

Arquivos de Zoologia

ARQ. ZOOL., S. PAULO, VOL. 21 (1): 1-40

11. VI. 1971

AN ATTEMPT TO CLARIFY THE GENERIC STATUS OF SOME NEOTROPICAL SPECIES CURRENTLY ASSIGNED TO *EURYPTERA*, *CHONTALIA* AND *OPHISTOMIS* (COLEOPTERA, CERAMBYCIDAE)

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SYNOPSIS

Type specimens of the Biologia Centrali-Americana lepturine Cerambycidae are redescribed and most are generically reassigned. New combinations are also listed for other Neotropical species. Three genera and one species are described as new.

INTRODUCTION

Among the presumably mimetic species of Lepturinae currently assigned to the genera *Euryptera* Serville and *Ophistomis* Thomson are an array of superficially similar but structurally diverse forms. Taxonomic analysis of this group of species has not only been complicated by superficial similarity and convergence in form and coloration, but by sexual dimorphism and polychromatism, a feature common to many groups of mimetic Neotropical Cerambycidae which occur in areas occupied by models exhibiting two or more aposomatic patterns (c. f. Linsley, 1961a, 1961b, 1962; Chemsak and Linsley, 1965). The systematics of the group is further complicated by the fact that many of the species in this lepturine complex, including some that serve as types of genera, are known from but a single specimen, which may be a female, the sex that in this group often exhibits the least distinctive structural specific characters.

The objective of the present paper is to re-examine the basis for generic classification in the group of species presently assigned to *Euryptera*, *Ophistomis* and certain related genera, to recharacterize the genera and generic types as they relate to the fauna of North America, to redescribe in comparative terms certain of the species which have been previously named, to indicate the probable generic assignments for some, and otherwise to help clarify the systematics of the group.

ACKNOWLEDGMENTS

Appreciation is expressed to the authorities of the British Museum (Natural History) for the privilege of utilizing museum facilities and studying the collection. We are particularly appreciative of the hospitality and assistance of Dr. P. Freeman, Mr. R. D. Pope, Mr. R. T. Thompson and the staffs of the Coleoptera Section and the Entomology Library. The National Science Foundation, through Grant GB-4944X, is gratefully acknowledged for making our visit to the museum possible.

Genus *Euryptera* Serville

Euryptera Serville, 1825 : 688; 1835 : 222; Thomson, 1860 : 144; 1864 : 402; Lacordaire, 1869 : 454 (pars); Belon, 1897 : 339 (pars); Boppe, 1921 : 106 (pars).

This genus was proposed by Audinet-Serville for a large, broad, lycid-like species from Brazil (*E. latipennis* Serville). In the genotype, the elytra are more or less flattened, costate, and expanded posteriorly, with the apices transversely sinuate with the sutural and external angles dentiform. The intercoxal process of the prosternum is narrow, more or less laminiform and arcuately declivous behind. The coxae are exerted, extending well above the intercoxal process. The intercoxal process of the mesosternum is prominent, broad, elevated above the coxae and arcuately but subvertically declivous in front.

In 1844, de Breme described a second species from Brazil, quite unlike the first, and other diverse species from South America were added to the genus by Pascoe in 1860 and 1866. Thus, when Lacordaire (1869), after transferring *Leptura distans* Germar, 1824 (= *Leptura lateralis* Olivier, 1795) from the United States to *Euryptera*, attempted to define it to encompass the species then known, he was hard pressed to do so. His re-characterization was rejected by Bates (1885) who relied on the form of the antennae, which, unfortunately from the standpoint of higher classification, are extremely variable, and his grouping compounded the confusion created by his predecessors.

Belon (1897) recognized the necessity for redefining and restricting the genus, but lacked the necessary material to do so. Based upon a study of published descriptions he discussed some of the superficial structural variations among species, but allowed them all to remain in *Euryptera*, added another divergent species, and offered a key based entirely on color. Gounelle (1911), in this account of Cerambycidae of Jathay, Goyaz, made no attempt to restrict or redefine *Euryptera*, but commented that *Euryptera dimidiata* Redtenbacher and *E. melanura* Redtenbacher represent transitional forms between *Ophistomis* (= *Strangalia*) and more typical *Euryptera*.

The restriction of *Euryptera* to species with the body form and sternal characters exhibited by the type species excludes practically all of the described North American species. Two of these, *E. fulvella* Bates (= *E. planicoxis* Bates) and *E. costaricensis* Melzer, have been recently removed to *Mimiptera* Linsley (1961b). These species have the general form of *Euryptera* but the anterior

coxae are flattened and not exerted and do not project above the intercoxal process which is broad, rather than laminiform, and vertically, rather than arcuately declivous behind. Others have been transferred to *Megachoriolaus* Linsley (1970).

Genus *Megachoriolaus* Linsley

Megachoriolaus Linsley, 1970 : 128.

This genus was proposed for a group of large, robust forms, with the antennae relatively short in both sexes, the intercoxal process of the prosternum narrow, that of the mesosternum broad and prominent, the posterior tarsi relatively short, and the punctuation of the elytra not coarser than that of the pronotum. In addition to the type species, *M. chemsaki* Linsley from Mazatlan, Sinaloa, and other species recorded from Mexico by Linsley (1970), two species named by Bates are here redescribed from the type specimens, and a new species made known from Chiapas, Mexico.

Megachoriolaus patricia (Bates), comb. n.

Euryptera patricia Bates, 1885 : 286, pl. 20, fig. 14; Belon, 1897 : 340; Linsley, 1961 : 132, 135.

Euryptera princeps Bates, 1885: 286, pl. 20, fig. 11; Linsley, 1961: 135, syn. n.

Male: Form moderately robust; elytra gradually widened posteriorly before rounding to apices; integument black, upper part of head, sides of pronotum, and all of elytra reddish-orange, underside of head and prosternum yellow; anterior coxae brownish; pubescence reddish-orange on matching areas, brownish on legs and vertex, black on antennae. Head with vertex impressed on each side of midline, obliquely rugose, interspaces very finely punctate, impressed areas reddish; antennal tubercles and sides of face reddish; front concave, clypeus densely punctate, punctures variable in size; antennae barely surpassing middle of elytra, first four segments with coarse, suberect setae, fifth and sixth with a few at apices, scape elongate-triangular, third segment distinctly shorter than scape, slightly longer than fourth, both subtriangular, fifth segment longer but not equal to scape, sixth segment slightly longer than fifth, segments six to ten successively slightly shorter, apices expanded externally but not serrate, eleventh segment elongate, longer than tenth, not appendiculate, poripherous areas lacking. Pronotum densely punctate, punctures much larger than those of vertex but not larger than those of elytra; median longitudinal dark area convex, with a narrow longitudinal smooth line, each side of median elevation deeply longitudinally sulcate, the sulcus extending from apex to base where it meets the base of an elytral sulcus which starts just inside of humerus, pubescence very dense, obscuring punctuation, appressed, spread somewhat fan-like on median elevation, lying transversely in longitudinal sulci, longitudinal on elevated lateral margins. Legs with posterior tarsi about seven-eighths as long as tibiae, first segment shorter than remainder of tarsus. Elytra about two and one-third

times as long as humeral width, humeral width about four-fifths of subapical width, surface with a deep longitudinal sulcus extending from inside humeri at middle of base in a gradual sweep closer to the suture in front of middle, following a pair of very fine, non-elevated costal lines and becoming obsolete before apex, punctures moderately fine, discrete, mostly separated by about one diameter, pubescence suberect, moderately short and dense but scarcely obscuring surface; apices broadly flexuose-truncate, sutural angle obtusely rounded, external angle dentate. Abdomen with sternites shining, sparsely coarsely punctate medially, more finely densely laterally, last sternite shallowly emarginate truncate, angles not produced nor dentiform. Length, 15 mm.

Female: Apical three-fifths of elytra black; antennae barely reaching to basal one-third of elytra, segments shorter than those of male but similarly proportioned; elytral apices with outer angle distinct but not prominent; abdomen with last segment rotundatetruncate, slightly impressed at middle. Length, 14 mm.

Type localities: Cordova, Mexico (*patricia*), Volcan de Chiriqui, Panama, 3000 to 4000 ft. (*princeps*).

Although secondary sex characteres are not well marked in this group, we interpret the type of *patricia* as female, that of *princeps* as male. Both share the peculiar scutate pronotum and elytra and agree in numerous other characters suggesting that they are conspecific and on this basis they have been synonymized by Linsley (1961b). The above descriptions were drawn from the respective types in the British Museum (Natural History).

Megachoriolaus filicornis, sp. n.

Male: Form moderately robust; elytra widened posteriorly before rounding to apices; body dark brownish-black, shining, face above clypeus and vertex, neck and pronotum at sides and intercoxal process of prosternum, elytra in toto golden yellow. Head with neck shining on black mid-line, punctures about as large as those of pronotum; vertex impressed on each side of shining midline, more deeply above antennal tubercles, surface finely, densely punctate, yellow areas densely clothed with transversely appressed long golden pubescence; antennal tubercles prominent, distance between their apices equal to half the length of a line extending from midway between them to anterior margin of labrum; yellow areas at side of face finely punctate, thinly clothed with appressed golden pubescence; muzzle prognathous; clypeus coarsely punctured basally, labrum less coarsely so, each with scattered long, suberect hairs; genal area below eye well defined, length greater than basal width of mandible; antennae slightly surpassing middle of elytra, first four segments shining, black, outer segments dull, with small poriferous areas, segments three to seven with successively smaller groups of coarse, erect black setae at their apices, scape subcylindrical, third segment distinctly shorter than scape, fourth segment shorter than third, fifth segment a little longer than third but shorter than scape, sixth segment slightly shorter than fifth, segments seven to ten very slightly thickened apically, successively slightly shorter, segments nine and ten, at least, with small, transverse, subapical poriferous

areas, eleventh segment a little longer and more slender than tenth. Pronotum with disc densely contiguously punctate except for a narrow median longitudinal impunctate line, punctures much larger than those of vertex of head, punctures of median basal lobe not coarser than those of disc; pubescence of yellow areas long, golden, appressed; prosternum shining, sides impunctate; metasternum finely punctate, metepisternum finely densely punctate throughout. Legs with posterior tarsi about four-fifths as long as tibia, first segment about as long as remainder of tarsus. Elytra about two and two-thirds times as long as humeral width, humeral width about three-fourths of subapical width; surface shining, feebly tricostrate, discal punctures less discrete than those of pronotum and not larger, pubescence fine; golden, depressed to suberect, not recumbent; apices obliquely truncate, sutural angle rounded, external angle distinctly dentiform. Abdomen with sternites shining, finely punctate, thinly pubescent; last sternite truncate, lateral angles not produced nor dentiform. Length, 11.5 mm.

Holotype male, from Chiapas, Mexico [Fry Collection, British Museum (Natural History)].

This species is superficially suggestive of *M. patricia* (Bates) but differs at once in structure of the pronotum and elytra which lack the prominent sulci of that species, also in the slender antennae, sparse pubescence and details of punctuation.

Megachoriolaus unicolor (Bates), comb. n.

Euryptera unicolor Bates, 1892 : 159, pl. 6, fig. 3; Linsley, 1961 : 133.

