

XV. NEOTROPICAL HOMOPTERA OF THE CARNEGIE  
MUSEUM.

PART 3. REPORT UPON THE COLLECTIONS IN THE SUBFAMILY *Bythoscopinæ*, WITH DESCRIPTIONS OF NEW SPECIES.

(PLATES LV; LVI, FIG. 4; AND LIX, FIG. 1.)

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The additions to the Bythoscopid fauna of South America included here only serve to emphasize the wealth of species to be discovered when there shall be an intensive collection of these little creatures in the various habitats included in the great Amazonian basin. It may be assumed as practically certain that these species represent a wide diversity of host-plants, and careful collection of material, with accurate records of the plants on which they occur, would serve an important purpose in determining their biological relations, and also the possibilities of their dispersion and economic menace to other countries. Doubtless many of the species are restricted to tropical plants, but our experience with a number of destructive pests, which have been introduced in the past, justifies a careful study of the possible immigrants from this region.

Owing to the brevity of many of the early descriptions, or the fact that they did not include mention of important characters for identification, there has been no little difficulty in arriving at positive conclusions as to some of the species. As the types of Stål's species are preserved in the Naturhistoriska Riksmuseet at Stockholm, it seemed especially desirable to secure reliable figures, at least for some of the most uncertain species. Through the generous cooperation of Dr. W. J. Holland, the Director of the Carnegie Museum when these studies were begun, and of Dr. Sjöstedt, the Intendant of the Riksmuseet, it has been possible to secure the services of a competent artist, Madame Ekblom, to prepare illustrations from a number of the types.

The plates accompanying this and the following paper are the result of this fortunate arrangement. In addition to the fact that these plates have enabled us to definitely fix some of the uncertain species, we feel sure they will prove of special value to future students of the group, who may not be able to consult the types in Stockholm.

In this connection, I wish to express my appreciation of the help given me by Mr. Douglas Stewart, the successor of Dr. Holland in the Directorship of the Carnegie Museum.

Order **HEMIPTERA** Linnæus.  
Suborder **HOMOPTERA** Latreille.  
Family **CICADELLIDÆ** Latreille.  
Subfamily **BYTHOSCOPINÆ** Dohrn.  
Genus **AGALLIA** Curtis.

*Agallia* Curtis, Entomological Magazine, Vol. I, 1833, p. 193.

1. *Agallia punctaticollis* (Stål) (Plate LV, fig. 3).

*Bythoscopus punctaticollis* Stål, Bidrag till Rio Janeiro-Traktens Hemipter-fauna,  
Pt. II, K. Svensk. Vet. Akad. Handl., Vol. III, No. 6, 1860, p. 54.

The original description given by Stål is as follows:

"Pallide testaceo-flavescens; maculis duabus parvis basalibus verticis, limbo interno lororum, maculis duabus anterioribus transversis thoracis, angulis basalibus scutelli et basi femorum nigro-fuscis; frontis lituris duabus elongatis, linea media longitudinali maculaque utrimque magna irregulari thoracis mediaque scutelli testaceis; tegminibus testaceo-, nigro-fusco- et sordide albido-variis. ♂. Long. 5.5, Lat. 1.75 mm.—(Mus. Holm.).

Caput leviter reclinato-declivum, vertice basi sursum libere prominente, lineola media suturaque frontali testaceis; fronte triangulari, latitudine basali nonnihil (quarta fere parte) longiore, a basi vix ad medium subito valde, dein apicem versus magis sensim et minus angustata, sutura frontali obtuse angulata. Thorax longitudine plus duplo latior, distincte punctatus, scutello nonnihil longior. Tegmina abdomen nonnihil superantia, testaceo-venosa, arcis duabus internis clavi testaceis, tertia nigra, macula ante medium apiceque albidis; corio areolis nigro-fuscis, discoidalibus et costalibus macula media sordide albida notatis."

The main points of the foregoing are set forth in the following lines:

Pale reddish yellow; two small black spots on base of vertex; internal border of loræ, two anterior transverse spots on thorax, basal angles of scutellum, base of femora, black fuscous; front with two elongated lines. Middle longitudinal line and a large spot of variable size on each side of thorax, and middle of scutellum, testaceous; elytra varied with testaceous, blackish, fuscous, and dull white.

