

STICHOLOTIDINAE (COLEOPTERA, COCCINELLIDAE) UPDATE:
DESCRIPTIONS OF NEW SOUTH AMERICA TAXA¹Robert D. Gordon²
Lúcia Massutti de Almeida³

ABSTRACT. *New additions to the neotropical Sticholotidinae fauna are described as follows: Argentipilosini, new tribe; Argentipilosa and Neojauravia, new genera, and Scotoscymnus triangularis, Argentipilosa nigra, A. martinsi, and Neojauravia naeida, new species. Illustrations of all taxa are provided and previously existing keys are modified to accept the new taxa.*

KEYWORDS. *Sticholotidinae, Coccinellidae, Coleoptera, taxonomy.*

The higher taxa of Western Hemisphere Sticholotidinae were classified by GORDON (1977); four tribes and 15 genera were recognized. Subsequent examination of specimens in the collection of the Universidade Federal do Paraná, Curitiba, Brazil (DZUP) and Museu de Zoologia da Universidade de São Paulo (MZSP), resulted in the discovery of a new tribe, two new genera, and four new species, all of which are described herein. Holotypes are deposited in the collection of the DZUP, MZSP; other type specimens are deposited there and in the U.S. National Museum (USNM), Washington, D.C.

TRIBE STICHOLOTIDINI Weise

Scotoscymnus Gordon, 1977:189.

Scotoscymnus triangularis, sp.n.
(Figs.1-2)

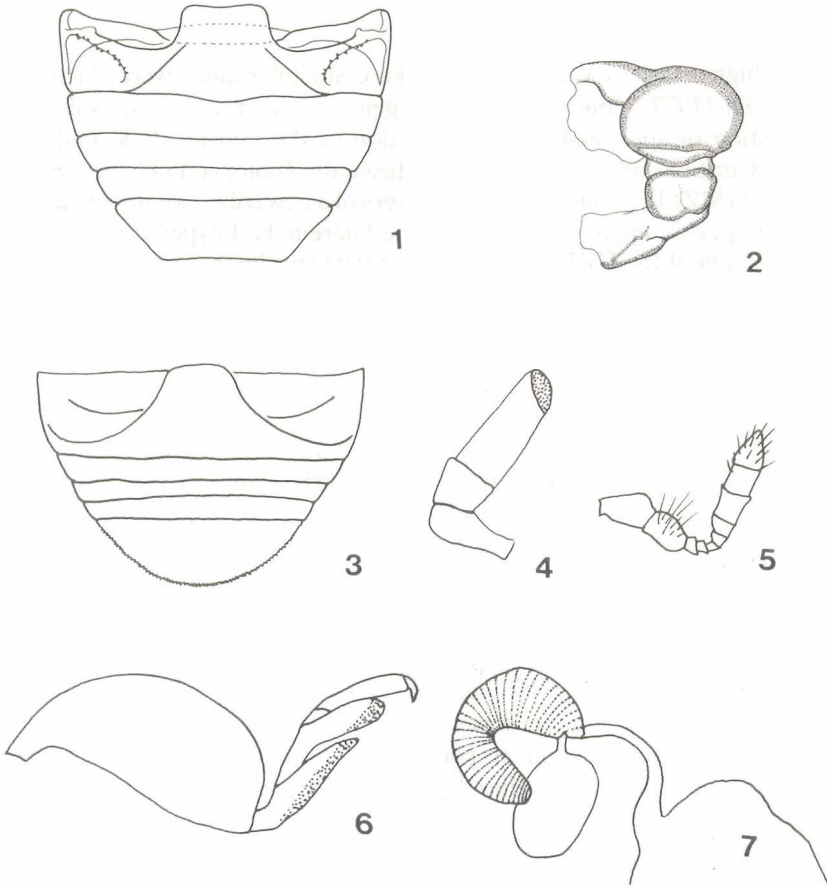
Holotype female. Length 1.40mm, width 1.00mm. Form triangular, strongly narrowed from apical 1/3 to acuminate apex. Color yellowish brown; leg and mouthparts yellow. Head with **clypeus** very short; surface shiny, with some coarse punctures, punctures separated by less than a diameter. Pronotum slightly alutaceous, feebly shiny, punctures fine, separated by less than to 3 times a diameter; anterolateral line separated from anterolateral angle by more than width of basal antennal segment, not joining lateral border until near posterior pronotal angle. **Elytron** shiny, faintly alutaceous, coarsely punctured, punctures separated by a diameter or less; pubescences parse (perhaps specimen rubbed), composed of semierect, short hairs; lateral border thickened, forming flat, wide

