The Generic Placement of *Xixuthrus domingoensis* Fisher (Coleoptera: Cerambycidae: Prioninae)

MICHAEL A. IVIE

Department of Entomology, The Ohio State University, Columbus, Ohio 4321	0.

Abstract.—Xixuthrus domingoensis Fisher is transferred to Mecosarthron. The species is illustrated and diagnosed. A key to the genera of West Indian Prioninae is provided.

From a zoogeographic standpoint, Xixuthrus domingoensis Fisher (1932:1) (Figs. 1, 2) is perhaps the most intriguing species of West Indian Cerambycidae. The other members of Xixuthrus are Oriental, and suspicion that the Hispaniolan X. domingoensis might be an introduced species rather than the result of natural disjunction led me to examine the type on a recent visit to the National Museum of Natural History. I found instead that the species belongs in the Neotropical genus Mecosarthron, and should be known as Mecosarthron domingoensis (Fisher) NEW COMBINATION.

Mecosarthron differs from Xixuthrus by having the profemora longer than or subequal to the mesofemora in males (profemora shorter than mesofemora in Xixuthrus), the third antennomere distinctly shorter than the first (Fig. 1) (subequal in Xixuthrus), and the anterior margin of the pronotum acutely indented near the sides and in the middle (Fig. 1) (smoothly bisinuate in Xixuthrus). For a description of Mecosarthron, see Lameere (1903:318).

Mecosarthron domingoensis Fisher can be distinguished from M. buphagas Buquet (Brazil) and M. gounellei Lameere (Brazil) by the finely punctate pronotum with irregular, smoothly glabrous calli on each side of disk (Fig. 1). I have not seen the other described species of Mecosarthron, M. tritomegas Lameere (Brazil).

It still seems possible that this species was introduced into Hispaniola. The other known members of the genus occur in Brazil, and I do not know of any specimens of *M. domingoensis* collected since the original description. Since two specimens exist, from different localities, seven years apart, and obtained by different museums, mislabeling seems out of the question. However, that such a large species, so disjunct from it's congeners, would go uncollected for so long, raises the possibility that the collections were the result of an adventive population that may have subsequently disappeared from Hispaniola.

Mecosarthron can be distinguished from other genera of West Indian Prioninae by the characters listed in the following key.

KEY TO THE GENERA OF PRIONINAE OF THE WEST INDIES

1.	Prosternal	process	round	led or	trun	cate	behin	d; mes	soste	rnur	n no	rm	al;	eye	es	
	coarsely	faceted														1

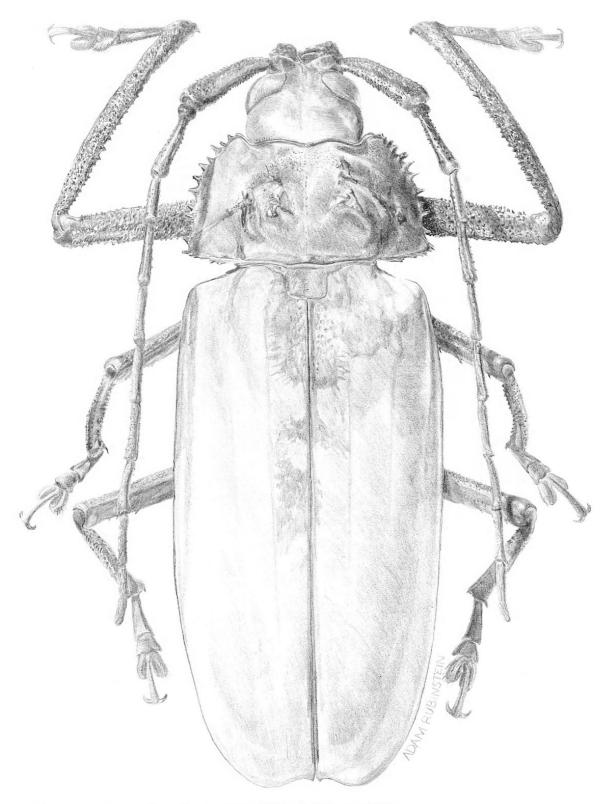


Figure 1. Mecosarthron domingoensis (Fisher), holotype: habitus.

	Prosternal process emarginate behind to receive mesosternal process; eyes	
	finely faceted Derancistrus Servi	ille
2.	Third antennal segment 1.5 or more times longer than the scape (Fig. 3)	3
	Third antennal segment subequal to or shorter than scape	6