Male: Form robust, oblong, convex; elytra subparallel; integument pale yellowish-brown, eyes, antennae, apices of tibiae, and tarsi in part, black; pubescence dark on black areas, otherwise golden. Head with neck shining, moderately densely punctate, punctures about as large as those of pronotum but discrete and separated; vertex deeply longitudinally sulcate, bigibbose, with a median longitudinal groove extending to base of clypeus, tumid areas adjacent to inner upper lobes of eye finely, densely punctate, clothed with appressed and suberect pubescence; sides of face and frons opaque, finely, densely punctate, pubescence short; clypeus shining, moderately densely punctate, punctures larger than those of frons; antennae extending slightly beyond basal one-third of elytra, first five segments clothed with coarse, suberect hairs, sparser on fifth, segments six to eleven opaque, minutely, densely punctate and pubescent, third segment subequal in length to scape, slightly enlarged apically, fourth segment a little shorter than third, also expanded at apex, fifth subequal to third, expanded apically, segments six to ten compressed but more parallel-sided, successively shorter to the eleventh which is distinctly longer than tenth, apex acute but not appendiculate, poriferous areas lacking. Pronotum rather coarsely, very densely punctate, punctures contiguous and in part confluent; pubescence only moderately long, fine, appressed, not obscuring surface. Legs with posterior tarsi about four-fifths as long as tibiae, first segment shorter than remainder of tarsus. Elytra oblong, evenly convex except for distinct humeral impression, not quite twice as long as humeral

width; apices transversely sinuate-truncate, sutural angle rounded, external angle dentiform; surface more finely, discretely punctate than pronotum, discal punctures mostly separated by one or two diameters, pubescence short, depressed but not appressed, only partially obscuring surface. Abdomen shining, sternites rather coarsely sparsely punctate medially, more finely and densely laterally, last sternite finely densely punctate apically as well as laterally, apical margin truncate, very slightly sinuate, lateral angles obtusely dentate. Length, 14 mm.

Type locality: Tepetlapa, Guerrero, Mexico, alt. 3000 ft.

This species may be readily distinguished from the other known species of *Megachoriolaus* from Mexico by the form and coloration.

Genus *Choriolaus* Bates

Choriolaus Bates, 1885 : 283; Boppe, 1921, 107; Chemsak, 1964: 232 (type species desig.).

Euryptera LeConte & Horn, 1883 : 313; Hopping, 1937 : 26; Knoll, 1946 : 184 (*non* Serville).

Form small, elongate, elytra subparallel or slightly expanded before narrowing to apices. Head elongate; antennal tubercles adjacent to upper inner edge of lower lobe of eye, antennal insertions not embraced by eye but widest part of lower lobe sometimes extending beneath them; clypeus somewhat prominent; antennae filiform or with outer segments thickened or subserrate, basal segments with some coarse bristles, fourth segment commonly abbreviated, outer segments usually without distinct poriferous areas. Pronotum campanuliform, apical constriction narrow, basal angles extending over elytral humeri. Prosternum with intercoxal process very narrow, laminiform, anterior coxae prominent, exerted; mesosternum with intercoxal process moderately broad but much narrower than coxae, depressed between them and arcuately but somewhat flatly declivous in front. Legs slender, posterior tarsi filiform, usually longer than tibiae in male, usually a little shorter than tibiae in female, first segment longer than remainder of tarsus, third segment deeply incised, lobes elongate. Elytra not attenuated, apices rounded, with or without an external angle or dentation, not spinose. Abdomen with last sternite truncate in the female, usually emarginate, rarely excavated in the male, the lateral angles sometimes produced but not spined.

Type species: *Choriolaus latescens* Bates (Chemsak designation, 1964).

When Bates proposed the genus *Choriolaus*, he included three species with filiform antennae, but otherwise not very closely related, although apparently from a common stock. The more general characters which they share appear to us of sufficient fundamental importance to require the inclusion of a number of species assigned by Bates and others to *Euryptera* and *Ophistomis*, if the genus is to be retained in the broad sense defined by the originally included species. We regard this as preferable to the alternative of additional genera

based upon the kind of antennal characters utilized by Bates (which appear to be primarily of value as specific characters), depending instead upon sternal structures, the position of the antennal insertion, and the length and structure of the posterior tarsi to hold together a group which appears to represent a natural taxon.

As redefined above, the genus would contain the following described species from North and Central America:

- aegrotus* Bates (*Choriolaus*)
- chichuahuae* (Bates) (*Euryptera*) comb. n.
- costulata* (Bates) (*Euryptera*) comb. n.
- flavivittata* (Bates) (*Ophistomis*) comb. n.
- fulveolus* (Bates) (*Ophistomis?*) comb. n.
- hirsutus* (Bates) (*Ophistomis*) comb. n.
- lateralis* (Olivier) (*Leptura*) comb. n.
- latescens* Bates (*Choriolaus*)
- mimulus* (Bates) (*Euryptera*) comb. n.
- nanus* Bates (*Choriolaus*)
- nigellus* (Bates) (*Ophistomis*) comb. n.
- pallidulus* Linsley (*Choriolaus*) [= *pubicollis* Linsley (*Choriolaus*)]
- sericeus* Bates (*Euryptera*) comb. n.
- xantho* Bates (*Ophistomis*) comb. n.

Although our survey of named "*Euryptera*" from South America is very incomplete, the following species also appear to be assignable to *Choriolaus*:

- angustata* Melzer (*Euryptera*) comb. n.
- angustisternus* Gounelle (*Euryptera*) comb. n.
- lyciformis* Pascoe (*Euryptera?*) comb. n.
- ruficollis* Pascoe (*Euryptera*) comb. n.

***Choriolaus aegrotus* Bates**

Choriolaus aegrotus Bates, 1885 : 283.

Female: Form narrow, elytra not expanded before apices; integument yellowish testaceous, eyes, antennae, extreme apices of femora, tibiae and tarsi black, sterna dark brownish-black, margined with yellow; pubescence short, pale yellow. Head with vertex tumid and longitudinally impressed, finely punctate, pubescence short, sparse, suberect; frons with a fine, median, longitudinal impression, somewhat tumid on each side; antennal tubercles yellow; clypeus coarsely punctate; antennae not extending to middle of elytra, first four segments slender, with a few semi-erect dark hairs, segments five to eleven dull, minutely, densely punctate, densely clothed with short appressed pubescence, third segment moderately elongate, a little longer than scape, fourth shorter than third or fifth, fifth subequal to third, segments six to ten becoming successively shorter and slightly thicker, apparently with obscure apical poriferous areas, eleventh segment a little longer than tenth, feebly appendiculate. Pronotum moderately finely,

densely punctate, the punctures larger than those of vertex of head; pubescence moderately short, fine, suberect, not dense. Legs with posterior tarsi subequal in length to tibiae. Elytra nearly three times as long as humeral width, each with two fine, thread-like, unelevated costae; disc flattened, epipleurae subvertical, apices each rotundate-truncate, obtusely angulate externally, surface more coarsely punctate than pronotum, the punctures mostly separated by less than one diameter, pubescence short, suberect, arising from the large punctures, not obscuring surface. Abdomen shining, finely punctate, thinly clothed with fine, pale, suberect pubescence; last segment with apex truncate. Length, 8 mm.

Type locality: Peras, Mexico (=Las Peras, Oaxaca, Mexico fide Selander and Vaurie, 1962).

Only the female type in the British Museum (Natural History) is known to us. The general form and coloration, less closely punctate elytra, form and proportion of the antennal segments, which appear to have indistinct poriferous areas, and the less closely punctate elytra will, in combination, separate this species from other described forms.

***Choriolaus chihuahuae* (Bates), comb. n.**

Euryptera chihuahuae Bates, 1885 : 285; Belon, 1897 : 342; Linsley, 1961 : 135.
Euryptera batesi Linsley, 1961 : 134, syn. n.

Male: Form narrow, elytra subparallel, scarcely expanded before apices; integument black, often with genae, sides of pronotum and prosternum reddish-orange, less commonly with the elytra wholly or partially yellowish; pubescence golden on reddish-orange areas, when present, as well as parts of head and most ventral areas, otherwise black. Head shining; vertex tumid, longitudinally sulcate, areas on each side of sulcus dull, finely, densely punctate, pubescence fine, dense, golden, appressed, somewhat obscuring surface, post-ocular genae with a tuft of long, erect, golden hairs above; frons with a median, longitudinal impression, pubescence short, obscure, appressed, sparse, pubescence moderately fine, dense below antennal insertions, otherwise sparse; clypeus and labrum more coarsely, densely punctate; antennae extending a little beyond middle of elytra, first five segments shining, moderately coarsely punctate, clothed with coarse, semi-erect black hairs, segments six to eleven dull, minutely, densely punctate, densely clothed with short, appressed pubescence, third segment longer than scape, fourth shorter than third or fifth, fifth a little longer than third, segments five to ten becoming successively shorter and bearing apical poriferous areas, eleventh segment longer than tenth, appendiculate. Pronotum with sides slightly rounded at middle, basal angles prominent, internal impression deeper than usual; disc densely, more or less confluent punctate, punctures larger than those of vertex of head, pubescence moderately dense, recumbent. Legs with posterior tarsi subequal in length to tibiae. Elytra about three times as long as humeral width, disc somewhat flattened, apices rotundate-truncate, outer angle dentiform; surface dullish, punctures moderately coarse, much larger than those of pronotum,

crater-like, mostly separated by one diameter or less, interspaces minutely tessellated; pubescence suberect, longer than that of pronotum, longer and denser apically. Abdomen shining, finely densely punctate, thinly clothed with fine, suberect pubescence, last sternite broadly emarginate at apex, lateral angles produced but not acute. Length, 9-10 mm.

Female: Form less elongate, integument black; antennae reaching basal one third of elytra, segments shorter and stouter than those of male but length ratios in approximately the same proportion, punctuation and pubescence similar, poriferous areas less conspicuous; last abdominal sternite truncate at apex. Length, 8-9 mm.

Type locality: *chihuahae*, *batesi*, Pinos Altos, Chihuahua, Mexico.

Since commenting on the type of *chihuahuae* in comparison with a female from Sierra del Nido, Chihuahua (Linsley, 1961b), a series of eight males and three females has been examined which were collected 24 miles west of La Ciudad, Durango, Mexico, ten on June 28, 1964 (H. F. Howden) and one on July 2, 1964 (W. R. M. Mason), the last bearing the additional data at an elevation of 7000 feet. This series is not only significant because of the range of color variation evident in the males, but through the association of the sexes, demonstrates that Bates type is indeed a female and *batesi* Linsley the male. This leaves the status of the Sierra del Nido specimen in doubt, and for the present it seems best that it remains that way. It is from an area quite remote from Pinos Altos which is in the extreme western part of the state.

In the series of males from Durango, two are wholly black as in the female, three have the sides of the prothorax reddish-orange as in the type of *batesi*, one has the sides of the elytra broadly fulvos and two have the elytra entirely fulvous along with more extensive pale areas on the prothorax and elsewhere.

***Choriolaus costulata* (Bates), comb. n.**

Euryptera costulata Bates, 1885 : 284; Linsley, 1961 : 133; Chemsak, 1964 : 76 (lectotype desig.).

Male: Form narrow, elytra gradually expanded toward apices; integument black, opaque, with vertex and occiput of head, sides of prothorax, anterior femora at middle, and tarsi, in part, golden yellow; pubescence golden on yellow areas, otherwise black. Head with vertex finely, densely punctate, pubescence appressed, not obscuring surface, with a fine, median longitudinal groove extending over frons to base of clypeus; clypeus densely punctate; labrum shining; antennae extending beyond middle of elytra, first four segments shining, moderately coarsely punctate, with coarse, suberect, black hairs, segments five to eleven dull, minutely, densely punctate, densely clothed with short, appressed pubescence, third segment slender, a little shorter than scape, fourth shorter than third, fifth subequal to third, segments five to ten becoming successively shorter, five to seven slightly enlarged at apices, eight to ten less so, eleventh segment

a little longer than tenth, feebly appendiculate. Pronotum with sides scarcely rounded at middle; surface finely, densely punctate, punctures larger than those on vertex of head, pubescence dense, recumbent, obscuring surface, median dark line wider than lateral pale areas. Legs with posterior tarsi subequal in length to tibiae. Elytra slightly more than three times longer than humeral width, four-fifths subapical width, bicostate, disc flattened, epipleurae vertical, apices separately rounded, without an external angle; surface densely punctate, the punctures moderately large, underspaces tessellated, pubescence short, somewhat depressed, not suberect, moderately sparse, not obscuring surface, longer and denser apically. Abdomen shining, finely densely punctate, thinly clothed with fine, suberect pubescence, last sternite triangularly emarginate at apex. Length, 8.5mm.