1. Contribuição nº 645 do Depto. de Zoologia, UFPR.
2. Systematic Entomology Laboratory, PSI, Agricultural Research Service, USDA, c/o National Museum of Natural History, Washington, D.C.20560, U.S.A.
3. Centro de Identificação de Insetos Fitófagos, Departamento de Zoologia, Universidade Federal do Paraná, Caixa Postal 19030;81504, Curitiba,PR, Brasil.

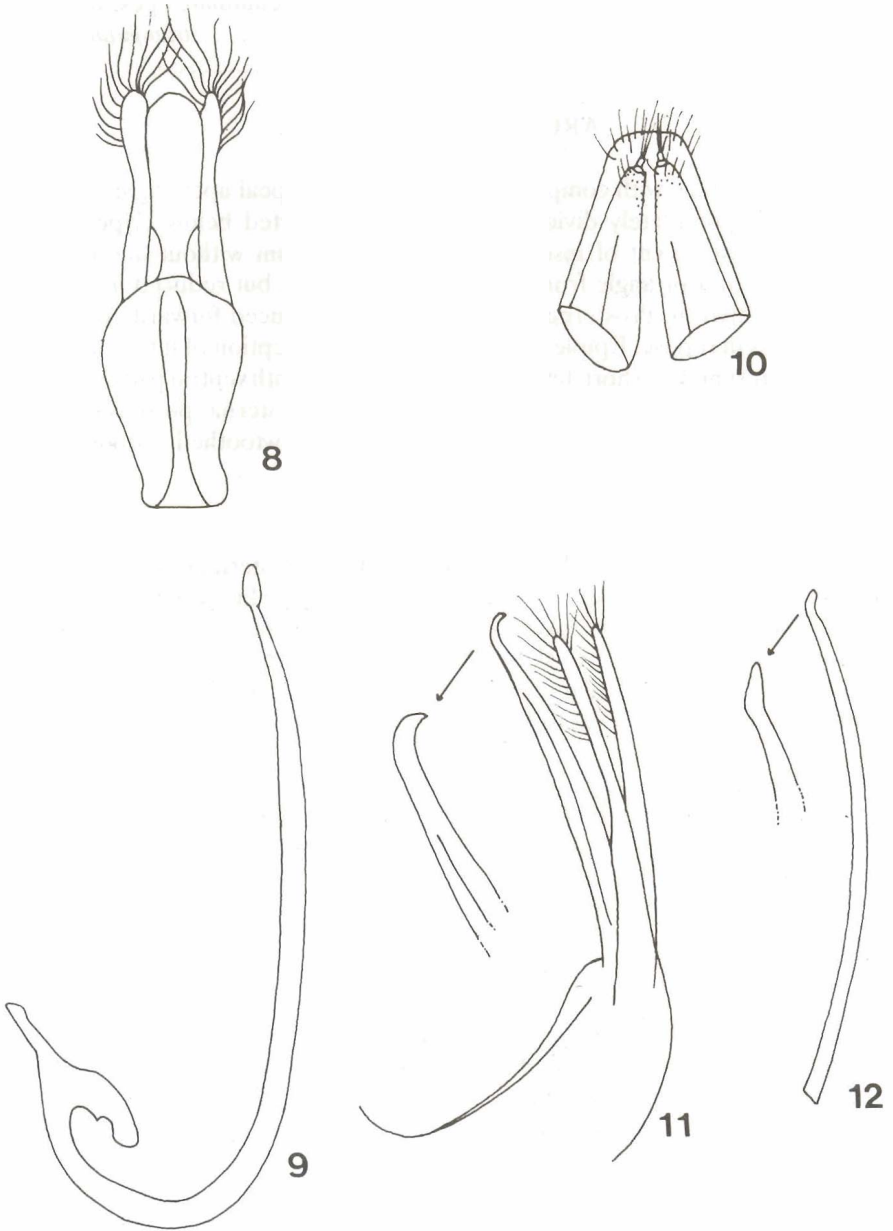
ridge with moderately deep groove between ridge and di of elytron. Functional wing and humeral callus present. Ventral surface smooth, polished, finely punctured, punctures and pubescence becoming dense on last 3 abdominal sterna. Postcoxal line on 1st abdominal sternum (fig.1). Spermathecal capsule as in fig.2.

