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Three New Mordellid Beetles from the Pacific

By EUGENE RAY

The three new species of Mordellidae described below were examined during my study of material from the Fiji and Philippine Islands. The types are deposited in the collections of Bernice P. Bishop Museum and the Chicago Natural History Museum as noted. My thanks are due to the officials of these institutions for the opportunity of describing this material.

Mordellistena dybasi, new species (fig. 1, *a-d*).

Derm of head and pronotum flavocastaneous; pronotum with a divided black spot at apex that narrows posteriorly and ends within a third of base; elytra black, with a double, C-shaped flavocastaneous spot, touching side margins below base and at a fourth from apex and reaching suture broadly at middle; ventral surface flavocastaneous, sides of meso- and metasternum and apical margins of abdominal segments black; anal style fuscous. Surface densely covered with fine, recumbent pubescence that partakes of ground color, except on antennae, where there is a sparse admixture of blackish hairs.

Form narrow, elongate, sides broadest along basal half of pronotum, elytra broadest at base. Antennae 1 mm. long, narrow, filiform, reaching base of abdomen; segments 1-2 large, equal; 4 one-half longer than 3, thicker on apical half; 5-10 each slightly longer than 4, no broader than the latter is at apex; 11 one-third longer than 10, broadest at distal third, sides and apex rounded. Terminal segment of maxillary palpi enlarged, with the form of a rather broad scalene triangle, mesal edge shortest, the latter and terminal edge rounded. Pronotum but slightly broader than long (0.56×0.5 mm.), apex and sides broadly rounded, basal angles right angles, base arcuate, midbasal lobe broad, strongly produced, subtruncate at tip. Scutellum small, triangular, acute at tip. Elytra 2.5 times as long as broad (1.44×0.56 mm.), sides subparallel on basal half, thence rounded to apex. Pro- and mesotibiae shorter than their tarsi, penultimate segment of the latter narrow, filiform. Inner spur of metatibiae four times as long as outer one. Metatibiae with two oblique ridges, the basal one extending completely across outer surface; basitarsi and second segment each with two ridges. Anal style four times length of hypopygium (1.12×0.31 mm.), narrow, elongate, attenuate to apex. Length 1.94 mm.; including anal style, 3.06 mm.

Palau Islands: Peleliu. Described from a series of eight specimens collected by Henry S. Dybas as follows: type male and four para-

types collected on the east coast of Peleliu, August 1, 1945, on clusters of dead *Ficus* leaves; three paratypes, type locality, August 3, 1945. Type and two paratypes in collection of Chicago Natural History Museum; other paratypes in collections of Bishop Museum and myself. This species is named for the collector, Henry S. Dybas.

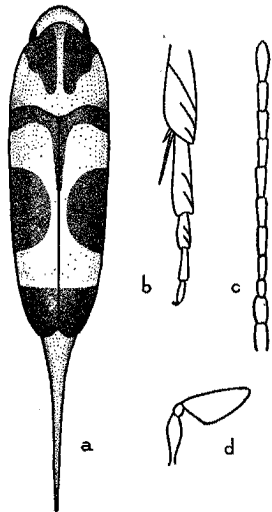


FIGURE 1.—*Mordellistena dybasi*: a, dorsal view; b, metatibia and tarsus; c, antenna; d, maxillary palpus.

This species is most closely allied to *M. signatella* Marseul (Soc. ent. Fr., Ann. V, 6: 476, 1876), found in Japan and Formosa, but may easily be separated by the different maculation of the pronotum and elytra, the latter having three fasciae, of which the second is often divided at middle; by the longer antennae, which have segments five to ten equal; and by the smaller size.

The pronotal spot is variable in size and in several specimens is coalesced to form a single, discal mass.

***Mordellistena walshi*, new species (fig. 2, a-d).**

Derm black; antennae, maxillary palpi, protibiae and tarsi, spurs of metatibiae and apices of abdominal segments narrowly, fuscocastaneous. Surface covered with fine, recumbent pubescence, partaking of ground color, except for obscurely sericeous areas broadly bordering the pronotum and on the elytra as follows: along base and humeri broadly, extending diagonally into disk to one-third length and connecting with a narrow, transverse, arcuate line before middle, and a broad, transverse band at one-third from apex.

Form slender, attenuate, sides broadest at base of pronotum. Body covered with fine, erect, short hairs. Antennae 0.67 mm. long, somewhat broadened distally, not reaching metacoxae; segments 1-2 large, broad, the former distinctly shorter; 3-4 small, equal in length, the latter much broader, together no longer than 2; 5-10 each slightly shorter than 3-4 together, slightly broader than 4 is at apex, each one-fourth longer than broad; 11 one-third longer than 10, broadened medially, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a short, broad, scalene triangle, slightly more than twice as long as broad, distal margin shortest, almost straight, lateral and mesal margins convex, angles rounded. Pronotum one-fourth broader than long (0.75×0.6 mm.), apex and sides rounded, basal angles obtuse, base arcuate, midbasal lobe short, broad, rounded. Scutellum triangular, broader than long, sides straight, apex rounded. Elytra 2.33 times as long as broad (1.75×0.75 mm.), sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae slightly shorter than their tarsi, penultimate segment of the latter narrow, filiform. Spurs of metatibiae unequal, the inner three times length of outer one. Metatibiae with two unequal, oblique ridges, the basal one extending completely across outer surface; basitarsi with three short, oblique ridges, second segment with two. Anal style three times length of hypopygium (0.9×0.3 mm.), broad on basal fourth, thence abruptly narrowed and attenuate, apex acute. Length 2.35 mm.; including anal style, 3.25 mm.