Head slightly obliquely sloped; base of vertex elevated; middle line and suture of front testaceous; front triangular, basal width somewhat (almost one-fourth) longer.

Stål's original description, with the appended synopsis of its main points, taken together with the figure of the type by Madame Ekblom, should make the identification of this species an easy matter. However, no specimens, which can be referred to it, have been seen by the writer.

## 2. *Agallia signata* (Stål) (Plate LV, fig. 1).

*Bythoscopus signatus* Stål, *Eugenies resa*, Ins. Hemipt., 1858, p. 291.

The diagnosis given by Stål is here reproduced:

"Pallide griseo-flavescens, margine ad oculos, maculis 2 superioribus lineisque 2 percurrentibus mediis basin versus sæpe confusis verticis, macula media vittaque utrimque e lineolis transversis frontis, vitta clypei, linea media, maculis nonnullis anticis duabusque majoribus late oblique triangularibus (singula interdum in duabus partita) thoracis, angulis basalibus, macula media vittaque ante hanc scutelli, maculis magnis femorum anteriorum vittaque lata posteriorum, abdomine (exceptis incisuris), areolis clavi albido-venosi venisque corii pallide sordide testaceo-flavo-hyalini nigro-fuscis, hujus lineola basali ad suturam clavi nec non macula prope costam ante medium albidis. ♂, ♀. Long. 4, Lat. 1.33 mm.

Patria: Buenos Ayres, Monte-Video.

Prope *B. venosum* locandus, longior, major. Caput supra visum valde obtuse rotundato-subangulatum, vertice supra brevi, ubique æquilongo, facie nonnihil reclinato-decliva. Thorax vertice supero vix ter longior, longitudine fere duplo et dimidio latior, transversim rugulosus. Tegmina apice haud marginata."

Dark gray and resembling the darker forms of *A. sanguinolenta*. Prof. Stål's description, quoted above, was based on specimens from Buenos Aires and Montevideo. A single specimen in the collection of the Carnegie Museum from La Plata, Argentina, (Holland coll.), agrees well with the description, and especially with the figure drawn from the type by Madame Ekblom.

3. *Agallia phalerata* (Stål) (Plate LVI, fig. 4).

*Bythoscopus phaleratus* Stål, Bidrag till Rio Janeiro-Traktens Hemipter-fauna, Pt. II, K. Svensk. Vet. Akad. Handl., Vol. III, No. 6, 1860, p. 54.

The description published by Stål is here given:

"Pallide subsordide testaceo-flavescens, pedibus sæpius purius flavescens; faciei parte dimidia apicali (excepto margine genarum), fascia inæquali inter oculos maculisque duabus basalibus magnitudine variantibus, sæpe cum fascia illa confluentibus, thoracis margine antico, vitta media maculaque utrimque sæpe cum vitta connexa, maculis tribus haud raro confluentibus scutelli et tunc hoc totum occupantibus, disco dorsali abdominis tegminibusque nigricantibus aut nigro-fuscis, venis suturaque clavi, vena corii ad suturam clavi nec non macula utrimque subapicali oblonga marginali pallide sordide testaceo-flavescens. ♀. Long. 4.5, Lat. 1.33 mm.—(Mus. Holm. et Stål).

*B. Fruticola* angustior. Caput supra visum brevissimum, late rotundatum, medio brevius, facie levissime convexa, paullulum reclinato-decliva. Thorax antice rotundatus, longitudine plus duplo latior, scutello nonnihil longior. Tegmina abdomine nonnihil longiora, venis subtilibus."

A free translation of part of the original description is here given:

'Pallid, somewhat soiled reddish yellow; feet quite frequently purer yellow; the apical half of the face, except the margin of the cheeks, together with a shorter or longer band between the eyes, two basal spots of varying size, which are often confluent with the band just mentioned, the front margin of the thorax, a median stripe, and a spot on either side of it, often uniting with this stripe, three spots upon the scutellum, occasionally confluent, and then occupying the whole of its surface, the dorsal disk of the abdomen, and the elytra, black or blackish fuscous; the face, the suture of the clavus, the veins of the corium as far as the suture of the clavus, together with an oblong marginal subapical spot on either side, pallid dirty reddish yellow.'

