moderately

exposed, segmental sutures broadly banded with black, intervening portions flavescent, ferruginous punctures hardly visible.

Venter glossy, sordid ochraceous, central portion impunctate; head and thoracic pleura sparingly nigropunctate; punctures on lateral portions of abdomen coarser, more widely spaced; transverse margins of abdominal sutures piceous, terminating laterally in conspicuous, square, black patch at incisures. Rostrum ochraceous, reaching fifth abdominal sternite, segment II attaining metacoxae, intercalary unit small, insignificant. Mesosternum fulvous, weakly tumid, median pale line obscure. Metasternum flat, hexagonal, slightly wider than long. Legs ochraceous, femora with anteapical, incomplete, castaneous annulus, in some cases with a few castaneous dots toward base; tibiae with fuscous dashes on upper surface; tarsi in some specimens pale rubescent. Median abdominal furrow shallow, broad, extending through fifth sternite.

Pygofer (fig. 13) subrectangular-ovate, slightly depressed; lateral apical lobes stubby, reflexed, subparallel, or feebly divergent, apices obtusely rounded; proctiger depressed cylindrical, elliptical in cross section, slightly dilated apically; parameres stout, thick, dorsoventrally arcuate, lying parallel to each other, apical portions declivous, apices obtusely rounded; ventral apical margin between lateral apical lobes reflexed, trisinuate, median sinus proportionately wider than in related species; submarginal impression moderately deep.

Basal plates of female genital valves subtrapezoidal, apical margins vaguely convex-arcuate.

Average length to tip of hemelytral membranes, 8.0 mm.; average width across humeri, 5.0 mm.

TYPE MATERIAL: Holotype, male; French Guiana; 1899; R. Oberthür, collector; deposited in the Muséum National d'Histoire Naturelle, Paris. Allotype, female; some data as for holotype; deposited in the American Museum of Natural History. Paratypes, two; same data as for holotype; male, deposited in the American Museum of Natural History; female, deposited in the Muséum National d'Histoire Naturelle, Paris.

DISTRIBUTION: French Guiana.

REMARKS: The dull brown color of this species, without a semblance of any punctured design on its dorsal surface, separates it from all others. In one of the type series there is evidence of sparse, obscure setae arising from the eyes. However, their infrequent occurrence does not exclude this species from being placed in the subgenus *Eurystethus*. The laterally directed denticles of the anterior margin of the pronotum, and the small, insignificant intercalary unit of the rostrum certainly place it in that subgenus.



**Eurystethus (Eurystethus) ovalis**, new species

Figure 14

*Eurystethus nigropunctatus*: RUCKES, 1958, p. 2, fig. 2 (misidentification).

DIAGNOSIS: Head scoop-shaped, distinctly concave, margins broadly reflexed; anterolateral pronotal margins narrowly explanate, abruptly reflexed; two vague, oblique, piceous bands across corium behind end of main vein.

SPECIFIC CHARACTERS: Oval, about 10.0 mm. in length; non-hispid; grayish yellow, in some specimens with reddish clouding here and there; punctures piceous, fuscous, and ferruginous, moderately fine, irregularly distributed, not conspicuously dense; small cluster of piceous punctures on inner corner of each cicatrix, and on crests of two central transhumeral tubercles; in some cases corium with oblique, elliptical ivory bar at end of main vein, followed by two subparallel, oblique, piceous bands; beneath glossy, sparingly and unevenly punctate, punctures on thoracic pleura fuscous to piceous, those on abdomen sparse, ferruginous, central portion of abdominal disc impunctate; small piceous spot on each side of abdominal marginal incisures.

Head narrowly oval, almost elliptical, about half again as long as wide between eyes, margins broadly reflexed, disc distinctly concave; anteocular tubercles small, obtuse, sinuses before them rather well developed, obtuse, margins from there onward feebly ampliate, apex narrowly rounded, subangular, entire; punctures pale ferruginous, sparse, unevenly distributed. Antennae reaching middle of scutellum, annulated black and yellow, yellow annulus on segment IV narrow, centrally placed; segmental ratios: 20/35/40/50/50, i.e., segment II longer than I, subequal to III, basal annulus of segment V broad.

Pronotum trapeziform, anterior margin about half of length of greatest diameter; anterolateral margins very feebly convex-arcuate, essentially straight, narrowly explanate, abruptly reflexed, ending just before humeri; anterior apical denticles small, acute, directed laterally; transhumeral tubercles well developed, central two with small cap of black punctures; central area of disc flavescent, with scattered ferruginous punctures. Scutellum slightly more than one-fourth longer than wide at base, apex extending to fifth abdominal tergite, somewhat narrowly rounded, its margins piceous, reflexed; basal tubercles well developed, obtusely conical, their crests exceeding crests of central two transhumeral tubercles; punctures fuscous to piceous, some aggregated behind basal tubercles, fewest toward apex; postfrenal lobe with median umbo, in some specimens rather vague. Hemelytra distinctly ampliate opposite base of abdomen, costal margin subreflexed near base and with several

brownish spots; punctures mostly fuscous to piceous, some aggregated in oblique bands behind main vein; membranes sepia, veins colorless. Connexivum moderately exposed, flavescent, with ferruginous punctures, segmental sutures broadly banded with black.

Rostrum fulvous, reaching fifth abdominal sternite, basal segment uniform in diameter, intercalary unit small, insignificant. Legs sordid flavescent; femora with anteapical, incomplete castaneous annulus; tibiae irregularly spotted with fuscous dots on dorsal surface; terminal tarsal segment infuscated on apical half. Median abdominal furrow extending through fifth sternite.

Pygofer (fig. 14) oval, capsular portion not depressed; lateral apical lobes stubby, shorter than length of capsule, parallel to each other, their apices very obtusely rounded, upturned; ventral apical margin between lobes reflexed, simply sinuate; submarginal impression shallow; proctiger depressed, narrowly cylindrical, rather uniform in diameter; parameres stout, convex on dorsal surface, thick, boomerang-shaped, apical portions weakly declivous, extreme apices acute, convergent.

Basal plates of female genital valves roundly triangular, equilateral, inner margins slightly divergent, apical margins arcuate.

Average length to tip of membranes, 10.0 mm.; width across greatest diameter, 6.75 mm.