Type material. **Holotype**; S. Bocaina, 1650m, S.J. Barreiro, SP, Brasil, XI-1968, Alvarenga e Seabra (USNM).

Remarks. This is the first species of *Scotoscymnus* recorded from Brazil, and only the third species known from South America. *S. triangularis* is about 0.4mm longer than most of the other known species, and its strongly triangular shape is



Scotoscymnus triangularis: 1, postcoxal line on 1st abdominal sternum; 2, spermathecal capsule. *Argentinipilosini*: 3, abdomen. *Argentinipilosa*: 4, maxillary palpus; 5, antenna; 6, tibia of proleg; 7, accessory gland.



Argentipilosa nigra: 8, basal lobe; 9, siphon; 10, genital plate. *A. marinsi*: 11, basal lobe; 12, siphon.

unique with the *Scotoscymnus* fauna thus far described. This species should be placed at the beginning of the key to *Scotoscymnus* (GORDON, 1977) as follows, and the subsequent couplets renumbered:

1. Form triangular, narrowed from apical 1/3 to acuminate apex; Brazil ..
 *triangularis*, sp.n.
 Form oval or round; not known from Brazil 2

ARGENTIPILOSINI, trib.n.

Sticholotidinae with compact form. Head with **clypeal** apex slightly curved; **gena** nearly completely dividing eye. Antenna inserted below **clypeal** angle anterior to eye, point of **insertion** exposed. Pronotum without line or ridge separating anterior angle from disc. Scutellum visible but **reduced** in size, not masked by **elytron**. Prosternum broad, strongly produced forward concealing mouthparts in repose. Epipleuron flat, foveate for reception of femur. **Functional wing** present. Leg short, femur swollen; protarsus with ventral pad composed of modified suckerlike setae. Abdomen with 5 visible sterna; **postcoxal** line on 1st sternum incomplete; apex of 5th sternum with sawtoothed **border** (fig.3). Male genitalia symmetrical.

Type-genus, *Argentipilosa*, gen.n.

Several characters of this tribe are unique or nearly so within the subfamily Sticholotidinae. The most obvious is the expanded prosternum which conceals the mouthparts, a character also found in the **Serangiini** but in a much different form. The suckerlike **protarsal** pads, and **sawtoothed** apex of the 5th abdominal sternum are characters not shared with known sticholotidine tribes; **Argentipilosini** is morphologically quite aberrant. This tribe is placed in the **key** to tribes (GORDON, 1977) as follows, subsequent couplets must be renumbered:

1. Prosternum greatly expanded in front to conceal mouthparts 2
Prosternum not greatly expanded, not concealing mouthparts 3
 2(1). Antennal club of a single knife-shaped or elongate-oval segment
 Serangiini
Antennal club with multiple segments **Argentipilosini**

Argentipilosa, gen.n.

Argentipilosini with body convex, heavily **sclerotized**. Head and **pronotum** covered with short, **dense**, scale-like setae, setae iridescent silver. Head with eyes separated by 1.7 times the diameter of an eye; apical margin of **clypeus thickened**; mandible with 2 apical teeth; apical segment of **maxillary palpus** nearly **parallel-sided** (fi.4). Antenna with 6-segmented scape, club **4-segmented**, strongly narrowed apically (fig.5). **Pronotal** base with broad, flat ridge. **Scutellum** extremely small, nearly invisible because of the small size. **Elytron** with numerous punctures of nearly equal size; surface shiny or nearly so. **Prosternum** with short, basal **carina** near coxal cavity; **coxae** widely **separated**. **Meso-** and **metasterna** with **depressions** for reception of femoral apices. Leg short; femur swollen, grooved for reception of tibia; tarsus **cryptotetramerous**, claw simple, without **basal angulation**. **Proleg** with tibia **strongly** expanded (fig.6), **meso- and metatibia** **less** strongly expanded. Female genitalia with accessory gland, lacking **infundibulum** (fig.7).