Female: Form less slender, antennae not quite reaching to middle of elytra, segments shorter and stouter than those of male but length ratios in approximately the same proportion, punctuation and pubescence similar, last abdominal sternite truncate at apex. Length, 11 mm.

Type locality: Juquila, Oaxaca, Mexico (Chemsak, 1964).

This species is suggestive of *C. lateralis* (Olivier), but is more elongate and opaque, with the elytra distinctly bicostate, the humeri black, the epipleurae abruptly vertical and the apices separately rounded, without an external angle. The outline and proportions of the elytra are also distinctive.

***Choriolaus flavirostris* (Bates), comb. n.**

Ophistomis flavirostris Bates, 1880 : 40.

Male: Form small, very slender, elytra slightly narrowed behind middle; integument black, genae, frons, basal pronotal angles to almost middle, elytra vaguely at humeri, femora basally, and part of first tarsal segments yellowish. Head with front long, subglabrous, median triangle vague; frontal line shallow; vertex finely densely punctate, moderately pubescent; antennae slightly shorter than body, segments from sixth expanded slightly, small rounded poriferous areas present at apices of segments eight to eleven, third segment longer than first, fourth shorter than third, fifth subequal to third, segments from sixth gradually decreasing in length. Pronotum campanulate, sides sinuate; apex narrowed but not impressed, base vaguely impressed; hind angles produced, extending over humeri; disc very densely confluent punctate, punctures smaller than those at base of elytra; pubescence moderately dense, depressed, bicolored; prosternum not impressed transversely; metasternum densely, shallowly punctate. Elytra about three times as long as broad, sides slightly impressed behind middle; basal punctures moderately coarse, cribrate, becoming finer toward apex; pubescence moderately dense, pale, suberect basally, depressed toward apex; apices oblique, sutural angle rounded, margin dentate. Legs slender; hind tarsi as long as tibiae, apical segments short, deeply cleft. Abdomen with last sternite broadly excavated; last tergite with apex truncate. Length, 9 mm.

Type locality: Zapote, Guatemala.

This species is known only from a unique specimen. Because of the card mounting, some of the sternal characteres cannot be listed. However, it may be readily distinguished from other known species by the narrow form and pattern of coloration.

Choriolaus fulveolus (Bates), comb. n.

Ophistomis (?) *fulveolus* Bates, 1885 : 283, pl. 20, fig. 7.

Female: Form rather small, elytra subparallel; integument yellowish, mandibles, clypeus, eyes, antennae, scutellum, apices of tibiae and femora black. Head with front fairly short, finely punctate except for divided median triangle; vertex very finely, densely punctate, finely pubescent; antennae inserted near lower eye margins, insertions well separated; antennae extending to about middle of elytra, segments from sixth thickened, small poriferous areas present at apices of segments six to eleven, basal segments with some coarse hairs, third segment longer than first, fourth shorter than third, fifth slightly longer than fourth, segments from sixth short. Pronotum transverse, campanulate, sides sinuate; apex narrow but not impressed, base very shallowly impressed; basal angles extending over humeri; punctures fine, very dense, middle with a vague glabrous spot; pubescence dense, depressed, golden; prosternum barely impressed at apex; meso- and metasternum finely densely punctate, densely pubescent. Elytra about 2.7 times as long as broad; basal humeral impressions shallow; basal punctures relatively large, well separated; pubescence moderately dense, suberect basally, subdepressed toward apex; apices oblique, sutural angles rounded, marginal dentate. Legs with hind tarsi about as long as tibiae, last segment cleft to middle. Abdomen with apex of last tergite emarginate. Length, 10 mm.

Type locality: San Juan, Vera Paz, Guatemala.

The unique specimen is mounted on a card making it impossible to more fully describe the sternal characteres.

Choriolaus hirsutus (Bates), comb. n.

Ophistomis hirsutus Bates, 1885 : 283; Chemsak, 1964 : 78 (lectotype desig.).

Male: Form narrow; elytra subparallel, not expanded posteriorly before rounding to apices; integument black, rostrum, except apex, pronotum, except disc which is clouded with brown, parts of sternum and sometimes the apex of the abdomen, femora basally pale reddish-brown or yellowish, pubescence long, erect. Head with neck polished and very sparsely punctate; vertex finely densely punctate, sparsely clothed with short appressed pubescence, median longitudinal line very fine, rostrum very elongate, genal length much greater

than vertical width of eye, lateral margins raised, distinct, frontal area with a shining triangular area above base of clypeus, clypeus narrow at base, shining, sparsely punctate; antennal insertion adjacent to middle of anterior margin of lower lobe of eye; antennae surpassing middle of elytra, with segments three to five filiform, very slightly thickened apically, with some coarse, suberect hairs, third segment slightly longer than scape, fourth segment shorter than third or fifth, fifth segment a little shorter than third, segments six to ten expanded externally at apex, subserrated, expanded portion with an apical poriferous area, eleventh segment a little longer than tenth, appendiculate. Pronotum broadly campanulate, sides very fully rounded at middle, basal angles extending over humeri, surface finely densely punctate, punctures much larger than those of vertex. Legs slender; posterior tarsi as long as tibiae. Elytra as long as humeral width, disc somewhat depressed, without costae; surface cribrately punctate, punctures much larger than those of pronotum, apices slightly oblique, sutural angle rounded, external distinct, very feebly dentiform. Abdomen with last sternite shining, concave, sides elevated, apex broadly, arcuately emarginate, lateral angles not produced. Length, 10 mm.

Female: Form a little more robust; antennae at most attaining middle of elytra; abdomen with last sternite truncate.

Type locality: Cordova, Mexico.

This species is very distinctive because of the very long erect pubescence which is particularly conspicuous on the pronotum, elytra and legs, and the very long, well-defined rostrum. Although the lectotype is not particularly lampyrid-like in appearance, the male and female associated with it by Bates are very definitely so, with lampyrid-like coloration on the pronotum and elytra, and the last two segments of the abdomen bright yellow. In spite of these differences, the three specimens appear to be conspecific.

We have also seen a specimen with lampyrid-like markings from four miles northeast of Pituchalco, Chiapas, Mexico, June 14, 1965 (Burke, Meyer, Schaffner).

***Choriolaus lateralis* (Olivier), comb. n.**

Leptura lateralis Olivier, 1795 : 22, pl. 3, fig. 7

Typocerus lateralis; LeConte, 1850 : 335.

Euryptera lateralis; Crotch, 1873 : 90; Leng, 1890 : 213; Bates, 1885 : 284; Hopping, 1937 : 27; Knull, 1946 : 184, pl. 27, fig. 116; 1954 : 129; Linsley, 1961 : 134.

Leptura distans Germar, 1824 : 524.

Euryptera flavatra Blatchley, 1914 : 92.

Euryptera lateralis flavatra; Knull, 1954 : 129.

Euryptera lateralis var. *flavatra*; Linsley, 1961 : 134.

Euryptera subintegra Casey, 1924 : 285.

Male: Form elongate, narrow, elytra expanded slightly before apices; integument black, with head (except eyes and mouthparts), sides of prothorax, and elytral humeri golden yellow (less commonly with basal or apical one-half to two-thirds golden yellow); pubescence golden on yellow areas, usually also on anterior coxae, anterior legs, mesosternum and some other ventral areas, otherwise black. Head shining, vertex finely densely punctate, pubescence thin, not obscuring surface; antennal tubercles with a group of coarse erect, black setae; frons with very fine, thin, appressed pubescence, punctation moderately dense below antennal insertions, otherwise sparse; labrum and clypeus coarsely densely punctate, pubescence long, fine, erect, pale; antennae extending well beyond middle of elytra, usually to apical one-fourth, first four segments shining, moderately coarsely punctate, clothed with coarse, semi-erect, black hairs, segments five to eleven dull, minutely, densely punctate, densely clothed with short, appressed pubescence; third segment moderately elongate, subequal in length to scape, fourth shorter than third or fifth, fifth a little shorter than third, segments five to ten becoming successively shorter and thicker, but not serrate, and bearing apical poriferous areas, obscure on fifth segment but becoming successively larger and more distinct on succeeding segments, eleventh segment one-fourth longer than tenth, appendiculate, with a large poriferous area. Pronotum with sides slightly rounded at middle; disc moderately finely granulate-punctate, the punctures larger than those on vertex of head, pubescence dense, recumbent, median dark, line wider than scutellum. Legs slender; posterior tarsi filiform, subequal in length to posterior tibiae, first segment much longer than remaining segments combined. Elytra nearly two and one-half times as long as greatest width, disc somewhat flattened, apices separately rounded to outer angle which is feebly dentiform but not spined; surface granulate-punctate, the punctures moderately coarse, much larger than those of pronotum, mostly more or less transversely confluent; pubescence suberect, moderately thin, not obscuring surface, longer and denser apically. Abdomen shining, finely densely punctate, thinly clothed with fine, suberect pubescence, apex of last sternite subtruncate, not emarginate, but with an obscure feeble median notch.

Female: Form less slender; antennae not quite reaching to middle of elytra, segments shorter and stouter than those of male but length ratios in approximately the same proportion, punctation and pubescence similar, poriferous areas smaller than in male, that of fifth segment, if present, too obscure to recognize; posterior tarsi five-sixths as long as posterior tibiae; last abdominal sternite truncate at apex. Length, 8-11 mm.

Type locality: "Amerique septentrionale."

This species has been recorded from the Mexican states of Oaxaca, Vera Cruz and Tamaulipas as well as the southeastern United States. There are several undescribed species from Mexico related to it but most of these lack the yellow humeri. In Florida, variations occur with the basal half of the elytra yellow, matching local color forms of *Lycostomus lateralis* (Melsheimer) which apparently serves as its model.

Choriolaus latescens Bates

Choriolaus latescens Bates, 1885 : 284, pl. 20, fig. 9.

Male: Form only moderately narrow, elytra subparallel, scarcely expanded before apices; integument of head, apical half of elytra, metasternum, abdomen, tibiae and tarsi dark brown to black, prothorax, above and below, basal half of elytra, anterior coxae and femora golden yellow; pubescence golden on yellow areas, otherwise black. Head shining, vertex neither longitudinally sulcate nor tumid, finely, densely punctate, pubescence thin, not obscuring surface; frons concave, with a median longitudinal groove, finely densely punctate, sparsely clothed with very fine, appressed pubescence; widest anterior portion of lower lobe of eye extending slightly beneath antennal insertions; labrum shining, finely punctate at base; antennae extending to apical one-third of elytra, first four segments shining, moderately finely, densely punctate, with coarse, semi-erect black hairs, segments five to eleven dull, minutely, densely punctate, densely clothed with very short, appressed pubescence, third segment moderately elongate, subequal in length to scape, fourth slightly shorter than third or fifth, fifth a little longer than third, segments six to ten becoming successively a little shorter and thicker, eleventh segment slightly longer than tenth, apex acute but not distinctly appendiculate. Pronotum with sides slightly rounded at middle, disc moderately finely, somewhat confluent punctate, punctures a little larger than those on vertex of head, pubescence moderately long, fine, mostly recumbent, not obscuring surface. Legs with posterior tarsi a little longer than tibiae. Elytra less than two and one-half times as long as humeral width, disc somewhat flattened, without costae, apices separately rounded to outer angle which is dentiform; surface less densely punctate than pronotum, punctures discrete, mostly separated by one diameter or less, not larger than those of pronotum; pubescence fine, appressed, not obscuring surface, longer than that of pronotum. Abdomen shining, finely punctate, sparsely clothed with fine, short, appressed pubescence; last sternite with apex truncate, not emarginate. Length, 11 mm.