TYPE MATERIAL: Holotype, male; Rio Cristalmayo, Chapare, Bolivia; April 8, 1950; L. Peña, collector; deposited in the American Museum of Natural History. Allotype, female; Yurac, vicinity of Tingo Maria, Peru; November 16, 1954; Schlinger and Ross, collectors; deposited in the California Academy of Sciences, San Francisco.

DISTRIBUTION: Bolivia: Chapare. Peru: Tingo Maria.

REMARKS: This species was wrongly identified by me as *E. nigropunctatus* Mayr and illustrated in my paper (Ruckes, 1958) describing *E. ellipsoidal*. The rather pronounced scoop-shaped head sets this species off from all others with which I am familiar.

### **Eurystethus (Eurystethus) pallescens, new species**

Figure 15

DIAGNOSIS: Narrowly ovate, nearly twice as long as wide; over-all color pale tan; abdominal venter essentially impunctate, with only a few widely scattered, lateral, pale ferruginous punctures; prosternum with small, elliptical, clear, fenestra-like spot on each acetabulum.

SPECIFIC CHARACTERS: Above matte, non-hispid; sordid ivory, or pale ashy yellow, head and median portions of pronotum and scutellum paler; punctures fine, pale ferruginous, rather dense on lateral portions

of pronotum, others more sparingly and unevenly distributed, especially on hemelytra; many specimens with numerous very fine, sanguineous, capillary-like markings, particularly on scutellum; beneath glossy, rich ivory yellow, punctures on thoracic pleura fine, piceous, unevenly scattered.

Head more than one-third longer than wide between eyes, almost elliptical; anteocular denticles minute, obtuse, barely reaching bases of eyes, sinuses before them shallow, obtuse, margins from there onward not ampliate, somewhat weakly reflexed, disc shallowly concave, apex narrowly rounded; punctures reddish ferruginous, uneven, surface vaguely rugulose. Antennae almost reaching middle of scutellum, conspicuously annulated black and yellow, or ivory, pale annulus of segment IV central; segmental ratios: 15/25/20/30/30, i.e., segment II longer than either I or III.

Pronotum subhexagonal, more than two and one-half times as wide as long medially; anterior margin less than half of transhumeral diameter, rather deeply excavated to receive head, anterior apical denticles acute, directed laterally; anterolateral margins feebly convex-arcuate, essentially straight, carinate, subreflexed; discal surface uneven, shallow transverse furrow behind cicatrices; humeri umbonate, other transhumeral tubercles obsolete; punctures ferruginous and fuscous, darker ones accumulating near cicatrices; paler median area with sparse, ferruginous punctures. Scutellum two-fifths longer than wide at base, apex reaching sixth abdominal tergite, narrowed, roundly angular, its margins slightly reflexed; basal tubercles low, obtuse, their crests barely higher than pronotal crest; basal angle piceous; punctures ferruginous to pale fuscous, darker ones tending to accumulate laterally in vague longitudinal bands. Hemelytra reaching or slightly exceeding apex of abdomen; punctures ferruginous, quite unevenly distributed, no distinct color design apparent; membranes pale brown at bases, fading and becoming colorless apically, veins colorless. Connexivum well exposed, sordid flavescent, with numerous transverse, reddish or ferruginous, vague bands.

Under surface of head with three to four small punctures near base of bucculae. Prosternum with small, clear, elliptical, fenestra-like spot on each acetabulum. Thoracic pleura with unevenly distributed fuscous punctures. Abdominal venter impunctate save for a few fine, vague punctures toward lateral margins. Rostrum pale fulvous, reaching through fifth abdominal sternite; segment I uniform in diameter, intercalary unit small, insignificant, segment II reaching between mesocoxae and metacoxae. Metasternum hexagonal, wider than long. Legs pale;

femora with a few irregular ferruginous markings, but no distinct anteapical annulus; tibiae with well-spaced ferruginous dots and blotches on dorsal surface; apical half of terminal tarsal segment fuscous. Median abdominal furrow shallow, extending through fifth segment.

Basal plates of female genital valves roundly trapezoidal, all angles obtuse, slightly wider than long, inner margins fuscous, contiguous for most of length.

Pygofer (fig. 15) ovate; lateral apical lobes short, apices acute, distinctly reflexed; proctiger depressed, cylindrical, gradually dilated apically; parameres very stout, inverted triangular, widest across apices, somewhat convex above, apices roundly truncate, inner angles slightly declivous, convergent, but not contiguous; ventral apical margin between lateral lobes narrowly reflexed, simply sinuate; submarginal impression moderately deep.

Average length to tip of membrane, 9.0 mm. (males), 10.25 mm. (females); average width across humeri, 4.5 mm. (males), 5.5 mm. (females).

TYPE MATERIAL: Holotype, male; Paramaribo, Surinam; February 12, 1958; P. H. van Doesburg, collector; deposited in the Rijksmuseum van Natuurlijke Historie, Leiden. Allotype, female; same data as for holotype. Paratypes (20), males (seven); same data as for holotype but with different dates: December 28, 1957 (one), February 12, 1958 (one), May 9, 1961 (one); deposited in the American Museum of Natural History; December 10-28, 1958 (three), May, 1959 (one); deposited in the Rijksmuseum van Natuurlijke Museum, Leiden; females (13); same data as for holotype but different dates: January 11-21, 1958 (five); deposited in the American Museum of Natural History; December 16, 1957 (three), February 12, 1957 (one), April, 1958 (one), June, 1958 (one), no date (two); deposited in the Rijksmuseum van Natuurlijke Museum, Leiden.

DISTRIBUTION; Surinam: Paramaribo.

REMARKS: This fine series of specimens was sent to me for study by Dr. P. H. van Doesburg, Jr. The body proportions are somewhat like those of *E. ellipsoidalis*, though the over-all dimensions are much smaller, and the body color is much paler. The form of the parameres is distinctive and differs from that of any other species known at the present time. I am not prepared to say to which other species *pallescens* is most closely related.

**Eurystethus (Eurystethus) sordidus**, new species

DIAGNOSIS: Anteocular denticle surpassing base of eye; connexivum

without transverse black bands along sutures; antennae barely exceeding base of scutellum; apex of head broadly rounded, with median notch.

**SPECIFIC CHARACTERS:** Ovate to broadly ovate; above matte, non-hispid; sordid testaceous, with rather dense overlay of dark ferruginous and fuscous punctures somewhat irregularly distributed on head and hemelytra, darker ones aggregating in small clusters and short lines; beneath sordid flavescent, glossy, coarser ferruginous and fuscous punctures sparingly distributed laterally, median portion of body impunctate.

