ELATERID AND EUCNEMID BEETLES OF GUAM

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FAMILY ELATERIDAE

Four species of Elateridae have been previously recorded from the island of Guam. As a result of collections made by the Guam Entomological Survey in 1936, three more species, here described as new, can be added. A fourth, represented by an incomplete specimen, adds still another, hitherto unknown from the island. Types of the new species are in the collection of the Experiment Station, Hawaiian Sugar Planters' Association.

1. Agrypnus bifoveatus Candèze, Monographie des Elaterides 1:41, 1857. This Philippine species has long been known from Guam. Three specimens were taken by Mr. Swezey at Piti, one at light, Aug.-Oct.

2. Lacon modestus (Boisduval).

Agrypnus modestus Boisduval, Voy. Astrolabe, 108, 1835.

Yona, May 12, 14, R. L. Usinger; Piti, Aug. 17, Swezey; Machanao, June 30, R. L. Usinger, several at light.

This species is widely distributed in the Pacific. Specimens in the Survey collection are from widely separated points on Guam.

3. Simodactylus cinnamomeus (Boisduval).

Aeolus cinnamomeus Boisduval, Voy. Astrolabe, 106, 1835.

This species occurs in Guam but is not represented in the Survey collection.

4. Simodactylus species.

A specimen of this genus, lacking head and thorax, was found by R. L. Usinger June 27, 1936 on Mt. Alifan; its reddish brown elytra measure 12 mm. in length. It is very different from the Polynesian S. cinnamomeus (Boisduval). The Mt. Alifan insect appears similar to S. hesperius Van Zwaluwenburg from Palau and the Carolines, and to S. palauensis Van Zwaluwenburg from Palau; like them, it bears a resemblance to some of the Philippine species of the genus. Its occurrence in the mountain forest suggests that it is native to Guam.

5. Melanoxanthus melanocephalus (Fabricius).

Elater melanocephalus Fabricius, Spec. Ins. 1:272, 1781.

A single specimen was taken by Swezey in a house in Piti, Sept. 9, 1936. It occurs throughout the Pacific area, and westward to the islands of the Indian Ocean.

6. Melanoxanthus guamensis, new species.

Slender. Generally blackish; head and antennae blackish with two or three basal segments of the antennae sometimes rufous; pronotum blackish or flavous suffused with blackish, but with hind angles always flavous, anterior margin usually flavous; scutellum black; base of elytra flavous, this coloration sometimes distinctly separated from, but usually confluent with, an elongate flavous marking on the basal one half; on posterior one third of elytra a smaller, elongate-oval, flavous spot; suture always black or dusky. Body beneath flavous to blackish; legs flavous. Pubescence fine, semi-erect, fulvous. Front convex on disk, flattened anteriorly; punctation moderately coarse, uniform; anterior margin broadly rounded. Antennae in male barely exceeding, or in female just failing to attain, the tips of the hind prothoracic angles; 2d and 3d segments subequal, together shorter than 4th; 4 to 10 feebly serrate, diminishing in length. Prothorax slightly longer than median width, even in female; sides narrowed from base of hind angles to anterior one third (slightly more arcuately in female than in male), thence more rapidly to anterior margin. Pronotum convex, flattened on disk, lightly punctate, punctures on disk as on head, subumbilicate toward sides; faintly impressed medianly at base. Hind angles stout, acutely unicarinate. Punctation of propleura umbilicate, shallow, sparse, distinctly coarser than on prosternum. Mucro subhorizontal, widely excavate between fore coxae. Scutellum moderately inclined; flat, elongate, acute behind. Elytra at base narrower than hind prothoracic angles; sides narrowed to middle in female, or beyond in male, thence conjointly narrowed to apex; apex subtruncate, sutural angles finely spinulose. Strial punctures rather coarse; intervals flat, finely punctulate. Length, males 3.5-3.6 mm.; females 3.75-4.25 mm.

Machanao, June 5, Usinger, holotype male; Inarajan, July 25, on *Pithe-colobium dulce*, Swezey, allotype female; Ritidian Pt., April 15, Bryan, two paratype males; Inarajan, May 6, Usinger; Ritidian Pt., June 2, Usinger, three paratype females; Machanao, June 5, Usinger; Mt. Alifan, June 27, Usinger.

The area occupied by the flavous maculations varies considerably. This species is similar to the Philippine M. vicinus Fleutiaux, but shows the following differences: 1, the base of the elytra is flavous, not black as in M. vicinus; 2, the maculation on the basal half of the elytra is longitudinal, not oblique; 3, the antennae of the male barely exceed, not just fail to attain, the tips of the hind prothoracic angles; 4, the base of the pronotum is barely impressed medianly, not acutely channelled as in vicinus.

