# STUDIES ON THE FAUNA OF CURAÇÃO AND OTHER CARIBBEAN ISLANDS: No. 100.

# THE COLEOPTERA CERAMBYCIDAE OF CURAÇAO, BONAIRE AND ARUBA

by

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During general examination of the West Indian Coleoptera Cerambycidae small amounts of material from the Dutch West Indian islands of Curaçao, Bonaire and Aruba came to hand. Following this, Dr. WAGENAAR HUMMELINCK of Utrecht, and Ir. COBBEN of Wageningen, searched their collections and produced fairly considerable numbers of specimens for examination. A personal search amongst the undetermined material in the Zoölogisch Museum, Amsterdam, produced more material, and a little more was found in the Rijksmuseum van Natuurlijke Historie, Leiden. A small quantity of material from Curaçao, from Drs. B. DE JONG, was already in my collection, and this agglomeration of material, collected over a period of years, has given, I think, a reasonable preliminary sample to show the extent of the Cerambycid fauna of the triumvirate under consideration herein.

The main affinities of the fauna of these islands appears to be with that of South America, several of the species being widely distributed in the Neotropics. However, there are considerable affinities of genera and species with those of the Antilles.

So far as I can discover, there are no previous records whatsoever for the islands of Aruba and Bonaire, and scarcely any for Curaçao, consequently virtually all herein are new records.

Twenty-eight species are recorded herein from the three islands, of which ten are described as new, as well as one new genus. Of these twenty-eight, thirteen are recorded only from Curaçao, five from Curaçao and Bonaire, two from Curaçao and Aruba, three from Curaçao, Bonaire and Aruba, and four from Aruba, taking these islands as an entity, although some are more widely distributed.

In the same island group there appear to be no records for, nor have I seen any material from, the islands of Klein Curaçao and Klein Bonaire.

The new species (nine) and subspecies (one) described in this paper are as follows: Eburia bonairensis sp. nov. (Curaçao, Bonaire); Elaphidion curaçaoae sp. nov. (Curaçao); Anelaphus curaçaoensis sp. nov. (Curaçao); Methia trium sp. nov. (Curaçao, Bonaire, Aruba); Atenizoides curaçaoae gen. nov. sp. nov. (Curaçao); Stizocera curaçaoae sp. nov. (Curaçao); S. insolita sp. nov. (Curaçao); Heterachthes arubae sp. nov. (Aruba); Lagocheirus araneiformis (Linn.) subsp. curaçaoensis nov. (Curaçao, Bonaire), and Urgleptes hummelincki sp. nov. (Aruba).

One new synonym is given, namely, *Eburia virginensis* Gilmour (1964) is synonymised with *Eburia thoracica* White (1853).

My most grateful thanks are due to the following for their great help and kind welcome to me, in seeing the collections under their care and the loan of material: Dr. P. WAGENAAR HUMMELINCK (Zoölogisch Laboratorium der Rijksuniversiteit, Utrecht), Ir. R. H. COBBEN (Laboratorium voor Entomologie der Landbouwhogeschool, Wageningen), Drs. C. A. W. JEEKEL (Zoölogisch Museum, Amsterdam), Dr. J. T. WIEBES and Drs. P. H. VAN DOESBURG Jr. (Rijksmuseum van Natuurlijke Historie, Leiden). Similarly my thanks are due to the following for material sent: Drs. B. DE JONG (Curacao), Dr. R. Malaise (Stockholm), and Dipl. Ing. E. FUCHS (Vienna).

Grateful thanks are also due to Dr. A. VILLIERS (Museum National d'Histoire Naturelle, Paris) and Dr. J. D'AGUILAR (Station Centrale de Zoologie Agricole, Versailles), for the loan of comparative material from Guadeloupe.

Collection	Cura- çao	Bo- naire	Aru- ba	Total
Zoölogisch Museum, Amsterdam [= A]	105	44	9	158
Rijksmuseum van Natuurlijke Historie, Leiden	<b>`</b> .			
[= L]	4	-	—	4
Zoölogisch Museum, Utrecht $[= U]$ (Hummelinck)	267	1	27	295
Laboratorium voor Entomologie, Wageningen				
[= W] (Cobben)	82	61	10	153
Gilmour Collection, Doncaster [= EFG] (de Jong)	26	— —		26
Fuchs Collection, Wien	I I	1		1
Naturhistoriska Riksmuseet, Stockholm	-	1	_	1
Grand Totals	484	108	46	638

#### SUMMARY OF MATERIAL EXAMINED

I would also like to acknowledge the valuable assistance which I have received from Dr. J. A. CHEMSAK of Berkeley, California, in consideration of the Methiini and Elaphidionini dealt with in this paper.

Finally, my thanks are due to Mr. C. J. DEVLIN, of the Department of Natural Sciences, Doncaster Museum, for taking the photographs for the plates.

### DISTRIBUTION OF SPECIES

<b>\</b>	Curaçao	Aruba	Bonaire	Greater Antilles	Lesser Antilles	S. American mainland	Neotropics generally
······	1		1				i –
Stenodontes (M.) spinibarbis (Linnaeus)	×	×			?	×	×
CERAMBYCINAR							
Eburia thoracica White	× I		•				
Eburia honairensis sp. nov.	ΙŶ.				^		
Anelabhus subtrobicus Casey				×	×		
Anelaphus curacagensis sp. nov.	$ \hat{\mathbf{x}} $			^			
Elaphidion irroratum Linnaeus			×				
Elaphidion conspersum Newman			$\left  \begin{array}{c} \hat{\mathbf{x}} \\ \hat{\mathbf{x}} \end{array} \right $				
Elaphidion curacaoae sp. nov.	1 x		$ ^{}$				
Stizocera curacaoae sp. nov.	$\mathbf{x}$						
Stizocera insolita sp. nov.							
Curtomerus tlavus (Fabricius)			X	×	×	•	
Methia trium SD. DOV.			$\left  \right\rangle$				
Atenizoides curacaoae gen, nov., sp. nov.							
Callichroma (M.) vittata (Fabricius)	Î,						
Achryson surinamum (Linnaeus)	$\hat{\mathbf{x}}$	×	×	×	×	x	×
Achryson ornationne Perroud					x .		
Oxymerus lebasi Dupont	x					x	
Heterachthes arubae sp. nov.		×					
LAMIINAE							
Acanthoderes (P.) circum/lexa DuVal	X		}	x	×		
Lagocheirus araneiformis (Linnaeus)							
subsp. curaçuoensis nov.		×	×				
Leptostytopsis argentatus (Du val)				×			
Urgiepies coolent Glimour	×		×	l.	×		
Ungleptes nummetincki sp. nov.		×					
Nussadrusing haldamanni LaCopta	1Č				^		
Devegata dagugena Erichaon	×				ł		
Doreusia adsycera Effenson		×				l Č	
Estalaidas hariarata Batan	1 Č		1		^		^
Estototaes perforata Dates	I X	I	1	1	1	۲.	1



Fig. 104. CURAÇAO, ARUBA and BONAIRE are situated 12°19'-12°37'30" N. Lat., 68°12'-70°4' W. Long. Their climate may be 425 km², greatest length 59 km, highest point 372 m; 76 km E of Aruba, 64 km from the peninsula of Paraguaná (Ven.). AruBa: about 175 km², greatest length 30 km, highest point 188 m; 27 km N of Paraguaná, 200 km E of the peninsula of La Goajira defined by a prolonged dry season and an erratic rainfall of about 400–600 mm a year (Oct.–Jan. being the "wettest" months), with a mean annual temperature of about 27°C, and a mean wind velocity of about 5 m/sec (3.4 Beaufort). – CURAÇAO: abt. (Col). BONAIRE: abt. 265 km<sup>2</sup>, greatest length 35 km, highest point 243 km; 40 km E of Curaçao, 87 km from the continent.

# Subfamily PRIONINAE

# Tribe MACROTOMINI

One genus of this world-wide distributed tribe is recorded from the islands under consideration.

## Subtribe stenodontina

### Genus STENODONTES Serville, 1832

### Subgenus MALLODON Serville, 1832

One widely distributed Neotropical species of this subgenus is recorded herein from Curaçao and Aruba.

# Stenodontes (Mallodon) spinibarbis (Linn.)

(Plate IX figs. 1-2)

Cerambyx spinibarbis LINN., 1758, Syst. Nat., ed. 10, p. 390.

Prionus spinibarbis: FABR., 1775, Syst. Ent., p. 163.

Armiger frangens VOET, 1778, Cat. Col. 2, 2, pl. 1 f. 2.

Armiger miles VOET, l.c., 2, pl. 1 f. 3.

Prionus spinibarbis: FABR., 1787, Mant. Ins. 1, p. 130.

Prionus spinibarbis: FABR., 1792, Ent. Syst. 1 (2), p. 249.

Prionus maxillosus OLIV., 1795, Ent. 4, (66), 16, pl. 1 f. 3.

Prionus spinibarbis: FABR., 1801, Syst. Eleuth. 2, p. 263.

Prionus dentatus FABR., 1801, l.c.

Prionus spinibarbis: TURTON, 1802, Syst. Nat. 2, p. 292.

Prionus maxillosus: TURTON, 1802, l.c.

Prionus similis Schönn., 1817, Syn. Ins. 1 (3), p. 345.

Prionus gagatinus GERMAR, 1824, Ins. Spec. Nov., p. 468.

Mallodon spinibarbe: WHITE, 1853, Cat. Col. Brit. Mus. 7, p. 43.

Mallodon spinibarbe: ROJAS, 1866, Ann. Soc. Ent. Fr. (4) 6, p. 238, (Biol.).

Mallodon spinibarbis: BATES, 1869, Trans. Ent. Soc. Lond., p. 46.

Mallodon germarii THOMSON, 1867, Physis 1; p. 100.

Stenodontes spinibarbis: LAMEERE, 1902, Mem. Soc. Ent. Belg. 9, p. 75 (Rev. p. 135). Stenodontes spinibarbis: HELLER, 1904, Stett. Ent. Zeit. 65, p. 391, pl. 4 (rt.), 5 f. 12. (Biol.).

Stenodontes spinibarbis: MELZER, 1919, Rev. Mus. Paulista 11, p. 45–47, pl. 2 f. 6–7. Stenodontes spinibarbis: WILLIAMS, 1929, Ann. Carnegie Mus. 19 (2), p. 143, pl. 4 f. 1. Stenodontes gegatina: WILLIAMS, 1929, l.c., p. 142.

Stenodontes spinibarbis: VIVAS-BERTHIER, 1942, Bol. Ent. Venez. 1 (2), p. 39.

Stenodontes spinibarbis: GUERIN, 1953, Col. Brasil, p. 330, pl. 40 f. 493.

Stenodontes (Mallodon) spinibarbis: GILMOUR, 1954, Bull. Inst. Roy. Sci. Nat. Belg. 30 (24), p. 6.

Stenodontes spinibarbis: BAUCKE, 1955, Agronom. Sulriograndense 2 (1), p. 78.

Stenodontes spinibarbis: COSTA LIMA. 1955, Ins. Brasil 9 (3), p. 86 (nota biol.).

Male: Of large size, robust, subdepressed.

Colour dark brown to black or nearly; nitid.

Head with mandibles elongate, curved, with a posterior internal tooth usually bifid. Jugular process unidentate. Pronotum very broad, as broad as elytra, subdepressed, finely and closely punctured, with smooth, nitid spaces: - a basal band, two large discal areas, and a small lateral internal area.

Elytra finely, but visibly punctured.

Antennae extending to about middle of elytra; scape distinctly passing the posterior border of eyes, distinctly curved.

Female: Pronotum narrower than in male; disc more or less smooth, fine punctation of male replaced by a coarser punctation. Antennae extending to about basal third of elytra.

Length: 29.5-67 mm. Breadth: 9.5-20 mm.

MEXICO to ARGENTINA, East of the Andes.

CURAÇAO: Agric. Station, 20. XI. 1948, B. A. Bitter coll.  $(1 \ coldsymbol{Q}, A)$ ; 20. I. 1949, A. C. J. Burgers coll.  $(1 \ coldsymbol{z}, 1 \ coldsymbol{Q}, A)$ . — Jongbloed, 11. XII. 1952, B. de Jong  $(1 \ coldsymbol{Q}, A)$ . — Groot Piscadera, in dead *Swietenia*, 27. I. 1949, P. Wagenaar Hummelinck  $(2 \ coldsymbol{z}, A)$ . — Hato, XI. 1950, A. D. Ringma coll.  $(1 \ coldsymbol{z}, A)$ . — Julianadorp, V–VI. 1957, van Ypenburg coll.  $(1 \ coldsymbol{z}, W)$ . ARUBA: Oranjestad, at light, 12. XII. 1936, Hummelinck  $(1 \ coldsymbol{z}, A)$ .

# Subfamily CERAMBYCINAE

# Tribe METHIINI

#### OEMINI Lacord., et auct.

The Methiini are a widely distributed tribe. To date twenty-eight genera have been described from the American continents. I add a further new one herewith, and there are probably others awaiting discovery.

### **Key to Genera of American Methiini**

# (Adapted after LINSLEY, 1962 & 1964)

1.	Eyes only shallowly emarginate	2
	Eyes very deeply emarginate, lobes often connected by	
	only a single row of facets; vertex not tuberculate between	
	eyes	3

2.	Vertex with a large erect tubercle between upper lobes of eyes
-	Vertex unarmed, without any trace of a tubercle
3.	Antennal segments 3–5 with blunt spine at apex; coloration metallic green
-	Antennal segments $3-5$ without short spine at apex (or if so then denticulate beneath also $-$ <i>Neoeme</i> ); coloration testaceous to fuscous, never brightly metallic 4
4.	Elytra abbreviated, or if as long as abdomen, procoxal cavities contiguous, without prosternal process; pronotum angulate, sinuate or rounded laterally
-	nal process; pronotum rounded laterally
5.	Antennae with basal segments thickened, as wide as scape, third segment shorter than scape, metatarsi more than half as long as tibiae
-	Antennae with basal segments not distinctly thickened, more slender than scape, third segment longer than scape; metatarsi less than half as long as tibiae
6.	Pronotum distinctly longer than broad, subcylindrical, sides parallel of very feebly convex; femora clavate
-	Pronotum as wide or wider than long, rounded laterally, femora slender, not, or at most only very feebly clavate 7
7.	Elytra dehiscing suddenly from base, suture deeply arcuate; abdomen abbreviated, shorter than metathorax; metatarsi broad, flat, first segment barely longer than broad <i>Coleomethia</i> Linsley, 1940
-	Elytra at most dehiscing from middle, not base, and suture not arcuate
8. 	Elytra dehiscing from about middle . <i>Methioeme</i> Zajciw, 1963 Elytra gradually narrowing apically, suture entire; (abdo- men much longer than metathorax; metatarsi cylindrical,
	first segment at least twice as long as broad 9

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9.	Eyes with lobes completely separated, not connected by a line or row of facets
-	Eyes with dorsal and ventral lobes connected posteriorly by a
	line or by one or more rows of facets; antennal second segment
	cated laterally in female Methics Newman 1842
	(= Staphylinoeme Gounelle, 1913)
10.	Antennal second segment obsolete
_	Antennal second segment distinct, although short
	Paratessaropa Zajciw, 1957
11.	Pronotum with a large, flat plate basally
-	Pronotum normal, without such a dorsal plate 12
12.	Pro- and mesosternal processes shortly triangular, not pro-
	longed between coxae; (pronotum strongly sexually dimorphic,
	in male half longer than broad, almost straight laterally, narrow-
	ing anteriorly; in female about a sixth longer than broad,
	Stenoeme Councile 1909
_	Pro- and mesosternal processes not shortly triangular.
	mesosternal at least well produced between mesocoxae 13
13.	Pronotum angulate-dilate, tuberculate, or shortly spinous
	laterally
-	Pronotum unarmed laterally, usually rounded 17
14.	Pronotum elongate, with a small anterior and a large post-
	median lateral tubercle; (elytra without costae; procoxae con-
_	Pronotum subquadrate to transverse at most only uni-
	tuberculate laterally
15.	Elytral apices shortly spinous at sutural angle, each elytron
	with 3-4 rows of small tubercles; pronotum shortly spinous
	laterally, disc with small scattered tubercles
	Phrynocris Bates, 1867
-	Brytrai apres rounded, unarmed, with at least leeble cos-

	tae, not tubercles; pronotum not spinous laterally, at most obtusely tuberculate, disc not tuberculate thus 16
16.	Elytral apices separately rounded, each elytron with three strong longitudinal costae; pronotum rather strongly tubercu-
-	Elytral apices rounded together; each elytron with only a single feebly raised costa; pronotum angulate-dilate latero-medially 
17. _	Pronotum strongly constricted basally
18. _	Elytra each lengthily unispinous apically . <i>Niophis</i> Bates, 1867 Elytra unarmed apically, at most acuminate
19. -	Antennal scape spinous apically
20. _	Pro- and mesocoxae contiguous Temnopis Serville, 1834 Mesocoxae at least, not contiguous
21.	Prosternal process extremely narrow, laminiform, pointed api- cally
-	Prosternal process narrow, but not usually laminiform, not pointed, usually slightly widened apically
22.	Antennae with segments thickened; base of pronotum not impressed; eyes not embracing antennal insertions <i>Haplidoeme</i> Chemsak & Linsley, 1965
-	Antennae with segments filiform; base of pronotum im- pressed; eyes embracing antennal insertions
23.	Elytra each feebly tricostate; elytral apices broadly rounded together
-	Elytra not at all costate; elytral apices each rotundate- acuminate
24.	Prosternal process not broadened apically, antennae unarmed in both sexes
-	Prosternal process somewhat dilated apically; antennal seg- ments 3-5 finely denticulate beneath in male, subdenticulate in female

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25. _	Elytra apices bidentate or bispinose26Elytral apices unarmed, rounded27
26.	Elytra each bidentate apically, whole surface roughened with small scattered tubercles; pronotal disc uneven
-	Elytra each bispinous apically; surface smooth, without tu- cles; pronotal disc with three small tubercles
27.	Elytra without costae; (mesosternal process as broad as coxae anteriorly, strongly narrowed to apex; pronotal disc with five almost obsolete carinae; elytral apices shortly truncate; elytra about four times as long as pronotum). Jabaquara Lane, 1956

# Genus METHIA Newman, 1842

The species of this genus are small and delicate, usually with abbreviated elytra. The majority of species so far described are from the southern United States and Mexico, with a few others from parts of South America and the West Indies. A further new species is added herein.

### PROVISIONAL KEY TO SPECIES OF METHIA

(Except punctata LeConte, 1873, bicolor Horn, 1885, and incauta Lane, 1939, for which see end of Key)

(Adapted after LINSLEY, 1962 and CHEMSAK & LINSLEY, 1964)

1.	Mesonotal stridulatory plate with a median longitudinal	
	line	2
-	Mesonotal stridulatory plate without a median line	5

- 2. Eyes separated above by less than diameter of third antennal segment, below by about diameter of scape . . . .
- Eyes separated above by at the least little less than the diameter of scape, below by 1½ times greatest width of scape; (eye lobes connected by a double row of facets).

- 4. Colour reddish-brown, abdomen piceous; neck coarsely, moderately deeply punctate; antennal third segment subequal to fourth; (7 mm. California: Mojave Desert) . *falli* Martin, 1920
- Colour testaceous, head and abdomen piceous; neck indistinctly punctate; antennal third segment more robust than and distinctly longer than fourth; (6-8 mm. Arizona) . . . . . .

carinata Linsley, 1940

3

5. Eyes separated on vertex by about diameter or more of antennal scape in male, more widely in female.
6 - Eyes contiguous or subcontiguous on vertex separated by

Lyes contiguous of subcontiguous on vertex, separated by	
at most diameter of third antennal segment in male, up to	
diameter of scape in female	13
	at most diameter of third antennal segment in male, up to diameter of scape in female

- Eyes with upper and lower lobes connected by two rows of facets; head, pronotum, underside and legs orange, elytra, except around scutellum, black; (elytral costae vague) (8-9 mm. México: Est. México) . . . . . . . bicolorata Linsley, 1962

8.	Eyes separated above by more than twice the greatest diameter
	of the antennal scape, below by at least three times this diame-
	ter; (colour piceous with head, pronotum, base of elytra and
	scutelium yellow) (5.2 mm. 1exas) . xanthocours Knull, 1935
	Eyes separated above by less than twice greatest diameter
	of antennal scape, below by not more than twice this di-
	ameter
9.	Eyes separated above by more than greatest diameter of an-
	tennal scape; elytra each tricostate, testaceous, with dark vittae
	at humeri, basal quarter and along margins and suture, re-
	mainder of body darker brown; (7 mm. México: Hidalgo)
	subvittata Chemsak & Linsley, 1964
-	Eyes separated above by slightly less than greatest diame-
	ter of antennal scape; elytra without vittae 10
10.	Pale testaceous, head and abdomen darker; pubescence moder-
	ately long, suberect, brownish, intermixed with pale hairs;
	(8.5 mm. Arizona)
	Dark brownish; pubescence short, pale, recumbent, intermixed
	with longer erect hairs; (5 mm. Arizona) . dubia Linsley, 1940
11.	Form robust; antennal scape with a small apical tooth; colour
	black, opaque, elytra each with a large pale testaceous macula
	preapically; (4.75 mm. Arizona) acostata Linsley, 1940
-	Form slender; antennal scape not toothed apically; colour
	testaceous or piceo-fuscous
12	Eves separated above by at least the greatest diameter of an-
	tennal scape in male, by nearly this diameter in female. (elytra:
	$\cancel{2}$ 24 x pronotum 2 x breadth: 9 44 x pronotum 24 x
	breadth) (5-9 mm S E United States)
	busilla (Newman) 1840
12	Even with connecting piece of upper and lower lobes with
15.	Eyes with connecting piece of upper and lower lobes with-
	Free with upper and lower labor connected by at least one
-	Eyes with upper and lower lobes connected by at least one
14.	Uniformly pale yellow, except eyes black, subnitid; elytra four
	times as long as pronotum; (4.2–8.6 mm. Haiti)
	pallida Fisher, 1932

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-	Fuscous, opaque, except antennae, legs and elytra basally and suturally pale yellow-testaceous; elytra only slightly more than three times as long as pronotum; (5 mm. Brazil: Rio de Janeiro) 
15.	Eyes separated beneath by diameter of antennal scape or more
-	Eyes contiguous beneath or separated by less than diame- ter of antennal scape
16.	Eyes with upper and lower lobes connected by at least two rows of facets
-	Eyes with upper and lower lobes connected by only one row of facets
17.	Elytra at most barely covering first two abdominal segments, two and a quarter times as long as basal breadth ( $\mathcal{J}$ ) ( $\mathcal{Q}$ un- known); costae scarcely evident; (6.5 mm. S. California) <i>robusta</i> Linsley 1940
-	Elytra extending to abdominal apex or beyond; costae distinct
-	Form short, robust; pronotal disc with a small broad tubercle each side of middle prebasally, and a faint one each side pre- medially; (dark brown, elytra each with an elongate brownish- yellow patch behind scutellum and a diagonal vitta of same colour from humerus to suture at basal third) (14.4 mm. Texas: Chisos Mts.) lata Knull, 1958 Form elongate, slender; pronotum without tubercles 19
19.	Elytra uniformly black, or with pale vittae, or pale except apices; elytral basal punctures fine, sparse, widely separated; pronotum distinctly, closely punctured; (10-15 mm. Colorado and Utah to Arizona; Texas and México: Chihuahua) mormona Linell, 1896, (= mormonica Casey, 1924) = delicata Casey 1924)
	Elytra brownish, with distinct pale patches at base, basal third and apical third; elytral basal punctures dense, shallow, con- tiguous; propertum finely, subopaquely, rugulose; (13 mm

tiguous; pronotum finely, subopaquely rugulose; (13 mm. México: Hidalgo) . . . . maculosa Chemsak & Linsley, 1964