Head oblong, about half again as long as wide between eyes; antecular denticle prominent, subacute, surpassing base, but not reaching middle of eye, sinus before denticle roundly rectilinear, margins from there onward slightly ampliate, broadly reflexed, apex broadly rounded, with small median notch; disc somewhat concave; punctures ferruginous, unevenly distributed. Antennae annulated sordid yellow and black, yellow annulus of segment IV narrow, subbasal; segmental ratios: 40/30/-45/55/55, i.e., segment II distinctly shorter than either I or III.

Pronotum transversely subelliptical; anterolateral margins somewhat explanate, mildly convex-arcuate, slightly reflexed; anterior margin half of length of transhumeral diameter, shallowly excavated centrally to receive head; anterior apical denticles acute, prominent, directed laterally; punctures fuscous and ferruginous, rather dense, most of them as far apart as own diameters, two vague bands of darker punctures arising from middle of anterior margin, diverging posteriorly and becoming evanescent before reaching posterior margin; transhumeral tubercles well developed, conspicuous by virtue of nigropunctation; disc somewhat uneven. Scutellum one-third longer than wide at base; apex reaching middle of sixth abdominal tergite, narrowly truncate, lateral margins reflexed; basal tubercles moderately low, obtuse, their crests barely exceeding height of central two transhumeral pustules; punctures fuscous and ferruginous, dense, about as far apart as their own diameters, not arranged in any recognizable pattern; basal angles not piceous. Hemelytra ferruginopunctate, with some fuscous punctures aggregated in small, irregular, widely spaced clusters; costal margin slightly ampliate opposite base of abdomen, basal portion of margin barely reflexed; membranes medium brown, veins colorless, reaching end of abdomen. Connexivum moderately exposed, flavescent, with red, ferruginous, and fuscous punctures unevenly distributed, but not forming bands along segmental sutures.

Rostrum sordid flavescent, apex not surpassing fifth abdominal segment; basal segment slightly dilated toward its apical end, intercalary unit small, insignificant, segment II reaching mesocoxae. Metasternum

distinctly wider than long. Legs sordid flavescent; femora with some brown spots but no recognizable anteapical annulus; tibiae with compact pairs of brown spots on dorsal surface; tarsi uniformly flavescent. Median abdominal furrow wide, shallow, extending through fifth sternite.

Basal plates of female genital valves roundly trapezoidal, angles obtuse, discs fuscopunctate, not impressed.

This species measures 9.5 mm. in length; 5.5 mm. in width across humeri.

TYPE MATERIAL: Holotype, female; Sinnamary, French Guiana; February, 1951; *ex* collection H. Ruckes; deposited in the American Museum of Natural History. Paratype, female, Cayenne, French Guiana; Noualhier, collector; deposited in the Muséum National d'Histoire Naturelle, Paris.

DISTRIBUTION: French Guiana.

REMARKS: The absence of a male specimen prevents pinpointing the exact phyletic position of this species. There is no doubt, however, that it is an example of *Eurystethus* and represents a new species of that subgenus.

#### HISPIDISOMA, NEW SUBGENUS

TYPE SPECIES: *Eurystethus* (*Hispidisoma*) *variegatus*, new species.

DIAGNOSIS: Dorsal surface distinctly hispid; eyes and extreme lateral margins of pronotum setigerous; intercalary rostral unit conspicuous, usually distinctly enlarged or swollen; basal rostral segment incrassate to subclavate.

SUBGENERIC CHARACTERS: Dorsal surface with dense, short, erect, stiff setae, ranging in color from pale golden yellow to dark brown; eyes and extreme lateral pronotal margins distinctly setigerous; anteocular processes usually elongate, subspinous to ligulate, directed more or less obliquely forward, sinuses before them roundly rectilinear to subacute; anterolateral margins of pronotum somewhat explanate, convex-arcuate, in some cases broadly, shallowly reflexed; anterior apical denticles of pronotum acutely triangular, or ligulate (in one species lacking), directed obliquely anteriorly; head feebly exerted, eyes subpedunculate; rostrum reaching sixth abdominal sternite, or longer, in some species attaining apex of abdomen, basal segment conspicuously thickened, gradually incrassate to subclavate, intercalary unit prominent, in some cases swollen, or compressed-sacculate.

#### KEY TO THE SPECIES OF THE SUBGENUS *Hispidisoma*

1. Dorsal setae bronzy brown or fuscous; dorsal punctures very fine, dense,

- barely farther apart than own diameters, evenly distributed .....  
 ..... *punctissimus*, new species
- Dorsal setae golden yellow or paler; dorsal punctures only moderately dense, mostly several times as far apart as own diameters, unevenly distributed ..... 2
- 2(1). Antennae and legs entirely black, only knees flavescent; anteocular processes nodular, slightly exceeding bases of eyes; anteocular sinuses obtuse ..... *nigricornis*, new species
- Antennae annulated black and yellow, or black and orange; greater portion of legs sordid flavescent; anteocular processes spinoligular, or spinodenticular, sinuses before them rectilinear to acute ..... 3
- 3(2). Anterior apical corners of pronotum very obtusely rounded, without denticle, or lobule of any kind; anteocular processes spinoligular, apices attaining outer surface of eyes at least; anterolateral margins of pronotum conspicuously explanate, broadly, shallowly reflexed; species not exceeding 8.5 mm. in length ..... *nigroviridis*, new species
- Anterior apical corners of pronotum subangular, with small, acute denticle, or narrow elongated lobe directed obliquely forward; anteocular processes spinodenticular, apices surpassing base of eye, but not surpassing outer surface; anterolateral margins of pronotum weakly explanate, reflexed or not ..... 4
- 4(3). Process at anterior apical angle of pronotum small, acutely triangular, denticular (figs. 7, 8) ..... 5
- Process at anterior apical angle of pronotum somewhat elongate, almost twice as long as wide, its margins subparallel, its apex somewhat rounded (figs. 9, 10) ..... 6
- 5(4). Anteocular process reaching outer surface of eye; intercalary unit of rostrum distended into compressed sacculus (fig. 3); anterolateral pronotal margins feebly convex-arcuate; femur with narrow, antepical, piceous annulus ..... *sacculatus*, new species
- Anteocular process not reaching outer surface of eye; intercalary unit of rostrum enlarged but not sacculate (fig. 2); anterolateral margins of pronotum distinctly convex-arcuate, somewhat explanate; legs orange-ochraceous, with broad piceous annulus nearly reaching middle of shaft ..... *variegatus*, new species
- 6(4). Apex of scutellum truncate, its lateral margins strongly reflexed; setae on pronotal disc as long as height of transhumeral tubercles; anterolateral pronotal margins straight; ventral abdominal segments with transverse, large, irregular, pale ferruginous blotches between spiracles and midline ..... *fulvescens*, new species
- Apex of scutellum narrow, subacutely rounded, its lateral margins not at all reflexed; setae on pronotal disc about half of height of transhumeral tubercles; anterolateral pronotal margins somewhat convex-arcuate; median portion of ventral abdominal disc castaneous to piceous, lateral portions flavescent, densely nigropunctate entad of spiracles .....  
 ..... *microlobatus*, new species