Type locality: Oaxaca, Mexico.

Although the unique type of this species has the last segment of the abdomen truncate, usually a female characteristic in this group, in the absence of material of both sexes we are inclined to regard the specimen as a male because of the relatively long antennae and posterior tarsi. In any event, it may be recognized by the combination of coloration, the simple structure of the vertex of the head, the form of the frons with the lower lobe of the eye extending slightly more anteriorly than usual, and the elytral pubescence which is appressed, rather than suberect.

Choriolaus lyciformis (Pascoe), comb. n.

Euryptera? lyciformis Pascoe, 1866 : 289.

Euryptera lyciformis; Belon, 1897 : 341.

Female: Form elongate-triangular, elytra gradually expanded posteriorly from humeri to more than one and one-half times humeral width before rounding to apices. Integument yellow, eyes black, antennae with basal segments brownish, outer segments black; mid-line of pronotum, scutellum, a transverse median band and apical one-third of elytra, apices of tibiae and tarsal segments, and abdominal sternites, except margins, brownish-black; pubescence yellow on yellow areas, brownish-black on dark areas. Head with vertex longitudinally impressed, lobes finely, densely punctate, clothed with short pubescence, longer at posterior dorsal margin of upper lobe of eye; clypeus finely densely punctate; labrum at base a little more coarsely punctate than clypeus; antennae extending to approximately middle of elytra, first five segments clothed with coarse suberect hairs, segments six and seven with coarse hairs on inner side, outer segments finely densely punctate, densely clothed with short, fine, appressed pubescence, third segment subcylindrical, longer than scape, fourth segment subcylindrical, distinctly shorter than third and fifth, fifth and following segments becoming successively shorter, fifth to seventh flattened, expanded but not serrate, eleventh segment more or less appendiculate, appendix conical, pale. Pronotum scarcely rounded at middle; surface very densely punctate, punctures much larger than those of vertex, pubescence fine, appressed, scarcely obscuring punctation, median dark line widened slightly at middle, about as wide as scutellum at base. Legs with posterior tarsi shorter than tibiae, first segment longer than following segments together. Elytra three and one-half times as long as basal width; dark bands dividing length into unequal fourths, ante-median band truncate behind, anterior margin curving upward toward suture, posterior band extending to apices, anterior margin truncate; surface not costate, very densely, moderately coarsely punctate, punctures much larger than those of pronotum, largely transversely confluent, pubescence moderate, fine, suberect, not concealing punctation. Abdomen with last sternite truncate at apex. Length, 10 mm.

Type locality: Santa Marta, New Grenada (Colombia).

This species differs at once from other described species in the form of the elytra and pattern of coloration. However, it appears to fit well *Choriolaus* in fundamental characters. We have seen only the type, in the collection of the British Museum (Natural History).

***Choriolaus mimulus* (Bates)**

Euryptera mimulus Bates, 1885 : 285.

Euryptera mimula; Linsley, 1961 : 132, 136.

Male: Form moderately narrow, elytra not appreciably expanded apically before rounding to apices; integument black, head except eyes, interocular area above antennal tubercles, vertex, neck above, mouthparts, and antennae, yellow, except for median stripe, elytra yellow over basal one-half; sterna and coxae wholly or partially yellow or brownish; pubescence golden on yellow areas, otherwise black. Head with vertex convex above, very finely, densely punctate,

clothed with short, appressed pubescence, with a median longitudinal groove extending down frons to base of clypeus, but indistinct between upper lobes of eye; clypeus and labrum shining; antennae extending to apical one-third of elytra, first four segments clothed with long, coarse suberect hairs, segments five to eleven finely punctate, densely clothed with very fine, short, appressed pubescence, small poriferous areas at their apices, scape somewhat stout, third segment cylindrical, shorter than scape, fourth cylindrical, shorter than third, fifth and sixth subequal to third, slightly expanded apically, seventh to tenth successively decreasing in length and thickness, eleventh segment distinctly longer than tenth, appendiculate, appendix conical, pale. Pronotum with sides slightly rounded at middle; surface opaque, very densely punctate, punctures much longer than those of vertex of head, but not coarse, pubescence long, fine, appressed, scarcely obscuring punctation, median dark area narrowed anteriorly, widened medially, covering median lobe at base, about as broad as scutellum, which is also black. Legs with posterior tarsi about as long as tibiae, first segment longer than following segments together. Elytra more than two and one-half times as long as humeral width; apices truncate, rounded at suture, external angle acutely dentate; surface not costate, very densely, moderately coarsely punctate, punctures much larger than those of pronotum, largely transversely confluent, pubescence moderately long, subdepressed, not obscuring surface. Abdomen shining, finely punctate and sparsely clothed with fine suberect hairs; last sternite with apex with a median apical triangular impressed emargination. Length, 9 mm.

Female: Antennae reaching only to about middle of elytra but segments proportioned much as in male; abdomen with last sternite truncate apically, moderately coarsely punctate and feebly impressed medially at apex. Length, 9 mm.

Type locality: Cordova, Mexico.

The above description has been drawn from a female taken at El Limon, Tamaulipas, Mexico, June 9, 1951 (H. E. Evans) and a male from 22 miles north on the same date. The female agrees well with the type of *mimulus* (which is female, not male, as stated by Bates). The male shares numerous characters with the female and the association seems reasonable even though the two were not taken together.

Although suggestive of *C. lateralis*, as noted by Bates, this species differs in details of punctation and pubescence and in the form of the elytral apices, which have an acutely dentate external angle which is almost spiniform. Further, the poriferous areas at the apices of the outer antennal segments are very much smaller and not nearly so clearly defined as in *lateralis*. The males differ, also, in the form of the last abdominal sternite, which in *lateralis* has only an obscure, feeble median notch at the apex.

Choriolaus nanus Bates

Choriolaus nanus Bates, 1885 : 284, pl. 20, fig. 8.

Female: Form oblong, small, elytra subparallel, not expanded before apices; head (except eyes and antennae); integument of prothorax, and femora (except apices) yellow, elytra black, mesosternum, metasternum and abdomen brownish; pubescence golden on yellow areas, otherwise black. Head shining, vertex finely, sparsely punctate and pubescent, with a fine median longitudinal line which continues on to frons; frons shining, finely punctate; antennae with first five segments moderately shining, with some coarse, semi-erect, black hairs, second segment cylindrical, longer than broad (normal?), third segment longer than scape, fourth distinctly shorter than third, fifth segment longer than third, segments six and seven successively shorter (segments eight to eleven missing in type). Pronotum narrowed gradually from base to middle, then broadly rounded to apex; surface densely punctate, the punctures much larger than those on vertex of head, pubescence sparse, recumbent. Legs with posterior tarsi a little shorter than tibiae. Elytra about two and one-half times as long as humeral width, disc feebly convex, not costate, apices separately rounded, without an external angle; surface coarsely rugoso-punctate, the punctures larger than those of the pronotum, confluent between the rugae, pubescence fine, sparse, depressed, not obscuring punctation. Abdomen shining, finely, densely punctate, thinly clothed with fine, suberect pubescence; last segment with apex rotundate-truncate. Length, 5.7 mm.

Type locality: Mexico.

Redescribed from the unique type in the British Museum (Natural History). Unfortunately one antenna is missing and the other is incomplete. However, the fifth segment is the longest of the seven segments remaining (and thus presumably of all the segments), an important specific character. The form of the pronotum is unique among the described species and gives it a distinctive facies. Further, the elytra are rugoso-punctate. Only the female is presently known.

Choriolaus nigellus (Bates)

Ophistomis nigellus Bates, 1872 : 233.

Ophistomis nigella; Bates, 1880 : 40, pl. 4, fig. 20.

Female: Form narrow, elytra subparallel, slightly tapering posteriorly; integument black, frons, part of vertex, neck, pronotum except large median spot near apex reddish, antennae with segments eight to ten yellow (eleventh missing). Head with neck polished, impunctate; vertex very finely punctate, pubescence vague; median line deep on front; front moderately elongate; median glabrous triangle divided; punctures shallow, sparse; antennae inserted at lower eye margins, antennal tubercles divergent; antennae extending to about middle

of elytra, segments from fifth thickened slightly, basal segments with coarse hairs, third segment subequal in length to scape, fourth slightly shorter than third, fifth subequal to third. Pronotum broadly campanuliform, sides broadly rounded; hind angles acute, extending over humeri; apex very narrowly impressed at margin, base broadly, shallowly impressed across middle, disc convex, dark area transversely rugulose, median glabrous line short, basal; prosternum short, glabrous, not impressed, intercoxal process laminiform; mesosternal process narrow, lying below surface of coxae. Elytra about three times as long as broad; disc densely cribrate punctate; pubescence dense, long, subdepressed; apices obliquely sinuate truncate. Legs short; hind tarsi slender, first segment about half as long as tibia, last segment cleft to about middle. Abdomen with last sternite rather broad, feebly impressed at apex; last tergite narrowly emarginate at apex. Length, 9 mm.

Type locality: Chontales, Nicaragua.

The condition of the unique type is such that a more complete description is difficult to compose. In addition to the broken parts, the surface is covered with some foreign substance which obscures the punctation and mats the pubescence.

***Choriolaus pallidulus* Linsley**

Choriolaus pallidulus Linsley, 1935 : 82.

Choriolaus pubicollis Linsley, 1935 : 82, syn. n.

This species may be recognized by the highly polished, sparsely punctate pronotum and long erect pubescence. It is suggestive of *C. hirsutus* (Bates) but the erect hairs are less dense and the outer antennal segments, although thickened are not expanded externally.

The polychromatism and variability characteristic of many mimetic Cerambycidae is responsible for the above synonymy. The types of *pallidulus* from Tejupilco and *pubicollis* from Bejucos, both in the state of Mexico, are respectively pale testaceous with the eyes, antennae, tibiae and tarsi black, and black, with the prothorax, scutellum and anterior femora rufo-testaceous. However, a series of 28 specimens taken by J. A. Chemsak, H. F. Howden, J. Powell and J. Doyen on *Buddleia wrightii* Robins, five miles north of Mazatlan, Sinaloa, includes 17 individuals with the coloration of *pallidulus* and 11 with that of *pubicollis*. Examples of both color forms have been seen from Arroyo Santiago near Jesus Maria, Nayarit, July 5, 1955 (B. Malkin), and of the dark form from eight miles south of Elota, Sinaloa, July 2, 1963 (F. D. Parker and L. A. Stange) and 55 miles west of Tequila, Jalisco. An example from three miles northwest of Santa Maria del Oro, Nayarit, is like the typical pale form but with the elytral apices black.

Choriolaus ruficollis (Pascoe), comb. n.

Euryptera ruficollis Pascoe, 1866 : 289; Belon, 1894 : 342.

