

Measurements:	BL	TL	WL	WW
Male	1.98-2.17	0.77-0.82	1.92-2.06	0.77
Female	2.36	0.85	2.14	0.71

TYPE MATERIAL: PANAMA.—Holotype male from *Anoura geoffroyi lasiopyga* (host no. 6218), Casa Lewis, Cerro Punta (Chiriquí), elevation above 5000 feet, 4 May 1960, C. M. Keenan and V. J. Tipton. In the collection of Chicago Natural History Museum.

Paratypes.—From *A. g. lasiopyga*: a male, Cerro Hoya (Los Santos), elevation 1500-3200 feet, 11 February 1962. GUATEMALA.—From *A. g. lasiopyga*: a male, Santa Elena (Chimaltenango), 10,000 feet elevation, 26 January 1934, F. J. W. Schmidt, Field Museum-Leon Mandel Guatemala Zoological Expedition. From *Anoura* sp. (CNHM cat. no. 73362): a male and female, San Lorenzo, 4 mi. NE of Volcan de Jumay (Jalapa), elevation 3750 feet, 15 February 1952, L. de la Torre, CNHM Guatemala Zoological Expedition (1951-52). MEXICO.—From *A. g. lasiopyga*: 1, Santa Lucia (Sinaloa), elevation 3200 feet, 28 July 1963, J. Knox Jones. TRINIDAD.—From *Anoura geoffroyi* [*geoffroyi*]: a male, Aripo Cave, 19 March 1955, W. G. Davis [RML no. 33590]; a male, Tamana Caves, 11 December 1954, C. C. Sanborn, CNHM Trinidad Zoological Field Trip. Paratypes to be deposited in the collections of Chicago Natural History Museum; the United States National Museum; and the Environmental Health Branch, USAFSC, at Corozal (Canal Zone).

OTHER MATERIAL EXAMINED: 3, without host identification, from Cueva Nanarita, Hacienda El Marne (Santa Ana), EL SALVADOR, 960 meters elevation, H. Felten [SNI].

REMARKS: *A. modestini* appears to be restricted to *Anoura geoffroyi*. It is named for Mr. Sulpice Modestin of the Environmental Health Branch, at Corozal (Canal Zone), in appreciation of his assistance in the field.

**Anastrebla mattadeni** Wenzel, new species. Figures 138B; 139E, F.

Easily distinguished from *A. nycteridis* n.sp. and *modestini* n.sp. by the long slender setae of postvertex and occiput (fig. 139E); from *modestini* which has similar eyes and laterovertex, it may further be separated by its very different mesonotal chaetotaxy (fig. 138B).

DESCRIPTION: *Head*.—Anterior division of laterovertex with nine or ten setae. Dorsal sclerite of postgena with a conspicuous heavy posterior macroseta which is much longer than the remiform seta and extends beyond occiput. Postvertex and occiput with five pairs of long, tapering macrosetae which are gradually shorter toward sides, the inner pair conspicuously longer than the outer. Eyes strongly projecting, multi-faceted, seven or eight facets visible from above. Ventral ante-ctenial area much wider than long (29:21.5).

*Thorax* (fig. 138B).—Prescutum with pigmented suture; epaulets diagonal, with four strong short setae; arc consisting of four to five strong conspicuous setae, no discal setae anterior to them; setae of arc nearly twice as long as discals, interval between transverse mesonotal suture and second pigmented suture with four transverse rows of setae toward side, but five or six along middle, where setose area extends anteriorly to a point just beyond level of second suture. Antescutellar row of setae consisting of about 12-14 long very strong setae shorter at middle, longer laterally, the shortest one not quite twice as long as the longest discal scutal setae, of which there are a single irregular transverse row at middle and two to three laterally. *Wings*.—R<sub>1</sub> and R<sub>s</sub> without setae

basally, ( $R_s$  sometimes without any setae), fourth sometimes bare at base; sixth without setae basally, as usual.  $R_s$  nearly twice as long (20.5:11–12) as distance from fork to crossvein  $r-m$ . Third crossvein strongly bent and recurrent. Protibiae with a double row of 10–12 longer strong setae, the apical ones macrosetae; mesotibiae with 14–16 strong setae; metatibiae with short setae only. Pro- and mesofemora with a few macrosetae dorsally and laterally on apical half, metafemora with a conspicuous dorsal row of six to eight macrosetae. First segment of all tarsi as long as the next three; underside of hind tarsi with a double row of stronger plantar bristles that are longer than the others, the outer row of about four much stronger; lateral to these are minute plantars; succeeding segments with minute plantars.