In the following descriptions, the species follow the order in which they are presented in the foregoing key, which does not imply that they are in their natural phyletic sequence.

**Eurystethus (Hispidisoma) punctissimus**, new species

**DIAGNOSIS:** Densely hispid above, dorsal setae bronzy brown or darker; punctures fuscous to piceous, very dense, many contiguous, evenly distributed; anteocular processes stout, somewhat triangular, barely reaching outer surface of eyes; intercalary unit of rostrum obpyriform, but not sacculate.

**SPECIFIC CHARACTERS:** Oblong, lateral margins subparallel, 9.5 mm. in length (female); above sordid testaceous densely overlain with fine fuscous and piceous punctures barely farther apart than own diameters, many contiguous, rather evenly distributed, no distinctive punctured design apparent; beneath ochraceous, glossy, punctures dark castaneous, coarser than above, some encroaching on central portion of abdominal disc; dorsal surface setae bronzy brown or darker, marginal and antennal setae pale, silvery.

Head oval, apex acutely rounded; eyes distinctly setigerous; anteocular processes prominent, stoutly triangular, apices acutely rounded, almost reaching outer surface of eyes, sinuses before processes acutely rounded, margins from there onward very feebly ampliate, disc quite weakly concave; punctures fine, dense. Antennae annulated black and orange; segmental ratios: 30/25/30/40—, i.e., segment II slightly shorter than either I or III, segment V missing.

Pronotum subreniform, about two and one-half times as wide as long; anterolateral margins mildly explanate, slightly convex-arcuate, not at all reflexed; shallow transverse furrow behind cicatrices; punctures quite dense, rather regularly distributed, two small piceous clouds behind inner corners of cicatrices; transhumeral pustules low but distinctly evident. Scutellum half again as long as wide at base; basal tubercles low, blunt; postfrenal lobe with umbo, apex evenly rounded, its lateral margins weakly reflexed; punctures quite dense, sparser apically. Hemelytra densely punctured, without design; membranes barely attaining apex of abdomen, rich medium brown, veins colorless. Connexivum well exposed, rather evenly nigropunctate.

Venter pale ochraceous; head with numerous punctures; punctures on thoracic pleura dense, somewhat congested; abdominal punctures dark castaneous, some extending onto central area of posterior sternites. Rostrum long, reaching onto seventh sternite, basal segment strongly incrassate, intercalary unit quite enlarged, somewhat narrowly pear-shaped (inverted) but not sacculate. Legs sordid testaceous; femora conspicuously spotted with fuscous dots, posterior two pair with anteapical fuscous annuli, tibiae with rows of fuscous spots on dorsal surface, apical half of terminal tarsal segment fuscous. Lateral segmental margins of abdo-



men with fuscous stripe on basal half.

Basal plates of female genital valves subtrapezoidal, apical margins narrow, converging toward midline.

TYPE MATERIAL: Holotype, female; Chapada, Brazil; August; deposited in the American Museum of Natural History.

DISTRIBUTION: Brazil.

REMARKS: The absence of a male specimen prevents pinpointing the exact phyletic position of this species. That it is in the subgenus *Hispidisoma* is evident from the strongly setigerous condition of the dorsum. It must be closely related to the new species that follow, particularly *variegatus* and *sacculatus*.

### **Eurystethus (*Hispidisoma*) *nigricornis*, new species**

Figure 16

DIAGNOSIS: Antennae and legs entirely black, only knees flavescent; abdominal venter mostly black, only small central area and lateral margins flavescent.

SPECIFIC CHARACTERS: Elongate-oval, three-fifths as wide as long; dorsal setae pale golden yellow; color old ivory, punctures fuscous and ferruginous, irregularly distributed, fuscous ones accumulated in small clusters on hemelytra and in bands on pronotum and scutellum; larger cluster of dark punctures adjacent to cicatrices; beneath glossy, flavescent, pleura coarsely fuscopunctate, abdomen with pair (1 + 1) of broad, longitudinal, dark castaneous bands.

Head one-third longer than wide between eyes; anteoocular processes reduced to small, obtuse, setigerous lobules, sinuses before them shallow, margins from there onward feebly ampliate, apex narrowly rounded, entire; disc very feebly concave; punctures mostly ferruginous, fewest on vertex. Antennae slightly exceeding base of scutellum, entirely black; segmental ratios: 30/20/40/50/55, i.e., segment II half of length of III, shorter than I. Eyes distinctly setigerous.

Pronotum subreniform, two and one-half times as wide as long; anterior margin shallowly excavated centrally to receive head; anterolateral margins explanate, convex-arcuate, shallowly reflexed, anterior apical denticle quite small; transhumeral pustules obsolete, humeri distinctly umbonate; punctures irregularly disposed, ferruginous and fuscous, the latter accumulated in large cluster at inner corner of each cicatrix, and in pair (1 + 1) of vague, posteriorly divergent bands. Scutellum about one-half again as long as wide at base, apex reaching sixth abdominal tergite, narrowly rounded, lateral margins somewhat thickened, very feebly reflexed; basal tubercles low, obtuse, not elevated above pronotal

crest. Hemelytra unevenly fuscopunctate, with four to six small, irregular clusters unevenly spaced; membranes reaching abdominal apex, unevenly blotched with pale yellow-brown, veins colorless. Connexivum well exposed, pale old ivory, sutures broadly banded with black, intervening areas with few ferruginous punctures.

