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## RECORDS AND DESCRIPTIONS OF TIPULIDAE FROM SOUTH AMERICA (DIPTERA). III<sup>1</sup>

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### ABSTRACT

New species of crane flies belonging to the genus *Teucholabis* Osten Sacken are described, collected in Ecuador and Peru by Mr. L. E. Peña. The novelties include *Teucholabis (Teucholabis) cariosa*, *T. (T.) inermis*, *T. (T.) megaspatha*, *T. (T.) perproducta*, *T. (T.) sentosa*, *T. (T.) wirthiana* (all from Libertad, 6 km southeast of Tena, Napo-Pastaza, Ecuador), *T. (T.) cinderella* (from Avispas, Peru), *T. (T.) felicitata*, *T. (T.) lipacantha*, *T. (T.) metatibiata* and *T. (T.) schistostyla* (all from Quincemil, Cuzco, Peru).

The preceding part under this title appeared in March 1968 (Papéis Avulsos de Zoologia, São Paulo, vol. 21, art. 8: 87-97). In the present report I again am considering species belonging to the Eriopterine genus *Teucholabis* Osten Sacken, vastly developed throughout Tropical America where more than 200 species have been described and unquestionably many more await discovery.

1. "Records and descriptions of Tipulidae from South America (Diptera). II" was published on March 5, 1968, as article 8, pages 87-97 of volume 21 of this journal. The list of species contained in the article is correctly cited in the paper's abstract, page 87. However, after the last proof had been returned to the printers, in part of the issue, a line (page 92), containing the heading *Teucholabis (Teucholabis) flavofimbria* was dropped and inadvertently substituted by another one, reading *Cryptolabis (Cryptolabis) phallostena*, a name correctly applied in page 94 to another species; in another part of the issue, a line (page 94), containing the heading *Cryptolabis (Cryptolabis) phallostena* was dropped and also inadvertently substituted by another one, reading *Teucholabis (Teucholabis) flavofimbria*, a name correctly applied on page 92 of this part of the issue.

This note is to ensure that the name *Teucholabis (Teucholabis) flavofimbria* Alexander is to be applied to the species described on page 92 of Papéis Avulsos de Zoologia, vol. 21 (type from Quincemil, Cuzco, Peru, August 1962, Luis E. Peña), and that the name *Cryptolabis (Cryptolabis) phallostena* Alexander is to be applied to the species described on page 94 of the same paper (type from Contulmo, Palo Botado, Nahuelbuta, Arauco, Chile, February 2, 1953, Luis E. Peña).  
The Editors.

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The genus *Teucholabis* was proposed by Osten Sacken in 1859 for a single Nearctic species, *T. complexa*, a new species, occurring throughout eastern North America. Only seven species of the genus presently are known from north of the Mexican border. In the Old World rather numerous species occur, particularly in the Oriental fauna. At this time I am describing a series of species from Ecuador and Peru that were collected by Señor Luis E. Peña to whom I am greatly indebted for the privilege of retaining the materials in the Alexander Collection of Tipulidae.

***Teucholabis (Teucholabis) cariosa*, sp. n.**

Size medium (wing of male about 6.5 mm); thorax almost uniformly reddish yellow, abdomen black; rostrum, antennae, halteres and legs black; wings strongly darkened, more uniformly in cells beyond cord; abdominal sternal pocket on segment five blackened, with numerous darkened tubercles, lateral setae relatively small; male hypopygium with spine of basistyle yellowed, curved into an acute blackened spine; outer dististyle a long simple rod with about eight long scattered setae, inner style with beak bidentate; aedeagus blackened, with four setae, terminal spine slender.

**Male**

Length about 6.5 mm; wing 6 mm; antenna about 1.5 mm.

Rostrum polished black, about one-half as long as remainder of head, palpi black. Antennae black throughout. Head apparently reddish yellow.

Thorax almost uniformly reddish yellow; praescutum and scutum with long erect setae. Halteres black. Legs with coxae and trochanters yellowed, fore coxae slightly darker; remainder of legs black, femoral bases very restrictedly yellowed, on fore legs including about the basal sixth, on middle and hind pairs more restricted; posterior tibiae near outer end with an elongate glandular area provided with abundant short erect setae, posterior basitarsi with more than proximal third dilated. Wings strongly darkened, more uniformly so in cells beyond cord, basal cells vaguely streaked with paler; a narrow scarcely evident darker seam over cord, stigma still darker; veins brownish black. Venation: Sc long, Sc<sub>1</sub> ending about opposite three-fifths Rs; R<sub>2+3+4</sub> about two-thirds R<sub>2</sub>; m-cu close to fork of M.