20. -	Elytral pubescence recurved, sparse or dense, pale or dark. 21 Elytral pubescence suberect, sparse, dark or pale 25
21.	Elytra dark with violaceous cast, pubescence dark, sparse; (7-12 mm. México: Chihuahua)
-	Elytra not violaceous, pubescence pale
22.	Elytral pubescence sparse, with a few longer, erect setae inter- spersed; (pronotal base strongly constricted, apical and basal transverse impressions strong) (6–8 mm. México: Quintana Roo – Cozumel Isl., Isla Mujures)
-	Elytral pubescence dense, with longer setae
23.	Pronotum strongly constricted basally, disc with rather flat but distinct calluses on sides of middle towards apical half; antennal basal segments annulated with darker bands at apex; elytra often pale or with pale maculae; (5–7 mm. S. Texas; Mexico: Tamaulipas) <i>constricticollis</i> Schaeffer, 1908 Pronotum gradually constricted from middle at base, disc without calluses; antennae concolorous
24.	Neck behind eyes scabrous, transversely rugulose; antennal scape with a strong apical tooth; elytra with very vague costae; (6.5 mm. Baja California) <i>subarmata</i> Linsley, 1942 Neck behind eyes distinctly punctate with central glabrous area; apical tooth of scape feeble; elytra distinctly costate; (7 mm. Lower California) <i>pallidipennis</i> Linsley, 1942
25.	Elytral pubescence dark; (colour fuscous with distinct pale vittae on elytra) (10 mm. México: Puebla)
-	Elytral pubescence pale
26.	Pronotal disc slightly concave, with an impressed, subglabrous, V-shaped area at middle beginning near basal margin; (5 mm. Virgin Islands: Jost Van Dyke) . <i>impressicollis</i> Chemsak, 1966 Pronotal disc without such an impression

27.	Pronotal disc with calluses	28
	Pronotal disc smooth, without calluses; (elytra flavous-	
	testaceous, with only apices darkened)	29

28. Pronotal disc with a longitudinal, arcuate, usually rufous callosity each side, disc punctate; antennal pubescence longer; (elytra, 2 Q Types: -3.2-3.25 × pronotum, 2.2-2.3 × breadth) (colour variable (?) from almost completely flavous (Types QQ) to (?) almost completely dark) (5-10 mm. locus typ. - St. Thomas, ? West Indian Islands) necydalea (Fabricius), 1793 (It is possible that several species are represented under this name from the Caribbean area)

 Pronotal disc with a round, glabrous, depressed callus at middle near base and two indistinct, raised calluses at basal margin, disc almost impunctate; antennal pubescence shorter; (colour pale, elytra pale brownish-testaceous to testaceous, often slightly darkened basally) (4-7.5 mm. Virgin Islands: Virgin Gorda, Prickly Pear Isl., St. John). . insularum Chemsak, 1966

29. Elytra nitid, not dehiscent; (3-5 mm. Baja California) . . . . debilis (Horn), 1895
Elytra rather matt, slightly dehiscent; (7 mm. Argentina) . . argentina Bruch, 1918

30.	Elytral pubescence sparse, dark, both recurved and suberect; (elytra vittate, impunctate, subopaque) (6 mm. México: Est. México) lineata Linsley, 1935 Elytral pubescence pale, usually fairly dense 31
31.	Elytral costae feeble or lacking; antennal scape lacking even a feeble apical tooth; (eyes with upper and lower lobes connected by two rows of facets)
32. _	Colour uniformly black; pronotum as long or longer than broad; (4.5-6 mm. S. California) brevis Fall, 1929 Colour flavous, with head black and pronotum infuscated medially: pronotum transverse, almost a third broader than

long; (6 mm. Arizona) . . . . . . . . . . . . . . . flavicornis Casey, 1924

33.	Eyes with upper and lower lobes connected by only a single row of facets
-	Eyes with upper and lower lobes connected by at least two rows of facets, sometimes three or four
34.	Colour dark reddish-brown; elytra not strongly dehiscent towards apex; apex of fifth abdominal sternite of male con- cavely emarginate, broadly U-shaped; elytral marginal costae vague; (7 mm. México: Durango)
	Colour fuscous, elytra pale, vaguely vittate; elytra strongly dehiscent towards apex; apex of fifth abdominal sternite of male deeply notched, V-shaped; of female, broadly, concavely emarginate; female with elytra testaceous, shining; elytral marginal costae distinct; (6-8 mm. México: Sonora) occidentalis Chemsak & Linsley, 1964
35.	Elytra about two and a half times as long as broad, barely covering first two abdominal segments; (4.5-7 mm. Arizona)
-	Elytra at least three times as long as broad, not much shorter than abdomen (occasionally longer in some forms of <i>aestiva</i> )
36.	Antennal scape with apical tooth distinct; metatibiae straight; (colour brownish to piceous, elytra frequently vittate); (5–9 mm. Coastal and S. California) aestiva Fall, 1907 (mormona Fall, 1901 /ragilis Linell, 1932)
-	Antennal scape with apical tooth feeble; metatibiae feebly sinuate; (elytra varying in colour from all dark to mostly pale,

sinuate; (elytra varying in colour from all dark to mostly pale, with vittae usually present); (6–9 mm. Baja California) . . . . *picta* Linsley, 1942

Because of inadequate description, it has proved impossible to key the following three species. The original descriptions are therefore given below.

### Methia bicolor (Horn)

Dysphaga bicolor HORN, 1885, Trans. Amer. Ent. Soc. 12, p. 196. Methia bicolor: LINSLEY, 1962, Univ. Calif. Publ. Ent. 20, p. 33. F e m a le: "Pale reddish-yellow, elytra, antennae and tarsi piceous. Head coarsely and rather closely punctate. Thorax as wide as long, sides slightly arcuate, disc moderately coarsely punctate, the punctures indistinct, shallow. Scutellum pale. Elytra a little wider at base than thorax, extending to the middle of the abdomen, dehiscent, gradually narrowed to apex which is very obtuse, disc of each indistinctly bicostate, the surface punctate-scabrous but smoother near the base.

Length: 30 inch: 7.5 mm.

Texas."

(Original description)

#### Methia incauta Lane

Methia incauta Lane, 1939, Bol. Biol. (N.S.) 4 (1), p. 73.

,,Of a dark fuscous, with base of elytra a little lighter, antennae and tarsi of a reddish-yellow; clothed with sparse and fine pubescence. Head densely punctured, pronotum more sparsely. Elytra scarcely reaching to middle of second abdominal segment, the apices separately rounded. Posterior femora distinctly not reaching the apical segment of the abdomen. Metasternum and abdomen pubescent.

The antennae vary in colour from a pale yellow thus as also to black.

Length: 5.5-8 mm. Breadth (humeral): 1.25-1.5 mm.

BRAZIL: Matto Grosso, Salobra (18-29. X. 1938) (12 examples)."

(Translation of original description)

#### Methia punctata LeConte

Methia pusilla CHEVROLAT (nec pusilla Newman), 1862, Ann. Soc. Ent. France (4) 2, p. 256.

Methia punctata LeConte, 1873, Smiths. Misc. Coll. 11 (264) p. 240.

Methia punctata: LENG & HAMILTON, 1896, Trans. Amer. Ent. Soc. 23, p. 163.

"The following species is mentioned by Chevrolat, Ann. Ent. Soc. Fr., 1862, p. 256, as M. pusilla, which it replaces in the Antilles.

Methia punctata. Fuscous testaceous, with antennae, femora and elytra pallid, latter with an oblique vitta from base to middle, another submarginal, and apex dark; pronotum densely punctate, broader than long, laterally almost straight, transversely impressed posteriorly, not callus dorsally.

Length: 5.8-10 mm.

SAN DOMINGO: (1 9) (Mr. Gabb). CUBA: (Dr. Gundlach)

Very similar to *M. pusilla*, but the sides of the prothorax are scarcely dilated at the middle, the front transverse impression is wanting, the posterior constriction is less deep, there are no dorsal callosities, and the elytra are comparatively shorter. The colour of the head and prothorax is light and dark brown mixed; the elytral vittae are connected transversely near the base, and about the middle, but frequently disappear, leaving only a humeral cloudy spot. The wings as in all the species of the tribe are very imperfectly folded at tip."

(Original description)

### Methia trium sp. nov.

### (Plate X figs. 1-2)

Male: Form elongate, moderately slender. Colour dark ferruginous, antennae, legs and elytra light flavous-ferruginous, elytra each with dark vitta from humerus obliquely to about apical quarter, anterior part of disc usually with a more vague, short vitta, apex darkened. Pubescence sparse, short, pale, recurved, denser on pronotum, particulary laterally, and underside.

Head distinctly broader than pronotum, almost as broad as elytral base; antennal tubercles moderately raised, rather strongly broadly depressed between; coarsely, fairly closely punctured, subconfluently anteriorly. Eyes broadly rounded beneath, separated by about diameter of antennal scape, separated above by less than diameter of third antennal segment, strongly emarginate, lobes connected by one or two rows of facets. Antennae about twice as long as body, scape moderately robust, without apical tooth; second segment short, more than twice as broad as long; third segment about equal to fourth, slightly shorter than fifth; following segments only gradually decreasing, tenth longer than eleventh.

Pronotum very slightly broader than long, sides broadly rounded, widest at about middle; slightly constricted basally, which is very slightly narrower than apex; disc feebly depressed, with sides very feebly longitudinally tumescent and slightly paler than rest; matt, extremely finely and closely granularly punctured. Stridulatory plate of mesonotum with a generally conspicuous median longitudinal integumental line.

Elytra one and two-thirds as long as broad, only covering about basal half of first abdominal ventrite; two and a third times as long as pronotum; slightly, gradually narrowing to apices, which are broadly rounded, suture very feebly dehiscent from about middle; each vaguely bicostate, the anterior discal short; rather nitid, less so to apex; fairly coarsely, shallowly, fairly sparsely punctured.

Legs with femora strongly clavate, depressed; tibiae slender, posterior slightly bisinuate, densely, lengthily setose.

Prosternum regularly convex. Underside rather nitid, fairly finely

punctured, pro- and metasterna rather more coarsely, apical ventrite broadly, shallowly emarginate apically.

F e m a l e: In general slightly more robust than male. Colour much paler, unicolorous testaceous, except eyes black. Antennae about one and three-quarters as long as body. Pronotum extremely finely and closely micro-punctured, apparently not granular. Abdomen with apical, fifth, ventrite strongly, triangularly emarginate.

Length: 5.5–9 mm. Breadth: 1.2–1.6 mm.

CURAÇAO: Jongbloed, at lamp, 1957, B. de Jong (& Holotype, & Allotype, 3 & Paratypes, W); 20. X. 1952, de Jong (1 & 1 & Paratypes, A); 8. VIII. 1952, de Jong (1 & Paratype, A); 7. IX. 1952, de Jong (1 & Paratype, A). — Cas Corá, 26. VIII. 1958 (1 & 1 & Paratypes, A). — Willemstad, at light, 1956, R. H. Cobben (1 & 2 & Paratypes, W). — Piscadera Baai, Carmabi, at light, 24. X. 1963, P. Wagenaar Hummelinck (1 & Paratype, U); 12. XI. 1963, Hummelinck (1 & Paratype L) 30. XII. 1963, Hummelinck (1 & Paratype, U); 7. I. 1964, Hummelinck (1 & Paratype). Carmabi, 1957, Cobben (1 & Paratype, W); 20. IX. — (1 & Paratype, A). — Julianadorp, V-VI. 1957, Cobben (1 & Paratype, W). — Porto Marie, hofje, 21–28. IV. 1930, MacGillavry (2 & Paratypes, A). — Sint Kruis, hofje, 21–28. IV. 1930, MacGillavry (1 & Paratype, A). — Curaçao, at light, de Jong (1 & 3 & Paratypes, W); de Jong (1 & Paratype, EFG); 1957, Cobben (2 & Paratypes, W).

BONAIRE: Kralendijk, 24. X. 1930, Hummelinck (1  $\bigcirc$  Paratype, A). — Fontein, hofje, 21–24. V. 1930, MacGillavry (1  $\circlearrowright$ , 10  $\bigcirc$  Paratypes, A). — Dos Poos, 24. V.-6. VI. 1930, MacGillavry (2  $\circlearrowright$  3  $\bigcirc$  Paratypes, A). — Bonaire, 1950, E. Pieters Kwiers (1  $\circlearrowright$  Paratype, W); III. 1957, Cobben (2  $\circlearrowright$ , 1  $\bigcirc$  Paratypes, W); V. 1957, Cobben (2  $\circlearrowright$ , 1  $\bigcirc$  Paratypes, W); VI. 1957, Pieters Kwiers (1  $\circlearrowright$ , 1  $\bigcirc$  Paratypes, W); X. 1957, Pieters Kwiers (6  $\circlearrowright$ , 2  $\circlearrowright$  Paratypes, W); at light, XII. 1957, Pieters Kwiers (5  $\circlearrowright$  Paratypes, W); 1958, Pieters Kwiers (2  $\circlearrowright$ , 4  $\circlearrowright$  Paratypes, W).

ARUBA: Oranjestad, 16. VI. 1930, MacGillavry (1 3, 2  $\heartsuit$  Paratypes, A). — Eagle Petroleum Co., at light, V. 1955, Hummelinck (1  $\heartsuit$  Paratype, U). — Bubali, at light, 12. XI. 1963, Hummelinck (1  $\heartsuit$  Paratype, U).

The following specimens have not been made Paratypes because the mesonotal stridulatory plate does not have a visible median line, although in other respects they appear to agree with the other specimens.

CURAÇAO: Jongbloed, at light, de Jong (1 3, W); 17. X. 1952, de Jong (1  $\Im$ , A). — Porto Marie, hofje, 14–21. IV. 1930, MacGillavry (1  $\Im$ , A). — Savonet, Hofje, 28. IV.-5. V. 1930, MacGillavry (1  $\Im$ , A). — Curaçao, 1957, Cobben (1, W).

BONAIRE: Fontein, hofje, 21–24. V. 1930, MacGillavry (2 J, 1  $\heartsuit$  A). Bonaire, III. 1957, Cobben (1  $\heartsuit$  W); V. 1957, Cobben (2 J, W); X. 1957, Pieters Kwiers (1  $\heartsuit$  W); 1958, Pieters Kwiers (1  $\heartsuit$ , W). Described from a series of 96 specimens, (excluding 13 not designated as Paratypes).

Holotype (male) and Allotype (female) placed in the E. F. Gilmour Collection. Ninety-four Paratypes (31 males, 63 females) as follows: Laboratorium voor Entomologie, Wageningen (21 males, 33 females); Zoölogisch Museum, Amsterdam (7 males, 27 females); Zoölogisch Laboratorium, Utrecht (1 male, 3 females); E. F. Gilmour Collection (1 female, with others placed there from the above).

From *Methia necydalea* (Fabr.) this new species may be separated through the mesonotal stridulatory plate having a median line, and elytra comparatively much less elongate in comparison to basal breadth and pronotal length.

## Genus ATENIZOIDES novum

Form elongate, very narrow, slender, subcylindrical, narrowing apically. Head large, elongate, very strongly constricted and sulcate behind eyes, thence transversely strongly swollen; feebly depressed between antennal tubercles, which are widely separated, only slightly raised; muzzle very short; eyes very large, coarsely facetted, strongly swollen and projecting; feebly emarginate; only moderately separated above, very widely separated below; mandibles fairly elongate, broad, flattened basally, strongly curved, very acute apically; maxillary palpi very elongate, about three times as long as labial, apical segment rather feebly subsecuriform. Antennae distinctly longer than body in male, filiform, clothed all round with fairly long setae; scape short, not nearly reaching posterior border of eye, swollen; third segment short, a little longer than scape, much shorter than third or any of the following, which are very elongate. Pronotum elongate, base broader than apex; strongly constricted preapically; rounded and broadest premedially, but narrower than head across eyes, subparallel basally; with a narrow median longitudinal sulcus. Scutellum small, somewhat elongate. Elytra very elongate, gradually attenuate to apices, which are narrowly rounded, unarmed; semirecumbent setose-pubescent; even. Procoxae conical, very prominent, contiguous, prosternal process lacking, except a short, triangular, anterior projection; procoxal cavities angulate externally, open posteriorly. Mesosternal process very narrow, sublinear. Metepisterna fairly broad anteriorly, rather strongly narrowing posteriorly. Legs rather elongate; femora rather robust, clavate, subdepressed; tibiae slender; tarsi very elongate and slender, (metatarsi missing, but pro- and mesatarsi almost as long as respective tibiae).

Female: Unknown.

Type Species: Atenizoides curaçaoae gen. nov., sp. nov.

This distinctive new genus is most closely allied to *Atenizus* Bates, 1867, from which it may be immediately distinguished by the vertex lacking any trace of tubercle, the longer legs, less depressed form, rather differing pronotal shape, amongst other differences.

### Atenizoides curaçaoae sp. nov.

(Plate X fig. 3)

Male: Ferruginous; rather nitid; covered above and below with sericeous, grey, semirecumbent pubescent, only moderately dense, not concealing derm, on elytra irregularly and sparsely condensed into small, rounded, slightly denser spots; underside nitid, pubescence sparser. Eyes black; mandibular apices black.

Head coarsely subrugosely punctured. Pronotum rather finely and closely granular; with a fine, shallow, median longitudinal sulcus over about anterior three-quarters from preapical transverse sulcus; anterior margin strongly anteriorly arcuate, rather strongly elevated Scutellum small, subparallel-sided; finely and closely granular; slightly elongate, slightly more than one and a quarter times longer than broad.

Elytra elongate, very slightly more than three times as long as pronotum, not quite two and two-thirds times as long as basal breadth; humeri broadly rounded; gradually slightly narrowing to apices which are separately, rather narrowly rounded; very coarsely, fairly closely, irregularly punctured, rather coarser basally, a little finer posteriorly.

Underside fairly coarsely, moderately closely punctured; apical ventrite about equal in length to preapical, rather broadly, fairly shallowly arcuate emarginate apically; pygidium very broad, apex rather broadly truncate. Legs somewhat subscabrosely, a little coarsely punctured; first mesotarsal segment about equal in length to following two segments united; (metatarsi lacking).

Female: Unknown.

Length: 5.5–6.4 mm. Breadth: 1.1–1.3 mm.

CURAÇAO: Piscadera Baai, Carmabi, III. 1957), R. H. Cobben (2 S, W).

Holotype (male) placed in E. F. Gilmour Collection. Paratype (male) in the Laboratorium voor Entomologie, Wageningen, Holland.

I have to thank Ir. R. H. COBBEN for generously allowing me to retain the type of this species.

# Tribe ACHRYSONINI

Only one genus of this tribe occurs in Curaçao, Aruba and Bonaire.

#### Genus ACHRYSON Serville, 1833

Two species of this genus have been seen from the islands under consideration, one of which, *A. surinamum* (Linn.), is very widely distributed throughout the Neotropics.

### Achryson surinamum (Linn.)

(Plate XV fig. 1)

Cerambyx surinamus LINN., 1767, Syst. Nat., ed. 12, p. 632. Cerambyx longicolle DEGEER, 1775, Mem. Ins. 5, p. 117, pl. 14. Leptura simplex VOET, 1778, Cat. Col. 2, p. 22, pl. 20 f. 99. Leptura biangulatus VOET, 1778, l.c., 2, p. 23, pl. 20 f. 102. Stenocorus circum/lexus FABR., 1787, Mant. Ins. 1, p. 144. Stenocorus pallens FABR., 1792, Ent. Syst. 1, p. 144. Leptura biangulatus: VOET, 1794, Cat. Col. ed. Panzer, 3, p. 58, pl. 20 f. 99. Leptura simplex: VOET, 1794, l.c., 3, p. 58, pl. wO, f. 99. Cerambix circum/lexus: OLIV., 1795 (? 97), Ent. 4, (67) p. 127, pl. 23 f. 182. Cerambix surinamensis: OLIV., 1795, Ent. 4, (67), p. 42, pl. 13 f. 93. Saperda surinamus: TURTON, 1802, System of Nature 2, p. 314. Stenocorus pallens: TURTON, 1802, l.c., p. 337. Stenocorus circum/lexus: TURTON, 1802, l.c., p. 338. Achryson circum/lexum: CAST., 1840, Hist. Nat. Col. 2, p. 453. Achryson circum/lexum: CAST., 1850, Hist. Nat. Col. 2, p. 453. Achryson surinamum: WHITE, 1855, Cat. Col. Brit. Mus. 8, p. 298. Achryson surinamensis: CHEVR., 1862, Ann. Soc. Ent. Fr. (4) 2, p. 264.

- Achryson surinamum: BATES, 1870, Trans. Ent. Soc. Lond., p. 247.
- Achryson surinamum: LEC., 1873, Smithson. Misc. Coll. 11, (265), p. 300.
- Achryson surinamensis: LENG, 1885, Ent. Amer. 1, p. 35, p. 2 f. 25.
- Achryson surinam: LENG, 1885, Bull. Brooklyn Ent. Soc. 7, p. 117.
- Achryson surinamum: GAHAN, 1895, Trans. Ent. Soc. Lond., p. 92.
- Achryson surinamum: CRAIGHEAD, 1923, Bull. Canada Dept. Agr., (n.s.) 27, p. 138 (larva).
- Achryson surinamum: LINSLEY & MARTIN, 1933, Ent. News 44, p. 180 (habits).
- Achryson surinamum: SAALAS, 1936, Ann. Zool. Soc. Zool.-Bot. Fenn. Vanamo 4, p. 59, pl. 5 f. 50.
- Achryson surinamum: LINSLEY, 1942, Proc. Calif. Acad. Sci. (4) 24, p. 33.

Achryson surinamum: VOGT, 1949, Pan.-Pac. Ent. 25, p. 140.

Achryson surinamum: FREUDE, 1954, Bol. Ent. Venezolana 9 (1-4), p. 30 (nota).

- Achryson surinamum: COSTA LIMA, 1955, Ins. Brasil 9 (29), Col. (3), p. 92 f. 62.
- Achryson surinamum: BAUCKE, 1955, Bol. Agron. Sulriograndense 2 (1), p. 51, pl. 1 f. A.
- Achryson surinamum: DUFFY, 1960, Monogr. Imm. Stages Neotrop. Timber Beetles, p. 88 (biol.).
- Achryson surinamum: LINSLEY, 1962, Univ. Calif. Publ. Ent. 20, p. 46.
- Achryson surinamum: ZAJCIW & RUFFINELLI, 1962, Bol. Fac. Agron. Montevideo 60 p. 23.
- Achryson surinamum: GILMOUR, 1964, Stud. Fauna Curaçao 18, p. 77 (record).
- Achryson surinamum: CHEMSAK, 1966, Proc. U.S. Nat. Mus. 118 (3526), p. 211.

# Male: Narrow, subparallel.

Colour testaceous, with very variable undulating black markings and small maculae on elytra, and sometimes on head and thorax, sometimes almost completely unicolorous; pubescence sparse, short, uniform.

Head coarsely, closely punctured. Antennae about one and a half times as long as body; scape coarsely punctured; segments three to eleven slender, slightly darkened at apices.

Pronotum longer than broad, sides broadly rounded or subparallel; surface opaque, somewhat granulate-punctate; prosternum similarly punctured, except for polished apical third.

Elytra two and a half to three times as long as broad, surface coarsely somewhat granulate-punctate; thinly, uniformly pubescent.

Abdomen with sternites opaque except for apical margins, finely, sparsely punctured and pubescent; fifth sternite subequal in length to fourth, apex subtruncate.

Legs finely punctured and pubescent.

Female: Antennae only a little longer than body. Pronotum very coarsely punctured and somewhat reticulate. Prosternum shining, sparsely granulate. Abdomen with fifth sternite longer than fourth, narrowly rounded at apex.

(Adapted after LINSLEY, 1962)

Length: 8-23 mm. Breadth: 2-5.8 mm.

HOST PLANTS: Aspidosperma, Cercidium, Picus, Prosopis juliflora, Acacia sp., Acacia decurrens molissima, Schnopsis, Pithecellobium, Ulmus crassifolia, Celtis laevigata, Inga edulis, Nectandra, Robinia pseudoacacia, Tamarindus indica, Chlorophora tinctoria, Brya.

SURINAME (Type – surinamus L.; Type – longicolle Degeer); FRENCH GUIANA (Type – circum/lexus Fabr.); WEST INDIES (Type – pallens Fabr.). U.S.A. to Argen-TINA, MONTSERRAT, ANTIGUA, JAMAICA, CUBA.