The figure on Plate LVI together with the foregoing text should facilitate the determination of this species. However, no specimens, which can be referred to it, have been thus far seen by me.

4. *Agallia assimilis* (Stål) (Plate LV, fig. 4).

*Bythoscopus assimilis* Stål, Bidrag till Rio Janeiro-Traktens Hemipter-fauna, Pt. II, K. Svensk. Vet. Akad. Handl., Vol. III, No. 6, 1860, p. 55.

Stål's description is herewith given:

"Dilute testaceo-flavescens, pedibus, abdomine tegminibusque sordide pallidioribus; maculis tribus basalibus verticis, sutura frontali

clypeoque fere toto nigricantibus; thoracis linea media longitudinali maculaque utrimque arcuato-oblonga, illa cum angulis basalibus scutelli dilutius, his valde obscure fusco-testaceis; tegminibus dilute fusco-testaceo-venosis, venis-clavi, macula obliqua ad suturam clavi prope apicem nec non macula basali areolæ basalis mediæ corii subalbidis. ♀. Long. 6, Lat. 1.75 mm.—(Mus. Holm.).

Præcedenti [*punctaticollis*] affinis, statura similis, præter colorem pallidiorem picturamque differt fronte proportionaliter latiore, utrimque minus profunde sinuata, a basi vix ad medium nonnihil, dein apicem versus parum angustata, vitta utrimque lineolis transversis fusco-testaceis formata; sutura frontali recta. Thorax impunctatus."

A free translation of the first paragraph of the foregoing follows:

Rather dilute testaceous yellow; feet, abdomen, and elytra more pallid; three spots at base of vertex, frontal suture and clypeus almost entirely black; a middle longitudinal line on the thorax and an oblong arcuate spot on each side, the former together with the basal angles of the scutellum more faintly, the latter very darkly, fuscous-testaceous; elytral veins pale fusco-testaceous; veins of clavus, oblique spot at suture toward apex, and also a spot at basal areole, and at basal and central areoles of corium, dull white.

Allied to *A. punctaticollis* and of similar size, but the color is paler and the general appearance, as given on Plate LV, fig. 4, is different. The front is proportionally wider, less deeply sinuate on each side; base not, middle somewhat, then toward apex strongly narrowed, stripe on each side of transverse line fusco-testaceous, frontal suture straight. Thorax impunctate. I have not seen this species, but the description of Stål accompanied by the free translation above given together with the figure given on Plate LV, should serve to identify it.

##### 5. *Agallia peregrinans* (Stål) (Plate LV, fig. 2).

*Bythoscopus peregrinans* Stål, *Eugenies resa*, Ins. Hemipt., 1858, p. 291.

The description given by Stål is here quoted in full:

"Pallide griseo-flavescens; maculis 2 superis verticis, maculis 3 scutelli pectoreque nigricantibus; venis tegminum ultra medium subalbidis. ♂, ♀. Long. 3.25, Lat. 1 Millim.

*Var.* vitta utrimque inæquali frontis, clypeo maculisque ocellorum nigro-fuscis.

*Patria:* Insulæ Taiti et Oahu, California, Rio Janeiro; var. e Rio Janeiro.

Caput obtuse rotundatum, vertice supero ubique æquilongo, facie nonnihil reclinata, fronte latitudine nonnihil longiore, prope basin utrimque sinuata, dein leviter angustata. Thorax vertice ter longior, longitudine duplo et dimidio latior. Tegmina haud marginata."

From the localities cited by Stål it appears that he may have had more than one species in hand, when he wrote his brief diagnosis. The figure of the type, given on Plate LV, may serve to identify the species, but I have seen no specimens, which could without question be referred to it.

Genus *MACROPSIS* Lewis.

*Macropsis* Lewis, Trans. Ent. Soc. London, Vol. I, 1835, p. 49.