Abdomen, including hypopygium, black. Sternal pocket on segment five placed far distad, subtriangular in outline, appearing blackened from very numerous short dark tubercles, surrounding setae relatively small; pocket on segment six with only five or six short setae. Male hypopygium with spine of basistyle a yellow horn that curves into an acute blackened point, the latter with long yellow setae at base; mesal flange blackened, margin virtually smooth, outer angle produced into a blackened spine. Outer dististyle a long simple rod, more than one-half longer than the spine of basistyle, narrowed gradually to a microscopic point, surface with about eight long setae arranged in pairs along the surface; inner style with beak bidentate. Aedeagus blackened, terminal spine slender; base with four setae, two near end of expanded part shorter, two longer setae before midlength of the narrowed portion, exceeding the latter in length.

Holotype, ♂, Libertad, 6 km southeast of Tena, Napo-Pastaza, Ecuador, May 10-12, 1963, Luis E. Peña col.

Other species that resemble the present fly in certain features include *Teucholabis (Teucholabis) atripennis* Alexander and *T. (T.) laxa* Alexander, differing in the details of the male hypopygium and of the modified sternal abdominal pocket.

### ***Teucholabis (Teucholabis) cinderella*, sp. n.**

General coloration of thorax polished black, variegated with yellow; frontal prolongation of head relatively short, reddened; knobs of halteres obscure yellow; fore legs chiefly blackened, basal fourth of femora yellowed, remaining femora and tibiae yellow, the former with a vague pale brown subterminal ring, posterior tibia with a small darkened glandular spot before apex; wings whitened, very restrictedly clouded with darker, more evident as a narrow seam at cord; male hypopygium with spine of basistyle slender, glabrous; outer dististyle with apical fourth abruptly narrowed into a spine.

#### **Male**

Length about 6.5 mm; wing 5.2 mm; antenna about 1.5 mm.

Frontal prolongation of head reddened, short, about one-third the remainder of head, palpi black. Antennae with scape and pedicel reddened, flagellum black; intermediate flagellar segments with lower face slightly produced, obtuse, outer segments shorter than verticils. Head with vertex polished black, more reddened beneath and on front and anterior vertex.

Pronotum yellowed, anterior end narrowly blackened. Mesonotum chiefly polished black, yellowed at suture; scutellum and anterior third of mediotergite yellowed; pleurotergite black, with very long setae. Pleura reddened, with conspicuous light silvery areas on dorsal sternopleurite and metapleura. Halteres with stem dusky, knob obscure yellow. Legs with all coxae and trochanters reddish yellow; fore legs blackened, basal fourth of femora yellowed, middle and hind legs with femora and tibiae yellow with a vague subterminal darkening on femora; tarsi black, middle legs with proximal half of basitarsi vaguely yellowed; posterior tibiae with a small darkened glandular area at near six-seventh the length, proximal third of basitarsi dilated. Wings whitened, restrictedly to scarcely evidently patterned with very pale brown along cord and over the broad wing apex, stigma dark brown; veins brown, more intensely so in the darkened areas, wing base yellow. Venation: Sc relatively short, Sc<sub>1</sub> about opposite one-fourth the arcuated Rs, R<sub>2</sub> at fork of Rs; vein R<sub>5</sub> deflected strongly caudad to wing tip, narrowing the cell, cell R<sub>4</sub> at margin subequal to cell R<sub>2</sub>; m-cu at fork of M.

Abdominal tergites black, basal sternites yellow, variegated with black, outer segments paler, hypopygium black. Sternal pocket on segment five transverse, with abundant relatively short setae on all parts excepting the posterior margin; no pocket on segment six. Male hypopygium with spine of basistyle elongate, slender, subequal in length to the outer dististyle, glabrous, narrowed gradually to the acute tip; mesal flange reduced to a small blackened triangular

point, margins smooth. Outer dististyle expanded at midlength, thence abruptly narrowed into a slender spine, tip acute, margin of expanded part with microscopic denticles; inner style with beak microscopically bidentate, the teeth approximated. Aedeagus with a conspicuous obtuse flange on outer half.

Holotype, ♂, Avispas, Peru, September 20-30, 1962, Luis E. Peña col.