CURAÇAO: Jongbloed, 30. IX. 1952, B. de Jong (1  $\Diamond$ , A); 7. XI. 1952, de Jong (1  $\eth$ , 1  $\Diamond$ , A); 18. XI. 1952, de Jong (1  $\Diamond$ , A). — Willemstad, I. 1957, R. H. Cobben (2  $\eth$ , 2  $\wp$ , W). — Piscadera Baai, Carmabi, VI. 1957, Cobben (1  $\oiint$ , W); at light, 30. XI. 1963, P. Wagenaar Hummelinck (3  $\wp$ , L, U). — Porto Marie, hofje, 14–21. IV. 1930, H. J. MacGillavry (2  $\wp$ , A). — Sint Kruis, hofje, 21–27. IV. 1930, MacGillavry (1  $\oiint$ , 2  $\wp$ , A). — Savonet, hofje, 28. IV. – 5. V. 1930, MacGillavry (1  $\oiint$ , 1  $\wp$ , A). — Curaçao, Heylaerts (1  $\oiint$ , 1  $\wp$ , L); at light, 1956, Cobben (1  $\wp$ , W); 1959, de Jong (1  $\oiint$ , EFG); de Jong (2  $\oiint$ , EFG); (1  $\wp$ , A). BONAIRE: Kralendijk, Hotel Zeebad, 13. IV. 1955, Hummelinck (1  $\wp$ , U). — Bonaire, VII. 1957, Cobben (1  $\wp$ , W); X. 1957, E. Pieters Kwiers (1  $\oiint$ , W). ARUBA: Oranjestad, 16. VI. 1930, MacGillavry (1  $\wp$ , A). — Eagle Petr. Comp., W. of Oranjestad, 10. V. 1955, Hummelinck (2  $\oiint$ , LU); at light, 15. XI. 1963, Hummelinck (1  $\oiint$ , U); XI. 1963, Hummelinck (1  $\oiint$ , 2  $\wp$ , U).

#### Achryson ornatipenne Perroud

(Plate XV fig. 2)

Achryson ornatipenne PERROUD, 1855, Ann. Soc. Linn. Lyon (2) 2, p. 383. Achryson ornatipenne GAHAN, 1895, Trans. Ent. Soc. London, p. 92. Achryson ornatipenne GILMOUR, 1964, Stud. Fauna Curaçao 18, p. 76.

Male: Fairly small, narrow, elongate.

Dark brown, underside, antennae and legs ferruginous, covered with recumbent greyish or flavous-grey setae, fairly sparsely, with larger, suberect setae here and there; pronotum with three narrow, longitudinal discal glabrous vittae, not reaching anterior border; elytra each with four narrow longitudinal glabrous vittae: one, very short, subscutellarly; second, longer, against suture, over more than median third; third medio-discal; fourth from middle of elytra to apical quarter thence directed obliquely to suture thence almost to apex and continued anteriorly along lateral margin to about middle. Underside sparsely greyish pubescent. Antennae and legs sparsely pubescent, with longer setae.

Head rugosely punctured; sulcate medially. Antennae very slightly shorter than body; basal segments subrugosely-punctured.

Pronotum slightly elongate; rounded laterally; subrugoselypunctured, except glabrous vittae which are finely granular. Scutellum small, subtriangular, feebly truncate apically.

Elytra narrow, subcylindrical, about three times as long as pronotum, slightly narrowed to apices, which are feebly truncate; slightly rugosely punctured basally, thence fairly sparsely subasperately punctured, sublinearly; finer to apex.

Underside with prosternum finely, transversely striate; remainder finely punctured. Legs of only moderate length; finely punctured; femora rather swollen; tarsi slender.

Female: Antennae a little shorter than in male. Apical abdominal ventrite slightly more elongate.

Length: 7-11 mm. Breadth: 1.4-2.3 mm.

GUADELOUPE (Type); TRINIDAD.

ARUBA: Plantage Fontein, 27. VI.-5. VII. 1930, H. J. MacGillavry (1  $\Diamond$ , A). — Eagle Petr. Comp., W of Oranjestad, at light, V. 1955, P. Wagenaar Hummelinck (1  $\Diamond$ , 1  $\Diamond$ , U). — Aruba, 12. I. 1949, J. van Zijl (1  $\Diamond$ , A); IV. 1957, R. H. Cobben (1  $\Diamond$ , 2  $\Diamond$ , W).

# Tribe HESPEROPHANINI

Of this widely distributed tribe only one genus, *Eburia*, is recorded from Curaçao and its neighbours.

### Genus **EBURIA** Serville, 1834

Two species of this genus are recorded from the area, one previously recorded from the Lesser Antilles, the other described herein as new.

# KEY TO WEST INDIAN SPECIES OF EBURIA

1. -	Elytra without eburneous maculae2Elytra with eburneous maculae3
2.	Elytra each with three feeble costae; general colour yellowish, with a finer, closer and regular punctation; (27 mm. Guade- loupe)
	Elytra without costae; general colour grey, elytra with large asperate, sparse, glabrous punctures; (17–20 mm. Hispaniola, Jamaica, Cuba)
3. —	Elytra with a third set of eburneous maculae, or pale- coloured pubescent discal vitta, on posterior half 4 Elytra with only basal and median, or only basal, ebur- neous maculae
4.	Elytra with an elongate, very irregular eburneous macula or two on posterior half; median eburneous maculae surrounded with glabrous black; (21-25 mm. Jamaica)
-	Elytra with two small basal macula and a discal vitta on posterior half whitish; median eburneous maculae not black encircled; (19–24 mm. St. Martin, St. Barthélemy, St. Eusta- tius, Antigua, Guadeloupe, Dominica) decemmaculata (Fabricius), 1775
5.	Femora unarmed apically; (16 mm. Guadeloupe)
-	Femora at least unidentate or unispinose apically 6
6. –	Elytral median eburneous maculae surrounded with a distinct glabrous, even, narrow area

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7.	Pronotal disc without two black tubercles; (22–25 mm. Cuba,
-	Guadeloupe, Dominica) octomaculata Chevrolat, 1862 Pronotal disc with two premedian black or glabrous tu- bercles.
8.	Elytra with only a single eburneous macula, at the base;
_	Elytra with more than one eburneous macula, at least one
9.	pair
-	contact
10.	Elytral apical sutural and marginal spines equal in length; metafemoral apical spines equal in length; (19-25 mm. Cuba, U.S.A.)
-	Elytral apical sutural spine much shorter than the marginal; metafemoral apical spines not equal in length
11.	Elytra each with only three small eburneous maculae (two basal, 1 median, the latter very small) (30 mm. Cuba) marginalis Fisher, 1947
-	Elytra each with only three small eburneous maculae (two basal, 1 median, the latter very small) (30 mm. Cuba) <i>marginalis</i> Fisher, 1947 Elytra each with two pairs of eburneous maculae 12
11. - 12.	Elytra each with only three small eburneous maculae (two basal, 1 median, the latter very small) (30 mm. Cuba) <i>marginalis</i> Fisher, 1947 Elytra each with two pairs of eburneous maculae 12 Pronotum with the small lateral callosity, between lateral spine and anterior border, pubescent and not black; (27-30 mm.
11. - 12. -	Elytra each with only three small eburneous maculae (two basal, 1 median, the latter very small) (30 mm. Cuba) <i>marginalis</i> Fisher, 1947 Elytra each with two pairs of eburneous maculae 12 Pronotum with the small lateral callosity, between lateral spine and anterior border, pubescent and not black; (27–30 mm. Jamaica) <i>jamaicae</i> Fisher, 1942 Pronotum with the small lateral callosity, between lateral spine and anterior border, glabrous and black 13
11. - 12. - 13.	Elytra each with only three small eburneous maculae (two basal, 1 median, the latter very small) (30 mm. Cuba) marginalis Fisher, 1947 Elytra each with two pairs of eburneous maculae 12 Pronotum with the small lateral callosity, between lateral spine and anterior border, pubescent and not black; (27–30 mm. Jamaica) jamaicae Fisher, 1942 Pronotum with the small lateral callosity, between lateral spine and anterior border, glabrous and black 13 General colour above bluish-cinerous, concealing the dark
11. 	Elytra each with only three small eburneous maculae (two basal, 1 median, the latter very small) (30 mm. Cuba) marginalis Fisher, 1947 Elytra each with two pairs of eburneous maculae 12 Pronotum with the small lateral callosity, between lateral spine and anterior border, pubescent and not black; (27–30 mm. Jamaica) jamaicae Fisher, 1942 Pronotum with the small lateral callosity, between lateral spine and anterior border, glabrous and black 13 General colour above bluish-cinerous, concealing the dark derm; (20 mm. Cuba)

- Elytral apices with at least the marginal spines elongate. . 15

15.	Pronotum with apical lateral angles broadly and distinctly swollen; (glabrous area round elytral eburneous maculae broad) (21.5 mm. Cuba)
16. _	Elytra each with one or two blackish, glabrous, costae running posteriorly from the median eburneous maculae, the outer ap- proaching the apex, the inner sometimes indistinct; (15–20 mm. Cuba, Hispaniola, Bahamas, Turks & Caicos Isl., U.S.A., Nicaragua, México)
17.	Meso- and metatibiae with the inner spine only slightly longer than the outer; elytral eburneous maculae widely separated, small, subequal, the outer macula of median pair slightly in advance of the inner; (20 mm. Puerto Rico)
-	Meso- and metatibiae with inner spine distinctly longer than the outer; elytral eburneous maculae narrowly sepa- rated, larger, the inner macula of basal pair elongate and longer than outer, outer macula of median pair distinctly longer than inner
18.	Pronotal lateral spine long and acute; elytral apices strongly bispinose, sutural spine much shorter than marginal (14–20 mm. Cayman Isl.)
_	Pronotal lateral spine broad, short and obtuse; elytral apices with marginal spine never very long, marginal small or obsolete; (13.5–21 mm. Bonaire, Curaçao) <i>bonairensis</i> sp. nov.
19.	Elytra each with both pairs of eburneous maculae sepa- rated
-	Elytra with at least median eburneous maculae contiguous, and generally also the basal
20.	Pronotal disc without discal tubercles; (3 pronotum unarmed laterally, 9 with small tooth); (16-20 mm. Cuba)
_	Pronotal disc with two small premedian dark ferruginous
	or blackish tubercles.

21.	Elytra, apices separately, obliquely truncate, with a small spine
	at sutural angle only; (10–19 mm. Cuba) <i>cubae</i> Fisher, 1932
-	Elytral apices bispinose
22.	Elytral apices with a very short tooth at each angle; pronotum
	with a short median spine laterally on each side; (9–23 mm. St.
	Vincent)
-	Elytral apices with a distinct spine at marginal angle and an
	obsolete spine at sutural angle; pronotum slightly swollen
	laterally, without a spine. J unknown; (14–15.5 mm. Cuba).
	$\mathcal{Q}$ elongata Fisher, 1932
23.	Pronotal disc without small black tubercles; (pronotum un-
	armed laterally)
-	Pronotal disc with two premedian blackish tubercles 25
24.	Elytral apices feebly bidentate, teeth subequal; testaceous,
	pronotum with two pearl-grey pubescent patches on each side
	discally; (ca. 20 mm. Guadeloupe, Martinique)
	dejeani Gahan, 1895
-	Elytral apices bidentate, marginal spine longer than sutural;
	head and pronotum ferruginous, with an intermixed bluish
	sheen; (Antigua) bimaculata (Voet), 1778
25.	Elytral basal maculae narrowly separated (basal subequal)
	(18–22 mm. Little Cayman) <i>lewisi</i> Fisher, 1948
-	Elytral basal maculae contiguous, (or one much reduced) . 26
26.	In general irrorate with rather dark punctures above 27
-	Not irrorate with dark punctures
27.	Antennae in $\mathfrak{F}$ about three times as long as body; prothorax in
	$\mathfrak{z}$ unarmed laterally, $\mathfrak{Q}$ with small tooth; prothorax transverse;
	(29–31 mm. Cuba)
-	Antennae in $\mathfrak{F}$ only a little more than twice as long as body;
	prothorax shortly spinous laterally in both $\mathcal{J}$ and $\mathcal{Q}$ , prothorax
	about as long as broad; (25–31 mm. Dominican Republic)
	fisheri Russo, 1930
28.	Elytra with the outer of the basal eburneous maculae much
	smaller than inner, or absent; (12–20 mm. Bahamas)
	bahamicae Fisher, 1932

Elytra with outer of basal maculae almost as wide as inner. 29

- 29. Pronotum completely unarmed laterally in both sexes; (3 pronotum with coarsely punctured area each side uniting with opposite side beneath, without a preapical lateral black macula; \$\overline{2}\$ pronotum lacking this area and narrower, with a small black macula preapically externally); (11-21 mm. St. John, St. Thomas, St. Croix, Curaçao) . . . . . . . . . . . thoracica White, 1853 (= virginensis Gilmour, 1964, SYN. NOV.)
- 30. Pronotum alveolate-punctate; pronotum in ♂ with a small lateral spine, ♀ with an almost obsolete tubercle; elytra scarcely pubescent to apical third or quarter, thence silky fulvous-grey to apex; (17.5–22 mm. Cuba, Mona Isl., Puerto Rico, Tortola, St. Thomas, Guadeloupe). . quadrimaculata (Linnaeus), 1761
  - Pronotum obsoletely, rather transversely, rugose, distinctly spinous laterally in both sexes; elytra generally and evenly pubescent; (11-25 mm. Jamaica) . . tetrastalacta White, 1853

### Eburia thoracica White

(Plate XI figs. 1-2)

Eburia thoracica WHITE, 1853, Cat. Col. Brit. Mus. 7, p. 92. Eburia virginensis GILMOUR, 1964, Stud. Fauna Curaçao 18, p. 77, pl. 1 f. 1–2. (SYN. NOV.).

Male: Fairly small to moderately large, elongate. Light ferruginous; with light tawny pubescence, thin on the pronotum laterally and anterior two thirds of the elytra, very dense on a narrow band margining above the coarsely rugose latero-pronotal area. Pronotal disc with two feebly tumescent black tubercles slightly premedially. Elytra each with two geminate glabrous, elongate, flavous, eburneous contiguous maculae, basal pair with external slightly shorter, extending to about basal sixth of elytra; median pair lying between a little premedially and about preapical twofifths, inner slightly shorter; basal pair slightly dark ferruginous behind, median pair darkened on derm at both ends.

Head very coarsely, fairly closely punctured. Eyes fairly closely

approaching above, separated by about one and a quarter times the breadth of an upper lobe. Antennae about one and two-fifths as long as the body; scape moderately swollen, not very elongate; third segment about one and a third times length of scape; fourth very slightly shorter than the third; fifth and sixth each about equal to fourth; following segments to tenth very gradually decreasing; apical, eleventh segment a little more elongate, about equal to fourth; basal segments coarsely, rather sparsely punctured, these becoming much finer towards the apical segments.

Pronotum as broad as long; subcylindrical; broadly rounded laterally, completely unarmed; broader basally than apically; disc with two feeble, fairly broad, slightly premedian, black tumescences, and a short longitudinal, median to slightly premedian, glabrous line; laterally from the border of the disc a large very strongly rugosely punctured area, which extends completely across the prosternum and unites with that of the other side, this area very sparsely pubescent; disc with coarse shallow reticulate alveolate punctures, except on tubercles and median line. Scutellum slightly elongate, subparallel-sided basally, thence subtriangular to apex; very finely and fairly closely punctured.

Elytra elongate, three times as long as pronotum; base about a sixth wider than pronotum at widest; gradually narrowing to apices, which are slightly obliquely truncate, each angle moderately strongly spinous, the sutural angle less strong than the marginal; each elytron with two geminate, contiguous, eburneous maculae; about basal two-thirds, up to apices of median maculae, very strongly, coarsely and closely punctured, thereafter the punctures very much finer to apex, and also finer along suture.

Underside with prosternum very strongly rugosely punctured; prosternal process finely and fairly closely punctured, strongly raised, as high as coxae; strongly and broadly, regularly rounded above and anteriorly; vertically declivous posteriorly, with a low, obtuse median tumescence at the posterior upper border; moderately broad, almost a third as broad as a procoxal cavity. Mesosternal process very broad, about twice as broad as the prosternal, about two-thirds as broad as a mesocoxal cavity; strongly declivous anteriorly; broadly explanate apically, lateral angles strongly produced into concavities in the mesocoxae; apex strongly, semicircularly emarginate. Apical ventrite slightly transverse, slightly shorter than preapical, broadly rounded latero-apically, becoming very feebly emarginate medially. Pygidium broad, very broadly rounded lateroapically, apex with a shallow, broad, median emargination.

Legs elongate, moderately slender; femora only feebly swollen to apices, anterior a little more strongly; meso- and metafemora bispinose apically, those on former weaker, the external on the mesofemora very short, only broadly angular, scarcely a quarter as long as the inner; those on metafemora rather strong, the outer only a little more angularly, broadly produced, scarcely half as long as the inner. Tarsi moderately elongate and slender, except the anterior a little broadened; first metatarsal segment about equal to following two segments united.

Female: Differs from male as follows: pronotum distinctly narrower and tapering from base to apex; about a fifth longer than broad; apex scarcely three-quarters as broad as base; slightly rounded laterally; completely unarmed laterally; discally with similarly two discal premedian black tubercles, and antero-laterally, a small blackish, subglabrous macula, which is at most only feebly tumescent; laterally simply alveolate-punctate. Elytra more elongate, about three and a quarter times as long as pronotum; geminate eburneous maculae similarly placed, but more elongate; – basal pair extending to about basal two-ninths, median pair from about basal three-tenths to apical two-fifths. Antennae scarcely longer than body, exceeding elytral apex by about apical segment.

Underside with prosternum simply very coarsely punctured; prosternal process rather more strongly tumescent and subexplanate apically, slightly narrower; mesosternal process similar, but apical emargination triangular; apical ventrite more elongate, about equal in length to prepaical, rather narrower and less narrowed to apex, which is similar in shape to that of male. Pygidium similar to that of male but more subparallel-sided.

Legs scarcely more slender than those of male; mesofemoral apical external spine a little strong, about a third length of inner; external spines on metafemora strong, about half as long as the inner. Length: 11–21 mm. Breadth: 2.4–5.2 mm.

"BRAZIL" (Erroneous. Type of thoracica White – Brit. Mus. N.H.); ST. THOMAS (Bowring-Chevrolat Coll. – Brit. Mus. N.H.); ST. JOHN (S. of Cruz Bay – Holotype of virginensis Gilmour, EFG); ST. CROIX (Canaän – Allotype of virginensis Gilmour, EFG).

CURAÇAO: Jongbloed, 30. X. 1951, B. de Jong (1 §, A); 3. VIII. 1952, de Jong (1  $\Diamond$ , A); 21. X. 1952, de Jong (1  $\Diamond$ , A); 8. I. 1953 (1 §, A). — Mahaai, 24. XII. 1951, de Jong (1  $\Diamond$ , A); 21. I. 1952, de Jong (1 §, A); 17. IV. 1952, de Jong (1 §, A). — Willemstad, 1956, R. H. Cobben (2  $\Diamond$ , W). — Piscadera Baai, Carmabi, 1957, Cobben (2  $\Diamond$ , W); 28. IX. 1962, Louise J. van der Steen (1  $\Diamond$ , U); at light, 20. XI. 1963, P. Wagenaar Hummelinck (4 §, 3  $\Diamond$ , L, U); at light, 30. XI. 1963, Hummelinck (3 §, 10  $\Diamond$ , L, U); 10. XII. 1963, Hummelinck (2 §, 5  $\Diamond$ , U); 22. XII. 1963, Hummelinck (1  $\Diamond$ , U); at light, 7. I. 1964, Hummelinck (3 §, 6  $\Diamond$ , L, U). — Julianadorp V–VI. 1957, van Ypenburg (1 §, W). — Hato, 1949/50, A. D. Ringma (1 §, U). — Curaçao, 21. IX. 1963, de Jong (1 §, 1  $\Diamond$ , EFG); de Jong (1 §, EFG).

Having now seen photographs of *Eburia thoracica* White, and thanks to the assistance of Mr. R. T. THOMPSON, of the Dept. of Entomology, British Museum (Nat. Hist.), London, in examining the museum specimens, I now synonymise my species *Eburia virginensis* with *E. thoracica* White.

The label on the type of E. thoracica White reads ,,F. Walker, Brazil (Ent. Club 44-12)." A second specimen from the Bowring-Chevrolat Collection has a hand-written label including the name ,,St. Thomas".

It is obvious, therefore, that the locality "Brazil" is erroneous, and should be stricken from the records, the actual locality being certain of the Lesser Antillean Islands, as known so far and detailed above.

#### Eburia bonairensis sp. nov.

(Plate XI figs. 3-5)

Male: Fairly small to moderate-sized. Ferruginous, legs and antennae slightly lighter; covered, fairly uniformly, with short, recumbent, moderately dense tawny-grey pubescence, greyer on underside, less dense on legs; pronotum with two premedian discal tubercles, median line, and a small latero-anterior macula on each side, glabrous, ferruginous, lateral spines pubescent, slightly blackishferruginous; meso- and metafemoral apical spines and elytral apical spines ferruginous, concolorous with rest. Elytra each with two geminate, eburneous, rather dark yellow maculae, a basal and a median, median pair narrowly glabrous surrounded; both pairs fairly narrowly, but distinctly separated, basal slightly diverging posteriorly; inner of the basal pair very slightly longer than inner; outer of median pair usually distinctly longer than inner, which is occasionally obsolete or nearly.

Head not concave between upper lobes of eyes, but with a narrow, fairly short, moderate sulcus; upper lobes moderately approaching, separated by about breadth of an upper lobe; broadly, shallowly depressed, and medially sulcate, between the antennal tubercles, which are not very strongly raised; sparsely, fairly closely punctured, most dense at posterior border. Antennae elongate, from slightly more than one and a half, to one and three-quarter times as long as body; segments to fourth moderately, fifth sparsely, fringed beneath; segments unarmed apically; scape moderately elongate, not strongly clavate; third segment almost twice as long as scape; fourth only very slightly shorter than third; fifth slightly (about a tenth) longer than third; sixth scarcely shorter than fifth; following gradually decreasing, apical segment slightly longer than preapical, tenth, segment; scape moderately closely, fairly coarsely punctured; following segments more finely punctured.

Pronotum slightly transverse, about one and a quarter times as broad, across lateral spines, as long; base very much broader than apical margin, but general appearance somewhat subquadrate with subparallel sides due to antero-lateral tumescence; latero-medially with a rather small, short, obtuse spinous tooth, with a broad anterolateral tumescence with a small glabrous macula superiorly; disc with two premedian, broad, conical, moderate sized, glabrous tubercles; midline from between these tubercles to posterior transverse sulcus very feebly elevated, glabrous and almost impunctate; fairly coarsely, rather closely, subrugosely punctured, but almost indiscernible owing to pubescence; disc with two broad, obtuse, moderately raised tumescences at about basal fifth. Scutellum broadly rounded apically, very finely and closely punctulate.

Elytra elongate, about three and a third times as long as pronotum, about two and a half times as long as basal breadth; only slightly narrowing to apices, which are almost straight truncate, marginal angle not very lengthily, but moderately, rather stoutly toothed, sutural angle with a small tooth which is often much reduced or even obsolete so that the angle is rounded; covered with very large, shallow punctures, with interstices completely fairly finely and closely punctured, having a general, broadly subrugose appearance, the punctures becoming finer after the median maculae.

Prosternum almost completely, very coarsely, fairly closely punctured, remainder of underside finely and closely punctured. Prosternal process only moderately narrow, almost half as broad as a procoxal cavity, moderately declivous anteriorly, very slightly explanate apically, apex vertically truncate, bearing a strong, but not high, tubercle. Mesosternal process fairly broad, almost twice as broad as prosternal, rather strongly declivous anteriorly, with a strong, broad, median, fairly low tubercle; fairly strongly, gradually explanate to apex, which is very strongly semicircularly emarginate, the lateral projections broad, subtruncate apically and inserted into fairly shallow mesocoxal concavities. Apical ventrite about equal to, or very slightly longer than preapical segment, shallowly, feebly emarginate apically, broadly rounded laterally.

Legs moderately elongate, fairly slender; meso- and metafemoral apices rather stoutly, acutely and strongly but not very lengthily bispinose, the inner spine slightly longer than the external; metafemoral apex extending very slightly past elytral apices. Tarsi elongate, moderately robust; first metatarsal segment slightly shorter than following two segments united.

F e m a l e: Similarly coloured to male. Pronotum a little less broad, somewhat less tumescent latero-anteriorly. Antennae only extending slightly past elytral apices by the apical, or last two segments. Sternal processes similar to those of male; apical ventrite slightly more elongate, slightly narrower, about one and a quarter times as long as preapical segment, very broadly rounded, almost subtruncate apically. Metafemoral apices not reaching elytral apex.