Female: Form narrow, elytra subparallel, not expanded before apices; integument black, head (except eyes, vertex and antennae), prothorax, mesosternum, pro- and mesocoxae, anterior femora (except apex) and base of first segment of all tarsi, yellow orange, pubescence golden on yellowish areas, otherwise mostly black. Head with neck shining, interocular vertex brown, tumid, with a very narrowly impressed median longitudinal line, surface very finely, densely punctate, thinly clothed with moderately long, fine appressed and erect pale hairs; lateral areas below antennal insertions finely, densely punctate; frons dullish, minutely, densely punctate; clypeus and labrum shining, coarsely punctate; antennae not reaching to middle of elytra, first five segments filiform, first four with some coarse, suberect hairs, third segment a little longer than scape, fourth a little shorter than scape, fifth slightly longer than third, segments six to ten successively shorter and perceptibly thicker, eleventh segment slightly longer than tenth, appendiculate. Pronotum slightly rounded at sides, surface finely, densely punctate, clothed with moderately long, fine, appressed pubescence. Legs with posterior tarsi filiform, elongate, but distinctly shorter than tibiae, first segment longer than following together. Elytra about three times as long as humeral width, somewhat flattened, apices obliquely subtruncate, sutural angle rounded, outer angle dentate; surface moderately coarsely rugoso-punctate, punctures much larger than those of pronotum, mostly transversely confluent, pubescence moderate, subappressed, not obscuring surface. Abdomen finely, densely punctate, clothed with long, appressed hairs; last sternite truncate at apex. Length, 10 mm.

Type locality: Santa Maria, New Grenada (Colombia).

Redescribed from the type specimen in the British Museum (Natural History). This species is distinctive in the form, coloration, structure of the antennae and densely punctate abdomen.

Choriolaus sericeus (Bates), comb. n.

Euryptera sericea Bates, 1885 : 285; Belon, 1897 : 341; Linsley, 1961 : 132, 136.

Male: Form narrow; elytra slightly expanded apically before rounding to apices; integument black, head, except interocular area above antennal tubercles and a median band over vertex and dorsal surface of neck, golden yellow; pronotum laterally, elytra, except suture, anterior coxae, anterior and intermediate femora at base, and all tarsi in part, yellow or golden yellow. Head with vertex finely densely punctate and pubescent, with a median longitudinal groove extending down frons to base of clypeus, deeply separating antennal tubercles;

frons shining, raised areas below antennal insertions finely punctate and thinly clothed with short, appressed pubescence; clypeus and labrum shining, finely punctate; antennae extending to apical one-fourth of elytra, segments heavy, enlarged but not serrate, first four segments clothed with coarse, subappressed black hairs, short on scape, successively longer on segments two to four, segments five to eleven finely, densely punctate, clothed with finer appressed hairs, scape robust, third segment shorter than scape, gradually enlarged to apex, subconical, fourth segment a little shorter than third, slightly wider than apex of third, fifth about as long as third, sixth to tenth successively very gradually decreasing in length and width, eleventh segment elongate, appendiculate. Pronotum with sides slightly rounded at middle; surface very densely punctate, punctures a little larger than those of vertex but obscured by pubescence which is long, dense, appressed; median dark area covering median lobe at base but narrower than lateral golden areas. Legs with posterior tarsi about as long as tibiae, first segment longer than following segments together. Elytra about three and one-half times as long as basal width, subapical width less than four-fifths of humeral width, disc flattened, apices obliquely truncate; surface opaque, without costae, very densely punctate, punctures mostly transversely confluent, larger than those of pronotum; pubescence moderately long, fine, appressed, scarcely obscuring surface; sutural black line a little wider than scutellum at base, gradually narrowing posteriorly and becoming gradually evanescent behind middle. Length, 10.5 mm.

Type locality: Volcan de Chiriqui, Panama, 4000 to 6000 feet.

This distinctive species is known only by the type specimen, which is glued to a card so that the sternal and abdominal structures are not visible. However, the other characteres place it with the species here included in *Choriolaus*, from which the nature of the punctation and pubescence, the structure of the antennae, and the coloration (if constant) will separate it.

***Choriolaus xantho* (Bates), comb. n.**

Ophistomis xantho Bates, 1885 : 282.

Male: Form slender; elytra very slightly narrowed toward middle, slightly widened posteriorly before rounding to apex; integument yellowish, with vertex at summit, median longitudinal stripe of pronotum, scutellum, most of ventral surface, apices of femora, and tibiae black. Head with rostrum short, antennal insertions adjacent to upper anterior margin of lower lobe of eye; (antennae missing). Pronotum campanuliform, sides feebly rounded at middle, apex feebly constricted; surface finely, very densely punctate, clothed with fine appressed pubescence, golden at sides, black on median stripes, the latter, at base, about twice as wide as scutellum. Legs slender, posterior tarsus distinctly shorter than tibia, third segment very short, shallowly notched, lobes short. Elytra as long as humeral width; disc somewhat flattened, not costate; surface only moderate shining, cribrately punctate, punctures more or less transversely confluent,

especially toward middle, pubescence moderately long, fine, appressed; apices slightly oblique, sutural angle rounded, external angle obtuse, not dentate. Abdomen with last sternite broadly concave, sides elevated, apex broadly, arcuately emarginate to middle of segment, lateral angles obtuse but pronounced. Length, 10 mm.

Type locality: Oaxaca, Mexico.

Unfortunately the unique type has both antennae missing, a fact which will make the species difficult to identify with certainty. The female which Bates associated with the male as possible color variety may or may not be conspecific. There are no definitive characters to associate them, although the punctuation and pubescence are quite similar.

Lygisteroides, gen. n.

Form elongate, only feebly convex, elytra much elongated, expanded slightly posteriorly before narrowing to apices. Head short; vertex convex at summit, concave above antennal tubercles, with a narrow, median longitudinal groove extending from summit to clypeus; post-ocular genae prominent above; frons very short, bigibbose; antennal tubercles approximate, antennal insertions adjacent to, but distinctly separated from, upper inner margin of lower lobe of eye, not within ocular emargination; clypeal suture deeply impressed, transverse; clypeus and labrum each very short, transverse; antennae more or less filiform, basal segments with some coarse hairs, outer segments without poriferous areas. Pronotum subtriangular and broadly constricted apically, not campanuliform; width at base, one and one-half times length; basal angles not extending to elytral humeri, basal width about one-third less than humeral width of elytra. Prosternum with intercoxal process very narrow, laminiform; anterior coxae prominent, exerted; mesosternum with intercoxal process moderately broad, but much narrower than coxae, depressed between them and arcuately declivous but somewhat concave. Legs slender. Elytra not attenuated, without apical spines.

Type species: *Euryptera longipennis* Bates.

This genus is probably closest to *Choriolaus* Bates, but differs from it as well as related genera in the form of the head, compressed muzzle, and the structure of the pronotum, which not only differs in form, not being campanulate, but is much narrower at base than the elytra.

Lygisteroides longipennis (Bates), comb. n.

Euryptera longipennis Bates, 1885 : 286, pl. 20, fig. 13; Belon, 1897 : 341; Linsley, 1961 : 132.

Female: Integument black, elytra reddish-orange; pubescence reddish-orange on pronotum, scutellum and elytra, otherwise black. Head with vertex

finely, densely punctate, pubescence thin, not obscuring surface; neck coarsely, densely but discretely punctate; post-ocular genae clothed above with long, curved hairs; ocular emargination with short, erect hairs; clypeus more coarsely, less densely punctate than vertex, pubescence long, fine, pale, erect; antennae not surpassing middle of elytra, first four segments shining, with numerous coarse, semi-erect black hairs, fifth segment with fewer, segments five to eleven dull, minutely, densely punctate, densely clothed with short, appressed pubescence, each slightly expanded apically, third segment distinctly shorter than scape, fourth shorter than third, a little more than half as long as scape, fifth segment subequal to scape, sixth and seventh subequal, each longer than fifth, eighth to tenth successively shorter, eleventh scarcely longer than tenth, apically produced but not appendiculate. Pronotum densely, confluent punctate, punctures larger than those of vertex of head but not those of neck, pubescence moderately long, dense, suberect. Elytra more than three times as long as humeral width, tricostate, texture thin, delicate; surface finely, densely punctate, punctures not larger than those of pronotum, pubescence fine, depressed, suberect; apices separately rounded, without an external angle. Abdomen shining, finely, sparsely punctate, very sparsely clothed with fine, suberect pubescence, last abdominal sternite truncate at apex. Length, 14 mm.

Type locality: La Ciudad, Durango, Mexico, elevation 8100 feet.

This species, known only from the unique type in the collection of the British Museum (Natural History) bears a striking resemblance to the lycid *Lygistopterus rubripennis* (LeConte).

Genus *Chontalia* Bates

Chontalia Bates, 1872 : 233; 1885 : 283.

Form only moderately elongate, elytra moderately broad, not expanded before narrowing to apices. Head moderately elongate; vertex convex, without a median longitudinal groove; post-ocular genae prominent above, tuberculiform; frons divided by a fine, median longitudinal groove, a prominent oblique elevation on each side leading to antennal tubercles; antennal insertions within ocular emargination, partially embraced by eye; clypeus prominent, somewhat tumid; antennae filiform, basal segments with some coarse hairs, outer segments without poriferous areas. Pronotum campanuliform, apical constriction very narrow, basal angles extending over elytral humeri. Prosternum with intercoxal process very narrow, laminiform; anterior coxae prominent, exerted; mesosternum with intercoxal process moderately broad but much narrower than coxae, depressed between them and arcuately but somewhat flatly declivous in front. Legs slender, posterior tarsi filiform, longer than tibiae, first segment longer than remainder combined, third segment deeply incised, lobes elongate. Elytra not attenuated, without apical spines.

Type species: *Chontalia cyanipennis* Bates (monobasic).

This genus is based upon the single known female described by Bates. The combination of characters enumerated above will distinguish it from those of any of the related genera. However, the position of the antennal insertion, well within the ocular emargination, is unique.

Chontalia cyanicolor Bates

Chontalia cyanicolor Bates, 1872 : 233; 1840 : 40, pl. 5, fig. 3.

Female: Integument black, with head, prothorax, and episterna cyaneus, basal half of elytra yellow; pubescence yellowish on yellow area of elytra, otherwise black. Head shining; vertex finely, not densely punctate, pubescence fine, appressed, sparse; frons with raised areas finely punctate, sparsely clothed with fine, appressed hairs; clypeus shining, more densely punctate basally, pubescence fine, sparse; antennae extending well beyond middle of elytra, first five segments moderately shining, with some coarse hairs, appressed basally, suberect apically, segments five to eleven dull, minutely, densely punctate, densely clothed with short, appressed pubescence, scape a little longer than fifth segment, third, fourth and fifth segments becoming successively longer, segments five to ten successively shorter, eleventh scarcely longer than tenth, not appendiculate. Pronotum densely punctate, the punctures slightly larger than those on vertex of head, pubescence moderately long, fine, recumbent, not dense. Elytra not quite twice as long as humeral width, apices separately rounded, without an external angle; surface moderately coarsely punctate, punctures larger than those of pronotum and much more widely separated mostly by two or more diameters; pubescence moderately long, fine, sparse, appressed. Abdomen shining, finely, sparsely punctate, sparsely clothed with fine, appressed pubescence; last segment with apex subtruncate. Length, 10 mm.

Type locality: Chontales, Nicaragua.

This species is known to us only the unique type in the collection of the British Museum (Natural History). The pattern of coloration is distinctive, as are the proportions of the antennal segments. The elytra are less closely punctate than is usual for species in this group of genera.

Genus **Strangalia** Audinet-Serville

Strangalia Audinet-Serville, 1835 : 200⁽¹⁾.

Ophistomis Thomson, 1857 : 319; 1860 : 154 (Type : *O. flavocinctus* Thomson, monobasic); 1864 : 140, Syn. n.

Ophiostrumis Gemminger & Harold, 1872 : 2875 (emend.); Gounelle, 1911 : 1; Bruch, 1911 : 193.

(1) A comprehensive bibliography will be provided for this genus in the near future by Linsley and Chemsak.