*Teucholabis (Teucholabis) cinderella* is generally similar to various other Neotropical species, including *T. (T.) azuayensis* Alexander, *T. (T.) hilaris* Alexander, *T. (T.) laterospinosa* Alexander, *T. (T.) neoleridensis* Alexander, *T. (T.) nigrosignata* Alexander, and some others, all differing among themselves chiefly in hypopygial characters, including the spine of the basistyle and both dististyles.

#### ***Teucholabis (Teucholabis) felicitia*, sp. n.**

Size medium (wing of male 7 mm); general coloration of thorax and abdomen black, head paler; halteres black, base of stem obscure yellow; legs black, bases of fore femora yellow; wings whitened, with three conspicuous brown crossbands and a darkened spot at arculus, Sc long; male hypopygium with apex of basistyle a transverse bar, its mesal end produced outwardly into a strong spine, outer margin with numerous setae; outer dististyle a simple slender rod, beak of inner style bidentate.

#### **Male**

Length about 7.5 mm; wing 7 mm; antenna about 1.8 mm.

Rostrum black, relatively short, less than one-half the remainder of head, palpi black. Antennae black; flagellar segments oval, a little shorter than the longest verticils. Head brownish black above, front and anterior vertex brown, beneath more reddened; vertex with abundant erect black setae.

Pronotum obscure reddish yellow. Thorax polished black, including the pleura, dorsopleural membrane light brown. Halteres black, extreme base of stem obscure yellow. Legs with fore coxae and trochanters reddish brown, remainder of leg black excepting more than proximal third of femur which is yellow, proximal half of basitarsus brown; middle coxae black, trochanters brown, remainder broken; posterior legs entirely black, proximal third of basitarsus slightly dilated. Wings whitened, with three conspicuous brown bands and a darkened spot at arculus, reaching costa at h; basal dark band extending from R to tip of vein 1st A, generally parallelsided, a little expanded distad in cell M; band at cord broader at stigma, narrowed on posterior cord, slightly disconnected from a paler brown cloud at end of vein 1st A; outer dark band including the broad apex beyond the general level of outer end of cell 1st M<sub>2</sub>, leaving only a small whitened spot in base of cell M<sub>3</sub>, prearcular field yellowed, including the veins; veins yellowish brown, darker in the patterned areas, darkest at cord. Venation: Sc long, Sc<sub>1</sub> ending just beyond midlength of Rs; R<sub>2+3+4</sub> about one-third R<sub>2</sub>; m-cu one-third its length beyond fork of M.

Abdomen black throughout. Sternal pocket on segment five heavily darkened, marginal setae numerous, of moderate length; segment six with about ten similar setae on either side of the broad

central area. Male hypopygium with apex of basistyle a transverse bar, its mesal end produced outwardly into a strong spine, outer margin with abundant long yellow setae; mesal flange unusually large, margin irregularly toothed, outer angle with long setae. Outer dististyle a simple slender rod with coarse setae; inner style with beak bidentate. Phallosome blackened, apex of aedeagus extended into a narrow rod, the tip slightly dilated.

Holotype, ♂, Quincemil, Cuzco, Peru, August 1962, Luis E. Peña col.

In its wing pattern this conspicuous fly bears a superficial resemblance to several species, including *Teucholabis (Teucholabis) cybele* Alexander, *T. (T.) formosissima* Alexander, *T. (T.) longispina* Alexander, *T. (T.) nigrocorporis* Alexander, *T. (T.) rostrata* Enderlein, *T. (T.) subpulchella* Alexander, *T. (T.) tartarus* Alexander, and some others, differing in details of coloration of the body, legs and wings, and especially in hypopygial structure. In the latter regard it is more like *T. (T.) biramosa* Alexander, especially in the apical spine of the basistyle, but in other respects the latter fly is entirely different.

### ***Teucholabis (Teucholabis) inermis*, sp. n.**

General coloration of thorax polished black, variegated with yellow on mesonotum and with a broad silvery pleural stripe; knobs of halteres light yellow; fore legs differing in color from the other pairs; wings whitish hyaline, very restrictedly patterned with brown, including the very pale apex, *Sc* short; male hypopygium without a terminal spine on basistyle; outer dististyle unequally bifid at near midlength.

#### **Male**

Length about 4.5 mm; wing 4.5 mm.