Length: 13.5–21.5 mm. Breadth: 3.7–5.8 mm.

CURAÇAO: Willemstad, at lamp, 1956, R. H. Cobben (1 & Paratype, W). — Hato, 1949/50, A. D. Ringma (2  $\bigcirc$  Paratypes, U). — Curaçao (1 & Paratype Riksmuseet Stockholm). BONAIRE: Kralendijk, 18. V. 1930, H. J. MacGillavry (1 & Paratype, A); 23. IX. 1948 P. Wagenaar Hummelinck (2  $\Im$  Paratypes, A). — Fontein, hofje, 21–24. V. 1930, MacGillavry (2  $\Im$ , 2  $\Im$  Paratypes, A). — Dos Poos, 24. V.-6. VI. 1930, MacGillavry (1  $\Im$ , 1  $\Im$  Paratypes, A). — Bonaire, at lamp, X. 1957, E. Pieters Kwiers ( $\Im$  Holotype,  $\Im$  Allotype, 2  $\Im$ , 1  $\Im$  Paratypes, W); at lamp, IX. 1957, Cobben (1  $\Im$ , 1  $\Im$  Paratypes, W); V. 1957, Cobben (1  $\Im$ , 1  $\Im$  Paratypes, W); (1  $\Im$  Paratype, Fuchs Coll., Wien).

Holotype (male) and Allotype (female) and three Paratypes (two male, one female) placed in the E. F. Gilmour Collection (through the kindness of Ir. R. H. COBBEN); five Paratypes (three male, two female) in the Laboratorium voor Entomologie, Wageningen; nine Paratypes (four male, five female) in the Zoölogisch Museum, Amsterdam, plus one Paratype (female) from the Zoölogisch Laboratorium, Utrecht, and another Paratype (female) from same source placed in the E. F. Gilmour Collection; one Paratype (male) in the Riksmuseet, Stockholm; one Paratype (male) in E. Fuchs Collection, Vienna.

This new species is perhaps most closely allied to *Eburia insulana* Gahan with which it agrees in having the pronotal lateral spine short, it has, however, at least the marginal elytral spine longer and stronger, although the sutural is sometimes lacking, and the mesoand metafemoral apical spines distinctly longer and more acute, with the inner somewhat longer than the external.

### Tribe TRACHYDERINI

One genus of this large Neotropical tribe is known from the islands considered herein.

### Genus **OXYMERUS** Serville, 1834

One species of this fairly large genus is recorded from Curaçao and Aruba.

### **Oxymerus lebasi** Dupont

(Plate X fig. 4)

Oxymerus lebasi DUPONT, 1838, Mag. Zool. 18, p. 47, pl. 214 f. 1.

Male: Moderately robust, elongate.

Glabrous, nitid. Light yellowish-ferruginous; head unicolorous; pronotum with seven blackish-brown discal maculae: four transversely, very slightly premedially, three postmedially, the three
median largest; scutellum unicolorous; elytra dark brown, with margin narrowly, and four yellowish longitudinal vittae: - a subscutellar to about middle, remaining three complete, two discal, one lateral. Underside yellow-ferruginous, with black as follows: - a macula on the prosternum against the procoxal cavity; one internally of mesepisterna; a large macula posteriorly on the metasterna, an elongate lateral on the metepisterna; abdominal ventrites one to three broadly black anteriorly, the black areas on metasternum and abdomen sometimes almost completely covering these areas. Antennae and legs light ferruginous.

Head with a few sparse, coarse punctures; remainder of body finely and very sparsely punctured. Antennae about one and threequarter times as long as body; third and fourth segments coarsely and closely punctured, gradually becoming finer thereafter.

Elytral apex sinuately truncate, marginal angle strongly spinous.

Underside with apical ventrite strongly transverse, subequal to preapical: broadly truncate apically.

Female: Antennae slightly longer than body by about apical segment. Underside with apical ventrite strongly transverse, scarcely longer than preapical, very broadly, feebly emarginate apically; densely fringed apically.

Length: 13-18.2 mm.; Breadth: 4.2-6 mm.

COLOMBIA (type); VENEZUELA; ARGENTINA.

CURAÇAO: Piscadera Baai, Carmabi, 1957, R. H. Cobben (1 3, W); B. de Jong (2 3, EFG).

ARUBA: Solito, 16. XII. 1936, P. Wagenaar Hummelinck (1 3, A). — Bubali, at light, 12. XI. 1963, Hummelinck (1 3, 2 , U). — Aruba, IV. 1957, Cobben (1 , W).

#### Tribe ELAPHIDIONINI

Four genera of this large tribe are herein recorded from the Curaçao triumvirate.

#### Genus ELAPHIDION Serville, 1834

Three species of this large genus are herein recorded from the islands, of which one is described as new.

## Key to West Indian Species of Elaphidion

1.	Elytral apices unarmed, rounded, or perhaps feebly trun- cate, antennal segments not spinous thus (femora unarmed
_	apically) [? Genus]2Elytral apices bispinose3
2.	Antennal segments 3-4 unispinose, 5-10 bispinose apically; uniformly dark reddish-brown, with irregular grey pubescence, in patches on the elytra; (16 mm. Dominican Republic) <i>rotundipenne</i> Fisher, 1932
-	Antennal segments 3-4 bispinose apically; dark brown, nitid; elytra with tawny pubescence in a narrow basal area, a sutural and marginal band and a few isolated subsutural premedian maculae; (33 mm. Guadeloupe)
3. -	Antennal segments 3 to 4 or 3 to 10 bispinose apically 4 Antennal segments 3 to 4 unispinose apically, some of following segments may be unispinose or bispinose 13
4.	Antennal segments 3 and 4 bispinose apically, segments 5 and 6 unispinose; (white maculate and irrorate: a humeral macula, an oblique premedian fascia, a marginal and sutural macula and almost bifasciate preapically; (14–16 mm. Cuba) <i>quadrituberculatum</i> Chevrolat, 1862
-	Antennal segments 3 to 10 bispinose apically 5
5.	Above covered uniformly with dense woolly light grey pube- scence, except pronotal disc with three glabrous dark-brown discal maculae, these on the two small anterior tubercles and a median line; underside densely pubescent, minutely and obso- letely dark brown irrorate; (15.5 mm. Cuba) <i>lanatum</i> Chevrolat, 1862
-	Not thus
6.	Meso- and metafemora only very feebly spinose apically; (brownish-black, antennae and legs ferruginous, elytra with irregular whitish pubescence; elytral apical spines of equal length); (13-16 mm. Cayman Brac) thompsoni Fisher, 1941
-	Meso- and metafemora distinctly spinose apically 7

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7.	Metafemora unispinose apically; (mesofemora unispinose apically)
-	Metafemora bispinose apically
· 8.	Elytra ferruginous-brown, nitid, with numerous tawny pu- bescent scattered maculae; (Hispaniola, ? Jamaica) conspersum Newman, 1841
_	Elytra and pronotum nitid black; a greyish-white line on each side of pronotum, each elytron with six maculae and a sutural vitta whitish; (14 mm. Cuba) <i>albosignatum</i> Chevrolat, 1862
9. -	Mesofemora unispinose apically; (Jamaica, Hispaniola, Puerto Rico, St. Martin) <i>spinicorne</i> (Drury), 1773 Mesofemora bispinose apically
10.	Antennae extending only to middle of elytra; head transversely gibbose between antennal tubercles, (reddish-brown, elytra sparsely, uniformly variegated with whitish pubescent) (30 mm. Bahamas)
-	Pronotal disc very uneven, with depressions and five smooth, glabrous tumescences; (elytra three and a half times as long as pronotum); (dark reddish-brown, with variegated greyish pubescence); (15 mm. Bahamas) <i>manni</i> Fisher, $Q$ , 1932 Pronotal disc fairly evenly convex, with five or six only feebly raised but distinct glabrous maculae
12.	Frons not rugose; eyes above separated by nearly three times the breadth of an upper lobe; elytra three times as long as pro- notum; abdomen finely, densely punctured laterally, smooth and glabrous medially. (Elytra with dense patches of white pubescence); (13.5–17 mm. Haiti, Dominican Republic, ? Cuba) 
-	Frons longitudinally rugose, elytra four times or nearly as long as pronotum; eyes above separated by only twice the breadth of an upper lobe; elytra nearly four times as long as pronotum; abdomen feebly, sparsely punctured, obsoletely granulose, sparsely, irregularly whitish pubescent; inner spine of meta-

	femoral apex considerably larger than outer; (elytra irregularly variegated, white pubescent) (14–20 mm. Bahamas) <i>manni</i> Fisher, 3, 1932
	(= wickhami Fisher, 1935)
13. _	Meso- and metafemora not spinose apically, at most angularlar14Meso- and metafemora spinose apically20
-	Elytra with white pubescence forming an irregular premedian fascia and irregular maculae basally and apically; antennal segments 3 to 6 unispinose, 7 to 9 bispinose apically; (11.5–20 mm. Cayman Brac)lewisi Fisher, 1941 Elytral pubescence variegated, not forming a distinct fascia; antennal segments not spined thus, not bispinose 15
15.	Antennal segments 3 and 4 only, unispinose apically; pronotum densely pubescent, except for a median longitudinal, slender, short, glabrous line; (Cuba, N. America)
_	apically
16.	Antennal segments 3-5 only, unispinose apically; (pronotum densely pubescent, with a median complete glabrous vitta, a small rounded glabrous macula on each side anteriorly and a short basal vitta on each side) (14 mm. St. Martin) <i>hummelincki</i> Gilmour, 1964
-	Antennal segments 3 to (6) 7 or 3 to 10 unispinose apically. 17
17. -	Antennal segments 3 to 7 unispinose apically (that on the 7th minute)
18.	Pronotal disc with two slight premedian tumescences; vertex very nitid, sparsely, coarsely punctured; mesosternal process broadly declivous anteriorly; upper lobes of eyes separated by slightly more than three times the breadth of an upper lobe; (black; elytra with dense pale tawny-white pubescence forming distinct latero-discal vittiform markings) (15 mm. St.Eustatius) 

- Pronotal disc evenly convex, without tumescences; vertex less nitid, closely coarsely punctured, the punctures rarely separated by more than the breadth of a puncture; mesosternal process very strongly declivous anteriorly, almost truncate; upper lobes of eyes separated by about twice the breadth of an upper lobe; (ferruginous, with pale tawny-grey pubescence less dense, not forming specific vittiform markings); (14 mm. Curaçao) . . . *curaçaoae* sp. nov.
- Pronotum with sparse whitish pubescence which is denser in places; elytra rather densely, irregularly whitish, with numerous long setae intermixed and an irregular glabrous macula near middle and another smaller at basal quarter near suture; elytra 3<sup>1</sup>/<sub>2</sub> times as long as pronotum; (10 mm. Cuba) . . . . . .

cubae Fisher, 1932

Pronotum only densely pubescent at sides; elytra sparsely, rather uniformly whitish pubescent, not concealing surface, feebly variegated; elytra 4 times as long as pronotum; (14 mm. 21 Metafemora unispinose apically; mesofemora unispinose 23 21. Antennal segments 3 to 7 unispinose apically; pronotum without three glabrous tubercles on each side; elytra sparsely, rather uniformly whitish pubescent, not concealing surface, feebly variegated; elytra 4 times as long as pronotum; (14 mm. Cuba) Antennal segments 3 to 5 or 6 at most, unispinose apically; pronotum with three distinct glabrous tubercles on each side, one basally and two transversely premedially; elytra each with an at least vague, premedian, elongate white 22

-	Elytra three and a half times as long as pronotum; elytra
	without a posterior costa; each elytron with a large irregular
	glabrous area along suture; white premedian pubescence dis-
	tinct; (14-20 mm. Cuba) scaramuzzae Fisher, 1951

23.	Antennal segments (5) 6 to 7, or 5 to 10, bispinose apically;	
	(segments 3 to 4 or 5 unispinose)	24
-	Antennae with no segments bispinose apically; (segments	

	•	-	•	•		•	<u> </u>			
3 to 4, or 5 to 6 or 7	unispinose	apically).	•		•	•	•	•	•	25

- 24. Dark brown or blackish nitid in the main, with whitish pubescence mainly laterally on pronotum, and irrorate on elytra, mainly condensed from humerus to broadly premedially, and more sparsely apically; (11-30 mm. Cuba, Jamaica to Guadeloupe, U.S.A., México, Nicaragua). *irroratum* (Linnaeus), 1767
  - In general densely and rather uniformly greyish pubescent above, pronotum with 4 minute discal glabrous tubercles and a short posterior median glabrous line; (16-20.5 mm. Cuba, Hispaniola, Puerto Rico, Montserrat). tomentosum Chevrolat, 1862
- 25. Fourth antennal segment less than half the length of the third; (piceous, sparsely clothed with short white pubescence, more dense medially and along lateral margin; (18 mm. Bahamas) . bahamicae Cazier & Lacey, 1952
- 26. Pronotum rugosely-punctured, apart from the glabrous slightly raised areas; elytral greyish pubescence placed in somewhat longitudinally elongate irregular maculae; (Mona Isl., Puerto Rico, Tortola, Virgin Gorda, St. Martin, Nevis) . . . . . . *insulare* Newman, 1840
  - Pronotum not rugosely punctured; elytra densely greyish pubescent, except for longitudinal sparsely pubescent vittae; (Greater and Lesser Antilles). . glabratum (Fabricius), 1775

#### Elaphidion irroratum (Linn.)

(Plate XIII figs. 1-2)

Cerambyz irroratus LINN., 1767, Syst. Nat. ed. 12, p. 633.

Cerambyx irroratus: DRURY, 1773, Ill. Exot., Ins. 1, p. 93, pl. 41 f. 3.

Stenocorus irroratus: FABR., 1775, Syst. Ent., p. 180.

Cerambyz irroratus: OLIV., 1790, Encycl. Meth. Ins. 5, p. 305.

Cerambyx bidens OLIV., 1790, l.c., p. 306.

Cerambyz irroratus: OLIV., 1795, Ent. 4 (67), p. 45, pl. 21 f. 163.

Cerambyz bidens: OLIV., 1795, l.c., p. 42, pl. 17 f. 125.

Stenocorus irroratus: FABR., 1801, Syst. Eleuth. 2, p. 307.

Stenocorus (Elaphidion) irroratus: DRURY & WEST., 1837, Ill. Exot. Ins. new ed. 1, p. 88, pl. 41 f. 6.

Elaphidion irroratum: SERV., 1834, Ann. Soc. Ent. Fr. 3, p. 67.

Cycliopleurus irroratus: HOPE, 1835, Trans. Zool. Soc. Lond. 1, p. 107.

Elaphidion irroratum: NEWM., 1840, Entomol. 1, p. 25.

Elaphidion ordinatum NEWM., 1840, Entomol., r, p. 26.

Elaphidicn tessellatum NEWM., 1840, Entomol., I, p. 26.

Elaphidion irroratum: LEC., 1850, Journ. Acad. Nat. Sci., Philad. (2) 2, p. 13.

Elaphidion irroratum: DuVAL, 1857, Hist. Nat. Cuba, Ins. p. 266, pl. 10 f. 7.

Elaphidion irroratum: HUBBARD, 1880, Amer. Ent. 3, p. 239 (biology).

Elaphidion irroratum: LENG, 1885, Ent. Amer. 1, p. 31.

Elaphidion irroratum: SCHWARZ, 1888, Proc. Ent. Soc. Wash. 1, p. 93 (biology).

Elaphidion irroratum: GAHAN, 1895, Trans. Ent. Soc. Lond. p. 99.

Elaphidion irroratum: LINSL., 1942, Proc. Calif. Acad. Sci. (4) 24, p. 86.

Elaphidion irroratum: KNULL, 1946, Ohio Biol. Surv. Bull. 39, p. 194.

Elaphidion irroratum: CAZIER & LACEY, 1952, Amer. Mus. Novit. 1588, p. 17.

Elaphidion irroratum: DUFFY, 1960, Monogr. Immat. Stages Neotrop. Timber Beetles, p. 123 (biology).

Elaphidion irroratum: LINSLEY, 1963, Univ. Calif. Publ. Ent., 21, p. 83, f. 30.

Male: Elongate, moderately slender; colour piceous to reddishbrown; integument shining, subglabrous with dense patches of white recumbent pubescence. Head densely pubescent next to eyes; antennae extending four or more segments beyond elytral apices, segments three to six or more with a spine at inner apex, third segment without outer spine, subequal to fifth, longer than fourth, sixth segment longer than fifth, third to ninth subequal, tenth a little shorter, eleventh longer than tenth, arcuate.

Pronotum wider than long, disc very coarsely, deeply punctate, finely, densely punctate at sides, disc with irregular impunctate areas, median longitudinal callus very wide; pubescence usually condensed at sides. Elytra coarsely punctate at sides, punctures a little smaller than those of disc of pronotum, separated by from 1 to 3 diameters, becoming smaller and more widely separated posteriorly; apices prominently bispinose, outer spine longer.

Prosternum impressed, impressions coarsely punctate, pubescent. Abdomen densely pubescent at sides; fifth sternite broadly rounded or subtruncate at apex.

Female: Antennae attaining or slightly surpassing elytral apices.

Prosternum transversely impressed in front of coxae on each side of middle, impressions finely, contiguously punctate. Abdomen with fifth sternite shallowly emarginate at apex.

(Adapted after LINSLEY, 1963)

Length: 11-30 mm. Breadth: 3-7 mm.

Host plants: Avicennia nitida, Laguncularia racemosa, Spondias purpurea, Albizzia lebbeck.

"AMERICA" (*irroratus* L.); BRAZIL (*ordinatum* Newm., *tessellatum* Newm.); NICARAGUA; MÉXICO; U.S.A., S. Florida; BAHAMAS; CUBA, HISPANIOLA, JAMAICA; ST.-BARTHÉLEMY.

CURAÇAO: Jongbloed, 15. VIII. 1952, B. de Jong (1 9, W); 11. X. 1952, de Jong (1 S, W); 16. X. 1952, de Jong (1 Q, W); 26. XI. 1952, de Jong (1 Q, W); 7. XII. 1952, de Jong (1 &); 19. XII. 1952, de Jong (1 Q, W); 28. XII. 1952 (1 Q, W); 8. I. 1953, de Jong (1 S, W); 13. I. 1953, de Jong (1 Q, W); 20. I. 1953, de Jong (1 9, W); 31. VIII. 1953, de Jong (1 3). --- Willemstad, 15. V. 1930, Jhr. Dr. V. H. van den Bergh (1 Q, A); 1956, R. H. Cobben (2 3, 4 Q, W). St. Thomas College, Hoogstraat, 1943, W. Holleman (1 9, A). Museum, 1949, P. Wagenaar Hummelinck (1 9, A). - Piscadera Baai, Carmabi, 1957, Cobben (1 Q, W); IX. 1958-XI. 1959, J. H. Stock (1 J, A); 24. X. 1963, Hummelinck (5 3, 24 9, L, U); at light, 20. XI. 1963, Hummelinck (3 3, 7 9, U); 30. XI. 1963, Hummelinck (2 3, 4 9, L, U); at light, 10. XII, 1963, Hummelinck (2 3, 2 9, L, U); 16. XII. 1963, Hummelinck (4 3, 1 9, L, U); 30. XII. 1963, Hummelinck (4 3, 4 9, U); at light, 7. I. 1964 (2 3, 5 9, L, U). --- St. Kruis, hofje, 27. IV. 1930, H. J. MacGillavry (1 3, 1 9, A). - Curaçao, at light, 12. IX. 1963, de Jong (1 9, EFG); 1959, de Jong (1 9, EFG); de Jong (3 J, EFG).

BONAIRE: Kralendijk, 26. X. 1930, Hummelinck (1 ♀, A). — Rincón, 2–4. VI. 1930, H. J. MacGillavry (1 ♂, A). — Fontein, hofje, 21–24. V. 1930, MacGillavry (1 ♂, 4 ♀, A). — Dos Poos, 24. V.–6. VI. 1930, MacGillavry (3 ♂, 2 ♀, A). — Bonaire, V. 1957, Cobben (2 ♂, W); XII. 1958, E. Pieters Kwiers (1 ♀, W).

## Elaphidion conspersum Newman

(Plate XII figs. 4-5)

Elaphidion conspersum NEWMAN, 1841, Entomologist 1, p. 110. Elaphidion conspersum: GAHAN, 1895, Trans. Ent. Soc. Lond., p. 101.

Male: Elongate, moderately slender.

Dark ferruginous, very nitid where glabrous to subglabrous; with areas and maculae of dense yellowish-grey pubescence. Head densely pubescent round eyes and two vittae down frons; pronotum in major part densely pubescent, with nitid glabrous areas as follows: - a median longitudinal, almost complete line, on each side premedially an oval macula, slightly lateral to them over mainly posterior twothirds a slightly curved, slightly oblique, narrow line almost to base, and laterally a few smaller maculae, scutellum densely pubescent; elytra wholly covered with very sparse recumbent pale setae, with numerous, distinct, small varisized rounded scattered maculae. Antennae and legs fairly closely yellowish-grey pubescent. Underside yellowish-grey pubescent, broadly dense laterally, rather sparser medially, pro- and mesosternal processes glabrous in main.

Head with a number of very large punctures between eyes, a few on frons, and some smaller, closer at posterior border. Antennae not quite extending to elytral apex, rather robust; segments three to 10 distinctly bispinose apically; third segment subequal to scape; following segments gradually decreasing to tenth, apical, eleventh, about a third longer than preapical, slightly arcuate.

Pronotum very slightly transverse, distinctly broader basally than apically, but sides broadly rounded, more strongly and more broadly in anterior half; pubescent areas very coarsely, closely, subrugosely punctured; nitid areas almost impunctate in main. Scutellum rather broadly triangular, rather narrowly rounded apically; very finely and closely punctured.

Elytra coarsely, only fairly closely punctured basally, gradually becoming finer and sparse to apex; apices each strongly bispinose, the marginal about twice as long as the sutural.

Underside in main finely and fairly closely punctured, more coarsely and very closely at sides and almost across prosternum;

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prosternal process strongly raised, as high as coxae, subplanate above, strongly projecting posteriorly, apex vertically truncate; mesosternal process subplanate above, rather strongly declivous anteriorly. Apical abdominal ventrite slightly longer than preapical, broadly, feebly emarginate apically, lateral angles broadly rounded.

Legs moderately elongate; meso- and metafemora stoutly subbispinose apically, the inner spine somewhat longer than outer.

Female: More robust than male, similarly coloured and marked. Antennae shorter, only extending to about apical third of elytra; apical segment slightly shorter than preapical. Apical ventrite slightly shorter than preapical, somewhat broadly subtriangular, rather strongly narrowed to apex, rather narrowly, feebly emarginate apically, lateral angle broadly rounded.

Length: 17-25.5 mm. Breadth: 4-9 mm.

HISPANIOLA, Haiti (Type Q, Brit. Mus. N.H.); ? JAMAICA (GAHAN, 1895; probably erroneous); TORTOLA (Cotypes, Brit. Mus. N.H.).

CURAÇAO: Cas Corá, Agric. Station, 20. I. 1949, A. C. J. Burgers  $(1 \, \wp, A)$ . — Piscadera Baai, Carmabi, at light, 24. X. 1963, P. Wagenaar Hummelinck  $(2 \, \wp, U)$ ; 16. XII. 1963, Hummelinck  $(1 \, \mathfrak{F}, EFG)$ ; 7. I. 1964, Hummelinck  $(1 \, \wp, EFG)$ .

#### Elaphidion curaçaoae sp. nov.

(Plate XIII fig. 3)

Female: Moderate-sized, elongate, moderately slender. Colour fairly dark ferruginous, with variably dense, tawny-grey pubescence, leaving glabrous, nitid areas as follows: on pronotum a complete median, fairly narrow, laterally bisinuate, vitta; laterally, premedially a rounded macula, and on each side basally an elongate short vitta over about basal quarter; scutellum very densely pubescent, with a very narrow median glabrous vitta; elytra each with three very narrow, ill-defined, rather vague, glabrous vittae, two discal, third on lateral declivity; underside less densely pubescent, glabrous to subglabrous medially; legs fairly densely pubescent, with numerous small rounded glabrous maculae. Head rather densely, variably very coarsely to coarsely punctured; antennal tubercles moderately raised; eyes with upper lobes separated by about twice the breadth of an upper lobe. Antennae extending to about apical ninth of elytra; segments three to seven unispinose at internal apex, that on third segment very prominent, almost half as long as fourth segment, that on seventh minute; third segment slightly shorter than scape, about a fifth longer than fourth; subequal to fifth; following segments to tenth very gradually decreasing; eleventh slightly longer than tenth; segments from apical half of fifth slightly depressed or slightly explanate on outer side.