6. *Macropsis elegans* (Van Duzee).

*Pediopsis elegans* Van Duzee, Jamaican Hemiptera, Bull. Buffalo Acad. Nat. Sci., Vol. VIII, 1907, p. 58.

Small, slender; head wider than pronotum; vertex very narrow at apex, a little wider at eyes; front broad, narrowed rapidly to clypeus; clypeus and loræ short. Pronotum angular anteriorly, the striæ minute, distinct; hind border concave. *Genitalia: female*, last ventral segment short, narrowed and subtruncate behind, with a slender tail-like appendage about half-way from middle on each side; pygofer short, broad.

Pale yellowish creamy, the prothorax with the borders and a median stripe bright red; tips of tarsi blackish.

Length: 3.5 mm.

One specimen, Ft. Principe, Rio Guaporé, Brazil, August, 1909, C. M. Acc. No. 4043 (Haseman coll.). Originally recorded as found in Jamaica, the present record appears to indicate that the species has a wide distribution.

Genus *BYTHOSCOPIUS* Germar.

*Bythoscopus* Germar, Silbermann's Revue Entomologique, Vol. I, 1833, p. 180.

7. *Bythoscopus pallidus* sp. nov.

Robust; head broad, narrower than pronotum; vertex very short; front tumid, narrowed very abruptly from antennal pits; clypeus longer than broad; loræ short; cheeks broad, sinuate. Pronotum large, transversely striate, hind border concave; elytra minutely punctate, and setose. *Genitalia: female*, last ventral segment a little longer than preceding; hind border nearly truncate or slightly concave; ovipositor scarcely longer than pygofer; *male*, last ventral segment slightly longer than preceding; plates fused, elongate, triangular, somewhat spoon-shaped, narrowed, acute, slightly upturned at tips.

Uniformly pale greenish yellow; abdomen above slightly tinged with fulvous; elytra hyaline, with minute whitish setæ.

Length: female, 5 mm.; male, 4.5 mm.

Described from one female, *type*, from Barra, Rio Grande, Brazil, Dec. 5, 1907, C. M. Acc. No. 3533; one male, *allotype*, taken near Ft. Principe on the Rio Guaporé, Brazil, Oct. 25, 1909, C. M. Acc. No. 4043 (Haseman *coll.*).

This species is apparently nearly related to *B. misellus* Stål, described from Mexico, but is larger; the female segment nearly truncate; and the male, which apparently belongs with this female, has a very distinct structure for the fused plates.

#### 8. *Bythoscopus nigrifrons* sp. nov.

Small, robust; head very short, narrower than pronotum; vertex narrowly visible from above; front flattened, tumid below, overhanging the clypeus and loræ; clypeus short, not reaching margin of cheeks; loræ small, oblique; cheeks short, lower margin sinuate. Pronotum distinctly striate, about four times longer than vertex, truncate behind; plates short, broad at base, abruptly narrowed to blunt tips, depressed on the disk and minutely punctured, and setose.

Brown; vertex and front black; narrow margin of vertex, ocelli, and the entire face below antennal pits, whitish or faintly tinged with reddish. A small patch in the posterior margin of pronotum, and the disk of the scutellum, fuscous; elytra setose, densely black; the apical cells margined with fuscous. Beneath brown, the femora and hind tibiæ more or less suffused with fuscous; spine of the latter whitish; tarsi brown.

Length: 3.5 mm.

Described from one specimen, male, *holotype*, from Chapada, Brazil, Nov., C. M. Acc. No. 2966 (H. H. Smith *coll.*).

This is a rather striking species, considerably smaller than *B. misellus*, and most clearly distinguished by the black vertex and front, and the shape of the male plates.

#### 9. *Bythoscopus lautus* Stål. (Plate LIX, fig. 1).

*Bythoscopus lautus* Stål, Bidrag till Rio Janeiro-Traktens Hemipter-fauna, Pt. II, K. Svensk. Vet. Akad. Handl., Vol. III, No. 6, 1860, p. 55.