Rostrum brown, palpi black. Antennae black; proximal flagellar segments short-oval, with short abrupt apical pedicels, outer segments more elongate. Head black, heavily light gray pruinose anteriorly, less evident behind.

Prothorax, including pleura, light yellow. Mesonotum chiefly intense polished black, center of suture, including parts of both the praescutum and scutum, and the scutellum light yellow. Mesopleura broadly black above, sternopleurite similarly blackened, the two areas separated by a conspicuous silvery longitudinal stripe extending from behind the fore coxae to base of abdomen, widened behind to include the metapleura; dorsopleural region darkened, only the extreme praescutal border brighter. Halteres with stem black, knob light yellow. Legs with coxae and trochanters yellow; fore femora black, basal sixth yellowed, remainder of fore legs black; middle and hind femora yellow, tips narrowly black, including about the outer sixth or less, tibiae more obscure yellow, tips brownish black, tarsi black, proximal end of posterior basitarsus slightly dilated. Wings whitish hyaline, very restrictedly patterned with brown, including the large short-oval stigma and a narrower seam over cord to vein *Cu*; wing apex beyond general level of cell 1st *M*<sub>2</sub> very pale brown, scarcely apparent; veins brownish black to black, those at wing base yellowed. Venation: *Sc* short, *Sc*<sub>1</sub> ending

virtually opposite origin of  $R_s$ , branches of the latter strongly divergent, especially  $R_3$  which ends at or close to wing tip, cell  $R_2$  at margin about one-half cell  $R_4$ ;  $R_2$  at or close to end of  $R_s$ ; m-cu immediately before fork of M.

Abdominal tergites brownish black; incisures narrowly yellowed, especially on outer segments, hypopygium black; sternites with posterior borders broadly yellow. Sternal pockets on segments five, six and seven, largest on five, on the others clearly indicated laterally. Male hypopygium without a spine on basistyle. Outer dististyle a strong rod that is unequally bifid at near midlength, axial spine subequal in length to the base, lateral spine about one-third as long; inner style with blade long and narrow, tip decurved. Aedeagus broad, blackened, apex a small curved black spine and several longer setae.

Holotype, ♂, Libertad, 6 km southeast of Tena, Napo-Pastaza, Ecuador, May 10-12, 1963, Luis E. Peña col.

Other species that have the body and wing coloration much as in the present fly and with vein Sc short include *Teucholabis* (*Teucholabis*) *biacifera* Alexander, *T. (T.) cinereiceps* Alexander, and some others, all differing from the present fly in hypopygial structure. *T. (T.) desdemonia* Alexander likewise is generally similar, differing in the open cell  $M_2$  of the wings and in hypopygial structure, especially the dististyles and aedeagus.

#### ***Teucholabis* (*Teucholabis*) *lipacantha*, sp. n.**

##### Male

Length about 6.5 mm; wing 6 mm; antenna about 1.6 mm. Characters generally as in *perproducta*, sp. n., differing chiefly in hypopygial characters.

Wing with the darkened bands narrower, the white ground areas correspondingly widened, more extensive than the darkened bands, dark marking at cord virtually interrupted at base of cell 1st  $M_2$ . Venation:  $Sc_1$  ending opposite midlength of  $R_s$ ,  $Sc_1$  alone much longer, exceeding vein  $R_2$  in length. Abdomen with sternal pocket of segment five with lateral setae fewer. Male hypopygium with apical spine of basistyle relatively short, less than the outer dististyle, appearing as a slightly arcuated rod that narrows gradually into an acute spine, margin of basal half with abundant setae. No secondary spine or spinule, as found in *bigladi* and *perproducta*.

Holotype, ♂, Quincemil, Cuzco, Peru, August 1962, Luis E. Peña col.

#### ***Teucholabis* (*Teucholabis*) *megaspatha*, sp. n.**

Allied to *hilaris* and *rubriceps*; general coloration of head and thorax orange, praescutum with a large oval black area on either side behind; knobs of halteres light yellow; posterior femora with base and apex black, posterior tibia with a modified glandular area near outer end; wings whitened, apex vaguely darkened, stigma and an area at arculus darkened, Sc relatively long; abdominal segments black, ringed with yellow; male hypopygium with phallo-

some bearing a very large oval darkened blade that extends some distance beyond apex of the small aedeagus.

### Male

Length about 6.5 mm; wing 6 mm; antenna about 1.5 mm.