Pronotum almost as broad as elytral base; slightly transverse; broadly, evenly rounded laterally, unarmed; coarsely, fairly closely punctured except on the smooth, glabrous areas; with a few, very sparse, elongate, erect setae laterally. Scutellum short, very strongly transverse.

Elytra elongate, very slightly more than three times as long as pronotum, two and a half times as long as basal breadth; subparallelsided, then broadly rounded to apices, which are narrowly, strongly emarginate, stoutly bispinose, marginal a little stronger than sutural; coarsely punctured basally, the punctures as large, or nearly, as the largest on pronotum, separated by from one to two or so their diameters, gradually becoming finer and sparser to the apex; rather subseriate in part.

Underside broadly nitid medially, and almost glabrous there, pubescence fairly dense laterally; median one extremely sparsely punctured, densely and finely laterally, with a few scattered larger punctures. Prosternal process strongly raised, higher than coxae, gradually declivous anteriorly; vertical posteriorly, apex strongly posteriorly projecting; about half the breadth of a procoxal cavity, rotundately explanate apically. Mesosternal process broad, about half as broad as a mesocoxal cavity, about a quarter broader than prosternal process; very strongly rounded anteriorly, almost vertical; strongly, suddenly explanate apically, the lateral projections inserted into mesocoxal depressions; apex emarginate. Apical ventrite moderately elongately suboval, feebly longer than preapical, broadly, strongly, regularly rounded apically.

Legs only moderately long, slender; femora moderately clavate,

the posterior least strongly; meso- and metafemora not spinose apically, mesofemora scarcely at all produced, metafemora very feebly obtusely angular. Metatarsi with first segment fairly short, about two-thirds as long as the following two segments united.

Male: Unknown.

Length: 14 mm. Breadth: 3.5 mm.

CURAÇAO: Piscadera Baai, Carmabi, at light, 24. X. 1963, P. Wagenaar Hummelinck (Q Holotype, EFG).

Holotype (female) placed in the E. F. Gilmour collection. Unique.

My thanks are due to Dr. P. WAGENAAR HUMMELINCK, collector of the specimen, who has kindly allowed me to retain the type.

This new species is possibly most closely allied to *Elaphidion* cobbeni Gilmour, from which it differs, apart from lighter colour and some pubescent placing, in lacking pronotal tumescences, vertex more densely punctured, mesosternal process more strongly declivous anteriorly, and upper lobes of eyes more closely approaching.

## Genus ANELAPHUS Linsley, 1936

Two species of this genus are recorded herein, one of which is widely distributed from Florida, through the Greater Antilles. The other is described as new.

## Key to West Indian Species of Anelaphus

(All these species have antennal segments 3-6 (or 7-8 - subjasciatum Gahan) unispinose apically)

1.	Elytral integument not concolorous, pale brown or reddish-
·	brown, marked with a piceous longitudinal vitta, frequently
	expanded postmedially; (8-11 mm. S. Florida, Bahamas, Antil-
	les, Curaçao) subtropicus Casey, 1924
-	Elytral integument concolorous, dark brown to ferruginous . $\  \  2$
2.	Elytral apices feebly emarginate
-	Elytral apices truncate or subtruncate

- Pronotum densely greyish pubescent, disc with five, short, glabrous, nitid costulae, two anterior, three basal, the median more elongate; elytra greyish pubescent, postbasally and subsuturally rather glabrous; ventral surface greyish, sprinkled with black, abdomen longitudinally brown medially; (Cuba).
   guttiventre Chevrolat, 1862.
- Pronotum densely greyish pubescent, disc with three feebly blackish tubercles, elytra with patchy greyish pubescence which aggregates into an ill-defined transverse, premedian fascia; ventral surface thinly greyish pubescent, more densely on the sides of the metasternum; (8-10 mm. Guadeloupe) . . . . . . subfasciatum Gahan 9, 1895
- Elytral whitish pubescence forming an ill-defined slightly premedian transverse fascia; (8-10 mm. Guadeloupe) . . . . . subfasciatum Gahan 3, 1895

## Anelaphus subtropicus (Casey)

(Plate XII fig. 3)

Anoploium subiropicum CASEY, 1924, Mem. Col. 11, p. 245. Elaphidion cinereum CHEVR., 1862, Ann. Soc. Ent. Fr. (4), 2. Elaphidion cinereum: SCHWARZ, 1888, Proc. Ent. Soc. Washington 1, p. 93 (biol.). Elaphidion cinereum: LENG, 1890, Ent. Amer. 6, p. 214. Elaphidion nanum GAHAN, 1895, Trans. Ent. Soc. Lond., p. 103. Anoplium nanum: LINSLEY, 1936, Ann. Ent. Soc. Amer. 29, p. 467. Elaphidion nanum: FRASER, 1948, Ent. Mon. Mag. 84, p. 127 (habits).

Anoplium nanum: CAZIER & LACEY, 1952, Amer. Mus. Novit. 1588, p. 19, f. 2.

Elaphidion nanum: DUFFY, 1953, Monogr. Imm. Stages Brit. Timber Beetles, p. 183, f. 53, 154, pl. 1 f. 2 (biol.).

Elaphidion nanum: DUFFY, 1960, Monogr. Imm. Stages Neotrop. Timber Beetles, p. 121, f. 70-72 (biol.).

Anelaphus subtropicus: LINSLEY, 1962, Univ. Calif. Publ. Ent. 21, p. 103.

Male: Form moderately small, depressed; integument brown or reddish-brown (rarely black), appendages frequently testaceous, elytra with a piceous longitudinal line, often expanded into dark cloud behind middle. Head rugosely but not coarsely punctate between and behind eyes; antennae a little longer than body, segments finely but distinctly carinate, segments 3 to 7 with a short inner spine at apex, scape coarsely, densely punctate, longer than third segment, third segment longer than fourth, shorter than fifth, segments 5 to 9 subequal or becoming gradually shorter towards apex, tenth segment distinctly shorter than ninth, eleventh not or scarcely longer than tenth.

Pronotum about as long as broad, sides rounded, integument coarsely, densely punctate except for a median smooth area and paired anterior and posterior latero-discal callus; pubescence depressed, frequently dense between discal calluses, with scattered long, erect hairs; scutellum wider than long, rounded, densely pubescent; prosternum feebly impressed in front of coxae, coarsely, shallowly punctate, rather densely clothed with appressed pubescence; metasternum sparsely punctate and subglabrous in middle, finely, densely punctate and pubescent at sides; episterna of metathorax finely, densely punctate and pubescent.

Elytra about two and a half times as long as basal width, surface coarsely, deeply punctate at base, punctures a little smaller than those of pronotum and mostly separated by 1 or 2 diameters, becoming finer posteriorly; apices rounded to suture, or subtruncate, or feebly emarginate, with sutural angle feebly dentiform.

Legs rather short; femora moderately robust, finely, sparsely punctate, sparsely pubescent.

Abdomen finely, very sparsely punctate, obscurely pubescent; fifth sternite more densely punctate at base, apex produced at middle, emarginate on each side. Female: Antennae a little shorter than body.

Length: 8-11 mm. Breadth: 18-25 mm.

Host plants: Conocarpus erecta, Guaiacum officinale, Casuarina equisetifolia, Xanthoxylum (Linsley, 1963).

U.S.A., FLORIDA, Key West (Type), Key Largo; BAHAMAS, South Bimini Isl.; CUBA; HISPANIOLA, Haiti; VIRGIN ISLANDS. CURAÇAO: B. de Jong (1 9, EFG).

LINSLEY (1963) states that judging from the type, *Stenocorus nanus* Fabricius (*Callidium cinereum* Oliv.) represents a different species.

#### Anelaphus curaçaoensis sp. nov.

(Plate XII figs. 1-2)

Male: Form moderately short; integument reddish-brown to brown, head and pronotum darker; pubescence short, recumbent, moderately dense, somewhat variegated with sparser areas between, tawny-grey, only condensed in a small patch laterally, slightly premedially on each side of pronotum, and scutellum and ocular margins very densely pubescent; elytra with rather numerous, fairly elongate pale tawny erect setae, arranged sublinearly in main; underside similarly pubescent, less dense on abdomen.

Head coarsely, densely punctured, the punctures in the main separated by not more than their diameter. Antennae moderately robust, tapering, reaching from about apical sixth to not quite the elytral apex; segments 3 to 6 with an inner, distinct, gradually shortening spine at inner apex, seventh segment with a very minute inner spine, outer angles subacute; segments beginning with fifth feebly excavated and moderately flattened externally; scape slightly shorter than second and third segments together; third segment a sixth longer than fourth, very slightly shorter than fifth; fifth to seventh subequal; following segments to tenth very gradually decreasing, eleventh a little longer than tenth.

Pronotum as long as broad, laterally broadly regularly rounded; surface opaque, fairly finely, densely punctured with scattered large punctures intermixed, particularly near and around the median discal smooth area, which is elongate and narrow, extending over the median half or more, rather irregularly defined, flat, polished, nitid.

Elytra three times as long as pronotum, two and a half times as long as basal breadth; disc very coarsely punctured basally, densely, punctures separated by less than their diameter, gradually becoming much finer and much less dense to the apex; apices straight truncate, both angles obtuse, rounded.

Prosternum almost glabrous, obtusely wrinkled and almost impunctate across about anterior third, remainder with scattered very large punctures, more finely and closely punctured between; not depressed. Prosternal process narrow, strongly rounded posteriorly. Mesosternal process fairly broad, about three times as broad as prosternal, subtruncate apically; broadly, moderately tumescent anteriorly. Meso-, meta- and metepisterna rather coarsely, not very closely punctured, interstices finely punctured. Abdomen with scattered intermixed large and fine punctures; apical ventrite broadly rounded apically. Legs fairly finely, moderately closely punctured, with a few scattered larger punctures intermixed.

Female: In general slightly more robust than male. Antennae reaching apical third to quarter of elytra; segments three to seven with an inner apical spine, the latter minute.

Pronotum subnitid, very coarsely, closely punctured, the punctures in main larger than those of elytral base. Elytra very slightly less than two and a half times as long as basal breadth. Prosternum with a less distinct glabrous anterior area, coarsely punctured. Apical ventrite broadly rounded apically.

Length: 10.2-14 mm. Breadth: 2.8-3.9 mm.

CURAÇAO: Jongbloed, 25. XII. 1952, B. de Jong (1 & Paratype); 8. I. 1953, de Jong (1 & Paratype). — Mahaai, 27. XI. 1951, de Jong (1  $\bigcirc$  Paratype); 10. XII. 1951, de Jong (1  $\bigcirc$  Paratype). — Parera, Pasanggrahan, 6. IV. 1949, P. Wagenaar Hummelinck (1  $\bigcirc$  Paratype, A). — Willemstad, at light, 1956, R. H. Cobben (1 & Paratype, W). — Piscadera Baai, Carmabi, 1957, Cobben (& Holotype,  $\heartsuit$  Allotype, EFG; 2  $\heartsuit$  Paratypes); 24. X. 1963, Hummelinck (1 & Paratype, U); at light, 30. XII. 1963, Hummelinck (1  $\heartsuit$  Paratype, U); at light, 7. I. 1964, Hummelinck (1  $\clubsuit$ , 2  $\heartsuit$  Paratypes, L). — Groot Piscadera in dead Swietenia, 27. I. 1949, Hummelinck (1  $\heartsuit$ , Paratype, A). Holotype (male), Allotype (female) and three Paratypes (1 male, 2 females) placed in the E. F. Gilmour Collection; one Paratype (female) in the Rijksmuseum van Natuurlijke Historie, Leiden; eight Paratypes (females) in the Zoölogisch Museum, Amsterdam; three Paratypes (one male, two females) in the Laboratorium voor Entomologie, Wageningen.

This new species appears to be most closely allied to *Anelaphus inermis* (Newman), from which it may be distinguished immediately by the median smooth area of the pronotum very elongate and narrow, not oval and postmedian; pronotum lacking distinct pale maculae and the prosternum not impressed or concave in either sex.

## Genus STIZOCERA Serville, 1834

Two new species of this widely distributed Neotropical genus are described herein.

## PROVISIONAL KEY TO SPECIES OF STIZOCERA

1.	Elytra cyaneous-green; (head, prothorax and scutellum, me- sosternum and pro- and mesocoxae ferruginous; antennae, legs,
	metasternum and abdomen black; pronotum transversely
	striate); (14.25 mm. Brazil: Amazonas) boyi Melzer, 1927
	Elytra not cyaneous-green
2.	Elytra completely black or dark bluish-grey; (pronotal disc
	smooth)
-	Elytra not completely dark, at least with a median light
	macula
3.	Elytra plumbeus, pronotum light red, antennae, abdomen and
	legs black; elytra gradually widening posteriorly; (9-10 mm.
	Brazil)
	[? Genus]
-	Body completely black above, with sparse white setae;
	elytra parallel-sided or narrowing apically 4
4.	Antennae and legs black; (some specimens black below, some

(Bolivia), have ventral surface and sides of thorax reddish); (ca. 12 mm. Bolivia, Brazil, Argentina). . tristis Guerin, 1844

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-	Antennae and legs yellow, apices of antennal segments, femoral clava and tibiae basally and apically, black; (12–14 mm. Argentina)
5. 	Elytra blackish with a median pale macula 6 Elytra not thus, elytra either bicoloured with basal part ferruginous and apical part black, or fasciate, or completely ferruginous, with at most extreme apex blackish, or also suture blackish
6.	Head and thorax black; elytral pale macula small; (14–19.5 mm. Brazil) bisignata Zajciw, 1958
-	longer, oval
7.	Elytral maculae larger; elytral apical spines shorter, somewhat divergent; (13 mm. Cuba, Panamá, Venezuela, Colombia, Boli- via, Brazil)
-	Elytral maculae smaller, somewhat oblique to each other; elytral apical spines a little longer and more parallel; (Bolivia, Brazil) <i>poeyi</i> Chevr., var. <i>conspicillata</i> Gounelle, 1909
8.	Brownish-black; elytra each with a suboval premedian tes- taceous macula and a postmedian oblique testaceous fascia; (10-14 mm. Argentina)
9.	Elytra distinctly bicoloured, basal part light ferruginous at least apical quarter black; (pronotal disc at least feebly plicate; head and thorax black)
-	Elytra unicolorous ferruginous or testaceous, with at most extreme apices blackish or sometimes also with suture and/ or posterior margin narrowly blackish
10.	Femora black, reddish basally; (basal half of elytra, sternum and first abdominal ventrite reddish); (12 mm. Colombia, Nicaragua, Is. Toboga) rugicollis Guerin, 1844

- Femora unicolorous light ferruginous or light brownish. . 11

11.	Abdomen red-brown; scutellum densely light yellow pubescent; apical quarter of elytra black; (13 mm. Brazil)
	Abdomen with first segment dark ferruginous, from second segment darkening to almost black at apex; scutellum finely grey pubescent; apical two-fifths suturally to third marginally black; (10.7 mm. Trinidad) howdeni Gilmour, 1964
12. _	Pronotal disc transversely plicate, these sometimes feebleand with punctures interspersed.13Pronotum smooth discally, not rugose, striate or plicate,but may have coarse punctures19
13.	Antennae completely black, at least after scape; femora black basally and apically; tibiae black; (pronotal plicae fine, feeble; elytral punctation moderate, linear; testaceous-red, elytra paler extreme apex blackish); (9.5–10 mm. Brazil) <i>horni</i> Melzer, 1923
<u> </u>	Antennae ferruginous to pitchy; femora at most blackish apically; tibiae ferruginous to pitchy
14. 	Elytral punctation coarse, dense basally, seriate, pronotal rugae strong, scabrose; (14.5–16.5 mm. Brazil, Argentina, Bolivia, Venezuela, Suriname, Trinidad) <i>plicicollis</i> Germar, 1824 Elytra with coarse, or dense punctures basally, not seriate; pronotal rugae finer
15. _	Head and pronotum black16Head and pronotum ferruginous18
16.	Elytra each with only two series of small punctures; suture and external apical margin of elytra, and apices of anterior and intermediate femora not darkened; (8.5 mm. Brazil)
	Elytra with much more numerous, larger, scattered punc- tures; suture and external apical margin of elytra black, about apical half of all femora black
17.	Antennal segments one to seven spinous at internal apex; pro- notum widest medio-laterally, narrowly punctured above and below; margino-apical black streak very narrow; scutellum

_	black or pitchy; (9.12 mm. Curaçao) <i>curaçaoae</i> sp. nov. Antennal segments one to six only spinous at internal apex; pronotum widest preapically, coarsely, fairly closely punctured and matt latero-discally to ventrally (? sexual); margino-apical black streak broader, about a third as broad as elytra in that area; scutellum ferruginous; (Q unknown) (10.3 mm. Curaçao) 
18. -	Femora darkened apically, contrasting with base (15 mm. Brazil) geniculata Pascoe, 1866 Femora not separately darkened apically; suture almost com- pletely blackish; (9–13 mm. Jamaica)
19.	Head, thorax and elytra ferruginous-red, elytral apical spines not blackened; (antennae except scape, legs and tarsi, except apical segment, black); (9–10 mm. Brazil) <i>longicollis</i> Zaiciw, 1963
	Reddish-ferruginous, elytral apices narrowly blackish or at least spines blackish
20.	Antennae and legs completely black; (dark-red; extreme elytral apices black); (11.5 mm. Brazil) <i>lissonota</i> Bates, 1870 Antennae ferruginous to yellowish; legs at most with apical part of femora black
21.	Pronotal disc coarsely, but not closely punctured; (head and pronotum rufous-testaceous, elytra yellow-testaceous, apex piceous); (22 mm. Br. Honduras) <i>laceyi</i> Linsley, 1934 Pronotal disc completely smooth and impunctate medially, or with very fine, sparse punctures
22.	Pronotal disc with two obsolete anterior tubercles and others behind; smooth medially; (ferruginous, antennae, elytra, base of femora and tibiae fulvous, femoral apices and external elytral apical spines blackish; (13 mm. Brazil)
-	Pronotal disc smooth, without tubercles; (elytral apical spines black)

The following three species are extremely close and I am not satisfied with the separative features given.

23.	Pronotum	brick-r	ed to	brov	vnish-	blacl	k; (	11-2	21 m	ım.	Bra	azil,
	Argentina)			• •			arn	nata	Ser	rville	, 1	834
<u> </u>	Pronotum	light re	d to te	stace	ous-rea	d	•••	•			•	24
<b>.</b> .	-				-	-	-					

- 24. Pronotum in males distinctly and regularly punctured laterally;
  (\$\overline\$?) (12-17 mm. Brazil) . . . . consobrina Gounelle, 1909
  - Pronotum at most sparsely and very finely punctured in both sexes (?); (11.5 mm. Brazil). . . . . . . . *fragilis* Bates, 1870

## Stizocera curaçaoae sp. nov.

#### (Plate XIV fig. 1)

Male: Form elongate, narrow, subcylindrical, slightly flattened above.

Head and pronotum black; scutellum black to pitchy, fairly densely greyish pubescent; antennae and legs light ferruginous, except about apical half of femora black; elytra light ferruginous, extreme apex black, extended, gradually fading, very narrowly along suture nearly to middle, and along margin to about apical third; underside ferruginous, abdomen pitchy to blackish from about posterior third of first segment; wholly clothed with long, erect setae; nitid; prosternum, mesosternum, metepisterna and metasternum laterally, rather thinly sericeous-grey pubescent.

Head fairly coarsely punctured, sparsely in main, but very densely across posterior border; narrowly sulcate medially between antennal tubercles, which are widely separated, a little raised; eyes with upper lobes widely separated by about two and a third times the breadth of an upper lobe. Antennae exceeding elytral apices by last segment; segments three to nine finely longitudinally carinate, the latter feebly; segments three to seven spinose at inner apex, very strong on basal, very small on seventh; scape only moderately robust, slightly arcuate, subclavate; third segment about one and a fifth longer than scape; fourth very slightly longer than scape; fifth equal to third; following segments very gradually decreasing, eleventh, apical, about equal to tenth. Pronotum very slightly longer than broad; slightly broader basally than apically; not very strongly, broadly rounded laterally, unarmed; slightly constricted basally and apically; disc slightly, fairly evenly convex, with two slightly premedian feeble tumescences; fairly strongly transversely rugose, these in whorls round the two tumescences; with only a very few, extremely sparse, coarse punctures. Scutellum rather small, transverse, broadly rounded, very finely and coarsely punctured.

Elytra three and three-quarter times as long as pronotum, three times as long as basal breadth; subparallel-sided laterally to a little postmedially, then gradually narrowing and broadly rounded to apices, which are truncate-emarginate, very slightly obliquely, bispinose, marginal spine only moderately elongate and stout, sutural small, scarcely more than dentate; coarsely, not very closely punctured, irregularly, closest and coarsest basally, rapidly becoming much smaller and sparser postmedially and increasingly so to apex.

Legs elongate; femora pedunculo-clavate, anterior and intermediate most strongly so; meso- and metafemora acutely bidentate apically, the posterior most strongly; all tibiae conspicuously longitudinally carinate.

Prosternum rather matt, with a few, feebly, short, transverse rugae, extremely finely and closely punctured, with a few very sparse, coarse punctures; metasternum and abdomen with a few very sparse, fairly coarse punctures; apical ventrite about equal in length to preapical, feebly broadly rounded apically, almost subtruncate.

F e m a le: Similar in form and colour to male. Antennae extending to about elytral apex. Abdominal apical ventrite about one and a half times as long as preapical, narrower than in male, more broadly rounded apically. Elytra proportionately slightly shorter to pronotal length. Underside somewhat more densely pubescent.

Length: 9-12 mm. Breadth: 2-2.7 mm.

CURAÇAO: Jongbloed, 25. X. 1952, B. de Jong (1 & Paratype, A); 30. X. 1952, de Jong (1 & Paratype, A); 18. XI. 1952, de Jong (3 & Paratypes); 21. XI. 1952, de Jong (2 & Paratypes, A); 26. XI. 1952, de Jong (1 & Paratype). — Willemstad, autumn 1956, R. H. Cobben (1 & Paratype, W). — Piscadera Baai, Carmabi, at light, 2. XI. 1963, P. Wagenaar Hummelinck (2 & Paratypes, U); at light, 30. XI. 1963, Hummelinck (& Holotype, & Allotype, EFG).

Holotype (male) and Allotype (female) placed in the E. F. Gilmour Collection. Two Paratypes (male) in the Zoölogisch Museum, Utrecht. One Paratype (male) in the Laboratorium voor Entomologie, Wageningen. Eight Paratypes (male) in the Zoölogisch Museum, Amsterdam; three placed in the E. F. Gilmour Collection.

This distinctive new species would appear to be most closely allied to *Stizocera geniculata* Pascoe (Brazil) which also has the femoral apices black, as also has *S. jamaicensis* Gilmour, but it differs from both in having the head and pronotum black, not ferruginous, amongst other several differences.

#### Stizocera insolita sp. nov.

(Plate XIV fig. 2)

Male: Form elongate, narrow, subcylindrical, slightly flattened above. Head and pronotum black; scutellum ferrugineous, fairly densely greyish pubescent; antennae and legs light ferruginous, except about apical half of femora black; elytra light ferruginous, extreme apex black, extended very narrowly along suture gradually fading to about apical third, and marginally more broadly, over about lateral third of elytra, to about apical two-fifths; underside ferruginous, abdomen pitchy from about middle of first ventrite; wholly clothed with erect setae; nitid; pro-, meso- and metasterna thinly sericeous-grey pubescent.

Head coarsely punctured, sparsely on frons and vertex, closely at base of antennal tubercles and lateroposteriorly; narrowly, and rather shallowly sulcate between antennal tubercles, which are widely separated, slightly raised; eyes with upper lobes widely separated by about twice the breadth of an upper lobe. Antennae over-reaching elytral apex only from about middle of apical, eleventh, segment; segments three to eight finely longitudinally carinate, the latter feebly; segments three to six spinose at inner apex, very strong on third, decreasing to small on sixth; scape moderately robust, feebly arcuate, subclavate; third segment one and an eighth times as long as scape; one and a quarter times as long as fourth, which is slightly shorter than scape; fifth equal to scape; sixth very slightly shorter than fifth; seventh equal to fifth; following segments including apical, extremely gradually decreasing.