The original description of this species by Stål is as follows:

"Sordide albida, maculis quattuor verticis, duabus ocellos cingentibus, nigris; vittis duabus obsolete frontis, vitta genarum, linea media longitudinali verticis thoracisque, hujus etiam maculis duabus minoribus anterioribus parteque basale anterius undata, maculis scutelli areolisque tegminum nitidulorum pallidissime subtetaceis, horum venis albidis. ♀. Long. 4, Lat. 1.25 Millim.—(Mus. Holm. et Stål).

Statura fere *B. Fruticolæ*. Vertex basi levissime reflexus; facies leviter convexa, subreclinato-decliva. Thorax longitudine duplo fere et dimidio latior, scutello nonnihil longior."

A free translation is herewith given:

Dirty whitish; four spots on the vertex, two encircling the eyes, black; two faint stripes on the front, a stripe on the cheeks, a median longitudinal line on the vertex and the thorax, the latter also with two smaller anterior spots, and the basal part, which is anteriorly wavy, the spots on the scutellum and the areoles of the slightly shining elytra, very pale subtestaceous; the veins of the elytra whitish. ♀. Length, 4, width 1.25 mm. (In the Museum at Stockholm and in the Collection of Stål.)

Size almost that of *B. fruticola*. Vertex at the base very slightly reflexed, face slightly convex, slightly sloping backward. Thorax almost two and one-half times broader than long, not longer than the scutellum.

The above description and translation, together with the figure of the type by Madame Ekblom, should enable the student to recognize this species, which as yet has not been seen by the author. Judging from the figure it belongs to the genus *Agallia*.

#### Genus IDIOCERUS Lewis.

*Idiocerus* Lewis, Trans. Ent. Soc. Lond., I, 1835, p. 47.

#### 10. *Idiocerus occipitalis* sp. nov.

Slender; head very broad, much exceeding pronotum in width, moderately arched; vertex as long at middle as next the eye, rounded uniformly to front; front narrowing uniformly to clypeus. Pronotum short, narrow, nearly twice as long as vertex. Elytra narrow. *Genitalia: female*, last ventral segment larger than preceding, rounded, produced, dark brown in contrast to the pale venter; ovipositor and pygofer brown.

Dark chocolate-brown to blackish, most of the vertex and the disk of pronotum light yellowish, bordered anteriorly with brownish and enclosed by a broad dark blackish band, which includes the lateral and posterior parts of the pronotum; the eyes and a narrow margin of vertex and a broad stripe between the eyes bordered with brown; lower part of face whitish; scutellum blackish; elytra dark brown or piceous, sub-hyaline; veins blackish. Beneath, thorax and legs white.

Length: 3 mm.

One specimen, *type*, taken at Santarem, Brazil, Dec., 1909, C. M. Acc. No. 4043 (Haseman *coll.*). The large yellow spot of the vertex and pronotum imparts an appearance very different from that of the common forms of this genus.

11. *Idiocerus albicollis* sp. nov.

More robust than *I. occipitalis*; head broad, moderately arched; vertex scarcely longer at middle than next the eye; front convex, abruptly narrowed from antennæ to clypeus; clypeus broad, about one-half longer than wide; apex a little expanded and rounded; loræ slightly tumid, extending nearly to margin of cheek; cheeks narrow, margin nearly straight. Pronotum short, about one-half longer than vertex. *Genitalia: male*, plates elongate, triangular, slightly acuminate, and upturned at tip.

Brown; vertex and anterior part of pronotum yellow; face, thorax, and legs whitish; abdomen tinged with brown; elytra sub-hyaline, tinged with brown; costal and outer apical areoles fuscous, leaving a transparent area on the outer costal areole.

Length: 3.25 mm.

Described from one male specimen, the *type*, from Chapada, Brazil, Nov., C. M. No. 2966 (H. H. Smith *coll.*). This species has the general appearance of *I. occipitalis*, but the large yellow spot of vertex and pronotum is reduced on the pronotum, and the pronotal border and frontal bands are lighter brown; the ocelli are encircled by fuscous, and the elytra have more transparent areas.

12. *Idiocerus eburneomaculatus* sp. nov.