Head, including rostrum, orange yellow, center of posterior vertex slightly darker, palpi black. Antennae with scape and pedicel brown, flagellum black; flagellar segments long-oval, exceeding their verticils.

Thorax polished orange, conspicuously patterned with black, on the praescutum including a large oval area on either side behind that attains the border; each scutal lobe with two contiguous brownish black marks; median region of notum, including scutellum, light yellow. Halteres with stem black, knob light yellow. Legs with coxae and trochanters of fore and middle legs yellow, posterior legs with trochanters and tips of coxae black; fore legs broken; middle femora yellow, apical fourth or more black, tibiae yellow, tips more narrowly blackened, tarsi brownish black; posterior femora with basal seventh and apical fourth black, the broad central part light yellow, remainder of leg brownish black to black; tibia with a modified glandular area about twice its length from tip, proximal fifth of basitarsus slightly dilated. Wings whitened, tip vaguely darkened, extending from vein  $R_4$  to  $M_3$ ; stigma darker brown, subcircular, cord very narrowly and insensibly darkened; a conspicuous brown prearcular spot; veins brown, darker at cord, more yellowed in the prearcular anal field. Venation:  $Sc_1$  ending opposite two-fifths  $Rs$ , in *hilaris* much shorter, at about one-fourth  $Rs$ .

Abdominal tergites black, outer segments with posterior borders narrowly yellowed; sternites bicolored, bases brownish black, apical half yellow, more uniformly yellowed on outer segments, styli of hypopygium black. Sternal pocket on segment five subcircular, with a more whitened circular central spot, all setae on cephalic margin, relatively short and abundant; pocket of sixth sternite with about 15 strong setae on either side of the broad central space. Male hypopygium with spine of basistyle broad and yellow at base, outwardly narrowed into a long darkened point, inner margin of base with abundant appressed yellow setae, outer margin of spine with microscopic spinules; outer mesal angle of style at base of spine produced into an acute black point; mesal flange very small, blackened, margin smooth. Outer dististyle a long simple gently sinuous rod, its tip an acute spine, surface with abundant setae, those of inner margin erect; inner style stout, terminating in a strong recurved spine, without a distinct basal lobe. Phallosome with a very large darkened blade that extends some distance beyond the small slender aedeagus, the latter with a pair of setae, the expanded blade with four longer setae near center of the disk.

Holotype, ♂, Libertad, 6 km southeast of Tena, Napo-Pastaza, Ecuador, May 10-12, 1963, Luis E. Peña col.

The closest relatives of this species are *Teucholabis* (*Teucholabis*) *hilaris* Alexander, *T. (T.) rubriceps* Alexander, and *T. (T.) subrubriceps* Alexander, all differing in details of coloration and especially in hypopygial structure, including the phallosome. The holotype male of *hilaris* formerly was preserved in the Hungarian

National Museum but was destroyed in 1956 during the riots in Budapest. A paratype male is in the author's collection.

**Teucholabis (Teucholabis) metatibiata, sp. n.**

General coloration of entire body polished black; rostrum elongate, subequal to remainder of head; knobs of halteres obscure yellow; legs with femora yellow, tips narrowly brownish black, the amount subequal on all legs, posterior tibiae with outer two-fifths darker and slightly more enlarged; wings very weakly tinted, unpatterned except for the small light brown stigma; male hypopygium with outer dististyle slender, strongly dilated at midlength, with a strong marginal spine, inner style with blade elongate, with a single apical spine; terminal spine of aedeagus slender.

**Male**

Length about 6 mm; wing 5 mm; antenna about 0.8 mm.

Rostrum elongate, subequal to remainder of head, black, palpi black. Antennae black, flagellar segments oval. Head polished black.

Pronotal scutum black, scutellum yellow. Mesonotum black, humeral region of praescutum and ends of suture slightly more yellowed. Pleura brownish black, with a vague longitudinal paler stripe. Halteres brownish black, knob elongate, obscure yellow. Legs with fore coxae brown, remaining coxae and all trochanters yellow; femora yellow, tips narrowly brownish black, subequal in amount on all legs, on posterior pair including about the outer eighth; tibiae brown, the posterior pair yellowed, the outer two-fifths darker and slightly more enlarged, tarsi black. Wings very weakly tinted, prearcular field light yellow; stigma small, short-oval, light brown; veins brown, slightly darker along cord, more yellowed in the brightened base. Venation: Sc<sub>1</sub> ending about opposite two-fifths the length of Rs; cell 1st M<sub>2</sub> elongate, nearly equal to vein M<sub>1+2</sub> beyond it.