Type-species, *Argentipilosa nigra*, sp.n.

The generic name is derived from the Latin *argentum*, meaning silver, and the Latin *pilus*, meaning hair, and refers to the silver pubescence on the head and pronotum.

Key to species of *Argentipilosa*

1. Dorsal color entirely black *nigra*, sp.n.
Dorsal color brown to nearly black except for median red vitta on elytron
..... *martinsi*, sp.n.

Argentipilosa nigra, sp.n.
(Figs.3-10)

Male. Length **1.90mm**, width **1.60mm**. Form oval, moderately convex. Color entirely black dorsally; ventral surface dark brown, nearly black; mouthparts yellow; leg dark reddish brown. Surface of head dull, impunctate, heavily reticulate; surface obscured by dense, scalelike **setae**. Surface of pronotum dull, impunctate except basomedially, reticulate; **surface** obscured by scalelike setae **except** less so basomedially; basomedial punctures fine, separated by about a diameter. **Elytron** feebly alutaceous, shiny, with punctures **coarser** than on base of pronotum; punctures separated by less than to twice a diameter. Ventral surface with **metasternum** and **1st** abdominal sternum coarsely punctured. Apex of **5th** abdominal sternum rounded. Genitalia with basal lobe apically spatulate; **paramere** slender, straight; shiphonal base strongly modified (**figs.8,9**).

Female. Similar to male except apex of **5th** abdominal sternum more strongly rounded; genitalia as in **fig.10**.

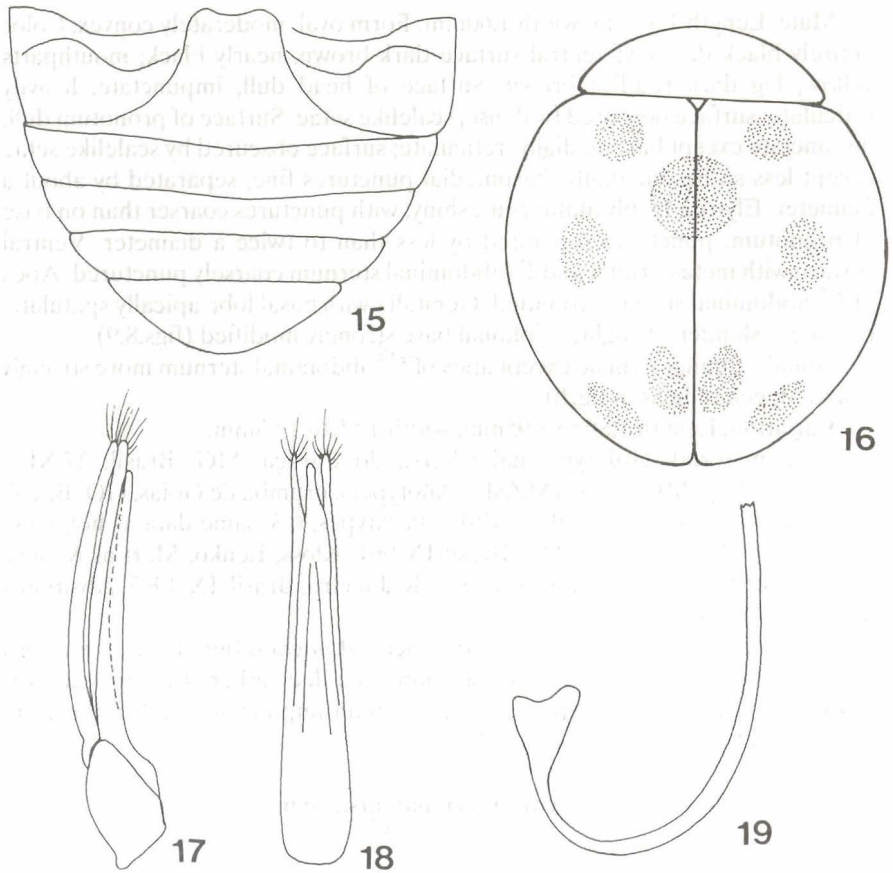
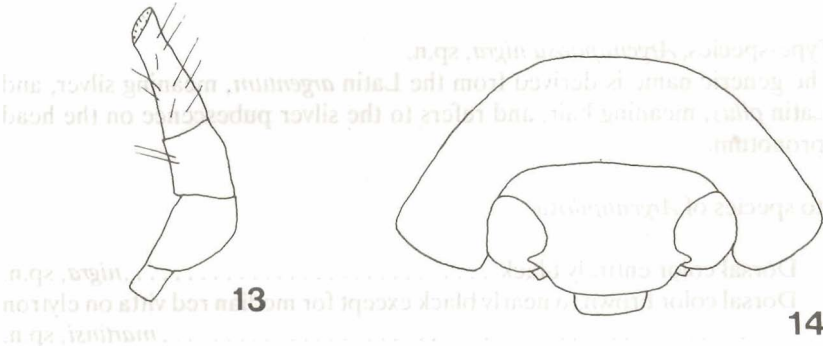
Variation. Length 1.80 to **1.95mm**, width 1.55 to **1.65mm**.