Under surface of head and thoracic pleura rather loosely punctured, base of head adjacent to eyes piceous. Mesosternum castaneous, its median portion flavescent. Metasternum distinctly wider than long, entirely flavescent. Rostrum reaching onto seventh abdominal sternite, basal segments pale, terminal two piceous; intercalary unit distinctly enlarged, somewhat canoe-shaped, but neither swollen nor sacculate, almost half as long as basal segment which is strongly incrassate. Median abdominal furrow prominent, extending through sixth sternite.

Basal plates of female genital valves roundly triangular, nearly equilateral, inner margin of each plate piceous, outer margin flavescent.

Pygofer (fig. 16) broadly ovate, slightly depressed; central portion of dorsal border shallowly emarginate, lateral portions deeply concave; lateral apical lobes stubby, strongly reflexed, divergent, apices rather evenly rounded; ventral apical margin between lobes abruptly reflexed, evenly sinuate; submarginal impression lunate, shallow; proctiger depressed-cylindrical, slightly distended at middle; parameres stout, broadly L-shaped, or boomerang-shaped, apical portion declivous, apices acute, divergent at extreme tips.

This species averages 10.5 mm. in length; 6.5 mm. in width across humeri.

TYPE MATERIAL: Holotype, male; Santo Domingo, Ecuador; November 10, 1956; R. W. Portman, collector; deposited in the California Academy of Sciences, San Francisco. Allotype, female; same data as for holotype. Paratypes, three females; same data as for holotype except one deposited in the Entomology Department, University of Idaho; two deposited in the American Museum of Natural History.

DISTRIBUTION: Ecuador.

REMARKS: The black antennae and almost totally black legs make this species unique among all the species of *Eurystethus*. That it belongs to the subgenus *Hispidisoma* is evident from the densely setose condition of the dorsal surface, and the presence of a prominent, swollen intercalary unit in the rostrum.

***Eurystethus (Hispidisoma) nigroviridis*, new species**

Figures 6, 17

DIAGNOSIS: Anterior apical corner of pronotum obtuse, without den-

ticle; anteocular processes prominent, acute, reaching outer surface of eyes; color variegated green and ivory, with black punctures; 8.5 mm. in length.

**SPECIFIC CHARACTERS:** Ovate, depressed; dorsum hispid, setae golden; color variegated pale green and ivory, with piceous punctures (except on head) and numerous extremely fine red capillary markings; punctures unevenly distributed, many aggregated in clusters, patches, and bands; main vein of corium orange; beneath glossy, rather flat, pale fulvous or ochraceous centrally, graduating to greenish ivory laterally; punctures fuscous to piceous, coarser than above, unevenly distributed; central portion of abdomen impunctate.

Head oval, slightly longer than median length of pronotum, and two-fifths longer than wide between eyes; anteocular processes narrowly triangular, at least twice as long as wide, apices acute, reaching outer limits of eyes, sinuses before them roundly acute, margins from there onward ampliate, apex rather broadly rounded; disc slightly uneven and feebly concave, punctures ferruginous, irregularly disposed; eyes piceous, distinctly setigerous, ocelli dull red. Antennae reaching base of scutellum, annulated black and orange; segmental ratios: 30/30/32/50/50, i.e., basal three segments subequal.

Pronotum transversely oblong, almost two and one-half times as wide as long; anterolateral margins slightly irregular, weakly convex-arcuate, strongly explanate; anterior apical angles obtusely rounded, reaching line drawn through eyes, partially encircling them, without denticles; anterior margin somewhat sigmoid behind eyes; disc somewhat uneven, with shallow transverse furrow behind cicatrices; transhumeral pustules very low, obtuse, but visible; punctures fuscous to piceous, unevenly distributed, some aggregated into broad oblique bands before and behind inner corners of cicatrices; lateral explanate portions of disc pale, with wide-spaced black punctures and dots. Scutellum half again as long as wide at base, apex acutely rounded, reaching seventh abdominal tergite, its lateral margins not reflexed; basal tubercles low, transversely oval, with pale greenish tint on crests; punctures fuscous to piceous, irregularly distributed; pair (1 + 1) of piceous bands extending longitudinally from bases of tubercles to base of postfrenal lobe, other punctures scattered. Hemelytra with six or more small, irregular clusters of congested piceous punctures, between which additional piceous punctures are unevenly scattered; main vein of corium orange; basal portion of costal margin slightly ampliate, subreflexed; membranes reaching abdominal apex, sepia brown, veins colorless. Connexivum moderately exposed, greenish ivory, with few ferruginous punctures, margins adjacent to sutures and incisures

piceous; apical segmental angles rectilinear, very slightly produced.

Rostrum long, reaching apical margin of seventh abdominal sternite; basal segments distinctly incrassate, subclavate; intercalary unit enlarged, slightly distended. Legs sordid ivory, with few basal fuscous spots and irregular fuscous antepical annulus; upper surfaces of tibiae with two rows of fuscous, usually contiguous dots; apical half of terminal tarsal segment fuscous. Lateral punctures of venter coarser than those on dorsum, unevenly distributed, median area of venter essentially impunctate. Margins of transverse sutures between abdominal segments narrowly fuscous or piceous; extreme lateral margins at incisures marked with a 7-shaped fuscous figure, abdominal disc fulvous, impunctate; seventh sternite with large central brown cloud; median furrow wide, shallow, extending through fifth sternite.

Pygofer (fig. 17) ovate, slightly depressed; central portion of dorsal border distinctly emarginate; lateral apical lobes stubby, strongly reflexed, apices subacutely rounded; proctiger cylindrical, slightly dilated at apical end; parameres stout, subtriangular from dorsal aspect, convex above, concave beneath, lateral margins strongly deflexed, apical portions slightly declivous; ventral apical margin between lateral apical lobes reflexed, with small triangular lobule bearing minute apical notch.

This species measures (males only) 8.5 mm. in length; 4.75 mm. in width across widest portion of the abdomen.

TYPE MATERIAL: Holotype, male; Belem, Pará, Brazil; November 10-22, 1963; Oliveira and Wygodzinsky, collectors; deposited in the American Museum of Natural History. Paratypes, four males; same data as for holotype; three deposited in the American Museum of Natural History, one deposited in the Museo Paraense "Emilio Goeldi," Belem, Pará, Brazil.

DISTRIBUTION: Brazil: Pará.