Abdomen, including hypopygium, black. Sternal pockets weak, on segment five larger but indistinct, with small setae; segment six with a similar pale center with few weak marginal setae. Male hypopygium of holotype with spine of basistyle broad-based, narrowed outwardly into a blackened point, inner margin with a fringe of long yellow setae, in the paratype the spine longer and more uniformly slender; mesal flange with margin only weakly crenulate. Outer dististyle with basal third slender, thence strongly dilated, outer fourth suddenly narrowed, inner margin with a strong spine; inner style with blade long, with a single apical spine, basal lobe small, with three setae. Apical spine of aedeagus slender.

Holotype, ♂, Quincemil, Cuzco, Peru, August 1962, Luis E. Peña col. Paratopotype, ♂, with the type.

The most similar species include *Teucholabis (Teucholabis) rectangularis* Alexander and *T. (T.) unicingulata* Alexander, which differ in details of the sternal pockets and hypopygia. The modification of the posterior tibia should be noted.

**Teucholabis (Teucholabis) perproducta, sp. n.**

Allied to *bigladi*; size medium (wing of male over 6 mm); general coloration of thorax and abdomen black; rostrum, antennae and halteres black; fore femora yellow on proximal half, remainder black; wings whitened, very heavily banded with dark brown, including also a conspicuous spot at arculus; abdomen with sternal pocket of segment five triangular in outline; male hypopygium with apex of basistyle produced directly caudad into a blade that is farther extended into a spine; outer dististyle a simple rod, inner style with beak large, bidentate.

**Male**

Length about 8 mm; wing 6.5 mm; antenna about 1.5 mm.

Rostrum black, about one-third the remainder of head, palpi black. Antennae black; flagellar segments long-oval, terminal segment about two-thirds the penultimate. Head dark brown, paler on genae and beneath.

Pronotum above obscure reddish brown, sides blackened. Mesothorax polished black, pleura with a small pruinose area above the mid-coxa. Halteres black, extreme base of stem vaguely paler. Legs with all coxae black, trochanters brown, posterior pair black; a single leg (fore) remains, femora with proximal half yellow, remainder of leg black, proximal part of basitarsus paler. Wings whitened, with three very conspicuous dark brown bands additional to a large spot at arculus; basal band broad, from origin of Rs to tip of vein 2nd A, slightly widened in cell M, second band at cord, the cephalic end more intense, stigma not further differentiated, the band constricted at M; wing tip very broadly brown, including all cells beyond level of outer end of cell 1st M<sub>2</sub>, including also a slightly darker seam at outer end of the latter; prearcular and costal fields slightly more yellowed; veins brown, darker along cord, prearcular veins yellowed. Venation: Sc long, Sc<sub>1</sub> ending about opposite midlength of Rs, R<sub>2</sub> just beyond the fork of Rs.

Abdomen black throughout. Sternal pocket of segment five large, triangular in outline, the point directed cephalad, center with very abundant microscopic black points, lateral setae numerous, of moderate size; sternite six with about a dozen scarcely modified setae on either side of median area. Male hypopygium with basistyle narrowed outwardly, produced into a blade that is extended into a long spine, margin of blade before the spine with relatively few yellow setae, margin of blade at base with a microscopic erect black spine; mesal flange conspicuous, appearing as a projecting knob with several strong setae. Outer dististyle a slender simple rod, narrowed outwardly, terminating abruptly in a microscopic spine, setae long but relatively sparse; inner style with beak large, bidentate, the teeth spinelike. Aedeagus blackened, with four setae, the abruptly narrowed apex cylindrical.

Holotype, ♂, Libertad, 6 km southeast of Tena, Napo-Pastaza, Ecuador, May 11, 1963, Luis E. Peña col.

The closest relative of the present fly is *Teucholabis (Teucholabis) bigladi* Alexander which is distinguished chiefly by hypopygial structure, including the apical blade of the basistyle;

in the present fly the second inner spine found in *bigladi*a is reduced to a microscopic blackened point. A third related species is *T. (T.) lipacantha*, sp. n., which again has the apical blade of the style quite distinct, as described.