Head much wider than pronotum, broadly arched; vertex as long at middle as next the eye; front convex, narrowed sharply below the antennæ; clypeus long; loræ large, somewhat tumid; cheeks narrow, margins nearly straight. Pronotum twice as long as vertex, hind border truncate or faintly concave; scutellum large, acuminate; elytral veins weak. *Genitalia: female*, last ventral segment short, truncate; ovipositor extending a little beyond pygofer; *male*, last ventral segment longer than preceding, narrowed posteriorly; plates compressed, reaching tip of pygofer.

Bright fulvous yellow; vertex faintly greenish yellow, with two large quadrate patches of fulvous; two transverse fulvous dots just above ocelli; ocelli red. Pronotum fulvous, with four light greenish yellow stripes not reaching the hind border; scutellum fulvous, faintly marked with yellow stripes; base of clavus yellowish; two ivory-white spots on the corium, one below the middle and the other at tip of clavus; elytra otherwise transparent, tinged with golden yellow; a small spot on membrane at tip of clavus and some of the apical veins fuscous.

Length: 4 mm.

Three specimens: two females, one male; *type*, *allotype*, and *paratype*, from Brazil, taken along the Rio Guaporé below Rio S. Miguel Aug. 22, C. M. Acc. No. 4043 (Haseman *coll.*).

13. *Idiocerus costalis* sp. nov.

Head slightly wider than pronotum, short; vertex rounding uniformly to front; ocelli rather near together; front distinctly convex, short, narrowed abruptly to clypeus; clypeus short, somewhat tumid; loræ long, reaching margin of cheek; cheeks triangular; outer border nearly straight, somewhat reflexed. Pronotum short, nearly twice as long as the vertex from the dorsal view; hind border truncate; scutellum broad, acuminate at apex; middle apical cell narrow, preceded by ovate anteapical. *Genitalia: male*, plates broad at base, contracted to slender, acute, upturned tips.

Dull olive-brown; apex of scutellum yellowish; ocelli, eyes, base of clavus, the costa to the cross-vein and the elytral veins, dark fuscous, or blackish; wings smoky.

Length: 3.5 mm.

Described from one male specimen, *type*, from Province del Sara, Bolivia, 450 M., taken Nov., 1909, C. M. Acc. No. 4549 (Steinbach *coll.*).

This is a small species, particularly distinguished by the opaque blackish costa.

14. *Idiocerus breviatus* sp. nov.

Head large, broad, bluntly rounded in front; vertex very broad, margins nearly parallel; ocelli rather near together; base of front sub-angular, narrowed abruptly to clypeus; clypeus short; loræ long, extending beyond clypeus, merging with cheek-margin; cheek-margin slightly sinuate. Pronotum short, shorter than vertex; scutellum triangular; elytra broad and short, but extending far beyond the short abdomen. *Genitalia: male*, plates broad at base, narrowed to near the center and extending as long, narrow, upturned acutely pointed tips.

Light brown; vertex and pronotum somewhat vitreous; elytra sub-hyaline, somewhat fuscous on basal part and with abrupt termination at end of clavus; apex milky hyaline; hind tibiæ and tarsal joints dusky.

Length: 3 mm.; width: 1.5 mm.

One male specimen, *type*, from Chapada, Brazil, Dec., C. M. Acc. No. 2966 (H. H. Smith *coll.*).

This species is remarkable for its very broad and short body, and may be particularly distinguished by the strong contrast between the smoky and milky parts of the elytra.

15. *Idiocerus flavotinctus* sp. nov.

Head very broad; vertex short, margins parallel; ocelli rather close together; front narrow at base, widening to antennal pits; clypeus twice as wide as long, slightly expanded, truncate at tip; loræ large, merging with border of cheek; cheeks triangular, margin nearly straight. Pronotum twice as long as vertex; scutellum large, acuminate; elytra much longer than body. *Genitalia: male*, plates elongate, triangular, compressed, and upturned at tip.

Yellowish, somewhat suffused with greenish; elytra transparent, tinged with golden yellow; ocelli brown and margined with brownish; base of corium with a fuscous spot; elytral veins pale, wing-veins black; tips of rostrum and tarsal claws fuscous; venter greenish yellow; tergum golden yellow, tinged with reddish on the disk. Male plates greenish, tipped with fulvous brown.