Pronotum slightly longer than broad, slightly broader basally than apically; subovoid in shape, broadest across about apical quarter, broadly rounded laterally, narrowing posteriorly; strongly and rather abrubtly narrowed apically, but not strictly constricted. basally shallowly constricted; disc moderately convex, uneven, with two slightly premedian tumescences, a median longitudinal area nitid over an area rapidly narrowing from anterior border, thence widening to include the two small tubercles, thence broadly rounded and slightly narrowing to base, this area somewhat obtusely tumescently bordered, anteriorly with a few coarse punctures, postmedially with a few, obtuse transverse rugae; the whole of the lateral area, extending ventrally across prosternum, very coarsely, moderately closely punctured, interstices finely and closely punctured. matt, (this would appear to be possible male sexual punctation). Scutellum rather small, transverse, broadly rounded, very finely and closely punctured.

Elytra three and a half times as long as pronotum, three times as long as basal breadth; subparallel-sided laterally to a little postmedially, then gradually narrowing and broadly rounded to apices, which are almost straight truncate-emarginate, bispinose, marginal spine stout, moderately elongate, sutural small, dentiform; coarsely, not very closely punctured, slightly sublinear in part, very coarse basally, becoming smaller posteriorly, rapidly so postmedially, towards apex fine and very sparse.

Legs elongate; femora pedunculo-clavate, anterior and intermediate most strongly so; meso- and metafemora bidentate apically, the outer on the mesofemora scarcely produced, those on the metafemora broadly subspinose; all tibiae conspicuously longitudinally carinate.

Prosternum similarly punctured (? sexually) to rest of pronotum except medio-discal area; mesosternum, metasternum and abdomen sparsely punctured, nitid; apical ventrite about equal in length to preapical, broadly truncate apically.

Female: Unknown.

Length: 10.6 mm. Breadth: 2.2 mm.

CURAÇAO: B. de Jong (1 3, EFG).

Holotype (male) in E. F. Gilmour Collection. Unique.

At first sight this new species is extremely close to Stizocera curacaoae sp. nov. described above, in being of very similar colour, except that the margino-apical black area is rather broader. The curious pronotal structure and punctation, through which it differs apparently from all species of Stizocera, is somewhat analogous to that in the males of the genus Periboeum. I do not consider it likely that this is the male of S. curacaoae, from which it differs in the antennal proportions, and proportions of elytral length to basal breadth and pronotal length.

## Genus CURTOMERUS Stephens, 1839

The most widely distributed member of this small genus is recorded herein.

#### **Curtomerus flavus** (Fabricius)

(Plate XIV figs. 3-4)

Callidium flavum FABR., 1775, Syst. Ent., p. 191.

Callidium flavum: OLIV., 1790, Encycl. Meth. Inst. 5, p. 261.

Callidium flavum: GMEL., 1790, Syst. Nat. 1 (4), p. 1849.

Callidium pilicorne FABR., 1792, Ent. Syst. r (2), p. 327.

Callidium pilicornis: OLIV., 1795, Ent. 4 (70), p. 68, pl. 8.

Callidium luteum STEPHENS, 1831, Brit. Ent. Mand. 4, p. 249.

Cylindera pallida NEWM., 1833, Ent. Mag. 1, p. 510.

Lampromerus pilicornis: THOMSON, 1860, Class. Ceramb., p. 203.

Lampromerus pilicornis: CHEVR., 1862, Ann. Soc. Ent. Fr. (4) 2, p. 263.

Cyrtomerus pilicornis: SCHIÖDTE, 1876, Nat. Tidskr. (3) 10, p. 409, pl. 13 f. 20-22 (biology).

Sotenus setiger SHARP, 1878, Trans. Ent. Soc. Lond., p. 205.

Ceresium impuncticolle FAIRM., 1881, Ann. Soc. Ent. Fr. 1, p. 473.

Solenus setiger: SHARP, 1885, Trans. R. Dublin Soc. (2) 3, pl. 5 f. 49.

Cylindera pilicornis: GAHAN, 1895, Trans. Ent. Soc. Lond., p. 108.

Cylindera pilicornis: SCHAEFFER, 1908, Bull. Brooklyn Inst. Arts Sci. 1, (12), p. 336.

Cylindera flava: AURIV., 1912, Col. Cat. ed. Junk-Schenkling 39, p. 120.

Cylindera flava: AURIV., 1929, Zool. Jahrb. Suppl. 16, p. 2 (nota).

Cylindera flava: BLAIR, 1935, Bull. Bishop Mus. 114, p. 273 (nota).

Cylindera flava: WOLCOTT, 1936, Journ. Agric. Univ. Puerto Rico 20, p. 261 (habits).

Cylindera flava: CAZIER & LACEY, 1952, Amer. Mus. Novit., 1588, p. 27, f. 8 (map).

Male: Form moderately robust; colour brownish-testaceous to rufotestaceous (rarely piceous), eyes black. Head with a few long, erect hairs on lower face; antennae extending 2 to 3 segments beyond apices of elytra, scape punctate, with a few long cilia externally. Pronotum scarcely longer than broad, surface with a few long, erect coarse hairs, disc coarsely but shallowly punctate. Elytra coarsely and somewhat linearly punctate, thinly clothed with moderate and long, suberect and erect pale hairs; surface concolorous, without fasciae; apices rounded to suture, without apical spines.

Prosternum shallowly impressed, coarsely, shallowly punctate; pro-, meso-, and metasterna shining, subglabrous. Abdomen with fifth sternite rounded at apex.

Female: Antennae scarcely or barely attaining elytral apices. Prosternum not impressed, shining, finely sparsely punctate; abdomen with fifth sternite subtruncate or shallowly emarginate at apex.

(Linsley, 1963)

Length: 4.8-11.5 mm. Breadth: 1.2-3.2 mm.

Host Plants: Acacia decurrens, A. farnesiana, Eucalyptus, Datura, Pimenta officinalis, P. vulgaris, Nicotiana, Bucida bucera, Casuarina equisetifolia, Coccolobis uvifera.

Cylindera flava: DUFFY, 1953, Mon. Imm. Stages Brit. Timber Beetles, p. 188, f. 159-160 (biology).

Curtomerus flavus: GRESSITT, 1956, Ins. Micronesia, Col. Ceramb. 17 (2), p. 77, f. 3c.

Curtomerus flavus: DUFFY, 1960, Mon. Imm. Stages Neotrop. Timber Beetles, p. 138.

Curtomerus flavus: LINSLEY, 1963, Univ. Calif. Publ. Ent. 21, p. 5, f. 1.

Cylindera flava: GILMOUR, 1964, Stud. Fauna Curaçao 18, p. 96.

Curtomerus flavus: CHEMSAK, 1966, Proc. U.S. Nat. Mus. 118 (3526), p. 212.

<sup>&</sup>quot;AMERICA" (Type – *flavum*); "W. INDIES" (Type – *pilicorne*. Type – *luteum*); BRITAIN, Camberwell (Type – *pallida* [Introduced]); HAWAII, Oahu (Type – *setiger* [Introduced]); TAHITI [Introduced]; SOUTH AMERICA; VENEZUELA; CENTRAL AMERICA; MÉXICO; ARUBA; CURAÇAO; GRENADA; ST. VINCENT; MONTSERRAT; BARBUDA; SABA; ST. MARTIN; ANGUILLA; BAHAMAS, South Bimini; HISPANIOLA, Rep. Dominicana; CUBA; JAMAICA; CAYMAN ISL., Cayman Brac, Grand Cayman.

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BONAIRE: Dos Poos, 24. V.-6. VI. 1930, H. J. MacGillavry (2 3, 1 Q, A). CURAÇAO: Jongbloed, 15. XII. 1952, B. de Jong (1 3, A); 8. I. 1953, de Jong (1 3, A). — Willemstad, 1956, R. H. Cobben (1 Q, W). — Plantersrust, XII. 1934, G. J. H. Molengraff (1 Q, A). — Hato, 1949/50, A. D. Ringma (1 3, U). — Porto Marie, hofje, 15. IV. 1930, H. J. MacGillavry (1 3, A). — St. Kruis, hofje, 21–27. IV. 1930, MacGillavry (3 3, A). — Curaçao, 1956, Cobben (1 Q, W); at light, 1957, Cobben (1 3, W). — De Jong (1 3, W). ARUBA: IV. 1957, Cobben (2 Q, W).

## Tribe IBIDIONI

Only one genus of this large Neotropical tribe is recorded from Aruba.

## Genus HETERACHTHES Newman, 1840

One new species of this genus is described below.

Key to West Indian Species of Heterachthes

1.	Unicolorous	black;			(Cuba,				Puerto				Ri	co	, U.S.A			١.,	ľ	Vic	agua,		
	Venezuela).		•			•			۰.			•			ebe	eni	is	Ňe	ew	ma	ın,	18	40
-	Not thus	•	•	•		•			•		•		•						•		•		2

2. Pronotum quinquetuberculate: a strongly raised median, two slightly premedian, two prebasal, latter four feebler; (elytral apical quarter almost wholly yellowish, and a small rounded yellow macula at basal two-seventh); (12.2 mm. Aruba) . . . . arubae sp. nov.

- Pronotum at most premedially bituberculate, or almost not . 3

- 3. Testaceous-brown, covered with fine greyish pubescence, only slightly nitid, each elytron with two oval yellowish maculae, one at basal third, other at apical third; (Puerto Rico, St. Croix, St. Eustatius, Antigua, Guadeloupe, Dominica, St. Vincent, Mustique, Grenada) . . . . . . quadrimaculatus Fabricius, 1792
- Elytra whitish-yellow, each elytron narrowly margined with dark brown; strongly nitid, almost glabrous; prothorax slightly darker, remainder reddish-brown; (11.5 mm. Dominica) . . .
   *fulgens* Fisher, 1932

## Heterachthes arubae sp. nov.

(Plate XIII fig. 4)

Female: Narrowly elongate, subcylindrical; elytra moderately nitid.

Ferruginous; head, pronotum and scutellum densely, somewhat sericeous, flavous-grey pubescent, concealing the derm in main; elytra sparsely flavous-grey pubescent, each with two pale yellow dermal maculae: – one small, rounded, rather inconspicuous, slightly latero-discally at basal two-sevenths; the other very large, covering almost the whole apical quarter, except lateral border and very extreme apex. Antennae ferruginous, segments from third lighter, finely light flavous-grey pubescent, more or less unicolorous, but segments three and four vaguely darkened apically. Legs ferruginous. thinly light flavous-grey pubescent. Underside very dark ferruginous, almost pitchy, a little nitid, moderately densely, fairly light flavous-grey pubescent; anterior half of prosternum almost glabrous, nitid. Almost wholly, with fairly sparse, moderately long, pale erect setae, especially on elytra, underside and legs.

Head finely and closely granular, matt, very finely transversely rugose across posterior border; broadly, obtusely depressed between antennal tubercles, which are widely separated, rather strongly swollen and raised; eyes coarsely facetted, strongly emarginate, lower lobe very large, quite strongly swollen; upper lobes fairly narrow, about 4-5 facets wide, moderately widely separated by about two and a half times the breadth of an upper lobe. Antennae slightly longer than body, exceeding elytral apices by last two segments, (eleventh segment missing on both antennae); scape sparsely, lengthily setose above, second to sixth segments sparsely fringed beneath, thereafter setose at apices; scape moderately long, extending to about posterior border of head, robust, with a distinct broad sulcus on basal half of anterior face, moderately coarsely rugosely-punctured; segments without carinae, and unarmed; third segment one and three-quarter times as long as scape, one and fiveninths as long as fourth, one and a sixth as long as fifth; sixth equal to fifth; seventh a fifth shorter than sixth; eighth to tenth gradually decreasing, ninth equal to scape, (eleventh missing).

Pronotum elongate, one and a third times longer than broad, slightly broader basally than apically; cylindrical, subparallel laterally, slightly broadly rounded laterally, basal and apical transverse constrictions moderately broad and well-marked; disc moderately convex, broadly moderately depressed prebasally, quinquetuberculate: – one median, strongly raised, glabrous, slightly postmedially, the four others less strong, not glabrous, one on each side slightly premedially, and one on each side just before prebasal constriction; covered with fairly fine, close subgranular punctation, matt. Scutellum slightly transverse, parallel-sided along about basal half, apex broadly rounded; finely and closely punctured.

Elytra elongate, subcylindrical; three times as long as pronotum, almost three and a quarter times as long as basal breadth; parallelsided to about apical third, thence slightly rounded and finally more strongly to apices, which obliquely truncate, both angles quite unarmed; disc with three irregular rows of sparse, widely separated granulose-punctures, each narrowly surrounded by a glabrous annula; remainder moderately closely, fairly finely punctured.

Underside finely and closely punctured, except anterior half of prosternum glabrous and almost impunctate. Prosternal process very narrow, about a seventh as broad as a procoxal cavity, strongly arcuate, broadened apically. Mesosternal process fairly broad, about three and a half times as broad as prosternal, gradually declivous anteriorly and broadly, feebly tumescent, strongly and very suddenly explanate apically into narrow lateral angular lobes, which are inserted into concavities in the mesocoxae; apex broadly emarginate. Abdomen with apical ventrite about one and a quarter times as long as preapical, rather subconical, broadly rounded apically.

Legs elongate; femora pedunculo-clavate, the anterior most strongly swollen; tibiae slender, without longitudinal carinae; with very coarse punctures; tarsi elongate and slender; first metatarsal segment a little longer than following two segments united.

Male: Unknown.

Length: 12.2 mm. Breadth: 2.2 mm.

ARUBA: IV. 1957, R. H. Cobben (1 9, EFG).

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Holotype (female) placed in E. F. Gilmour Collection. Unique.

I have to thank Ir. R. H. COBBEN for kindly allowing me to retain the type.

This new species is possibly most closely allied to *Heterachthes longipilis* Bates, (Brazil) through having the pronotum similarly quinquetuberculate and the yellowish elytral apex. It may, however, be immediately distinguished through its quite unarmed, not spinose, elytral apices, and lacking a median, strongly oblique, elytral yellowish fascia.

## Tribe CALLICHROMINI

Only the type genus of this tribe is recorded from Curaçao.

### Genus CALLICHROMA Latreille, 1816

#### Subgenus MIONOCHROMA Schmidt, 1924

One widely distributed Neotropical species of this genus is recorded from Curaçao.

#### Callichroma (Mionochroma) vittatum (Fabr.)

## (Plate IX figs. 3-4)

Cerambyx vittata FABR., 1775, Syst. Ent., p. 166. Cerambyz viridiaureum DEGEER, 1775, Mem. Ins. 5, p. 145, pl. 15 f. 1. Cerambyx ochropus VOET, 1778, Cat. Col. 2, p. 12, pl. 10 f. 41. Leptura aurea GMEL., 1790, Syst. Nat. 1 (4), p. 1877. Cerambyx ochropus: VOET, 1794, Cat. Col. ed. Panzer 3, p. 30, pl. 10 f. 41. Cerambix vittatum: OLIV., 1795, Ent. 4 (67), p. 32, pl. 2 f. 10. Cerambyz vittatum: LATR., 1807, Gen. Crust. Ins. 3, p. 38. Callichroma rugicollis GUÉRIN, 1844, Icon. Regn. Anim. Ins., p. 220. Callichroma assimilatum WHITE, 1853, Cat. Col. Brit. Mus. 7, p. 158. Callichroma scitulum PASC., 1866, Trans. Ent. Soc. Lond. (3) 5, p. 292. Callichroma rugicolle: BATES, 1870, Trans. Ent. Soc. Lond., p. 334. Callichroma vittatum: BATES, 1870, l.c., p. 334 (nota). Callichroma rugicollis: BATES, 1880, Biol. Centr.-Amer., Col. 5, p. 46; 1885, p. 293. Callichroma vittatum: GAHAN, 1895, Trans. Ent. Soc. Lond., p. 112. Callichroma vittatum: GOUNELLE, 1911, Ann. Soc. Ent. France 80, p. 74. Callichroma (Mionochroma) vittatum: SCHMIDT, 1924, Deutsch. Ent. Zeitschr., p. 306. Male: Moderate sized, elongate.

Brilliant metallic green, glabrous, nitid, except as follows: - pronotum with a broad blackish-green velvetty pubescent vitta on each side of disc; elytra each with a discal and marginal longitudinal velvetty black pubescent vittae over a dermal violet colour; sutural vitta green, covered, fairly sparsely, with transversely placed recumbent greyish pubescence, the green latero-discal vitta from humerus much more sparsely pubescent. Underside lighter nitid green, thinly greyish pubescent. Antennae, tibiae and tarsi black; femora light yellow-ferruginous.

Head with frons longitudinally wrinkled; vertex transversely wrinkled; with scattered, fairly coarse punctures, densely at posterior border. Antennae about one and two-third times as long as body.

Pronotal disc subplanate above, rather strongly raised before the basal constriction; median and lateral nitid areas transversely strigose; pubescent areas finely rugosely punctured. Scutellum elongately triangular, acute apically; with a fairly smooth median longitudinal sulcus; closely subrugosely punctured, becoming transversely strigose at apex; nitid, sparsely and usually inconspicuously black pubescent basally. Elytra finely closely rugulosely-punctured; apices rather narrowly, separately rounded.

Underside extremely finely and closely rugulosely-punctured, with a few scattered coarse punctures. Abdominal preapical (fifth) ventrite about equal in length to fourth, broadly, rather strongly semicircularly emarginate apically; apical (sixth) ventrite conspicuous, equal in length to fifth, orange-yellow basally.

F e m a le: Antennae more evenly thickened to apex; only slightly longer than body, exceeding elytral apex by about last two segments. Underside with apical (fifth) ventrite somewhat subconical, about one and a third times as long as preapical, broadly rounded apically.

Length: 12.23 mm. Breadth: 3.4-6 mm.

MÉXICO tO PARAGUAY; HISPANIOLA, Haiti.

CURAÇAO: Jongbloed, 19. XII. 1952, B. de Jong (3 J. 1 Q. A); 22. XII. 1952, de Jong (3 J. 2 Q. A); 26. XII. 1952, de Jong (1 J. A); 17. I. 1953, de Jong

(1  $\mathcal{Q}$ , A). — Willemstad, at light, 1956, R. H. Cobben (1  $\mathcal{J}$ , W); St. Thomas school, Hoogstraat, 1943, W. Holleman (1  $\mathcal{Q}$ , A). — Piscadera Baai, Carmabi, 1957, Cobben (3  $\mathcal{J}$ , W). — Patatentuin, Sta. Martha, 5. I. 1949, A. C. J. Burgers (1  $\mathcal{J}$ , U).

#### Subfamily LAMIINAE

#### Tribe APOMECYNINI

One genus of this world-wide tribe is recorded from Aruba.

#### Genus DORCASTA Pascoe, 1858

One widely distributed species of this moderately large Neotropical genus is recorded herein.

## Dorcasta dasycera Erichson

(Plate XVIII fig. 2)

Hippopsis dasycera ERICHSON, 1848, Schomb. Reise Brit. Guiana 3, p. 574. Dorcasta oryx PASC., 1858, Trans. Ent. Soc. Lond. (2) 4, p. 264. Dorcasta dasycera: BATES, 1866, Ann. Mag. Nat. Hist. (3) 17, p. 25. Dorcasta oryx: BATES, 1880, Biol. Centr.-Amer., Col. 5, p. 130.

Small, subcylindrical, elongate, narrow.

Dark ferruginous, fairly uniformly covered with not very dense fulvous-grey pubescence; with elongate, erect, black setae scattered all over, particularly on the antennae. Head laterally on vertex with a narrow fulvous vitta from behind eyes, this continued, more broadly latero-discally on pronotum, which also has a very narrow median vitta; another also lower on face continued along pronotum above coxae. Elytra black, very vaguely fulvous trilineate, these sometimes scarcely discernible.

Head fairly closely, moderately coarsely punctured; upper lobes of eyes narrow, closely approaching. Antennae about equal in length to body; segments rather robust.

Pronotum elongate, subcylindrical, parallel-sided, unarmed laterally; coarsely, only moderately closely punctured. Scutellum very small, broadly rounded apically.

Elytra very elongate, subcylindrical; apices very obliquely sinu-

ate-truncate, marginal angle rather lengthily acute; coarsely, moderately closely, sublinearly punctured.

Underside finely and closely punctured, more coarsely on prosternum. Legs short, robust.

Length: 5-8.5 mm. Breadth: 0.7-1.2 mm.

BRITISH GUIANA (Type – dasycera Erich.); BRAZIL, Santarem (Type – oryx Bates). ARUBA: IV. 1957, R. H. Cobben (1 9, W).

#### Tribe DESMIPHORINI

Two genera of this tribe are recorded from Curaçao.

#### Genus **DESMIPHORA** Serville, 1835

One widely distributed species of this genus is recorded from Curaçao.

#### Desmiphora hirticollis (Oliv.)

#### (Plate XVIII fig. 3)

Saperda hirticollis OLIVIER, 1795, Ent. 4 (68), p. 11, pl. 4 fig. 37.

Desmiphora hirticollis: CAST., 1840, Hist. Nat. Col. 2, p. 468; 1850, l.c., 2nd Edn., 2, p. 468.

Desmiphora hirticollis: WHITE, 1855, Cat. Col. Brit. Mus. 8, p. 401.

Desmiphora mexicana THOMS., 1860, Classif. Ceramb., p. 75.

Desmiphora lanata CHEVR., 1862, Ann. Soc. Ent. France (4) 2, p. 253.

Desmiphora mexicana: BATES, 1872, Trans. Ent. Soc. Lond., p. 200.

Desmiphora mexicana: BATES, 1880, Biol. Centr.-Amer. Col. 5, p. 116; 1885, l.c., p. 351.

Desmiphora hirticollis: GAHAN, 1895, Trans. Ent. Soc. Lond., p. 122.

Desmiphora intricata CASEY, 1913, Mem. Col. 4, p. 350.

Desmiphora hirticollis: BLAIR, 1933, Ann. Mag. Nat. Hist. (10) 11, p. 482.

Desmiphora hirticollis: VAN DYKE, 1953, Calif. Acad. Sci. Occ. Pap. 22, p. 134.

Desmiphora hirticollis: GUÉRIN, 1953, Col. Brasil, p. 306.

Desmiphora hirticollis: COSTA LIMA, 1955, Ins. Brazil 9 (29) Col. (3), p. 120.

Desmiphora hirticollis: BREUNING, 1963, Cat. Lamiaires du Monde (7), p. 511.

Male: Fairly small to moderate sized; subcylindrical, elongate.

Blackish to pitchy; densely pubescent, setose and fasciculose. Covered fairly densely to densely with variegated greyish, greyishwhite and fulvous pubescence. Antennae dark brown towards apex. Principal fasciculi as follows: - four small on vertex, anteriorly projecting, the two slightly lower whitish, the upper two blackish, pronotum with a large anterior, whitish, and two small ones anterolaterally; slightly obliquely fulvous, white-margined, vittate backwards; antero-laterally with a fairly large blackish, fulvous and white margined macula, and another smaller blackish latero-medially. Scutellum densely fulvous pubescent basally, whitish apically, longitudinally glabrous medio-anteriorly.

Elytra with principal fasciculi as follows: - a brown elongate fairly large on centro-basal tumescence, a smaller, brown, immediately lateral to it; a large one at apical declivity, white anteriorly, becoming fulvous then dark brown posteriorly; a smaller whitish latero-anterior to this; preapically three small whitish ones in an irregular line, the inner on suture; a small whitish on suture at about basal third, a small on lateral declivity at same level; a small one whitish on suture at about apical two-fifths; sometimes blackish over a common cordiform circumscutellar area; with diagonal streaks of white pubescence here and there. Underside blackish, laterally densely fulvous and greyish pubescent, submaculate in part.

Antennae extending very slightly past middle of elytra. Pronotum transverse, strongly obtusely spinose laterally; disc strongly tumescent anteriorly; disc with extremely large, deep, only moderately close scattered punctures.

Elytra elongate, subparallel; rather depressed antero-suturally; apices separately broadly rounded; with a very obtuse, broad, rather flexuous, medio-discal costa; sparsely, very coarsely punctured basally, becoming much finer and sparser to apex postmedially.