Form slender, tapering posteriorly. Head oblique, abruptly and deeply constricted behind the eyes; front rather short, palpi unequal, apical segments slender, cylindrical; eyes large, finely faceted, notched; antennae inserted on front along anterior margin of eyes, scape slender, distal segments usually with distinct poriferous areas, third segment longer than scape, fourth shorter than third, fifth longer than fourth. Pronotum trapezoidal, about as long as basal width, hind angles acute; prosternal process narrow, expanded at apex, front coxal cavities open behind; mesosternal process broad, gradually arcuate anteriorly, narrowing posteriorly. Elytra usually strongly cuneiform, sides narrowing at middle. Legs slender; posterior tibiae often carinate along inside in males; posterior tarsi slender, elongate, apical segment narrow, cleft at apex. Abdomen of males usually with last sternite deeply excavated and margins expanded.

Type of genus: *Leptura luteicornis* Fabricius (Thomson designation, 1860).

Of the more than twenty South American species currently assigned to *Ophistomis* we have been able to study authentic material of a number of them that appear to be referable to *Strangalia* as defined above. Among the latter are *S. bivittata* (Bates) comb. n., *S. flavocincta* (Thomson), comb. n., *S. fulvicornis* (Bates) comb. n., *S. irene* (Gounelle) comb. n., *S. ochroptera* (Bates) comb. n., *S. flavovittata* (Melzer) comb. n. (= *rustica* Melzer, syn. n.), *S. suavis* (Melzer) comb. n., *S. latifasciata* (Melzer) comb. n., *S. tristis* (Melzer) comb. n., *S. variabilis* (Melzer) comb. n., *S. zikani* (Melzer) comb. n., and *S. rubiginosa* (Gounelle) comb. n. *Ophistomis rostrata* Bates should be referred to *Cyphonotida* Cesey, comb. n. Chemsak (1969) has described several additional species of *Strangalia* from Mexico: *S. bicolorella*, *S. doliceps*, *S. palaspina*, *S. pulchra*, *S. auripilis*, *S. gracilis*, and *S. cavaventra*.

***Strangalia belti* (Bates), comb. n.**

Ophistomis beltii Bates, 1872 : 182.

Ophistomis belti; Bates, 1880 : 39, pl. 4, fig. 22.

Female: Form moderately robust, elytra attenuated; integument yellowish orange, mandibles at apex, genae, two longitudinal pronotal stripes extending over neck and narrowly inside of eyes, middle tarsi, hind legs except basal four-fifths of femora, and last abdominal segment black, black spots on elytra as follows: two elongate humeral bands, two rounded median spots not extending to suture, a post median stripe, and apices, dark sutural band slightly expanded, behind scutellum, becoming narrower and extending only to middle. Head with front long; vertex concave, irregularly confluent punctate; eyes moderate-sized; (antennae lacking). Pronotum elongate, sides barely sinuate; hind angles acute, extending over humeri; apex shallowly impressed transversely, base feebly impressed across middle; disc convex, moderately densely, irregularly punctate, punctures transverse, median longitudinal line glabrous; pubescence moderately

dense, rather long, subdepressed with longer erect hairs present at sides toward base; prosternum finely pubescent, prosternal process laminiform between coxae; mesosternal process arcuate, lying below coxal surfaces; meso- and metasternum very finely punctate, rather densely clothed with depressed golden pubescence. Elytra three times as long as broad, feebly impressed at middle; punctures rather fine at base, well separated, becoming denser toward middle than finer toward apex; disc with an arcuate impression on each side extending from inside of humeri to suture at about basal one-fourth; pubescence rather long, suberect basally and subdepressed toward apex; apices narrow, obliquely emarginate, angles subdentate. Legs slender; hind femora black at apical one-fourth. Abdomen almost impunctate, very sparsely pubescent; apex of last sternite impressed, angles spinose; apex of last tergite bilobed. Length, 18 mm.

Type locality: Chontales, Nicaragua.

This species is known only from the type which is in rather poor condition. Only four segments of one antenna are present and all of the hind tarsal segments are lacking. The species is quite distinct however from the others with similar elytral patterns.

***Strangalia biannulata* (Linsley), comb. n.**

Ophistomis biannulatus Linsley, 1935 : 83.

Male: Form slender, strongly tapering posteriorly; integument orange yellow, head with parts of front, vertex, antennae except parts of sixth and seventh segments, elytra apically, sides of thoracic sterna, second and last abdominal segments, front legs narrowly at apex of femora and tibiae, middle legs except most of femora and hind legs except most of femora black. Head with front short, sparsely punctate, median triangle divided, not elevated; vertex very densely, finely punctate, moderately densely clothed with subdepressed pubescence; antennae shorter than elytra, segments from seventh thickened, segments from sixth with apical poriferous areas, increasing in size to apex, eleventh segment strongly appendiculate. Pronotum elongate, sides sinuate; apex constricted, barely impressed, base very feebly impressed across middle; acute hind angles extending partially over humeri; disc convex, densely transversely punctate except for thin median line; pubescence moderately dense, depressed, dark at middle; prosternum finely rugulose across apical half; meso- and metasternum finely, densely punctate, densely pubescent. Elytra almost three times as long as broad, sides strongly narrowing before middle; basal punctures fine, dense, slightly asperate; pubescence moderate, short, subdepressed, golden except at apex; apices dehiscent, obliquely truncate, subacuminate. Legs with hind tibiae with a small tubercle at inside before apex; hind tarsi elongate, apical segment shallowly cleft. Abdomen very finely, densely punctate, punctures becoming coarser and sparser toward apex; pubescence very dense basally, becoming sparser toward apex; last sternite elongate, very shallowly impressed at apex, sides not inflated; apex of last tergite truncate. Length, 14-18 mm.

Female: More robust, elytra less attenuated. Antennae with poriferous areas reduced, distal segments short. Abdomen with last sternite broader, sinuate at apex, very shallowly impressed; apex of last tergite emarginate. Length, 15-18 mm.

Type locality: Bejucos, Temascaltepec, Mexico, Mexico.

The coloration of the males appears to be fairly constant. The females vary from having a narrow sutural dark band on the elytra to having most of the disc black except for narrow post humeral light lines. This species is also known from the states of Guerrero, Morelos, and Oaxaca. Adults may be collected on flowers including those of *Croton*.

Strangalia brachialis (Bates), comb. n.

Ophistomis brachialis Bates, 1885 : 280.

Ophistomis nigrita Linsley, 1935 : 110, syn. n.

Male: Form slender, elongate, elytra strongly attenuated; integument black, front femora except apices and basal half of middle femora yellowish. Head with front elongate, median triangle large, apex high; vertex finely contiguously punctate, pubescence fine, sparse; antennae extending beyond middle of elytra, segments from sixth slightly expanded, poriferous areas becoming progressively larger from fifth segment, occupying most of surface on distal segments, third segment longer than fourth, fifth subequal to third, sixth subequal to fourth. Pronotum moderately elongate, sides sinuate; apex rather abruptly constricted, barely impressed, base vaguely impressed; hind angles acute, extending partially over humeri; disc convex, shining, very sparsely, irregularly punctate; pubescence absent except for several long, erect hairs at sides near base; prosternum glabrous, intercoxal process laminiform; mesosternal process arcuate, level with surface of coxae; meso- and metasternum minutely densely punctate except for glabrous areas, punctate areas clothed with a pale recumbent pubescence. Elytra about three times as long as broad, sides impressed behind middle; punctures moderately coarse, well separated; pubescence very short, depressed, rather sparse; basal impression not attaining suture; apices narrow, acuminate, sutural angles dentate. Legs slender; hind tibiae carinate for most of their lengths; hind tarsi with last segment cleft at apex only. Abdomen extending about two segments beyond elytra; sternites finely, densely punctate and pubescent basally; last sternite excavated throughout, sides moderately produced, angle dentate; last tergite with apex broadly, shallowly emarginate. Length, 14 mm.

Type locality: of *brachialis*, Oaxaca, México; *nigrita*, Punta Gorda, British Honduras.

Beside the type, there are three additional male specimens at the British Museum. One is from Playa Vicente (Veracruz) and two from "Mexico". Other specimens which we have seen include: 1 ♂, Santo Domingo, 15 mi. SE

Simojovel, Chiapas, Mex., VII-8-15-58 on flowers of *Callea trichotoma* (J. A. Chemsak); 3 ♂, 1 ♀, Temescal, Oaxaca, Mex., VI-22-64 (D. Janzen), VII-5-65 (G. Nelson and family); 1 ♂, 1 mi. W. Fortin de las Flores, Veracruz, Mex., VII-2-62 (Janzen); 1 ♂, 2 ♀, Xcan, Quintana Roo, Mex., VIII-63, VII-14-17-64 (E. C. Welling).

***Strangalia emaciata* (Bates), comb. n.**

Ophistomis emaciata Bates, 1880 : 39.

Female: Form moderate sized, slender, elytra attenuated; integument yellowish, head except median spot on neck, prothorax except sides and basal median spot on pronotum, antennae except apex of fifth segment and segments six to ten, margins of sternites and apex of abdomen, legs except apices of femora black, elytra dark as follows: scutellum and scutellar area, a diamond shaped sutural spot behind scutellum which narrows and extends suturally to apex, elongate post humeral spots and triangular antemedian spots which do not attain suture and extend posteriorly along margins to about apical one-fifth. Head with front moderately long, median triangle large, not divided; vertex shallowly concave, densely, separately punctate, pubescence obsolete; antennae extending beyond middle of elytra, segments from apex of fifth through tenth yellow, small poriferous areas present on segments six to eleven, segments from sixth thickened. Pronotum elongate, sides sinuate; hind angles subacute, not produced over humeri; apex deeply impressed, base not impressed; disc convex, shining, very sparsely punctate; pubescence absent, a few long erect hairs present at sides at base; prosternum subglabrous, very sparsely pubescent, intercoxal process laminiform; mesosternal process arcuate, level with surface of coxae; meso- and metasternum very finely, moderately densely pubescent. Elytra about three times as long as broad, slightly impressed at middle; basal punctures fine, shallow, sparse and irregular, becoming obsolete toward apex; pubescence very sparse, short; apices narrow, sub-acuminate. Legs slender; hind tarsi with last segment cleft to about middle. Abdomen subglabrous; last sternite impressed at apex, angles dentate; last tergite rounded at apex. Length, 14 mm.

Type locality: Costa Rica.

The elongate, almost impunctate pronotum will separate *emaciata* from other known *Strangalia*. The species is known from a single specimen.

***Strangalia histrio* (Bates), comb. n.**

Ophistomis histrio Bates, 1885 : 281, pl. 20, fig. 3; Chemsak, 1964 : 78 (lectotype desig.).

Female: Form moderately robust, elytra attenuated; integument yellowish, tips of mandible, vertex of head, antennal segments one to six, basal and apical margins of pronotum narrowly, and margins of sternites black, pronotum with

two black stripes on each side of middle extending obliquely from in front of base to beyond middle than transversely to underside, elytra with narrow dark markings as follows: a median semi-circular band behind scutellum, an arcuate W-shaped stripe extending obliquely on each side from humeri, angling sharply, arcuately toward base and ending in a round spot near suture, each side with an oblique V-shaped stripe at middle which extends to suture, a post median oblique line angling toward base at suture, and two small spots before apex, the areas contained within the black outlines are paler yellow. Head with front long, frontal triangle large; vertex finely, densely punctate, finely, sparsely pubescent; antennae extending to about middle of elytra, segments seven to eleven yellow, small poriferous areas present only on segments ten and eleven, third segment longer than first, fourth shorter than third, fifth subequal to third, sixth shorter than fourth, segments from apex of fifth thickened. Pronotum slightly elongate, sides sinuate; apex shallowly impressed, base very vaguely impressed across middle; disc convex, median line slightly impressed longitudinally; punctures fine, dense, transverse, a small glabrous spot present medially at base; pubescence fine, subrecumbent with a few long erect hairs present at sides near base; prosternum glabrous, intercoxal process laminiform; mesosternal process level with coxae; meso- and metasternum sparsely pubescent. Elytra almost three times as long as broad, sides impressed slightly at middle; each elytron with a lunate impression extending from humeri to suture; punctures fine, well separated, becoming finer toward apex; pubescence sparse, short, subdepressed; apices narrow, acuminate. Legs slender; hind tarsi with apical segment cleft almost to middle. Abdomen glabrous, almost impunctate and non-pubescent; last sternite feebly impressed at apex; last tergite deeply emarginate at apex, angles dentate. Length, 15 mm.