Length: 6 mm.

Described from one specimen, male, *holotype*, from Mana River, French Guiana, June, 1917, C. M. Acc. No. 6008 (Klages coll.).

16. *Idiocerus principensis* sp. nov.

Head broad, distinctly arched; vertex margins parallel; ocelli nearer to the eye than to the middle line; front narrowing sharply to clypeus; clypeus broad at base, narrowed to tip; loræ reaching margin of cheek; cheek broad, margins nearly straight. Pronotum half longer than vertex; scutellum slightly acuminate. *Genitalia: female*, last ventral segment short, as long as preceding, faintly sinuate.

Light greenish, a common median stripe on vertex, pronotum and scutellum extending to a transverse band between ocelli, and a large roundish spot near the eye and a stripe behind it on pronotum, orange-red; inner border of clavus brown, commissure greenish white; outer part of clavus and the elytra hyaline, smoky at tip; a spot at base of corium and a dot on the disk dark fuscous; ocelli black. Beneath pale gray.

Length: 4 mm.

One specimen, *type*, from Ft. Principe, Rio Guaporé, Brazil, Aug., 1909, C. M. Acc. No. 4043 (Haseman coll.).

This is a handsome little species, somewhat resembling *I. flavidus*, but distinguished at once by the three orange-red stripes on the pronotum, which are in line with the spots of the vertex, and the central one with stripe on disk of scutellum.

17. *Idiocerus exquisitus* sp. nov.

Head broad, strongly arched in front, longer at center than next the eye; front rounded, short, contracted to clypeus; clypeus short, scarcely longer than wide; loræ broad, merging the cheek-margin; cheek triangular, border nearly straight. Pronotum scarcely longer than vertex; sinuate behind; scutellum acuminate; elytra long, rather slender. *Genitalia: female*, last ventral segment short, truncate; pygofers polished; *male*, plates narrow, compressed, curved upward, tips acute.

Greenish white, a fulvous stripe on middle of vertex and pronotum; ocelli dark brown, abdomen above black on base of middle line; apex with a large yellow spot at each side on segments two to four; elytra transparent, a large fuscous spot on the costa beyond the middle, and a dusky patch at end of clavus on inner border.

Length: 2.5 mm.

Three specimens, *type*, *allotype*, and *paratype*, from Rio Machupo, Bolivia, near Rio Guaporé, Aug. 25, 1909, C. M. Acc. No. 4043 (Haseman coll.). This very elegant little species is the smallest of the genus, which I have ever encountered, being smaller even than *I. minutus*, and is very distinct from other species in the markings on the abdomen, and the fuscous spots on the elytra.

18. *Idiocerus figuratus* sp. nov.

Broad, short; head much wider than pronotum, broadly rounded; vertex broad, as long at middle as next the eye. Pronotum strongly arched, nearly twice as long as vertex; hind border concave. *Genitalia: female*, last ventral segment slightly longer than preceding, truncate behind; ovipositor extending beyond pygofers.

Dark apple-green; vertex with two large orange-red oval spots. Pronotum with an orange fulvous arch, and narrow hind border; scutellum with disk and lateral angles, elytra with base of clavus, and a sub-sutural stripe, fulvous; face above blue-green; an orange-red band, including ocelli, from lower borders of eyes; lower part of front and clypeus yellowish white. Beneath greenish; tarsal claws blackish.

Length: 3 mm.

Described from two females, *type* and *paratype*, from Chapada, Brazil, Oct., C. M. Acc. No. 2966 (H. H. Smith coll.).

19. *Idiocerus flammeus* sp. nov.

Small; head wider than pronotum, distinctly arched; vertex as long at middle as next the eye; front somewhat tumid; clypeus widened to tip; cheek-margins sinuate. Pronotum twice as long as

vertex, slightly concave behind; elytral veins indistinct. *Genitalia: female*, last ventral segment elongate, convex; plates bulbous at base, narrow, compressed, sparsely setose at tip.