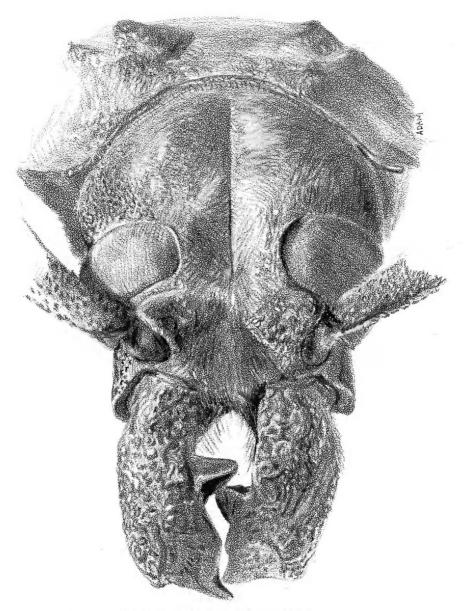
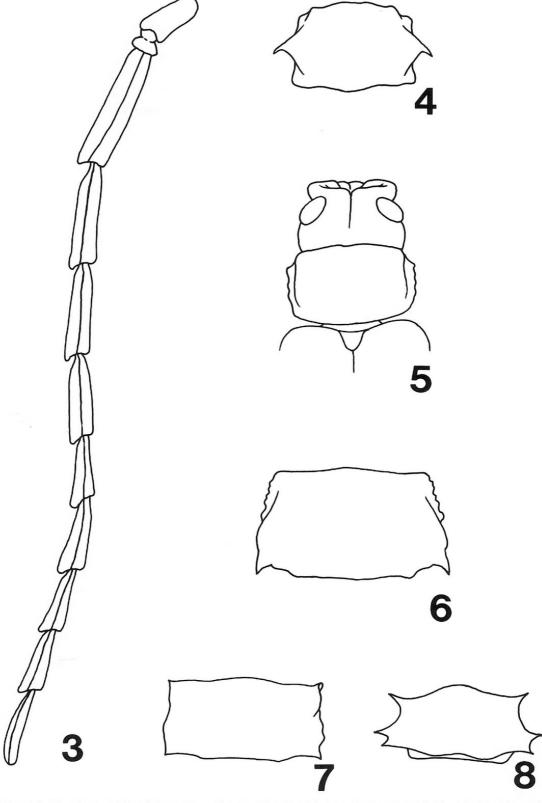


Figure 2. Mecosarthron domingoensis (Fisher), holotype: frontal view.

3. Antennae sub-serrate (Fig. 3); pronotum with a large curved spine medio-laterally (Fig. 4)
Antennae filiform; pronotum not as above
4. Head nearly as wide as pronotum and elytra (Fig. 5); third antennomere
not reaching basal half of pronotum; metepisternum narrowed poste-
riorly to a point Anacanthus Serville
Head distinctly narrower than pronotum and elytra; third antennomere
reaching beyond base of pronotum; metepisternum truncate behind 5
5. Elytra smooth; anterio-lateral angle of pronotum usually acute; epistoma
distinctly pubescent
Elytra asperate; anterio-lateral angle of pronotum rounded or obtuse (Fig.
6); epistoma bare or with few scattered setae Strongylaspis Thomson
6. Pronotum of male quadrate, anterior margin nearly straight, all angles
nearly right (Fig. 7); female pronotum armed laterally with 3-5 large



Figures 3–8. 3, 4. *Monodesmus* sp., Andros Is. 3, antenna; 4, pronotum. 5. *Anacanthus ruber* (Thunberg), Jamaica: head and pronotum. 6. *Strongylaspis corticaria* (Erichson), Panama: pronotum. 7, 8. *Cubaecola hoploderoides* Lameere, pronota. 7, male; 8, female (redrawn from Zayas, 1975: lamina 2c, 2d).

	spines, width across anterior pair equal to width at basal pair (Fig. 8);
	elytra pubescent
	Pronotum of male with anterior margin emarginate, angles projecting for-
	ward, acute, rounded, obtuse, spiniform or dentate; elytra variable 7
7.	Mandible rounded above, rugose laterally, strongly curved downward in
	male (Fig. 2); femora and protibiae multi-spinose below
	Mecosarthron Buquet
	Mandible carinate above, smooth laterally, not curved downward in male;
	femora and tibiae smooth on inner margin 8
8.	Elytra dull, pubescent; anterio-lateral angle of female pronotum acute
	Elytra shining, glabrous; anterio-lateral angle of female pronotum rounded
	or obtuse Stenodontes Serville

For distributions of genera of Prioninae in the West Indies, see Chemsak and Linsley (1982), with the addition of *Anacanthus ruber* (Thunberg) from Jamaica (new record, in Florida State Collection of Arthropods and my collection) and Guadeloupe (Villiers, 1980:152).

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LITERATURE CITED

- Chemsak, J. A., and E. G. Linsley. 1982. Checklist of the Cerambycidae and Disteniidae of North America, Central America, and the West Indies (Coleoptera). Plexus, Medford, New Jersey, 138 pp.
- Fisher, W. S. 1932. New West Indian cerambycid beetles. Proc. U.S. National Museum, 80(2922, art. 22):1–93.
- Lameere, A. A. L. 1903. Revision des prionides (Huitième memoire.—Mécosarthrines). Ann. Soc. Roy. Ent. Belgique, 47:307-320.
- Villiers, A. 1980. Coléptères Cerambycidae des Antilles Françaises. Annls. Soc. Ent. Fr. (N.S.), 16: 133-157 [I. Parandrinae, Prioninae, Lepturinae], 265-306 [II. Cerambycinae], 541-598 [III. Lamiinae].
- Zayas, F. de. 1975. Revision de la Familia Cerambycidae (Coleoptera, Phytophagoidae). Instituto de Zoologia, Academia de Ciencias de Cuba, La Habana, 443 pp.



Ivie, Michael A. 1985. "The generic placement of Xixuthrus domingoensis Fisher (Coleoptera: Cerambycidae: Prioninae)." *The Pan-Pacific entomologist* 61(3), 246–250.

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