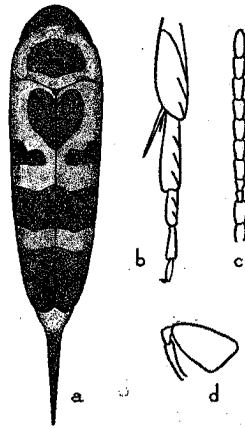


FIGURE 2.—*Mordellistena walshi*: a, dorsal view; b, metatibia and tarsus; c, antenna; d, maxillary palpus.

West Java. Described from a single female, the type, collected by M. E. Walsh in the Tjimarang Mountains, Djampanga, Tengah, March 1939, at an altitude of 1,500-2,000 feet. This species is named for the collector, M. E. Walsh.

This species is apparently most closely allied to *annuliventris* Pic (Mel. exot.-Ent. 50: 31, 1937), from Sumatra, and may be separated by the black derm, the unicolorous elytra with its obscurely sericeous,

pubescent markings, by the abruptly constricted anal style, and by the smaller size. It probably differs in other particulars, but Pic's short diagnosis does not permit a more adequate comparison.

The sericeous-pubescent pattern on the elytra is quite obscure and can be seen only from certain angles. It can easily be overlooked if examined without proper lighting.

***Dellamora gregis*, new species (fig. 3, a-c).**

Derm fuscous, antennae, maxillary palpi, anterior and middle legs and apices of abdominal segments castaneous. Surface covered with fine, recumbent pubescence, partaking of ground color.

Form moderately robust, attenuate, sides broadest before base of pronotum. Eyes covered with fine, erect, short, flavous hairs. Antennae 2.8 mm. long, short, not reaching metacoxae; segments 1-2 large, the former slightly longer; 3-4 narrow, equal, each slightly longer than 2; 5-10 each one-third longer than 4, somewhat expanded on distal third, subserrate; 11 slightly longer than 10, narrow, broadest one-fourth from apex, lateral and distal edges rounded. Terminal segment of maxillary palpi enlarged, broadly securiform, lateral margin longest, the latter and corners rounded. Pronotum one-third broader than long (3.4×2.4 mm.), apex and sides broadly rounded, the latter sharply constricted before base, basal angles obtuse, base arcuate, midbasal lobe broad, short, subtruncate. Scutellum subtriangular, broader than long, sides straight, apex rounded. Elytra more than twice as long as broad (6.42×3.1 mm.), sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter broadly expanded, emarginate to apex, extending to middle of terminal segment. Inner spur of metatibiae but slightly longer than the outer one. Metatibiae with three equal, oblique ridges, basitarsi with two, second and third segments each with one ridge. Anal style 3.33 times length of hypopygium (2.91×0.86 mm.), continuously attenuate to apex, the latter narrowly truncate. Length 8.82 mm.; including anal style, 11.73 mm.

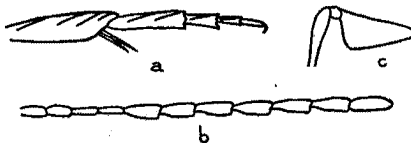


FIGURE 3.—*Dellamora gregis*: a, metatibia and tarsus; b, antenna; c, maxillary palpus.

Solomon Islands: Guadalcanal. Described from a single male, the type, collected by J. A. Kutsche on February 20. Type in collection of Bishop Museum.

This species is allied to *D. philippinensis* Ray (Coleop. Contr. 1 (3): 151, pl. 25, fig. 6, 1930), but the latter has one less ridge on the metafemora, lacks the prebasal constriction on the sides of the pronotum, the antennae and maxillary palpi are different, the color is lighter and it is smaller.

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Mordellidae of the Fiji Islands¹

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INTRODUCTION

This family, widespread throughout most temperate and tropical areas and absent in the Pacific only in the Hawaiian Islands, seems to be well-developed in the Fiji Islands. Eleven species have been described or recorded from these islands, one Samoan species is herein reported in an extension of distribution, and 19 are described as new.

Of the 12 known species four, including *Mordella decemguttata* Fabricius, *Dellamora consimilis* (Blair), *D. castanea* (Boheman), and *D. samoensis* (Blair) have a more or less widespread distribution, whereas the remaining forms, *Mordella lachrymosa* Lea, *M. vitiensis* Blair, *M. veitchi* Blair, *M. nigroterminata* Blair, *Mordellistena xanthocephala* Blair, *Dellamora greenwoodi* (Blair), *D. gracilicauda* (Blair), and *D. inscripta* (Lea) are known to occur only in the Fiji Islands.