7. Melanoxanthus palustris, new species.

Moderately slender. Generally yellowish brown, with pronotum somewhat more reddish; sutural margin dusky; meso- and metasterna, and abdomen castaneous. First four antennal segments light yellowish brown, the remainder darker. Legs light brown. Pubescence yellowish, fine, very short. Front very slightly convex; punctation moderately coarse, uniform, lightly impressed; anterior margin rather acutely rounded. Antennae failing to attain tips of hind prothoracic angles by less than the length of terminal segment in male, or by about the length of last two segments in female; 3d segment half as long again as 2d, the two together subequal to 4th; 4 to 10 feebly serrate; 11th broadly oval. Prothorax about as long as median width in both sexes, but not as long as width across tips of hind angles; sides posteriorly subparallel on basal one third in male, or arcuately rounded on posterior one third in female, thence subarcuately narrowed to anterior margin. Pronotum strongly convex; punctation coarser than on head, subumbilicate, lightly impressed, separated on disk by less than their own diameters, subconfluent toward sides; basal declivity rather abrupt, vaguely impressed medianly. Hind angles stout, acutely unicarinate. Propleura sparsely, shallowly umbilicate-punctate generally, almost impunctate toward base;

prosternum more closely, uniformly punctate. Mucro briefly upturned behind fore coxae, thence posteriorly subhorizontal; excavate between coxae. Scutellum sagittate; moderately inclined, flat, bluntly rounded apically. Elytra at base narrower than hind prothoracic angles; sides narrowed to beyond middle in male, or subparallel to about middle in female, thence conjointly narrowed to apex; apex rounded, entire; each elytron briefly divergent apically along suture, sutural angle finely spinulose. Strial punctures rather coarse; intervals flat, finely punctulate. Length, male 4.1 mm.; females 4.5 mm.

Atantano, Sept. 27, ex *Lumnitsera*, Swezey, holotype male; Sumay Road, June 23, ex *Lumnitsera*, Usinger, allotype female, paratype female.

This species was taken only on *Lumnitzera pedicillata*, but it is by no means certain that it is specific to this mangrove. Both localities given above refer, according to Mr. Swezey, to the same mangrove swamp, the only region in which the species was found.

8. Melanoxanthus usingeri, new species.

Slender, generally flavous: head blackish with irregular vellowish area behind anterior margin; antennae more or less uniformly yellowish brown; pronotum with blackish spot near lateral margin behind middle and along middle of disk; on either side anteriorly with ill-defined blackish markings; dusky along suture of elytra almost to apex, the dusky line widening behind middle to cover three intervals on either side (extending very vaguely as far as the 5th interval) thence narrowing regularly to the end of the dusky line along suture; each humerus with a small blackish mark. Body beneath generally yellowish brown, with abdomen darker. Legs light brown. Pubescence yellow; fine, short. Front moderately convex; punctation subumbilicate, uniform; on basal one third a brief, median, cariniform prominence which fails to attain the anterior margin of the pronotum; anterior margin of front broadly rounded. Antennae failing to attain tips of hind prothoracic angles by the length of the last three segments; 3d segment half as long again as 2d, the two together subequal to 4th; 4 to 10 feebly serrate, gradually diminishing in length: 11th elongate oval. Prothorax longer than median width; sides arcuately narrowed from base of hind angles to anterior one third, thence more rapidly to anterior margin; moderately convex; basal declivity moderate, not impressed medianly; punctation on disk finer than on head, coarser, subumbilicate toward sides. Hind angles short, blunt; slightly divergent; acutely unicarinate. Mucro briefly upturned behind fore coxae, posteriorly subhorizontal; excavate between coxae. Scutellum sagittate, moderately inclined; convex toward base; coarsely punctulate. Elytra at base as wide as hind prothoracic angles; sides subparallel to about middle, thence conjointly narrowed to apex; apex rounded, entire, not spinulose at sutural angles. Strial punctures rather fine; intervals flat, subrugose toward base. Female, length 8.0 mm.; width 2.1 mm.

Agat, May 31, ex *Pithecolobium*, Usinger, holotype female.

Its larger size and the triangular widening of the dusky marking along the suture will distinguish this species from the other two described above.

FAMILY EUCNEMIDAE

Fornax coxalis Fleutiaux, Soc. Ent. France, Bull. 43:250, 1938.

Barrigada, June 12, in rotten log, Swezey.

Apparently the only representative of this family in Guam. Described from Ponape, Caroline Islands, and Guam: Piti, in bamboo; Mt. Alifan, in rotten log.