REMARKS: This unique species belongs in the subgenus *Hispidisoma* by virtue of its strongly setose dorsal surface, setigerous eyes, long rostrum with a strongly incrassate to clavate basal segment and enlarged intercalary unit. The strongly explanate anterolateral pronotal margins without a denticle at the anterior apical angles and its contrasting green and ivory coloring readily distinguish this from other species in the subgenus. The specimens of the type series were collected from *Vatairea guianensis* Aublet, a member of the family Leguminosae. They rest tightly appressed to the bark of the trees where they are difficult to discern owing to their resemblance to small patches of green and black lichens. This species is the only one in which the head is longer than the median length of the pronotum.

**Eurystethus (Hispidisoma) sacculatus**, new species

Figures 3, 8, 18

**DIAGNOSIS:** Anteocular processes reaching, or exceeding, outer limits of eyes; intercalary rostral unit distinctly distended into compressed sacculus; hemelytra with pale discal spot and posteriorly contiguous cluster of fuscous punctures; transhumeral and scutellar tubercles very poorly developed.

**SPECIFIC CHARACTERS:** Ovale, densely hispid above; sordid flavescent, punctures ferruginous and fuscous, rather unevenly distributed, dense, many as far apart as their own diameters, some contiguous, others more widely spaced; corium with pale discal spot at end of main vein followed by contiguous cluster of congested fuscous punctures; beneath glossy, fulvous to flavescent, punctures fuscous, restricted to lateral thirds of body, median area impunctate.

Head oblong, about one-third longer than wide between eyes; anteocular processes reaching, or exceeding, outer surface of eyes, margins before them somewhat ampliate, apex broadly rounded, usually with minute apical notch; eyes distinctly setigerous; punctures ferruginous, densely and evenly distributed. Antennae reaching base of scutellum, annulated black and yellow; segmental ratios: 30/30/30/40/50, i.e., basal three segments equal, segment IV shorter than V.

Pronotum subrectangular, transversely oblong; anterolateral margins ampliate, very weakly convex-arcuate; anterior apical denticles small, acute, directed obliquely anteriorly; discal surface uneven, transhumeral tubercles low, barely discernible; punctures fuscous and ferruginous, some fuscous ones forming vague, posteriorly divergent bands arising from inner ends of cicatrices, paralleling anterolateral margins and terminating at posterior marginal angles, area between bands paler, with ferruginous punctures. Scutellum about half again as long as wide at base, apex reaching apical margin of sixth abdominal tergite, narrowly rounded, its margins not reflexed; basal tubercles very low, saddle between them vague; punctures moderately dense, sparsest toward apex, some fuscous ones forming vague, longitudinal bands subparallel to lateral margins. Hemelytra irregularly punctured, small aggregations of them forming wide-spaced clusters; costal margins weakly ampliate opposite third abdominal segment, basal portion of margin not at all reflexed; membranes pale brown, veins not conspicuous. Connexivum sordid flavescent to fulvous, punctures reddish ferruginous or darker, dense, irregularly distributed; apical segmental angles rectilinear, very slightly produced.

Venter flavescent or fulvous, punctures ferruginous and fuscous,

restricted to lateral thirds of body. Rostrum reaching apical margin of sixth abdominal sternite; segment I strongly incrassate, essentially clavate; intercalary unit distinctly compressed and distended to form obpyriform, flat sacculi. Mesosternum fulvous, vaguely infuscated. Legs flavescent, femora with narrow, anteapical, incomplete, fuscous annulus; tibiae spotted on upper surfaces; terminal tarsal segment uniformly flavescent. Median furrow wide, shallow, extending through fifth sternite.

Basal plates of female genital valves roundly subtrapezoidal, lateral margins convex arcuate, apical margins truncate; apical plates triangular, distinctly reaching beyond apical margin of abdomen.

Pygofer (fig. 18) ovate, slightly longer than wide; central portion of dorsal border shallowly emarginate; lateral apical lobes quite stubby, obtuse, divergent, reflexed; proctiger depressed cylindrical, uniform in diameter; parameres (in dorsal aspect) boomerang-shaped, concave margins facing centrally, angle of lateral margin rectilinear, apices acute, somewhat declivous, slightly surpassing lateral apical lobes; ventral apical margin abruptly reflexed, weakly convex-arcuate; submarginal impression deep.

This species averages 9.25 mm. in length, 5.25 mm. in width across the humeri.

**TYPE MATERIAL:** Holotype, male; upper Rio Mapuera (on equator), Brazil; February 2, 1938; W. G. Hassler, collector; deposited in the American Museum of Natural History. Allotype, female; same data as for holotype. Paratypes, two females; Manaos, Brazil; no date; Dr. Roman, collector; deposited in the Naturhistoriska Riksmuseum, Stockholm.

**REMARKS:** The inflated and sacculate intercalary unit in the rostrum reaches its maximum degree of development in this species. No other pentatomid that I have examined shows such a remarkable structure.

### ***Eurystethus (Hispidisoma) variegatus*, new species**

Figures 2, 7, 19

**DIAGNOSIS:** Pale flavescent, irregularly blotched with small clusters of piceous punctures; anteocular processes slightly exceeding middle of eyes, not quite reaching outer surfaces; rostrum not exceeding sixth abdominal sternite, segment II barely reaching mesocoxae; legs orange-ochraceous, femora piceous, with orange-ochraceous bases and apices.

**SPECIFIC CHARACTERS:** Oblong, about 11.0 mm. in length, 6.5 mm. in width across greatest diameter; above densely hispid, setae very pale golden yellow; pale flavescent, with moderately fine, ferruginous and fuscous punctures unevenly distributed, darker ones aggregated in small,

irregular clusters, producing an over-all blotched appearance; main vein of corium orange; connexivum flavescent, with moderately dense fuscous and ferruginous punctures; beneath glossy, sordid flavescent, median area impunctate, fuscous and piceous punctures restricted to lateral thirds of body; mesosternum castaneous, median linea flavescent.

Head narrowly oval, almost elliptical, about one and one-half times as long as wide between eyes; apices of antecular processes acutely rounded, slightly surpassing middle of eyes but not quite reaching their outer surfaces, sinuses before them acutely rounded, margins from there onward slightly ampliate before converging to somewhat narrowly rounded apex; tip of tylus suffused with orange; punctures ferruginous, unevenly distributed; disc weakly concave. Antennae annulated black and orange; segmental ratios: 30/25/35/52/55, i.e., segment II shorter than either I or III, segments IV and V quite long, subequal.