Type locality: Cerro Zunil, Guatemala.

Although Bates had two specimens at the time he described *histrío*, only one is in the collection of the British Museum.

***Strangalia lachrymans* (Bates), comb. n.**

Ophistomis lachrymans Bates, 1885 : 280, pl. 20, fig. 4.

Male: Form large, strongly attenuated; integument shining, black, elytra with two interrupted basal yellow, longitudinal vittae at middle. Head with front short, glabrous median triangle divided; vertex concave, finely, very densely punctate, pubescence sparse, long, erect; antennae extending to about elytral apices, segments from apex of fifth very slightly expanded, segments five and six with small apical poriferous areas, segments from seventh with a double set of two poriferous spots, third segment longer than first, fourth shorter than third, fifth subequal to third, sixth subequal to fourth, eleventh appendiculate. Pronotum elongate, sides sinuate; hind angles subacute, not extending over humeri; apex deeply impressed, base shallowly impressed; disc concave; punctures dense, confluent, transverse, median glabrous line irregular; pubescence rather

sparse, short, erect, with long erect hairs interspersed; prosternum sparsely pubescent, intercoxal process laminiform; mesosternal process arcuate, lying below surface of coxae; meso- and metasternum moderately densely pubescent. Elytra over three times as long as broad, sides impressed at middle; punctures fine, well separated; pubescence sparse, very short, depressed; basal arcuate impression extending only to middle of each elytron; apices narrow, acuminate. Legs slender, elongate; hind tibiae not carinate; hind tarsi with apical segment cleft to about middle. Abdomen elongate, extending about two segments beyond elytra; sternites basally minutely densely punctate; last sternite excavated for its entire length, sides strongly expanded; last tergite with apex rounded. Length, 22 mm.

Type locality: Purula, Vera Paz, Guatemala.

Known only from the unique type. Judging by the known color variation in this group, this species probably has individuals with pale longitudinal vittae over the entire elytra and also completely black forms.

***Strangalia melampus* (Bates), comb. n.**

Ophistomis melampus Bates, 1885 : 280.

Male: Form moderate-sized, slender, strongly attenuated; integument black, feebly shining, antennal segments seven to eleven yellow. Head with front long, narrow, median triangle prominent; vertex very finely, confluent punctate, sparsely pubescent; antennae shorter than elytra, outer segments feebly expanded, segments from seventh with very small poriferous areas, third segment longer than fourth, fifth subequal to third, sixth subequal to fourth. Pronotum elongate, sides sinuate; apex feebly impressed, base vaguely impressed; hind angles subacute, not extending over humeri; disc convex, densely transversely punctate except for glabrous median line; pubescence fine, sparse, depressed, sides at base with several long erect hairs; prosternum glabrous, intercoxal process laminiform; mesosternal process feebly arcuate, lying a little below surface of coxae; meso- and metasternum densely clothed with pale depressed pubescence. Elytra over three times as long as broad, sides deeply impressed; punctures fine, dense but separated; pubescence sparse, short, depressed; basal arcuate impression extending to suture; apices narrow, obliquely truncate, not dentate. Legs with hind tibiae strongly sinuate, carinate at apex; hind tarsi with apical segment cleft to about middle. Abdomen elongate, extending about two segments beyond elytra; sternites finely punctate and pubescent; last sternite excavated for its length, sides moderately strongly produced, angles obtuse; last tergite with apex densely pubescent, deeply emarginate. Length, 16 mm.

Type locality: San Geronimo, Guatemala.

The coloration is identical to that of *xanthotelas* but *melampus* differs by the densely punctate pronotum and more slender and strongly produced apex of the abdomen. In addition to the type, three males are at hand from El Salto, Escuintla, Guatemala, 1934 (F. A. Bianchi) and 20 km. E. Panajachel, Guatemala, IX-29-64 (J. M. Campbell).

Strangalia pectoralis (Bates), comb. n.

Ophistomis pectoralis Bates, 1885 : 282; Chemsak, 1964 : 78 (lectotype desig.).

Male: Form slender, rather small, elytra attenuated; integument yellowish, head except part of front, prothorax, antennae, legs except parts of femora and some sternites black, elytra narrowly black margined, with post basal black stripe broken at middle of elytra, two median spots not extending to suture, two spots or a stripe behind middle, and apices black. Head with front short; vertex densely subconfluent punctate, moderately densely pubescent; antennae shorter than elytra (type has last two segments missing), segments from fifth slightly expanded, fifth segment with a very small poriferous spot, segments from sixth to ninth with a row of poriferous area, each segment with two areas, third segment longer than first, fourth shorter than third, fifth slightly longer than fourth but shorter than third, sixth subequal to fourth. Pronotum elongate, sides barely sinuate; hind angles acute, extending partially over humeri; apex shallowly impressed, base vaguely impressed across middle; disc convex, densely punctate except for glabrous median line; pubescence fine, dense, golden and depressed; prosternum densely pubescent before coxae; prosternal process sub-laminiform; mesosternal process arcuate, not elevated above coxae; meso- and metasternum densely pubescent. Elytra less than three times as long as broad, barely impressed medially; punctures fine, well separated; pubescence bicolored, short, subdepressed; apices narrow, oblique, angles dentate. Legs slender; hind tibiae not carinate; hind tarsi with apical segment cleft to middle. Abdomen extending almost two segments beyond elytra; punctures very fine basally, dense at middle, becoming sparser toward apex; margins of sternites serrate at middle; last sternite excavated for half its length, sides slightly produced, angles dentate; last tergite emarginate at apex. Length, 13 mm.

Female: Form more robust. Antennae with poriferous areas reduced. Abdomen with last sternite medially impressed at apex; apex of last tergite shallowly emarginate. Length, 12 mm.

Type locality: Cordova, Veracruz, Mexico.

This species can be readily separated from *S. picticornis* and *S. saltator* by the densely punctate and pubescent pronotum. New records for this species include: 4♂♂, 4 mi. SW Simojovel, Chiapas, Mex., III-19-53 (R. C. Bechtel, E. I. Schlinger); 5♂♂, Pt. Barrios, Guatemala, III-11-05 (J. S. Hine); 1♂, 1♀, Stann Creek Dist., Middlesex, British Honduras, III-20-24-65 (E. C. Welling).

Strangalia picticornis (Bates), comb. n.

Ophistomis picticornis Bates, 1869 : 384.

Ophistomis felix Bates, 1885 : 282, pl. 20, fig. 5, syn. n.

Male: Form narrow, elongate, elytra strongly attenuated toward apices; integument yellowish, apices of mouthparts, clypeus, genae, two pronotal stripes

extending forward to antennal tubercles, antennae, legs except femora, black, elytra with black spots as follows: two median basal, usually two subbasal near margins, a median pair not extending to suture, post median pair, and apices black, lateral and sutural margins narrowly black. Head with front long; eyes moderate sized; vertex plane, finely densely punctate; pubescence sparse; antennae extending slightly beyond elytra, segments from fifth moderately expanded apically; fifth segment with two small poriferous areas at apex, sixth with two larger poriferous areas, segments from seventh with double poriferous areas extending length of segments, third segment longer than first, fourth shorter than third, fifth subequal to third, sixth subequal to fifth. Pronotum elongate, campanuliform, sides sinuate; hind angles acute, extending over humeri; apex narrowly impressed transversely, base vaguely impressed across median basal lobe; punctures moderately coarse, transverse, rather sparse, occurring only over middle three-fifths; pubescence sparse, dark, short, suberect; prosternum glabrous, prosternal process laminiform; mesosternal process arcuate, extending above coxae, meso- and metasternal pubescence fine, depressed. Elytra over three times as long as broad, impressed at middle; basal punctures fine, well separated, becoming finer toward apex; pubescence short, sparse, dark, subdepressed; apices narrow, obliquely emarginate, angles dentate. Legs slender, hind tibiae sinuate, somewhat expanded at apices, carina absent; hind tarsi slender, elongate, last segment shallowly cleft. Abdomen elongate, extending more than one segment beyond elytra; punctation fine, becoming obsolete toward apex; apical margins of sternites serrate, last sternite deeply excavated for almost its length, sides moderately produced, apices dentate; last tergite deeply V-shaped at apex, angles dentate. Length, 16-17.5 mm.

Female: Form more robust, elytra less strongly attenuated. Antennae with poriferous areas smaller, segments from apex of sixth to basal half of ninth yellow. Abdomen with last sternite slender, deeply impressed medially at apex, apex of last tergite deeply emarginate, angles dentate. Length, 15-20 mm.

Type locality: of *picticornis*, Chontales, Nicaragua; *felix*, San Feliz Panama.

The unique female type of *felix* fits into the series of *picticornis* very well. The relationship of these two species was observed by C. J. Gahan and he annotated the BCA volume in the British Museum, "*O. felix*) Appears to be a slight local variety of *O. picticornis* Bates. C. J. G."

Additional material examined: 1♂, 1♀, El Volcan, Chiriqui, Panama, II-26-28-36 (F. E. Lutz); 1♀, Tilaran, Guanacaste, 800 m., Costa Rica, III-3-34 (F. Nevermann).

***Strangalia saltator* (Bates), comb. n.**

Ophistomis saltator Bates, 1885 : 281, pl. 20, fig. 6; Chemsak, 1964 : 78 (lectotype desig.).

Male: Form slender, elongate, elytra strongly attenuated; integument pale rufo-testaceous, head except part of front, two broad longitudinal pronotal stripes,

antennae, legs except parts of femora, margins of sternal sclerites and apex of abdomen black, elytra with two median black spots extending from margins but not to suture, a post median black band, and apices black. Head with front moderately long, with a median elevated black triangle above clypeus; vertex concave, finely densely punctate, sparsely pubescent; eyes moderate sized; antennae extending slightly beyond elytra, segments from fifth moderately expanded at apices, fifth segment with two small poriferous areas, segments from sixth with three rows of poriferous areas extending length of segments, third segment longer than first, fourth shorter than third, fifth subequal to third, sixth shorter than fifth. Pronotum elongate, sides slightly sinuate; hind angles acute, extending over humeri; apex narrowly impressed transversely, base vaguely impressed across middle; punctures transverse, moderately coarse, located almost linearly on each side of median line; pubescence sparse, golden, short, subdepressed; prosternum subglabrous, finely sparsely pubescent, prosternal process tapering to laminiform; mesosternal process arcuate, rising slightly above coxae; meso- and metasternal pubescence fine, depressed. Elytra about three times as long as basal width, impressed at middle; basal punctures moderately coarse, well separated, becoming finer toward apex; pubescence sparse, short, pale and dark, subdepressed; apices narrow, obliquely emarginate, angles dentate. Legs slender; hind tibiae vaguely carinate; hind tarsi slender, apical segment cleft to middle. Abdomen extending about two segments beyond elytra; punctures fine, dense basally, becoming obsolete toward apex; apical margins of sternites serrate; last sternite deeply excavated for most of its length, sides moderately produced, apices dentate; last tergite emarginate at apex. Length, 14-16 mm.