**Teucholabis (Teucholabis) schistostyla**, sp. n.

Allied to *nocturna*; general coloration of body black, thoracic pleura more pruinose; rostrum long, subequal to remainder of head; halteres black, knob vaguely more yellowed; legs black; wings whitened, the tip narrowly brown, Sc long; male hypopygium with spine of basistyle long and slender, outer dististyle broad, profoundly divided into two unequal arms, the outer one slender, inner style unusually narrow, without a lower beak.

Male

Length about 7 mm; wing 6 mm.

Rostrum black, unusually long, subequal to remainder of head, palpi black. Antennae black. Head polished black.

Pronotum black, pretergites light yellow. Mesonotum black, surface slightly opaque by a faint bloom. Pleura chiefly gray pruinose, ventral sternopleurite and anepisternum black, dorso-pleural membrane light yellow. Halteres black, knob very vaguely more yellowed. Legs with coxae and trochanters black, remainder of legs (fore pair lacking) black; posterior basitarsi dilated on nearly the proximal third. Wings whitened, prearcular field light yellow; wing tip narrowly brown, extending from cell  $R_2$  into  $M_3$ , stigma oval, dark brown; veins brownish black. Venation: Sc long,  $Sc_1$  ending about opposite three-fifths Rs; m-cu shortly beyond fork of M.

Abdomen black throughout, surface subnitidous. Sternal pocket on segment five large, the center darkened by microscopic setae, marginal setae black, conspicuous, surrounding the pocket except at posterior end, segment six with about six or seven strong black setae on either side. Male hypopygium with spine of basistyle long and slender, tip acute, blackened; mesal flange conspicuous. Outer dististyle large, profoundly divided, outer arm slender, inner arm broad, its tip acute; inner style unusually narrow, the lower beak lacking; body of style with a low lobe that terminates in a small blackened point, near apex with a few strong black setae. Aedeagus with apical point a gently curved black hook, with two long setae at its base and two longer setae on back of the basal enlargement.

Holotype, ♂, Quincemil, Cuzco, Peru, August 1962, Luis E. Peña col.

The only closely related species is *Teucholabis (Teucholabis) nocturna* Alexander, of Venezuela, which differs especially in hypopygial structure, including the spine of the basistyle and both dististyles.

**Teucholabis (Teucholabis) sentosa**, sp. n.

General coloration of thorax yellowish brown above, light yellow on ventral pleura, above with three major black areas placed on

sides of praescutum and on dorsal pleurites; wings with the restricted ground obscure yellow, disk with extensive pale brown markings; male hypopygium with apical spine of basistyle a broad blade, the outer margin serrulate; outer dististyle a slender simple spine.

### Male

Length about 6.3-6.5 mm; wing 5.8-6.2 mm.

Rostrum yellow, about one-half the remainder of head; palpi and antennae black, flagellar segments oval, smaller and more slender outwardly. Head above dark brown, beneath more brightened.

Pronotum brownish yellow. Mesonotal praescutum medially polished yellowish brown, blackened in front and before suture, sides with a major polished black area; posterior sclerites of notum obscure yellow, scutal lobes slightly more darkened, posterior border of mediotergite broadly black. Pleura yellow on ventral half, with a more whitened longitudinal stripe, dorsal pleura brownish yellow with two major black circular areas. Halteres dark brown. Legs with coxae and trochanters yellow; fore femora dark brown, basal third yellowed, tibiae and tarsi dark brown to brownish black; middle and hind femora and tibiae yellow, the latter clearer, tips narrowly and vaguely darkened; tarsi black, proximal end of posterior basitarsus slightly dilated. Wings with the restricted ground obscure yellow, including the basal fifth and a band before cord together with much of the costal border to beyond stigma; remainder of wing paler brown, including virtually all cells beyond cord and a broad band extending from Rs to Cu across the basal cells, cells Cu and the Anals with the exception of their bases paler brown; stigma dark brown, conspicuous; veins brown. Venation: Sc long, Sc<sub>1</sub> ending about opposite two-thirds Rs; branches of Rs generally parallel to one another throughout their lengths.

Abdominal tergites brownish black, basal sternites light yellow, patterned with brown, outer sternites darkened, eighth and ninth segments yellow, styli brownish black. Sternal pocket on segment five longitudinally oval, with numerous setae on all sides except posterior end, center of pocket without major setae; pocket of segment six with about five or six very weak and inconspicuous setae on either side directed mesad. Male hypopygium with spine of basistyle a broad conspicuously darkened blade, outer margin of distal half with microscopic serrulations, apex narrowed into a long black spine; margin at base of spine with a pencil of long yellow setae, the longest virtually equal to the spine, the row extended basad on face of blade for about one-half its length; mesal flange darkened, margins smooth; setae at apex of basistyle black, very long, nearly equal in length to the blade. Outer dististyle a slender simple yellow spine that is nearly as long as the blade of the basistyle, slightly dilated at near midlength, thence narrowed into a long slender point, surface with very sparse small setae; tip of inner style conspicuously bidentate. Apex of aedeagus narrowed to a cylindrical blackened rod.