Type material. Holotype male: Serra do **Caraça**, MG, Brasil, **27.XI - 5.XI.1972**, Exp. Mus. **Zool.** (MZSP). Allotype: **Corumbá de Goiás**, GO, Brasil, **31.I-3.II.1962**, J. **Bechyné** col. (MZSP). Paratypes, **6:3**, same data as **holotype**; 1, Serra do **Caraça 1380m**, MG-Brasil-IX-% 1, Kloss, **Lenko**, **Martins & Silva** col. (2, MZSP; 1, USNM); 2, Corcovado, R. Janeiro, Brasil, **IX-1967**, Alvarenga & **Seabra** (**MNRJ, DZUP**).

Remarks. In addition to color differences, *A. nigra* differs from *A. martinsi* in having the apex of the male **5th** sternum rounded rather than truncate, the **basomedian** pronotal area punctate rather than impunctate, and in the completely different male genitalia.

Argentipilosa martinsi, sp.n.
(Figs.11-12)

Male. Length **1.90mm**, width **1.60mm**. Form oval, slightly more elongate and less convex than *A. nigra*. Color entirely yellowish red ventrally; head and pronotum reddish brown except anterior pronotal angle yellowish brown; elytron brown with obscurely defined, median, red vitta. Surface of head dull,



Neojaravia: 13, maxillary palpus; 14, head; 15, postcoxal line on 1st abdominal sternum. *N. naeida*: 16, habitus; 17, basal lobe, lateral view; 18, basal lobe, frontal view; 19, siphon.

impunctate, heavily reticulate, surface obscured by dense, **scalelike** setae. Surface of **pronotum** dull, impunctate, reticulate, obscured by scalelike setae, **basomedian** area without punctures. Elytron **alutaceous**, feebly shiny, with **punctures** separated by a **diameter** or less. Ventral surface with metasternum and 1st abdominal sternum coarsely punctured. Apex of 5th abdominal sternum truncate. Genitalia extremely long, slender; apex of basal lobe slender, **curved** upward; siphonal apex curved **upward** (figs.11,12).

Female. Similar to male except apex of 5th abdominal sternum conical.

Variation. Length 1.85 to 1.90mm, width 1.50 to 1.60mm; median **elytral vitta** varies in size.

Type material. Holotype male: **Faz. Pau d'Alho, Itu, SP, Brasil, II.1963, F. Werner, U. Martins col. (MZSP). Allotype (MZSP) and 4 paratypes, same data as holotype (2, DZUP ;2, USNM).**

Remarks. See **comparative remarks under A. nigra**. Three females in the type series were dissected **in an attempt to examine the internal genitalic parts**. The only structures found were the **genital plates; the spermathecal capsule, infundibulum**, etc. were completely **missing**.

Neojauravia, gen.n.