Underside with apical ventrite about equal in length to two to four united; rather broad and somewhat tumid, apex fairly narrowly truncate. Legs short, robust.

Female: Antennae not extending quite to middle of elytra. Abdominal apical ventrite almost equal in length to two to four united, rather broadly subconical, not tumid; moderately broadly truncate and densely hirsute apically. Length: 9.2-17 mm. Breadth: 3-5 mm.

MÉXICO tO BRAZIL and GALÁPAGOS Islands; CUBA; ST. VINCENT; GRENADA.
CURAÇAO: Willemstad, at light, 1956, R. H. Cobben (1 & W). — Piscadera Baai, Carmabi, 1957, Cobben (1 Q, W); at light, 30. XI. 1963, P. Wagenaar Hummelinck (1, U). — Julianadorp, V-VI. 1957, van Ypenburg (1 Q, W). — Curaçao, 1956, Cobben (1 & W); B. de Jong (1, EFG).

#### Genus ESTOLOIDES Breuning, 1940

The fairly widely distributed type species of this genus is herein recorded from Curacao.

## Estoloides perforata (Bates)

(Plate XVIII fig. 4)

Estola perforata BATES, 1872, Trans. Ent. Soc. Lond., p. 200. Estola perforata: BATES, 1880, Biol. Centr.-Amer. Col. 5, p. 118. Estola? perforata: AURIV., 1900, Ofvers. Vet. Aked. Forth. 57, p. 415. Estoloides perforata: BREUNING, 1940, Fol. Zool. Hydrobiol. 10, p. 74 [nota – as genotype].

Male: Moderately small to moderate sized; fairly elongate. Covered with semi-erect to erect moderately sparse setae.

Dark ferruginous, uniformly covered with fulvous-grey pubescence. Head, pronotum and elytra with large, fairly sparse glabrous punctures, on latter placed linearly, 10–11 rows on each elytron, with semi-erect seta from each puncture; scutellum margined with denser flavous-grey pubescence. Antennal segments darkened apically, somewhat greyer basally; fairly sparse, moderately lengthily fringed beneath.

Pronotum strongly, broadly spinous latero-medially; disc smooth. Elytra moderately elongate, subparallel-sided to a little postmedially, thence gradually rounded to apices, which are separately broadly rounded; smooth, fairly evenly convex, centrobasal area broadly, slightly tumescent; linearly punctate.

Antennae about one and a quarter times as long as body, exceeding elytral apex by about three apical segments.

Legs rather robust and only moderately elongate. Tarsi with apical one or two segments light ferruginous. Pro- and mesosternal processes rather broad. Abdominal apical ventrite nearly twice as long as preapical, slightly broadly emarginate apically, lateral angles broadly rounded and slightly, broadly, tumid.

Female: Antennae a little shorter than in male, exceeding elytral apex by about last segment. Apical ventrite about two and a half times as preapical, somewhat subconical; apical lateral angles not tumid, apex broadly truncate.

Length: 7–12 mm. Breadth: 2.1–3.5 mm.

NICARAGUA (Type); VENEZUELA.

CURAÇAO: Jongbloed, 30. X. 1952, B. de Jong (1  $\Diamond$ , A); 3. XII. 1952, de Jong (1  $\Diamond$ , A). — Willemstad, at light, 1956, R. H. Cobben (1  $\Diamond$ , W). — Piscadera Baai, Carmabi, 1957, Cobben (1  $\Diamond$ , W).

## Tribe ACANTHODERINI

One genus of this fairly large Neotropical tribe is recorded from the area dealt with herein.

## Genus ACANTHODERES Serville, 1835

#### Subgenus PSAPHAROCHRUS Thomson, 1864

One fairly widely distributed species of this genus is recorded from Curaçao.

#### Acanthoderes (Psapharochrus) circumflexa DuVal

(Plate XV figs. 3-4)

Acanthoderus circum/lexus DUVAL, 1857, Hist. Cuba, Ins., p. 270. Acanthoderus meteorica GISTL., 1857, Wirbell. Thiere, p. 79. Psapharochrus circum/lexus: CHEVR., 1862, Ann. Soc. Ent. Fr. (4) 2, p. 247. Acanthoderes circum/lexus: BATES, 1872, Trans. Ent. Soc. Lond. p. 207. Acanthoderes circum/lexa: GAHAN, 1895, l.c., p. 130.

Male: Of only moderate size, rather broad, subtriangular in shape.

Dark brown, covered with dense short, brown, rather silky pubescence, variegated with fulvous. Vertex with a black oval macula each side. Pronotum with a large latero-anterior triangular
whitish macula, mainly sublaterally, and pale along latero-posterior border. Scutellum blackish-brown with a slightly paler median vitta. Elytra darkest in circumscutellar region; laterally and apically abundantly variegated with fulvous and yellowish-white; each elytron with an oblique, subtriangular, white pubescent fasciate macula from margin extending from just onto disc, to, more usually, past midline of disc, the fascia slightly darkened medially; with blackish-brown oblique discal maculae at about basal third, slightly postmedially and at about apical fifth, usually paler bordered. Antennae light ferruginous, except scape and second segment dark; greyish pubescent, usually each segment broadly dark brown annulate, basally, premedially and preapically on third and fourth segment; basally and preapically on remainder.

Underside blackish; very sparsely grey pubescent, this denser laterally and along posterior border of pro-, meso- and metasterna. Legs dark ferruginous, lighter dorsally; fairly sparsely greyish pubescent on femora, with more condensed patches; tibiae and tarsi densely greyish-white pubescent, the former broadly brown annulate basally, medially and preapically.

Head short, broad; frons large, with a few scattered coarse punctures; eyes with upper lobes separated by nearly three times the breadth of an upper lobe; lower lobe rather large, quadrate, about equal in height to gena. Antennae fairly robust; scape rather short, strongly swollen; slightly longer than body by last two segments; apical two segments short curved, the tenth, preapical, planate and glabrous internally, apical segment glabrous on inner basal half, both these glabrous areas bordered with long setae.

Pronotum strongly transverse; strongly, very broadly obtusely tuberculate latero-medially; disc with a strong, broad, obtuse complete median costa, latero-medially on each side a very strongly raised, broad, conical tubercle, almost rivalling the lateral in size; with fairly close, extremely large punctures across borders and surrounding base of tubercles. Scutellum transverse, subtriangular, truncate apically.

Elytra rather broadly trigonate; strongly narrowing to apices, which are truncate, marginal angle rather shortly obtusely dentate, sutural rounded; centro-basally a strong, elongate crest, with a few glabrous granules on top; basally with a few sparse coarse punctures, these much finer and sparser postmedially.

Ventral surface finely and closely punctured. Prosternal process broad, subbitubercular posteriorly, mesosternal process very broad. Apical ventrite subtriangular, about one and a half times as long as preapical, broadly, feebly emarginate apically.

Legs moderately long, robust; femora strongly pedunculo-clavate; protibiae strongly broadened and densely, lengthily laterally fringed.

Female: Antennae slightly, but distinctly shorter than body; apical two segments without glabrous internal area and fringe. Apical ventrite twice as long as preapical, tumid, narrowly rounded apically. Protarsi not abnormally broadened or fringed.

Length: 9-13 mm. Breadth: 3.8-5.2 mm.

CUBA, Havana (Type); MÉXICO; GUATEMALA; NICARAGUA; COLOMBIA; VENEZUELA.
CURAÇAO: Emmastad, 1955, Dr. R. Flachs (1 3, A). — Piscadera Baai, Carmabi, at light, 24. X. 1963, P. Wagenaar Hummelinck (1 3, 3 9, L, U); 30. XI. 1963, Hummelinck (1 3, 8 9, L, U); 10. XII. 1963, Hummelinck (1 3, 2 9, U); 16. XII. 1963, Hummelinck (4 3, 6 9, U); 22. XII. 1963, Hummelinck (8 9, L, U); 30. XII. 1963, Hummelinck (5 3, 4 9, L, U); 7. I. 1964, Hummelinck, 14 3, 20 9, L, U). — Curaçao, 1959, B. de Jong (1 9, EFG).

### Tribe ACANTHOCININI

Four genera of this large tribe are recorded from the islands dealt with in this paper.

### Genus LAGOCHEIRUS Erichson, 1847

A new subspecies of the most widely distributed of the species of this genus, viz., *L. araneiformis* (Linn.) is described in this paper.

#### Lagocheirus araneiformis Linnaeus

### **Key to Subspecies**

 Elytra with a usually distinct, post-scutellar whitish vitta extending to basal sixth; scutellar dark brown maculae almost encircling scutellum; (13-23 mm. S. Florida, Cuba).
 subsp. stroheckeri Dillon, 1956

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-	Elytra without any postcutellar whitish vitta; scutellar dark maculae usually less extensive
2. -	Elytral postmedian dark brown fascia indistinct or lacking.[Insular forms]
3.	Scutellum completely pale grey pubescent like major elytral colour, not contrasting; dark markings very much less distinct or lacking, pronotum unicolorous greyish or with vague dark basal vittae; (19–23 mm. Curaçao, Aruba, Bonaire)
-	Scutellum either completely dark brown pubescent, or at least with dark basal maculae, contrasting with main elytral colour; dark markings generally more distinct, always dis- tinctly present on pronotum
4.	Elytral scutellar maculae extensive round the scutellum; pre- apical (quarter) dark fascia usually very broad, acutely angulate at suture, lateral angulation produced forward nearly as far as sutural; disc broadly pale (almost white) pubescent from behind base to apical third; (17–18 mm. Guadeloupe, St. Eustatius, St. Martin, St. John, Puerto Rico)
-	Elytral scutellar maculae greatly reduced and only adjacent to apical angles of scutellum, or absent; preapical dark fascia narrow, less distinct; disc more brownish pubescent 5
5.	Elytral large lateral dark brown maculae very finely and briefly margined with white posteriorly; postmedian fascia obsolete; preapical fascia uniformly narrow throughout, obtusely angu- lated; (17.3 mm. Jamaica, Hispaniola)
<u> </u>	Elytral lateral dark maculae broadly margined behind 1767, with whitish pubescence, which only occasionally forms a zigzag line; postmedian fascia indistinct; preapical fascia rather narrow, a little wider near suture, lateral undulation produced further forward than sutural; (15-28 mm. Martinique, Dominica, St.

Lucia, St. Vincent, Grenadines: Becquia Isl., Mustique Isl., Grenada). . . . . . . . . . . . subsp. insulorum Dillon, 1957

- Pronotum and elytra covered in large part with fulvous pubescence; elytral punctation rather coarse and quite sparse basally; (15-20 mm. British Guiana, French Guiana, Brazil, Colombia, Perú, Venezuela, Trinidad, Tobago).
  - subsp. julvescens Dillon, 1957
- Pronotum and elytra covered with dull greyish-brown pubescence; elytral punctation fine and close (13-25 mm. Panama Canal Zone, Costa Rica, Nicaragua, Guatemala, Honduras, British Honduras, México) . . . . subsp. ypsilon Voet, 1778

# Lagocheirus araneiformis (Linn.) subsp. curaçaoensis nov. (Plate XVI figs. 1-3)

Male: Dark ferruginous to piceous, densely covered with greyish to slightly brownish-grey pubescence, rarely slightly mottled with brownish. Body beneath densely greyish to slightly brownish-grey pubescent, abdomen complete pubescent. Brown markings as follows: head with a pair of small maculae on vertex between eyes, usually coalescent. Pronotum with apical vittae faint or almost obsolete; basal vittae fairly strongly angulate, short, not prolonged over discal tubercles; disc vaguely clouded with fulvous in part; discal punctures not outlined in white. Scutellum more or less concolorous with elytral greyish colour, without dark maculae. Elytra of general fairly light greyish appearance, scarcely at all clouded with brown, the only distinct macula being the large lateral; this occasionally obsolete (pl. XVI fig. 3) or almost; scutellar maculae lacking or almost, at most extremely vague at apical angles; lateral maculae with whiter pubescence in the angle of the lateral undulation; postmedian fascia indistinct or lacking; preapical fascia at apical quarter narrow, usually slightly wider and more vague towards suture, the lateral undulation about equally anterior as sutural; costae without or with a few only, extremely small black tufts. Antennal segments three to seven broadly uniannulate with grey.

Head fairly finely, moderately closely punctured; frons about equally broad as high; eye with lower lobe subquadrate, almost one and a half times as tall as genae. Pronotum almost twice as wide across lateral tubercles as long; lateral tubercles broad, conical, subacute apically; disc slightly tumid; the five tubercles prominent, subequal; punctation rather coarse, in general sparse, but close across middle of disc and posterior border. Elytra coarsely and fairly closely punctured over about basal quarter, thence gradually becoming finer and sparser to apex; basal tumescence broad, not very prominent, basal tubercle pronounced, distinct; basal costae fairly distinct; apices fairly broadly, straight truncate or nearly, both angles rounded, unarmed.

Antennae almost twice as long as body (one and eight-ninths); scape almost reaching pronotal base; third segment almost one and a third times as long as scape, only slightly longer than fourth; fourth a little more than one and a quarter times as long as scape; following segments gradually decreasing; sixth segment with a rounded appendix at internal apex which is about two-thirds as long as the thickness of the segment, and surmounted by a long tuft of black setae.

F e m a l e: Similarly coloured to male. Differs as follows: antennae shorter, one and a half times as long as body, third segment about a fifth longer than scape, about a quarter longer than fourth segment; sixth segment lacking an apical process. Protarsi simple. Apical ventrite more elongate, subconical.

Length: 12-23 mm. Breadth: 5.3-10.2 mm.

CURAÇAO: Jongbloed, 31. VIII. 1952, B. de Jong (1  $\bigcirc$  Paratype, A); 20. I. 1953, de Jong (1  $\bigcirc$  Paratype, A); on flowers of Moringa olei/era, 25. XI. 1959, de Jong (1  $\bigcirc$ , EFG). — Emmastad, 1955, Dr. R. Flachs (2  $\bigcirc$  Paratypes, A). — Willemstad, at lamp, XI. 1956, R. H. Cobben (2  $\Huge{d}$ , 3  $\heartsuit$ , Paratypes, W); 1934 (1  $\bigcirc$  Paratype, A). — Piscadera Baai, Carmabi, at light, 24. X. 1963, P. Wagenaar Hummelinck (8  $\Huge{d}$ , 8  $\bigcirc$  Paratypes, L, U); 20. XI. 1963, Hummelinck ( $\Huge{d}$  Holotype,  $\heartsuit$  Paratype, U); 30. XI. 1963, Hummelinck (3  $\Huge{d}$ , 8  $\heartsuit$ Paratypes, L, U); 10. XII. 1963, Hummelinck (1  $\circlearrowright$  Paratype, U); 16. XII. 1963, Hummelinck (3  $\Huge{d}$ , 2  $\circlearrowright$  Paratypes, L, U); 22. XII. 1963, Hummelinck ( $\Huge{Q}$  Allotype; 3  $\Huge{d}$ , 2  $\circlearrowright$  Paratypes, U); 7. I. 1964, Hummelinck (3  $\Huge{d}$ , 10  $\circlearrowright$  Paratypes L, U). — St. Kruis, hofje, 21–27. IV. 1930, H. J. MacGillavry (1  $\Huge{d}$  Paratype, A). — Savonet, hofje, 28. IV-5. V. 1930, MacGillavry (1  $\bigcirc$  Paratype, A). — Curaçao, 4. VI. 1949 (1  $\bigcirc$  Paratype, A); de Jong (1  $\bigcirc$  Paratype, EFG); de Wolff, coll. Heylaerts (1  $\oiint$  Paratype, L). ARUBA: Eagle Petr. Comp., W of Oranjestad, at light, 10. V. 1955, Hummelinck (1  $\oiint$  Paratype, U). — Oranjestad, 1955, J. G. van den Bergh (1  $\oiint$ Paratype EFG). — Bubali, at light, XI. 1963, Hummelinck (1  $\circlearrowright$  Paratype, EFG). — Savaneta, 1955, van den Bergh (1  $\oiint$  Paratype, U). BONAIRE: Kralendijk, at lamp, 10. X. 1930, Hummelinck (1  $\oiint$ , A). XI. 1948, (1  $\oiint$  Paratype, A). — Bonaire, at lamp, VII. 1957, Cobben (1  $\circlearrowright$  Paratype, W).

Holotype (male), Allotype (female) and 31 Paratypes (14 male, 15 female) placed in the E. F. Gilmour Collection (partly ex Zoöl. Lab., Utrecht); 39 Paratypes (2 male, 8 female) in the Zoölogisch Museum, Amsterdam (partly ex Zoöl. Lab., Utrecht); 4 Paratypes (1 male, 3 female) in the Laboratorium voor Entomologie, Wageningen; one Paratype (male) in the Rijksmuseum van Natuurlijke Historie, Leiden.

This new subspecies is well characterised from the others by its very pale colour, in fact in some specimens the dark markings are almost wholly absent. It is most closely allied to subspp. *insulorum* Dillon, and *guadeloupensis* Dillon, from which it may be distinguished by the pale scutellum, and neither of these are quite so pale as the new form. The four paratypes from Aruba are slightly more fulvous than the others, but this is possibly due to some preservation discolouration.

It is possible that this new subspecies may warrant specific status when more allied species are examined, in view of some slight antennal and other differences, although it undoubtedly belongs to the *araneiformis*-complex.

# Genus LEPTOSTYLOPSIS Dillon, 1956

One Greater Antilles species of this genus is recorded from Curaçao.

#### Leptostylopsis argentatus (DuVal)

(Plate XVI fig. 4)

Amniscus argentatus DuVal, in SAGRA, 1857, Hist. Nat. Cuba, Ins. 7, p. 273.

Leptostylus argentatus: CHEVR., 1862, Ann. Soc. Ent. Fr. (4) 2, p. 247.

Leptostylus argentatus: HORN, 1880, Trans. Amer. Ent. Soc. 8, p. 121, 123.

Leptostylus argentatus: LENG & HAMILT., 1896, Trans. Amer. Ent. Soc. 23, p. 117 Leptostylus taeniatus CASEY, 1912, Mem. Col. 4, p. 306.

Leptostylus argentatus: CAZIER & LACEY, 1952, Amer. Mus. Novit. 1588, p. 51.

Leptostylopsis argentatus: DILLON, 1956, Ann. Ent. Soc. Amer. 49 (2), p. 145. Leptostylus argentatus: DUFFY, 1960, Monogr. Imm. Stages Neotropical Timber Beetles, p. 251 (biology).

Male: Dark reddish-brown, densely covered with ashy or silverywhite pubescence. Head finely mottled with fuscous and with a short arcuate, fuscous streak medially at base of antennal tubercles; behind eve on gena a small black macula and another fuscous one each side at middle of vertex. Pronotum with a narrow median line glabrous or fuscous pubescent, and usually with a short, fine, fuscous streak each side of middle extending from apical margin. Elvtra fuscous on a common, small, guadrate patch around scutellum, and usually well sprinkled with numerous yellow maculae (placed on the tubercles); much of apical third and two maculae on each side (one smaller, just behind humerus, the other rather large, at middle) of brown pubescence; along suture and laterally with a number of fuscous points; just before apical third of suture an Lshaped fuscous macula which is directed squarely across the disc. Body beneath rather heavily mottled and clouded with brown. Legs and antennae heavily mottled with brownish; femora broadly before middle, and tibiae usually narrowly at basal third and broadly at apex, annulate with fuscous; last two segments of tarsi fuscous; antennae with all segments fuscous aniculate apically.

Entire upper surface minutely, densely alutaceous. Head with three setiferous punctures each side of vertex near eye, and two on gena below eye, rest impunctate; front one-eighth wider than high, widest just below eye, thence constricted and re-expanded to mouth, also somewhat narrowed between eyes; eyes with lower lobe feebly erect, not quite so tall as gena. Pronotum behind middle, two-thirds again as wide as long, sides feebly narrowing from base to near apex where it is narrowly constricted; lateral tubercles broad, obtuse, prominent; disc with fine punctures more or less arranged in lines or rings, one line in apical sulcus, and another of coarser punctures in basal sulcus, with four prominent but small tubercles in a row apically, and three larger ones posteriorly. Elytra each with six obsolete costae bearing rather close-set, small, but prominent tubercles; basal gibbosity broad, oblique, rather low, defined posteriorly by a broad, rather deep depression; entire surface finely and rather densely punctate; apex usually slightly prolonged, obliquely emarginately-truncate, the angles sometimes subdentiform. Prosternal process two-thirds as broad as a procoxal cavity; mesosternal process one-ninth wider than a mesocoxal cavity, its anterior margin abruptly vertical; fifth sternite scarcely longer than fourth; at apex broadly truncate. Legs successively longer posteriorly; femora moderately clavate, rather robust; protarsi much more robust than others, with first segment nearly as long as next two together. Antennae longer than body by one-half, sixth segment attaining elytral apex; scape slender, not prominent at apex; attaining basal fifth of pronotum; third feebly longer than scape; fourth very nearly as long as first; fifth three-fourths as long as fourth; rest gradually shorter.

Female: As male but fifth sternite as long as third and fourth together, its apex deeply emarginate.

(DILLON, 1956)

### Length: 7-13 mm. Breadth: 3-4.7 mm.

U.S.A., FLORIDA, Lake Worth (Type – taeniatus); BAHAMAS, S. Bimini, New Providence, Andros; CUBA (Type); CAYMAN Isl., Grand Cayman; JAMAICA; PUERTO RICO. CURAÇAO: Piscadera Baai, Carmabi, 1957, R. H. Cobben (1 3, W).

### Genus NYSSODRYSINA Casey, 1913

One mainly North American species of this small genus is recorded from Curaçao.

### Nyssodrysina haldemani (LeConte)

(Plate XVIII fig. 1)

Liopus haldemani LECONTE, 1852, Journ. Acad. Nat. Sci. Philad. (2) 2, p. 173.

Nyssodrys contempta BATES, 1864, Ann. Mag. Nat. Hist. (3) 13, p. 152 (Sep. p. 118) (nota).

Nyssodrys contempta: BATES, 1872, Trans. Ent. Soc. Lond., p. 220.

Liopus haldemani: HORN, 1880, Trans. Amer. Ent. Soc. 8, p. 124.

Nyssodrys contempta: BATES, 1881-85, Biol. Centr.-Amer. Col. 5, p. 179, 412.

Nyssodrys haldemani: HORN, 1886, Trans. Amer. Ent. Soc. 13, p. xii.

Nyssodrys haldemani: LENG & HAMILTON, 1896, Trans. Amer. Ent. Soc. 23, p. 133.

Nyssodrysina haldemani: CASEY, 1913, Mem. Col. 4, p. 310.

Nyssodrysina haldemani: DILLON, 1956, Amer. Ent. Soc. Amer. 49, p. 161.

Male: Fairly small to moderate-sized; elongate-ovate.

Light to dark ferruginous, fairly sparsely covered with rather silky greyish pubescence. Head denser fulvous pubescent, submaculate. Pronotum on each side of middle with flavous-grey flexuous to sublunate vitta, and one or two shorter on each side lateroanteriorly. Elytra variegated with grey, yellowish, fulvous and dark brown pubescence, greyish areas forming oblique broken fasciae at about basal quarter and postmedially, these bordered with broken yellowish and fulvous maculae, leaving darker areas latero-premedially, medio-suturally and postmedially. Underside fulvous-grey pubescent, rather denser laterally, sparser on abdomen. Antennae light ferruginous, usually darkened apically; sparsely greyish pubescent. Legs greyish pubescent; pro- and meso-femora blackish beneath; apical third of tibiae and tarsi black pubescent.

Head finely and closely punctured; frons very slightly elongate; upper lobes of eyes closely approaching, only separated by about half the breadth of an upper lobe; lower lobe elongate-oblong, slightly narrowing inferiorly, slightly more than twice as tall as the gena. Antennae about one and two-thirds to twice as long as body; slender; very sparsely, shortly ciliate below; scape elongate, slender, extending to basal pronotal sulcus; third segment slightly longer than scape; fourth slightly shorter than scape; following gradually decreasing to seventh; eight to tenth gradually increasing; eleventh, apical subequal to tenth.

Pronotum distinctly transverse, about one and a half times as long as broad; gradually widening laterally to about basal fifth, where obtusely angulate, thence shortly, fairly strongly constricted to base; disc feebly convex, smooth; extremely finely and closely punctured; with a single row of fairly coarse punctures across apical and basal sulci. Scutellum subtriangular, broadly rounded apically.