Holotype, ♂, Libertad, 6 km southeast of Tena, Napo-Pastaza, May 10-12, 1963, Luis E. Peña col.. Paratopotypes, 3 ♂♂, with the

type. Paratypes, 2 ♂♂, Quincemil, Cuzco, Peru, August 18 and October 15-20, 1962, Luis E. Peña col..

In its general appearance *Teucholabis* (*Teucholabis*) *sentosa* suggests species such as *T. (T.) atripennis* Alexander and *T. (T.) mythica* Alexander, but is quite distinct in hypopygial structure, particularly the outer dististyle and armature of the basistyle.

### ***Teucholabis* (*Teucholabis*) *wirthiana*, sp. n.**

General coloration of body yellow, including the short rostrum; mesonotal praescutum with a conspicuous subcircular black spot on either side; halteres and legs yellow; wings light yellow, prearcular and costal fields more saturated, stigma brown, vein Sc long; male hypopygium with spine of basistyle distinctive, apically with two long points; outer dististyle with a small lateral spine, inner style without a lower beak.

#### **Male**

Length about 6 mm; wing 5.3 mm; antenna about 0.9 mm.

Rostrum light yellow, relatively short, slightly more than one-third the remainder of head, palpi obscure yellow, indistinctly patterned with light brown. Antennae short; scape and pedicel light yellow, flagellum light brown, incisures of the more proximal segments narrowly pale, outer segments darker brown; flagellar verticils much exceeding the segments, especially the more proximal ones. Head light yellow, the broad vertex light gray, its center weakly more darkened.

Prothorax yellow. Mesonotum fulvous yellow, praescutum on either side with a single subcircular black spot at more than its own diameter from margin, central region of praescutum vaguely more fuscous. Pleura almost uniformly yellow. Halteres pale yellow, knobs more saturated yellow. Legs with coxae and trochanters yellow; remainder of legs yellow, fore femora with extreme tip light brown, outer tarsal segments more infuscated; posterior basitarsi with proximal sixth slightly dilated. Wings light yellow, prearcular and costal fields somewhat more saturated, stigma small, oval, brown; veins yellow, m and veins comprising the cord brown. Venation: Sc relatively long, Sc<sub>1</sub> ending about opposite two-thirds Rs, cells R<sub>2</sub> and R<sub>4</sub> at margin subequal in extent.

Abdomen yellow, the segments vaguely more darkened basally, the pattern produced by dense microscopic black setulae. Sternal pocket of segment five indicated by a grouping of about a dozen long setae on either side of a narrow central unmodified area, setae darkened basally, outer ends pale, all such setae contiguous or decussate at midline; no setal modifications on sixth sternite. Male hypopygium with spine of basistyle distinctive, glabrous, broadly flattened, outer end slightly expanded, terminating in two long acute black points, the axial one slightly longer; mesal flange undeveloped. Outer dististyle a pale rod, at near two-thirds the length with an acute subappressed spine; inner style with beak blackened, elongate, cultriform, without a lower beak or clearly defined basal lobe. Aedeagus with base dilated, with four setae, apex extended, tip blackened, obtuse and weakly bilobed.

Holotype, ♂, Libertad, 6 km southeast of Tena, Napo-Pastaza, Ecuador, May 10-12, 1963, Luis E. Peña col..

I dedicate this species to Willis W. Wirth, outstanding student of the Diptera, co-author of the invaluable *Catalog of the Diptera of America north of Mexico* (Washington, 1965). In its general appearance *Teucholabis (Teucholabis) wirthiana* is similar to *T. (T.) jocosa* Alexander and some allied species, differing in all details of the male hypopygium, particularly the basistyle and outer dististyle, as well as in the very different sternal pocket. The bispinous terminal spine of the basistyle suggests the condition in *T. (T.) biramosa* Alexander, *T. (T.) scabrosa* Alexander, and *T. (T.) spica* Alexander, all quite distinct in other features.