Female: Form more robust, less strongly attenuated. Antennae with outer segments short, poriferous areas greatly reduced. Abdomen with last sternite impressed medially; last tergite sinuate-emarginate at apex. Length, 14 mm.

Type locality: San Feliz, Panama (Chemsak designation, 1964).

The color pattern of the elytra is similar to that of *S. picticornis* and *S. pectoralis*. In the series available for study, none of the individuals of *saltator* have the median basal spots. The extensive poriferous areas of the antennae of the males and all black antennae of the female will separate *saltator* from *picticornis*.

Strangalia sallaei (Bates), comb. n.

Ophistomis sallaei Bates, 1885 : 280.

Female: Form moderately robust, elytra attenuated; integument pale orange-yellow, vertex of head, antennae except segments eight to ten, two longitudinal pronotal stripes coalescing at apex, tarsi and hind tibiae and margins of sternites black, elytra with a broad, arcuate brownish humeral band on each side, two black spots at middle not attaining suture and a broad dark longitudinal band extending marginally from behind median spots to apex, suture very

narrowly dark. Head with front long, frontal suture dividing the raised glabrous triangular area; vertex very finely, densely punctate, pubescence fine, short depressed, with a few long erect hairs interspersed; antennae extending at little beyond middle of elytra, segments from fifth with small poriferous areas, these becoming larger toward apex, segments from apex of fifth expanded slightly, third segment longer than fourth, fifth subequal to third, sixth subequal to fourth. Pronotum elongate, sides slightly sinuate; hind angles subacute, not extending over humeri; apex deeply impressed, base narrowly impressed across middle; disc convex, densely confluent punctate, densely clothed with short depressed pubescence, several long erect hairs interspersed at sides near base; prosternum finely pubescent before coxae, intercoxal process laminiform; mesosternal process arcuate, at same level as coxae; meso- and metasternum densely clothed with golden recumbent pubescence. Elytra about three times as long as broad, impressed at middle; basal punctures fine, dense, becoming obscure toward apex; each elytron with a lunate impression at base extending from humeri almost to suture; pubescence dense, short, depressed; apices narrow, obliquely truncate, angles dentate. Legs slender; hind tarsi elongate, apical segment cleft to middle. Abdomen glabrous, very sparsely punctate and pubescent; apex of last sternite medially impressed, angles not produced; apex of last tergite emarginate. Length, 18 mm.

Type locality: Mexico.

Known from a single specimen.

***Strangalia xanthotelas* (Bates), comb. n.**

Ophistomis xanthotelas Bates, 1892 : 158, pl. 6, fig. 4; Chemsak, 1964 : 75 (lectotype desig.).

Male: Form slender, elytra strongly attenuated; integument black, shining, antennae with segments from apex of eighth yellow. Head with front short, median triangle large; vertex finely, contiguously punctate, pubescence fine, sparse; antennae about as long as body, segments not expanded, poriferous areas absent, third segment longer than fourth, fifth longer than third, sixth subequal to fifth, remaining segments relatively long. Pronotum moderately elongate, sides feebly sinuate; apex feebly impressed, base not impressed across middle; hind angles acute, not expanded over humeri; disc convex, moderately densely irregularly transversely punctate, median line not impressed, glabrous; pubescence very sparse, sides near base with several long, erect hairs; prosternum shallowly punctate at base; intercoxal process laminiform; mesosternal arcuate, slightly below surface of coxae; meso- and metasternum minutely, densely punctate, densely pubescent. Elytra over three times as long as broad, sides impressed behind middle; basal punctures fine, well separated, becoming denser and larger toward middle; pubescence sparse, short, depressed, basal impression very short and shallow; apices narrow, acuminate. Legs with hind tibiae strongly carinate over apical two-fifths; hind tarsi with last segment barely cleft. Abdomen extending a little more than one segment beyond elytra; sternites minutely, densely punctate at basal sides, pubescence dense on punctate areas;

last sternite deeply excavated over entire length, sides moderately produced, angles dentate; apex of last tergite feebly emarginate. Length, 14-16 mm.

Female: Elytra less strongly attenuated. Antennae extending to about apex of elytra. Abdomen with apex of last sternite moderately impressed; last tergite with apex deeply emarginate. Length, 12 mm.

Type locality: Acaquizotla, Guerrero, Mexico.

An additional male is at hand from the type locality and four males from Rincon, Guerrero.

This species is distinctive by the long, non-poriferous antennae. Most specimens have only the last three antennal segments yellow.

Pseudotypocerus, gen. n.

Form short, robust; elytra broad across humeri, tapering posteriorly to apices, sides straight or very slightly narrowed at middle, attenuated at apices. Head elongate, antennal insertion distinctly separated from eye, opposite upper anterior margin of lower lobe; antennae filiform; basal segments setose, outer segments slightly thickened but not expanded apically, nor serrate, poriferous areas present in male, lacking in female. Pronotum campanuliform, coarsely punctate, basal angles extending over humeri apex constricted. Prosternum with intercoxal process narrow, laminiform, coxae prominent; mesosternum with intercoxal process rather broad, almost level with coxae, prominent anteriorly and steeply declivous. Legs slender, posterior tarsi very long, exceeding the tibiae, first segment much longer than remainder together, third segment short, cleft to middle, lobes short. Elytral apices narrowly emarginate, both sutural and external angles dentiform. Abdomen of male with last sternite broadly excavated, that of female apically impressed.

Type species: *Ophistomis rufiventris* Bates.

This genus is proposed for a species with a facies quite different from that of *Strangalia*, suggesting *Typocerus*, a genus to which it bears no close relationship. The antennae are slender and lack poriferous areas in the female. The posterior tarsi are very elongate in both sexes, and the pronotum coarsely, densely punctate.

Pseudotypocerus rufiventris (Bates), comb. n.

Ophistomis rufiventris Bates, 1872 : 183; 1880 : 39, pl. 4, fig. 19.

Ophistomis pubipennis Bates, 1885 : 279; Chemsak, 1964 : 78 (lectotype desig.), syn. n.

Male: Integument black, prothorax and elytra reddish or obscurely reddish. Head with vertex opaque, moderate coarsely punctate, punctures crater-like, crowded in part confluent or with a common rim, median line distinct, extending

to clypeus; front impressed, with elevated lateral margins, densely, moderately finely punctate except median polished triangular area; clypeus and labrum coarsely punctate denser at base; antennae presumably exceeding middle of elytra (apical segments missing in type), segments one to five shining moderately coarsely punctate, punctures somewhat elongated, clothed with coarse, suberect black setae, outer segments minutely punctate and pubescent, scape subcylindrical, third segment longer than scape, fourth segment three-fourths as long as third, subequal to scape, fifth segment barely longer than fourth, segments from sixth thicker, with apical poriferous areas. Pronotum coarsely, irregularly punctate, with an ill-defined smooth median longitudinal line, pubescence short, sparse, appressed. Elytra less coarsely and less densely punctate than pronotum, mostly separated by one diameter or slightly less, pubescence short, sparse, appressed. Metepisternum densely punctate over its entire length. Abdomen shining, moderately sparsely, not finely punctate, thinly pubescent; last sternite broadly excavated for more than one-half its length, apex shallowly emarginate, lateral angles obtuse. Length, 10-12 mm.

Female: Antennae attaining approximately middle of elytra; abdomen with last sternite apically impressed. Length, 12-13 mm.

Type locality: Chontales, Nicaragua (*rufiventris*). Chacoj, [Vera Paz], Guatemala (*pubipennis*).

P. pubipennis appears to be structurally identical with *rufiventris*, differing only in color. Although Bates considered *rufiventris* to be closely allied to his *Ophistomis rubricollis* from Ega, Brazil, we hesitate to regard the latter species, with its very different style of punctuation, as congeneric.

Additional material examined: 2♀♀, Punta Gorda, British Honduras, III-1934; 1♂, Punta Gorda, IV-1934 (J. J. White); 2♂♂, 10 mi S. Coacacoalcos, Veracruz, Mex., VII-10-63 (J. Doyen).

Pseudophistomis, gen. n.

Form moderately large, robust; elytra neither attenuated nor expanded apically, lateral and sutural margins straight, gradually narrowed before curving slightly to apices. Head elongate; antennal insertion distinctly separated from eye, lower margin about even with lower margin of eye; antennae filiform, outer segments slightly thickened, with distinct poriferous areas. Pronotum campanulate, apex abruptly constricted, base much narrower than elytra, basal angles attaining humeri but not extending over them. Prosternum with intercoxal process narrow, laminiform, coxae prominent, more or less oval; mesosternum with intercoxal process moderately broad but not as wide as coxae, only slightly lower than coxae, prominent and more or less obtusely tuberculate in front, steeply declivous. Legs slender, posterior tarsi filiform, as long as posterior tibiae first segment much longer than remaining segments together, third segment cleft to middle. Elytral apices emarginate, only slightly oblique, sutural and external angles each acutely dentate. Abdomen of female with last segment rotundate-truncate with a median apical triangular impression.

Type species: *Ophistomis pallidus* Bates.

This genus is based upon a species which bears a strong superficial resemblance to some of those assigned to *Megachoriolaus*, e. g., *M. unicolor* (Bates) and *M. breviceps* (Linsley). However, *Pseudophistomis* differs in the shape of the elytra which are gradually narrowed posteriorly before rounding to the apices, each of which is bidentate (rather than subparallel or slightly expanded before the apices, each of which is rounded at the suture and feebly to distinctly dentiform externally in *Megachoriolaus*), the form of the pronotum which is abruptly constricted at apex and the temples which are obliquely narrowed behind. From *Strangalia*, to which it appears to be more closely related, it may be distinguished by the robust form with the elytral margins straight, not attenuated with the elytral apices scarcely oblique, and the form of the pronotum which is campanulate and abruptly constricted apically.

***Pseudophistomis pallida* (Bates)**

Ophistomis pallidus Bates, 1872 : 183; Chemsak, 1964 : 78 (lectotype desig.)
Ophistomis pallida; Bates, 1880 : 40, pl. 15, fig. 2.

Female: Integument pale brownish yellow, antennae, except scape, mouthparts, a dorsal stripe on the femora, and sometimes the tibiae and tarsi black, pubescence short. Head with vertex dullish, finely, densely punctate from apex to antennal bases, with a median line extending to base of clypeus; frontal area polished at middle, finely, densely punctate at sides; clypeus densely punctate except anterior margin; antennae reaching to about middle of elytra, scape slender, gradually enlarged to apex; segments three to five slender, slightly enlarged at apex, third a little longer than scape, fourth two-thirds as long as third, fifth slightly shorter than third, segments six to ten somewhat thicker, parallelsided, last segment longer than tenth, apex conically produced but not appendiculate, fifth segment with a small but distinct pale oval poriferous area at apex of dorsal surface, sixth with short elongate area at base and a parallel pair at apex, following segments with paired poriferous areas at base and apex, those of ventral surface of segments similarly placed but not divided. Pronotum finely, densely, cribrately punctate, sparsely clothed with fine, appressed, golden pubescence. Elytra evenly convex except for humeral impression, more than twice as long as humeral width, surface finely punctate, punctures well separated, not larger than those of pronotum. Abdomen shining, very sparsely, finely punctate, sparsely clothed with short, suberect pubescence. Length, 13-15 mm.

Type locality: Chontales, Nicaragua.

Specimens in the collection of the British Museum (Natural History), in addition to the lectotype, are one example from the type locality, another from Panima, [Baja Vera Paz], Guatemala. This last is labelled "Cotype" but apparently incorrectly so since the locality is not mentioned by Bates in his original description, nor, for that matter, in the *Biologia Centrali-Americana*.

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