Elytra elongate-ovate, subparallel basally, gradually narrowing to apices, which are slightly obliquely truncate to suture, sutural angle broadly rounded, marginal more narrowly; centro-basal tumescence feeble; surface rather uneven, somewhat variable, from almost smooth to having rather distinct obtuse large concavities and subcostate; coarsely, moderately punctured basally, these finer to apex, punctures denser in sulci, sparser on costae. Underside finely and closely punctured, with a number of coarse scattered punctures on metasternum. Prosternal process very narrow, about an eighth or ninth as broad as a procoxal cavity, much lower than coxae, scarcely rounded; mesosternal process very broad, about three-fifths to three-quarters as broad as a mesocoxal cavity, broadly concave, narrowing somewhat apically, apex broadly, slightly emarginate. Apical ventrite subtriangular, about one and a quarter to one and a half times as long as preapical; fairly broadly, rather strongly emarginate apically; pygidium moderately broad, slightly emarginate apically, lateral angles broadly rounded.

Legs elongate, especially the posterior; metatarsi elongate and slender, first segment about equal to following two segments united.

Female: Antennae about one and a half times as long as body. Apical ventrite produced into an elongate ovipositor, distinctly extending past elytral apices, about two and a quarter to three times as long as preapical segment, fairly narrowly, feebly emarginate apically; pygidium moderately broadly, narrowing and sublanceolate to apex, which is very narrowly rounded. Legs rather shorter than in male.

Length: 6.2–9.3 mm. Breadth: 2–3.3 mm.

U.S.A. (Type – haldemani LeConte); MÉXICO (Type – contempta Bates), Jalapa, San Luis Potosi, Vera Cruz (AMNH), Quintana Roo (EFG), Sinaloa, Guanajuato (CAS), Chiapas, Oaxaca (UC); GUATEMALA (ANMH); COSTA RICA (Fuchs) (Stockholm); EL SALVADOR (U.C., Davis); PANAMA (AMNH) (Fuchs) (CAS); CANAL ZONE (CAS). CURAÇAO: B. de Jong (1 &, 1 Q, EFG).

Dillon has stated (1956, p. 161) that he does not consider that *contempta* Bates is a synonym of *haldemani* LeConte. I cannot, at present, subscribe to this view. I have examined quite long series of what I consider to be *haldemani*, from several places in Central America and compared them with specimens from the United States in my own collection, including one from Georgia (Savannah), a locality given by Dillon (l.c.), but cannot basically differentiate them.

There would appear to be variation in the length of the ovipositor in the female from slightly more than twice as long as the previous two segments united, to about three times as long. Also the depth of the elytral sulci shows moderate variation and whilst Dillon states that the (large) elytral punctures are confined to the sulci in *contempta* Bates, but not in *haldemani*, I must confess that in the United States *haldemani* that I have seen, I consider the punctures likewise to be mainly in the sulci. The only explanation that occurs to me for this suggested differentiation, is that the specimens which Dillon considered to be *contempta*, were not *contempta* Bates. Mr. E. A. J. Duffy, of the Commonwealth Institute of Entomology, London, has very kindly made a careful check for me of the *haldemani* in the British Museum (Nat. Hist.), with the specimens of *contempta* Bates examined for his Biologia Centrali-Americana 5, Longicornia, p. 179, 412) and considers that these are identical. In fact I have examined two specimens from Panamá (Bugaba, 1500 ft., Champion) amongst material from the American Museum of Natural History, New York, which are almost certainly a portion of the material seen and listed by Bates.

### Genus URGLEPTES Dillon

Three species of this large Neotropical genus are herein recorded from the triumvirate of islands being considered, of which one is described as new.

# **K e y to Caribbean Species of Urgleptes**

1.	Colour uniformly brownish-yellow, immaculate; (6.6–6.75 mm. Cuba)
-	
2. -	Elytral apices rounded.3Elytral apices truncate.6
3.	Upper lobes of eyes widely separated by twice the breadth of an upper lobe; lower lobes scarcely taller than genae; antennae at most $1\frac{3}{4}$ (3) or $1\frac{1}{2}$ (2) times as long as body; (3.5-4 mm. Saba, St. Eustatius, Guadeloupe, Curaçao, Bonaire)
<b>-</b>	Upper lobes of eyes only separated by about the breadth of an upper lobe; lower lobes of eyes at least one and a half times genae; antennae at least twice as long as body 4
<b>4.</b>	Lower lobe of eye about one and a half times as tall as gena; tibiae blackish annulate medially as well as apically; tarsi blackish, antennae $2\frac{3}{4}$ ( $\varphi$ ) times or nearly ( $\varphi$ ) as long as body; (3.2-5 mm. Jamaica) <i>jamaicensis</i> Gilmour, 1966 Lower lobe of eye about one and three-quarter times as tall as gena; tibiae not blackish annulate, either wholly flavous or apical half black; at most about two and a third times as long as body.
•	us bouy

5.	Tibiae blackish over about apical half; tarsi with at least apical segments blackish; elytra with at least a few distinct dark brown maculae; with a dark dorso-external macula; (4-5 mm. Guade-loupe)
6.	Antennal scape almost completely blackish, without a median dark annula: (2.4–4.5 mm. Puerto Rico)
-	Antennal scape distinctly broadly blackish annulate medially and with apex black
7.	Elytra wholly marmorated with dark brown, light brown and blackish; pronotum about one and three-quarter times as broad as long; pro- and mesofemora and tibiae mainly black, except basally; (5 mm. Haiti)
-	Elytral disc mainly pallid, with a few posterior and lateral blackish markings; pronotum not quite one and a half times as broad as long; femora and tibiae mainly flavous 8
8.	Lower lobe of eye one and two-thirds as tall as gena; elytral apices slightly, but distinctly, obliquely truncate (3.3 mm.
_	Lower lobe of eye only about one and a quarter times as tall as genae; elytral apices almost straight truncate (3.5–4 mm. B.V.I.:

Urgleptes guadeloupensis (Fleutiaux & Sallé)

Peter Isl.; ? Tortola, ? Antigua). . . . clarkei Chemsak, 1966

Lepturges guadeloupensis FLEUT. & SALLÉ, 1889, Ann. Soc. Ent. Fr. (6) 9, p. 472. ? Lepturges guadeloupensis: GAHAN, 1895, Trans. Ent. Soc. Lond., p. 136. Urgleptes guadeloupensis: GILMOUR, 1959, Opusc. Zool. Munich 28, p. 8. Urgleptes guadeloupensis: GILMOUR, 1963, Stud. Fauna Curaçao 17, p. 79.

Male: Small, elongate-ovate, somewhat subdepressed.

Ferruginous, variably fairly sparsely to fairly densely grey pubescent; with a few dark maculae, somewhat variably. Head pitchy on frons, rest dark ferruginous, very sparsely pubescent, denser round eyes. Pronotum denser grey pubescent laterally, broadly brownish down the disc; lateral tubercles darkened. Scutellum sparsely greyish. Elytra with a brown infra-humeral macula, sometimes continued, less distinctly along margin; sometimes brokenly brownish along suture; apical half with a number of small elongate, short or long, brown maculae; circumscutellar area usually rather darker brownish. Underside ferruginous, moderately densely greyish pubescent. Antennae light ferruginous; scape blackish annulate about medially; scape to segment nine or ten (very vaguely) blackish apically; very sparsely greyish pubescent. Legs light flavous-ferruginous, sparsely, very inconspicuously, greyish pubescent; femora blackish maculate below, and sometimes above, black apically; tibiae with about apical third to nearly half blackish; apical half of first tarsal segments and usually others wholly, darkened.

Antennae slender, elongate, almost two and a half times as long as body; basal segments very shortly and very sparsely setose below; scape only slightly swollen, elongate, extending almost to pronotal basal sulcus; third segment about a tenth longer than scape; fourth equal to third; fifth about a fifth shorter than fourth; sixth and seventh gradually decreasing; eighth to tenth gradually increasing, apical, eleventh, subequal to tenth. Head with antennal tubercles moderately raised, broadly, shallowly concave between; frons large, rather transverse, about one and a quarter times as broad as long; moderately convex; with a fine median longitudinal line; head very finely and closely microgranular, matt; eyes moderately large; lower lobe subquadrate, narrowed below, about one and threequarter times as tall as gena; upper lobes moderately closely approaching, separated by about the breadth of an upper lobe.

Pronotum trapezoidal; strongly transverse, about one and twothirds as broad as long, sides gradually widening to the lateral tubercles, which are placed at about the basal sixth, are very broad based, the anterior border continued in a line with lateral border, apices acutely spinous and posteriorly directed; strongly constricted thereafter to base; disc feebly convex; basal transverse sulcus broad and extremely shallow, continued sublaterally below base of tubercles, with a single, rather irregular row of fairly coarse, moderately close punctures; rest very finely and closely microgranular, matt. Scutellum transverse, more or less semicircular, broadly rounded; closely microgranularly punctured, fairly matt.

Elytra elongate-ovate; subparallel-sided laterally to about middle, thence broadly rounded to apices, which are separately broadly rounded; disc slightly convex, with a moderate, broad, premedian depression; centrobasal area scarcely tumid; moderately coarsely, fairly closely punctured; rapidly becoming smaller and sparser postmedially, interstices closely micropunctured.

Underside very finely and closely punctured, except submentum impunctate and nitid. Prosternal process extremely narrow, very low, somewhat depressed medially, about a tenth or twelfth the breadth of a procoxal cavity. Mesosternal process narrow, about two to two and a half times as broad as prosternal, about a sixth as broad as a mesocoxal cavity, very low, feebly declivous anteriorly, narrowing to apex, which is very narrowly truncate. Apical ventrite somewhat subtriangular, about equal to preapical, rather narrowly, feebly emarginate apically. Pygidium broad, truncate apically.

Legs moderately elongate; profemora strongly clavate; meso- and metafemora pedunculo-clavate, the intermediate most strongly swollen, posterior less so. Tibiae normal. Tarsi moderately elongate and slender; first metatarsal segment about one and a half times as long as following two segments united.

Female: Similarly coloured to male. Antennae little shorter, about one and two-thirds to one and three-quarter times as long as body. Apical ventrite about one and two-thirds as long as preapical, shortly subconical, apex feebly emarginate. Pygidium moderately broad, truncate apically.

Length: 4-4.6 mm. Breadth: 4.2-1.3 mm.

GUADELOUPE: Type (1 Cotype – Paris Museum). — E.F.A.C., 9. IV. 1958, R. Benard (1 3, Stat. Cent. Zool. Agric., Versailles). — C. E. A., IV. 1957, Benard (1  $\Diamond$ , Stat. Cent. Zool. Agric. Versailles). — Piton de Sainte-Rose (300 m), 30. IV. 1964, J. Bonfils (1 3); 28. VI. 1963, Bonfils (1 3, Stat. Cent., Zool. Agric. Versailles). — Pointe-à-Pitre, VI. 1961, Bonfils (1 3, Stat. Cent. Zool. Agric. Versailles).

CURAÇAO: Sint Kruis, hofje, among mango trees, 21-27. IV. 1930, H. J. MacGillavry (1 3, A).

# Urgleptes cobbeni Gilmour (Plate XVII figs. 3-4)

### Urgleptes cobbeni GILMOUR, 1963, Stud. Fauna Curação 17, p. 79, 85, pl. 3 f. 1-3.

Male: Ferruginous, thinly and patchily grey pubescent, with dark pitchy and dark ferruginous dermal maculae somewhat variably. Head pitchy on frons and antennal tubercles; with sparse grevish pubescence, denser round eves. Pronotum grevish pubescent, rather densely laterally, with a distinct, very broad, median complete vitta which is dark ferruginous, usually with two small vague grevish maculae anteriorly, and two posteriorly; apex of lateral tubercles darkened. Scutellum brown-ferruginous, sparsely grevish pubescence. Elytra very variegated with pitchy and light brown dermal maculae and with greyish or tawny-greyish pubescence, which forms slightly denser maculae and broken discal vittae; the dark maculae placed mainly as a circumscutellar macula, a short row postmedially obliquely backwards from laterally to suture and some maculae on apical quarter, these latter three areas are always present; other than these, small irregular dark areas are often present on lateral declivity; sometimes the grey markings are very vague. Ventral surface light ferruginous, thinly light tawny-grey pubescent. Antennae light ferruginous; scape blackish annulate medially; segments from scape to eighth blackish apically; thinly tawny-grey pubescent. Legs light ferruginous; femora narrowly blackish apically, and usually with blackish markings medially, sometimes not present on the profemora; tibiae black annulate slightly postmedially, meso- and metatibiae blackish apically; tarsal segments sometimes vaguely darkened apically; thinly light tawny-grey pubescent.

Small, elongate-ovate; slightly subdepressed. Antennae slender, about one and a half times as long as body; basal segments very sparsely setose below; scape slightly swollen, elongate, extending to about pronotal basal sulcus; third segment about one and a seventh times as long as scape; fourth about equal to third; following segments gradually decreasing to apex. Head with antennal tubercles moderately raised and swollen, broadly concave between. Frons large, transverse, about one and a quarter times broader than long; feebly convex; head very finely and closely microgranular; matt. Eyes of only moderate size; lower lobe subquadrate, scarcely taller than the gena; upper lobes widely separated by twice the breadth of an upper lobe.

Pronotum trapezoidal; strongly transverse, about one and fourfifths as broad as long; gradually widening to lateral tubercles, which are placed at about basal fifth, are very broad based, anterior border directly continued in a line with lateral border, apices acutely spinous and posteriorly directed; strongly constricted thereafter to the base; disc slightly convex; basal transverse sulcus broad and very shallow, continued sublaterally below the base of the tubercles, with a single row of fairly coarse, only moderately close punctures; rest very finely and closely microgranular, matt. Scutellum subtriangular, slightly transverse, rounded apically; closely microgranularly punctured, matt.

Elytra elongate-ovate; very slightly widening laterally to about medially, thence broadly rounded to the apices, which are separately broadly rounded; disc moderately convex, with a moderate, broad, premedian depression; centrobasal area a little tumid, broadly; moderately coarsely and fairly closely irregularly punctured, the punctures becoming much smaller and sparser on apical third; interstices fairly closely micropunctured.

Underside finely and closely, rather microgranularly punctured, except submentum impunctate and nitid. Prosternal process extremely narrow, very low, almost plane or subdepressed medially, about a twelfth as broad as a procoxal cavity. Mesosternal process narrow, about twice as broad as a mesocoxal cavity, very low, feebly declivous anteriorly, narrowing to the apex, which is very narrowly truncate. Apical ventrite subtriangular, about one and a half times as long as the preapical; not very broadly, shallowly emarginate apically. Pygidium broad, very broadly rounded apically, with a shallow median emargination.

Legs of moderate length; profemora strongly clavate; meso- and metafemora pedunculo-clavate, the intermediate strongly swollen, the posterior distinctly less so. Tibiae normal. Tarsi moderately elongate and slender; first metatarsal segment about one and a half times as long as following two segments united. Female: Similarly coloured to male, particularly with regard to the blackish dermal elytral markings, but the tawny-grey pubescence in general distinctly less conspicuous.

Antennae only feebly shorter than in male. Apical ventrite almost twice as long as preapical, shortly subconical; apex feebly emarginate. Pygidium moderately broad, broadly rounded apically.

Length: 2.9-5 mm. Breadth: 0.8-2 mm.

ST. EUSTATIUS (Type, EFG); SABA, Windwardside (Paratype, W).
CURAÇAO: Jongbloed, at light, 1957, B. de Jong (1 \overline, W). — Piscadera Baai, Carmabi, 1957, R. H. Cobben (1 \overline, 2 \overline, W). — Julianadorp, at light, V-VI. 1957, Cobben (1 \overline, 3 \overline, W).
BONAIRE: at light, XII. 1957, E. Pieters Kwiers (1 \overline, 4 \overline, W); 1957, Cobben (1 \overline, W); XII. 1958, Pieters Kwiers (1 \overline, W).

Urgleptes hummelincki sp. nov.

(Plate XVII fig. 2)

Female: Small, elongate-ovate, subdepressed.

Light ferruginous, head slightly darker, fairly thinly grey pubescent, slightly sparser broadly down middle of pronotum and laterally, elytra with very sparse, scattered, very irregular areas mainly as a postbasal oblique fascia, a latero-discal band, brokenly across middle as mainly longitudinal traceries over apical quarter, these areas appearing thus a little darker; antennae light ferruginous vaguely darkened apically; legs light flavous-ferruginous, almost unicolorous, pro- and mesofemora vaguely darkened above; underside light ferruginous, fairly thinly grey pubescent.

Antennae slender, elongate, almost two and a third times as long as the body; basal segments very sparsely setose below; scape rather slender, only feebly swollen, elongate, extending to about pronotal basal sulcus; third segment very slightly longer than scape, subequal to fourth, following segments gradually decreasing. Head with antennal tubercles moderately raised, broadly, moderately concave between. Frons subquadrate, only slightly broader than long, slightly convex; with a fine median longitudinal line which extends to the posterior border of the head; head very finely and closely microgranular, matt. Eyes moderately large; lower lobes subquadrate, about one and three-quarter times as tall as gena; upper lobes moderately separated by about the breadth of an upper lobe.

Pronotum trapezoidal; strongly transverse, about one and twothirds as broad as long; sides gradually widening to lateral tubercles, which are placed at basal sixth, are extremely broad based, the anterior border continued in same line as lateral border, apices acute, subspinose, somewhat latero-posteriorly directed, thereafter strongly constricted to base, the constriction directed straight inwardly, not anteriorly concave; disc slightly convex; basal transverse sulcus broad and very shallow, continued sublaterally below the base of tubercles, with a single row of not very coarse, only moderately close, punctures, these very feeble medially; rest very finely and closely microgranular, matt. Scutellum subtriangular, somewhat transverse, broadly rounded apically; very finely and fairly closely punctured, subnitid.

Elytra elongate-ovate, very slightly widening laterally to about medially, thence broadly, gradually rounded to the apices, which are separately broadly rounded; disc moderately convex, with a moderate, broad, premedian depression; centrobasal area only very feebly convex; rather coarsely, only moderately closely punctured, mainly irregularly, the punctures finer and sparser on about apical fifth, interstices fairly closely micropunctured.

Underside very finely and closely punctured, rather nitid, submentum only very sparsely punctured. Prosternal process extremely narrow, sublinear, very low, subdepressed medially, about one twelfth the breadth of a procoxal cavity. Mesosternal process very narrow, scarcely broader than the prosternal, about a tenth the breadth of a mesocoxal cavity, very low, only very feebly declivous anteriorly, narrowing to the apex, which is very narrowly truncate. Apical ventrite shortly subconical, about one and a half times as long as the preapical; apex fairly narrowly, feebly emarginate. Pygidium fairly broadly, moderately broadly rounded apically.

Legs of moderate length; femora very strongly clavate, meso- and metafemora pedunculo-clavate, the intermediate strongly swollen. Tibiae normal. Tarsi elongate and slender; first metatarsal segment about one and a half times as long as the following two segments united. Male: Unknown.

Length: 4.2 mm. Breadth: 1.2 mm.

ARUBA: Bubali, NW of Oranjestad, at light, 12. XI. 1963, P. Wagenaar Hummelinck (1 9, EFG).

Holotype (female) placed in the E. F. Gilmour Collection. Unique.

Named after the collecter, Dr. P. WAGENAAR HUMMELINCK, who has kindly allowed me to retain the type, and to whom I owe grateful thanks for supplying the majority of the material covered in this paper, following his very kind reception of me to his department in Utrecht.

This new species may be easily separated from Urgleptes guadeloupensis (Fleutiaux & Sallé) by its unicolorous, flavous coloured legs and the elytra without dark brown markings.

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## PLATE IX



- 1. Stenodontes (Mallodon) spinibarbis (Linn.) from Aruba;  $\mathcal{J}$  (× 1.2).
- 2. Stenodontes (Mallodon) spinibarbis (Linn.) from Curaçao;  $\mathcal{Q}$  (× 1.0).
- 3. Callichroma (Mionochroma) vittatum (Fabr.) from Curaçao; & (× 2.25).
- 4. Callichroma (Mionochroma) vittatum (Fabr.) from Curaçao;  $\mathcal{Q}$  (× 2.25)

PLATE X



- 1. Methia trium sp. nov., from Curaçao;  $\delta$  holotype (× 6.5).
- 2. Methia trium sp. nov., from Curaçao;  $\varphi$  allotype (× 5).
- 3. Atenizoides curaaçoae gen. nov., sp. nov., from Curaçao; 3 holotype (× 8).
- 4. Oxymerus lebasi Dupont, from Curaçao; ♂ (× 3).



- 1. Eburia thoracica White, from Curaçao;  $\mathcal{J}$  (× 3.5).
- 2. Eburia thoracica White, from Curaçao;  $\mathcal{Q}$  (× 2.6).
- 3. Eburia bonairensis sp. nov., from Bonaire; 3 holotype (× 3.1).
- 4. Eburia bonairensis sp. nov., from Bonaire; Q allotype ( $\times$  2.5).
- 5. Eburia bonairensis sp. nov., from Bonaire; 3 paratype ( $\times$  2.9).

### PLATE XII



- 1. Anelaphus curaçaoensis sp. nov., from Curaçao; & holotype (× 4.4).
- Anelaphus curaçaoensis sp. nov., from Curaçao; ♀ allotype (× 4.1).
   Anelaphus subtropicus (Casey) from Curaçao; ♀ (× 4.8).
- 4. Elaphidion conspersum Newman, from Curaçao; & (× 2.6).
- 5. Elaphidion conspersum Newman, from Curaçao;  $\mathcal{Q}$  (× 2.25).

PLATE XIII



- 1. Elaphidion irroratum (Linn.) from Bonaire;  $\delta$  (× 2.25).
- Laphaton vironaum (Linn.) from Donale, δ (× 2.20).
   Elaphidion irroratum (Linn.) from Curaçao; φ (× 2).
   Elaphidion curaçaoae sp. nov., from Curaçao; φ holotype (× 3.5).
   Heterachthes arubae sp. nov., from Aruba; φ holotype (× 3.9).

#### PLATE XIV



- 1. Stizocera curaçaoae sp. nov., from Curaçao; 3 holotype ( $\times$  4.8).
- 2. Stizocera insolita sp. nov., from Curaçao; 3 holotype (× 4.6).
- 3. Curtomerus flavus (Fabr.) from Curaçao; & (× 4.8).
- 4. Curtomerus flavus (Fabr.) from Curaçao;  $\mathcal{Q}$  (× 4.5).

### PLATE XV



- Achryson surinamum (Linn.) from Curaçao; ♂ (× 3.0).
   Achryson surinamum (Linn.) from Curaçao; ♀ (× 3.0).
- 3. Achryson ornatipenne Perroud, from Aruba;  $\mathcal{Q}$  (× 4.8).
- 4. Acanthoderes (Psapharochrus) circum/leza DuVal; from Curaçao; & (× 4.8).
- 5. Acanthoderes (Psapharochrus) circum/lexa DuVal; from Curaçao;  $\mathcal{Q}$  (× 4.0).

#### PLATE XVI



- 1. Lagocheirus araneiformis (Linn.) subsp. curaçaoensis from Curaçao; 3 holotype (× 3.0).
- Lagocheirus araneiformis (Linn.) subsp. curaçaoensis nov. from Curaçao; 2 allotype (× 2.7).
- 3. Lagocheirus araneiformis (Linn.) subsp. curaçaoensis nov. from Curaçao;  $\mathcal{Q}$  para type (× 2.8).
- 4. Leptostylopsis argentatus (DuVal); from Curaçao; & (× 4.5).

PLATE XVII



- 1. Urgleptes guadeloupensis (Fleut. & Sallé), from Curaçao;  $\delta$  (× 11.2)
- 2. Urgleptes hummelincki sp. nov., from Aruba; 3 holotype (× 11.15).
- Urgleptes cobbeni Gilmour, from Bonaire; & (× 13.7).
   Urgleptes cobbeni Gilmour, from Curaçao; \$\varphi\$ (× 12.1).

### PLATE XVIII



- Nyssodrysina haldemani (LeConte), from Curaçao; & (× 6)
   Dorcasta dasycera (Erichson), from Aruba; ♀ (× 6.7).
- 3. Desmiphora hirticollis (Oliv.), from Curaçao;  $\varphi$  (× 3.25).
- 4. Estoloides perforata (Bates), from Curaçao; 3 (× 4.7).