Sticholotidinae with form loose, not **compact, dorsally pubescent**. Head with eyes separated by 2.5 times the diameter **of an eye; gena** extending **slightly** onto eye; apical margin of clypeus not **thickened**, truncate, **reflexed; mandible** with 2 apical teeth; apical segment of maxillary **palpus** strongly tapered (fig.13). Antenna with 7-segmented **scape**, 3-segmented club, inserted under **clypeal** angle, point of insertion **concealed** (fig.14). **Pronotum** short, broad, length to width ratio 2.5 to 6.0. Elytron with numerous punctures of nearly equal size. Epipleuron broad, descending **externally**. **Prosternum** with **intercoxal process** bicarinate from base to apex. Ventral surface without depressions for **reception** of legs. **Postcoxal** line on 1st abdominal sternum incomplete, reaching hind margin of sternum (fig.15). Leg long, slender; femur not grooved for reception of tibia; tarsus cryptotetramcrous, claw with **strong** basal angulation. Male genitalia symmetrical.

Type-species, *Neojauravia naeida*, sp.n.

Neujauravia is the first known Western Hemisphere genus of Sticholotidini to have long, distinct dorsal pubescence. It resembles, and is structurally very similar to, the Old World genus *Jauravia* Motschulsky, but *Jauravia* has long antennae and dorsally visible **antennal** insertions. We consider those two genera to be sister groups. **The** key to New World genera of Sticholotidinae in GORDON (1977) is modified as follows:

- Form abnormally convex; **epipleuron** foveate for reception of femur . . .
 *Glomerella* Gordon
- Form normally convex; **epipleuron** not foveate for reception of femur . . . 2
- 2(1). Apical segment of maxillary **palpus** long, slender, strongly tapered . . . 3
- Apical segment of maxillary **palpus** wide, not strongly tapered 4

- 3(2). Elytron **glabrous** or nearly **so**; **prosternum** with small anterior projection *Nexophallus* Gordon
 Elytron with long, **distinct pubescence**; **prosternum** without anterior projection *Neojauravia*, **gen.n.**
- 4(2). **Prosternum** with **intercoxal process** somewhat triangular, strongly **raised** *Neotina* Gordon
 Prosternum with **intercoxal process** rectangular, slightly raised
 *Nesina* Gordon

Neojauravia naeida, **sp.n.**

(Figs.13-19)

Holotype male. Length **2.00mm**, width **1.80mm**. Form widely oval, slightly convex. Color mostly **yellow**; head with apical half yellowish brown, **posterior** half black; **pronotum** yellowish **brown**, paler laterally elytron with 5 brown or black spots (**fig.16**); mew- and metasternum black. Dorsal surface shiny except elytron somewhat alutaceous; **punctures** on bead separated by less than a diameter; punctures on **pronotum** much smaller than on head, separated by a diameter or less; punctures on elytron equal in size to **head** punctures, separated by a diameter or less. Ventral surface smooth, shiny, nearly impunctate. Apex of 5th abdominal sternum truncate. Genitalia long, slender, basal lobe apically acuminate; siphon with apical half broken, lost (**figs.17,18,19**).

Allotype. Similar to male except apex of 5th sternum **rounded**.

Variation. Length 1.80 to **2.00mm**, width 1.75 to **1.80mm**; head and pronotum may be entirely yellow.

Type material. Holotype; Piracicaba, SP, **12-19-III-1987**, F.D. Benett (DZUP). Allotype (DZUP) and 1 paratype; **Piracicaba, SP, 13-02-1987, 27-02-1987**, L. Crestana, *Schinus terebinthifolium* (USNM) .

Remarks. **This** dorsally pubescent species, with yellow **elytra** and black **elytral** spots, does not **resemble** other any known Western Hemisphere sticholotidine. Therefore generic characters are not needed to recognize this (as yet) **monotypic** genus. The **allotype** is the only female available and **d i i o n** disclosed no **spermathecal** capsule or other genitalic parts except the genital plates, and we presume that they are absent in this species.

Etymology. The epithet is an arbitrary combination of letters, and the gender is feminine.

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REFERENCE

- GORDON, R.D. 1977. Classification and phylogeny of the New World Sticholotidinae (Coccinellidae). *Coleopterists Bull.* 21:185-228.