Pronotum transversely vaguely reniform, not less than two and one-half times as wide as long, anterior two-thirds of disc mildly declivous; anterior margin quite shallowly excavated centrally to receive head; anterolateral margins explanate, convex-arcuate, provided with fringe of short setae along edges; anterior apical angle with small, acute denticle directed obliquely anteriorly; disc with pronounced transverse furrow ending laterally in rather well-defined impression on each side; transhumeral pustules quite low, barely evident, humeral ones largest; cicatrices slightly tumid, somewhat infuscated, and covered with some loose piceous punctures; small clusters of piceous punctures adjacent to transhumeral pustules, remaining punctures ferruginous, unevenly distributed; edges of anterolateral margins with several dark brown, small spots. Scutellum with vague infuscated clouds; punctures fuscous and ferruginous, irregularly distributed, densest laterally, median portion pale flavescent; basal tubercles low, obtuse, but clearly visible, with shallow saddle between them; basal angles with a few piceous punctures; apex narrowly rounded, but not angular, lateral margins fuscous and mildly reflexed; no conspicuous umbo on postfrenal lobe. Hemelytra with numerous small, irregular clusters of piceous punctures, with loosely scattered punctures between them; main vein orange; no clearly defined discal spot present; membranes quite pale brown, veins colorless. Connexivum exposed, pale flavescent, punctures fuscous and ferruginous, darker one aggregating near margins of sutures but not forming piceous bands there; apical angles of segments rounded, slightly produced.

Rostral segment I incrassate but not clavate, intercalary unit conspicuous but not distended (fig. 2); apex of rostrum reaching onto sixth abdominal sternite. Legs orange-ochraceous, femora largely piceous

toward apices, tibiae with conspicuous fuscous spots on dorsal surface, apical portion of terminal tarsal segment fuscous. Median abdominal furrow extending through fifth sternite. Narrow margins of transverse abdominal sutures castaneous, extreme lateral margin of each segment with short castaneous stripe on basal half; spiracles piceous, pseudo-sutures castaneous.

Basal plates of female genital valves trapezoidal, lateral and apical margins straight; apical plates oval, short, not surpassing apical margin of abdomen.

Pygofer (fig. 19) ovoidal, somewhat depressed; central portion of dorsal border mildly emarginate; lateral lobes stubby, ivory yellow, apically obtusely rounded, reflexed, axes divergent; ventral apical margin between lobes strongly reflexed, with minute median notch; proctiger cylindrical, depressed, feebly widened at its middle; parameres glossy brown, convex above, concave beneath, stoutly triangular from dorsal aspect, attenuating and declivous toward very acute apex which overhangs ventral apical margin.

This species averages 11.25 mm. in length; 6.5 mm. in width across humeri.

TYPE MATERIAL: Holotype, male; Rio de Janeiro, Brazil; January, 1920; deposited in the American Museum of Natural History. Allotype, female; same data as for holotype. Paratypes, five males, four females as follows: Males; Provincia del Sara, Bolivia (one); Santa Cruz de la Sierra, Bolivia, November, 1910 (one), both deposited in the Carnegie Museum, Pittsburgh; São Paulo, Brazil, October 18, 1945 (two), one deposited in the American Museum of Natural History, one in the United States National Museum; no data (one), deposited in the American Museum of Natural History. Females, Rebouças, Parana, Brazil, November, 1951; F. Plaumann, collector; one deposited in the American Museum of Natural History; Rebouças, Brazil, October 18, 1945; Alm, collector; two, deposited in the United States National Museum; no data; one, deposited in the American Museum of Natural History.

DISTRIBUTION: Bolivia: Provincia del Sara; Santa Cruz de la Sierra. Brazil: São Paulo; Rebouças; Rio de Janeiro.

REMARKS: I have selected this species as the type of the subgenus because it represents an intermediate, or average, form between two extremes. Its variety of blotching and color suggests the name *variegatus* for the species.



**Eurystethus (Hispidisoma) fulvescens, new species**

Figures 9, 20

**DIAGNOSIS:** Over-all color orange-brown; ventral abdominal segments with pairs (1 + 1) of large, pale, ferruginous or fulvous, irregular blotches entad of spiracles.

**SPECIFIC CHARACTERS:** Broadly ovate; above densely hispid, setae pale golden yellow; pale ochraceous densely overlain with fine ferruginous and brown punctures, producing over-all fulvous appearance; beneath glossy, orange-ochraceous, abdominal segments with large, irregular, fulvous or light ferruginous blotches between spiracles and midline; lateral portions of thoracic pleura fuscous to piceous, congestedly punctured; punctures on abdomen ferruginous.

Head broadly oval, between one-fourth and one-third longer than wide between eyes; antecular processes dentiform, acutely triangular, barely reaching middle of eyes, sinuses before them roundly rectilinear, margins from there onward weakly ampliate, apex moderately broad, with minute apical notch; anterior portion of head feebly declivous; punctures ferruginous, rather widely spaced; disc feebly concave. Eyes distinctly setigerous. Antennae sordid, annulated dark and pale, basal three segments vaguely clouded, pale annulus on segment IV basal; segmental ratios: 30/30/30/40/45, i.e., basal three segments equal.

Pronotum trapezoidal, three times as wide as long, anterior margin slightly less than half of length of transhumeral diameter; anterolateral margins straight, narrowly explanate, weakly reflexed, ending abruptly at humeri, leaving small, obtuse notch there; humeri distinctly umbonate; anterior apical denticles prominent, directed obliquely anteriorly, more than half again as long as wide, apices acutely rounded; punctures mostly ferruginous, quite regularly distributed; disc with small, median, calloused, flavescent mark, resembling the Russian capital letter L, lying between cicatrices; transverse tubercles quite prominent, their crests infuscated. Scutellum one-fourth longer than wide at base; apex truncately rounded, reaching sixth abdominal tergite, its lateral margins reflexed, longitudinal furrow between margins in form of deep, V-shaped furrow; basal tubercles obtuse, moderately low, their crests not surpassing height of posterior level of pronotum; punctures quite dense, with vague longitudinal band of darker ones on each side extending from basal tubercles to postfrenal lobe; median portion of postfrenal lobe slightly elevated but not distinctly umbonate. Hemelytra with ferruginous and fulvous punctures irregularly distributed, numerous ones aggregated into indeterminate, wide-spaced clusters; corium with flavescent, pale, discal spot at end of main vein, followed by small cluster of brown

punctures; membranes pale fulvous, veins colorless; costal margin approximate opposite third abdominal segment, basal portion of margin reflexed. Connexivum flavescent, punctures indistinct, small fulvous blotches present; apical angles of segments roundly rectilinear, not at all produced.