*Abdomen*.—Dorsal inner margins of lateral lobes of tergum I+II with five to six very long, thin setae; anterior face with about five short setae. Sternum II strongly, densely setose in a median triangular area which extends to about basal fourth; apical margin with 20–22 longer setae along apical margin, two of them macrosetae, one each side of middle, with seven or eight setae between them. *Female*: Dorsal connexivum with a few longer setae at base and a few in a single row along inner margin of each lateral setose area, the others very short, about half as long as ventral connexival setae; four pairs of widely separated short segmental setae. Tergum VII with a pair of exceptionally long macrosetae; medial and posterior to these a pair of very short setae. Supra-anal plate with four apical macrosetae and just anterior to them a pair of very short widely separated setae. Seventh sternites with 11–12 long setae, five to seven of them long macrosetae, several of these exceptionally long. Ventral arc not produced, though there is a lobe-like, apparently non-sclerotized, microsetose area extending anteriorly from its dorsal edge; arc with a single pair of short setae. *Male*: Sternum V not differentiated. Hypopygium well developed, with a short seta and two or three macrosetae on each side of sternum VII+VIII, and a row of about eight macrosetae along dorsum and sides of tergum IX.

<i>Measurements</i> :	BL	TL	WL	WW
Male	2.05–2.14	0.77–0.82	1.84–1.92	0.77–0.82
Female	2.17–2.31	0.82	1.98–2.17	0.81–0.89

TYPE MATERIAL: PANAMA.—Holotype male (slide) and allotype female (alcohol) from *Anoura cultrata* (host no. 8593), upper Río Changena Camp (Bocas del Toro), elevation 2500 feet, 27 September 1961, C. M. Keenan and V. J. Tipton. In the collection of Chicago Natural History Museum.

Paratypes.—From *Anoura cultrata*: 15 (2 bats), Cerro Malí (Darién), elevation 4100–4800 feet, 2 and 13 February 1964, C. O. Handley, Jr.; 2 (2 bats), Cerro Tacarcuna (Darién), elevation 4100–4800 feet, 20 February and 9 March, Handley. From *Anoura geoffroyi lasiopyga*: 1, Rancho Mojica (Bocas del Toro), elevation 4800 feet, 12 September 1961. VENEZUELA (Rancho Grande [Aragua], 30 March 1961, C. O. Handley, Jr.).—From *Anoura g. lasiopyga*: 3 (2 bats). From *Anoura aculeata*: 5 (2 bats). From *Enchisthenes hartii*: 1. Paratypes to be deposited in the collections of Chicago Natural History Museum; the United States National Museum; the Environmental Health Branch, USAFSC, at Corozal (Canal Zone); the Departamento de Zoologia, Secretaria da Agricultura, São Paulo, Brazil; and the Facultad de Ciencias, Universidad de Venezuela.

REMARKS: This species is named for Mr. Edmond Mattaden of the Environmental Health Branch, at Corozal (Canal Zone) in appreciation of his assistance in the field and in the laboratory.

*A. mattadeni* is recorded from three species of *Anoura*. However, we suspect that it is primarily a parasite of *A. cultrata* and *A. aculeata* and that the records from *A. g. lasiopyga* may be in error, either because of misidenti-

fication of the host or contamination in the field. The record from *Enchisthenes hartii* is obviously doubtful and probably represents a contamination.

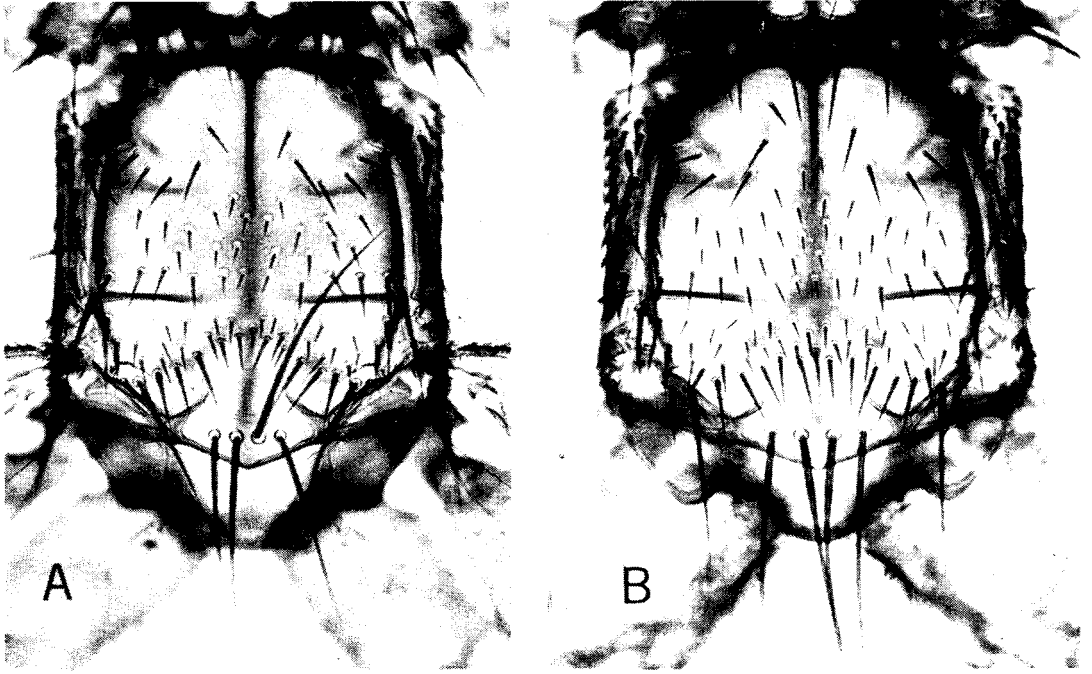


Fig. 138. Thorax, dorsal view. A, *Anastrebla modestini*, new species, male paratype from *Anoura geoffroyi lasiopyga* (no. 6218), Casa Lewis (Chiriquí). B, *A. mattadeni*, new species, paratype from *A. g. lasiopyga* (no. 5343), Rancho Grande (Aragua), VENEZUELA.