Pale yellowish, tinged with bright fulvous or sanguineous; vertex with two broad stripes extending from near base to the ocelli. Pronotum tinged with fulvous; scutellum with two whitish spots on the disk; elytra hyaline; abdomen above more or less tinged with sanguineous, below yellowish; tips of hind tibiae and the tarsal claws fuscous.

Length: 3 mm.

Described from five specimens, four females and one male, *type*, *allotype*, and *paratypes*; two females and one male from Province del Sara, Bolivia, C. M. Acc. No. 5064, Nov., 1912; two females from Province del Sara, Bolivia, 450 M., Nov., 1909, C. M. Acc. No. 4549 (Steinbach *coll.*).

#### 20. *Idiocerus vittatus* sp. nov.

Head broad; vertex long, somewhat longer at middle than next the eye; front broad, short; clypeus widened toward the tip; loræ broad, nearly touching cheek-margin; border of cheek slightly sinuate. Pronotum short, about one-half longer than vertex. *Genitalia: male*, plates elongate, triangular; tips compressed and upturned.

Apple-green with three dark orange-red stripes on the pronotum, the median one extended over vertex to base of front and united with a cross-band between ocelli and backward to the middle of the scutellum; a large spot between this stripe and the eye, and a broad stripe on each side of the pronotum. Base and inner border of clavus rich brown, as also outer border of clavus and most of corium; a black dot at base of corium and on the disk, and a fuscous spot on the costal border; apical veins dark; membrane smoky. Beneath pale greenish or dirty white; ocelli black; tip of clypeus dusky.

Length: 3.5 mm.

Described from a single male specimen, *holotype*, from Ft. Principe, Rio Guaporé, Brazil, Aug. 26, 1909, C. M. Acc. No. 4043 (Haseman *coll.*).

#### 21. *Idiocerus fulvotinctus* sp. nov.

Small; head broad, distinctly arched; vertex broad; front broad, somewhat tumid; clypeus short; borders of cheeks nearly straight. Pronotum short, about twice as long as the vertex. *Genitalia: male*, plates somewhat swollen at base, narrowed beyond middle, compressed and a little upturned at tip.

Greenish yellow, deeply tinted with orange or fulvous; vertex, hind border, median line, pronotum, hind border, and indistinct median

line, greenish; elytra sub-hyaline, greenish, deeply tinged with orange; face mostly fulvous; cheeks greenish; ocelli reddish; abdomen fulvous.

Length: 3 mm.

Described from three male specimens, *type* and *paratypes*, one a little more deeply tinted with fulvous than the others, from Province del Sara, Bolivia, 450 M., Nov., 1909, C. M. Acc. No. 4549 (Steinbach *coll.*).

This species approaches *I. fulvus* and *I. ocellatus*, but lacks the dark dots on the elytra, and differs in the color-pattern, as well as the genitalia.

**22. *Idiocerus rugifrons* sp. nov.**

Face, vertex, pronotum, and scutellum minutely rugose; head wider than pronotum, scarcely produced before; vertex broadly sub-angulate; ocelli scarcely farther from each other than from margin of eye; front broad, rounded to clypeus; clypeus contracted at middle; loræ elongate, reaching border of cheek; cheek rather broad, rounded, scarcely sinuate on border. Pronotum short; lateral margin reduced to an angle; hind border truncate; elytra with short oval anteapical cell. *Genitalia: male*, plates narrow at base, divergent, and contracted behind the middle, compressed, rounded and blunt at tip.

Dark olive-green, tip of scutellum brighter green; elytra sub-hyaline, suffused with brownish; cross-vein, base and apex of outer apical, and the apical veins fuscous; lower part of face bright green; thorax dark brown; abdomen and legs lighter brown. Male plates brownish, inner borders greenish with a discal fuscous dot.

Length: 3.5 mm.

Described from one male specimen, *type*, in the author's collection, collected by H. S. Parish, at Bartica, British Guiana, Mar. 20-30, 1901.

This species is near to *Bythoscopus* in shape, but the vertex and pronotum are minutely rugose, instead of striate, and the face agrees better with the species of *Idiocerus*.