Rostrum reaching basal margin of sixth abdominal sternite, segment I distinctly incrassate, intercalary unit enlarged but not conspicuously swollen or sacculate. Mesosternum castaneous, its median furrow flavescent. Metasternum ochraceous, slightly wider than long. Median abdominal furrow wide, shallow, extending through sixth sternite. Thoracic pleura with large castaneous blotches and dense, congested, piceous punctures. Abdomen ochraceous, with large, irregular, fulvous patches on each side between spiracles and impunctate median area, lateral punctures scattered, ferruginous to fulvous.

Pygofer (fig. 20) rather quadrangular ovate from dorsal aspect, evenly ovate from lateral view; central portion of dorsal border slightly produced over base of proctiger, shallowly emarginate at apex; lateral apical lobes oval, stubby, slightly divergent, strongly reflexed, apices obtusely rounded; ventral apical margin between lobes abruptly reflexed, with wide, shallow emargination; submarginal impression quite small, shallow; proctiger uniformly cylindrical, relatively long, narrow, not depressed; parameres stout, triangular in dorsal aspect, convex, apical portions slightly declivous, becoming cuneiform or wedge-shaped, their apices vertically truncate and contiguous beneath proctiger.

This species measures 9.5 mm. in length; 7.75 mm. in width across the humeri.

TYPE MATERIAL: Holotype, male; Rio de Janeiro, Brazil; 1929; deposited in the American Museum of Natural History.

DISTRIBUTION: Brazil: Rio de Janeiro.

REMARKS: The stoutly triangular parameres with their wedge-shaped apices separate this species from all others yet discovered. Its closest affiliate may be *E. variegatus*, just described.

### **Eurystethus (Hispidisoma) microlobatus, new species**

Figures 10, 21

DIAGNOSIS: Broadly ovate, 6.50 mm. in length (male); anterior apical process of pronotum ligulate, apically rounded, directed obliquely anteriorly; anteocular denticles acutely triangular, reaching middle of eyes.

SPECIFIC CHARACTERS: Broadly ovate, less than half again as long as wide through greatest width across abdomen; above hispid, setae very short, golden yellow; eyes setigerous; ground color flavescent, punctures

dark ferruginous and fuscous, somewhat irregularly distributed, many contiguous; beneath glossy, sordid flavescent, median portion of abdomen impunctate, castaneous, lateral punctures castaneous, or darker, congested; marginal areas up to spiracles essentially impunctate; bilateral halves of mesosternum piceous.

Head oblong, half again as long as wide between eyes; antecular processes denticular, acute triangular, their apices attaining middle of eyes, sinuses before them deep, roundly rectilinear to roundly acute, margins from there onward ampliate, apex moderately rounded, with minute apical notch; punctures fuscous, somewhat congested; anterior half of disc slightly concave. Antennae reaching base of scutellum, annulated black and yellow, narrow annulus on fourth segment subbasal; segmental ratios: 20/20/30/40/50, i.e., segment II equal to I, shorter than III.

Pronotum transversely subelliptical, about two and three-fourths times as wide as long; anterolateral margins narrowly explanate, convex-arcuate, not reflexed; anterior margin shallowly excavated centrally to receive head, anterior apical angles extended into obliquely directed ligulate lobules, apices of which are evenly rounded; punctures fuscous, dense, mostly as far apart as their own diameters, some more widely spaced, some contiguous; median portion of disc sordid ivory, with wide-spaced ferruginous punctures; transhumeral tubercles prominent, each capped with small cluster of fuscous punctures. Scutellum a little less than half again as long as wide at base, apex narrowly rounded, attaining seventh abdominal tergite (male), apical margins not at all reflexed; punctures fuscous, small, vague clusters of them across base, on basal tubercles, and near lateral margins where frena end; basal tubercles prominent, obtusely conical, their crests about as high as transhumeral tubercles; disc of postfrenal lobe with obtuse umbonate elevation. Hemelytra irregularly fuscopunctate, small clusters of punctures unevenly distributed; disc of corium with conspicuous, oblique, irregular, elliptical, ivory spot at end of main vein, followed by parallel cluster of congested fuscous punctures; membranes slightly exceeding abdominal apex, sepia, veins colorless. Connexivum moderately exposed, flavescent, with pinkish suffusion and irregular fuscous patches near segmental sutures and incisures; apical angles of segments roundly rectilinear, not at all produced.

Under surface of head and sides of bucculae fuscopunctate, with pair (1+1) of short, longitudinal, brown streaks on basal portion. Thoracic punctures fuscous, lateral portion of propleuron infuscated. Mesosternum piceous, its midline and entire metasternum sordid flavescent. Rostrum

fulvescent, apex reaching basal margin of fifth abdominal sternite, basal segment distinctly incrassate, intercalary unit well developed but not conspicuously dilated, or swollen. Median abdominal furrow wide, shallow, reaching sixth sternite.

Pygofer (fig. 21) ovate, slightly wider than long as seen from dorsal aspect; central portion of dorsal border produced over base of proctiger, its apical margin rather deeply emarginate; lateral apical lobes somewhat rectangular, reflexed, with sigmoid apical margins and concave dorsal surfaces, lateral apical angles acute; ventral apical margin between lobes abruptly reflexed, truncate; submarginal impression very shallow; proctiger depressed, cylindrical, essentially uniform in diameter; parameres in dorsal aspect somewhat triangular, with weakly sinuate posterolateral margins and declivous acute apices overhanging ventral apical margin.

This species (male specimen) measures 6.50 mm. in length; 4.75 mm. in width across the greatest abdominal diameter.

TYPE MATERIAL: Holotype, male; De Morgenstond Estate, near Paramaribo, Surinam; January 28, 1958; P. H. van Doesburg, Jr., collector; deposited in the Rijksmuseum van Natuurlijke Historie, Leiden, the Netherlands.

DISTRIBUTION: Surinam.

REMARKS: This is the smallest species of *Eurystethus* yet discovered. Dr. van Doesburg believes that it feeds on *Erythrina glauca* Willdenow, a tropical representative of the family Leguminosae. The type specimen was taken at light. It is the only example of a species in this genus in which the anterior apical angles of the pronotum are produced into ligulate lobules. From this characteristic is derived the specific name, *microlobatus*.

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