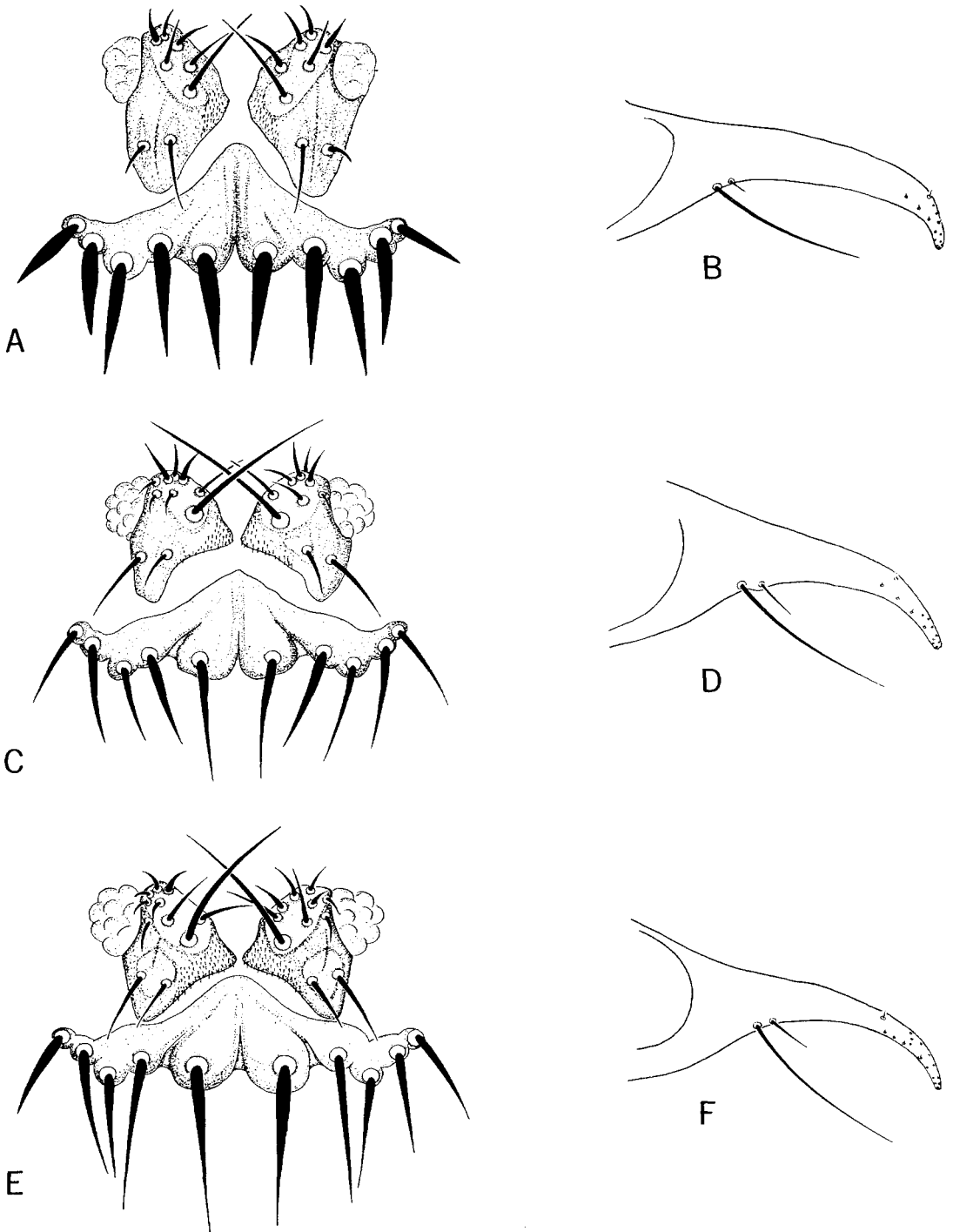


Fig. 139. A and B, *Anastrebla nycteridis*, holotype; A, laterovertices, postvertex, and occipital plates (of head); B, left male gonapophysis. C and D, *Anastrebla modestini*, new species, same structures; C, male paratype from *Anoura g. geoffroyi* (C. C. Sanborn no. 552), Tamana Caves, TRINIDAD; D, holotype male. E and F, *Anastrebla mattadeni*, new species; E, female paratype from *Anoura aculeata* (no. 5344), Rancho Grande (Aragua), VENEZUELA; F, paratype from *Anoura geoffroyi* (no. 5343), same locality.