Mordella decemguttata was described from Java (?) and subsequently recorded from Ceram, New Guinea, Woodlark Island, and the Fiji Islands. I have at hand two specimens from Australia, which have been used as the basis for subsequent redescription and notes, but have seen none from Fiji. K. G. Blair (1, p. 563)² considers this identification and the indicated synonymy as being "a little doubtful."

Dellamora consimilis was originally described as a *Mordellistena* from Fiji and subsequently recorded by Blair from several localities in the Samoan Islands. It is probably more widespread than present

¹ Funds for the printing of this paper were contributed by the Juliette M. Atherton Trust.

² Numbers in parentheses refer to the Bibliography, page 320.

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knowledge indicates. In the material before me, it is represented everywhere in Fiji that collections have been made.

Dellamora castanea was described as a *Mordella* from the island of Guam, redescribed under the name of *Mordella dodonaeae* by Montrouzier from New Caledonia, recorded as *Mordellistena dodonaeae* by Blair from both Fiji and Samoa, and subsequently mentioned in "Insects of Guam" (3, p. 59) as occurring in the original type locality. I have seen 44 specimens, taken both from Guam and several localities in Fiji. The former are a fairly homogeneous group and coincide well with the original description and with notes and descriptions made by Blair; the latter vary considerably in several important characters. In the Guam paper (3, p. 59) *D. dodonaeae* was synonymized by Blair with *D. castanea*, with which decision I am in agreement.

Dellamora samoensis, known only from Samoa and described as *Mordellistena*, is herein recorded from Viti Levu, Ovalau, the Lau Islands, and Matuku Island.

I have seen specimens of all species mentioned herein, except *Mordella vitiensis*, *M. nigroterminata*, *Dellamora greenwoodi*, and *D. inscripta*, these being sufficiently distinctive to be temporarily included in the keys without examination.

The genus *Dellamora* was erected by Normand in 1916 to include a North African species having the penultimate segment of the pro- and mesotarsi expanded and bilobed and ridges on the metatibiae and two basal segments of the metatarsi. *Dellamora greenwoodi*, *D. gracilicauda*, *D. consimilis*, *D. castanea*, *D. inscripta*, and *D. samoensis* are herein transferred from the genus *Mordellistena* because of the first of these characters; these species, however, have ridges on the three basal segments of the metatarsi. It is thought unwise at present to suggest a new name for their reception, since in the Fiji Islands, as well as in other faunal areas, many of the species of *Mordellistena* have been found to have the expanded, bilobed tarsal segment and ridges on either two or three basal segments of the metatarsi. Further investigation may indicate the desirability of this separation as a genus or subgenus at some time in the future.

This study is based almost wholly on the 361 specimens received for study from the collections of Bernice P. Bishop Museum and collected by Elwood C. Zimmerman during the Henry G. Lapham Expedition of 1938. To Dr. Peter H. Buck and Mr. Zimmerman

my thanks are due for the opportunity to study this material. To Mr. William J. Gerhard of the Chicago Natural History Museum appreciation is acknowledged for the use of certain comparative material.

Types of all species hereinafter described are returned to Bishop Museum. Paratypes and duplicates, when available, are retained by me.

LIST OF MORDELLIDAE

Genus *Mordella* Linnaeus

- | | |
|-----------------------------------|--------------------------------|
| 1. <i>decemguttata</i> Fabricius | 4. <i>nigroterminata</i> Blair |
| 2. <i>lachrymosa</i> Lea | 5. <i>veitchi</i> Blair |
| 3. <i>nesiotica</i> , new species | 6. <i>vitiensis</i> Blair |

Genus *Tomoxia* Costa

7. *anotata*, new species

Genus *Mordellistena* Costa

- | | |
|--------------------------------------|-------------------------------------|
| 8. <i>acies</i> , new species | 14. <i>macilenta</i> , new species |
| 9. <i>agalma</i> , new species | 15. <i>ploiaria</i> , new species |
| 10. <i>angusticeps</i> , new species | 16. <i>poecila</i> , new species |
| 11. <i>arcuata</i> , new species | 17. <i>variabilis</i> , new species |
| 12. <i>bryani</i> , new species | 18. <i>xanthocephala</i> Blair |
| 13. <i>dehiscentis</i> , new species | 19. <i>zimmermani</i> , new species |

Genus *Dellamora* Normand

- | | |
|--|--|
| 20. <i>aesura</i> , new species | 26. <i>greenwoodi</i> (Blair), new combination |
| 21. <i>castanea</i> (Boheman), new combination | 27. <i>homora</i> , new species |
| 22. <i>consimilis</i> (Blair), new combination | 28. <i>inscripta</i> (Lea), new combination |
| 23. <i>curticauda</i> , new species | 29. <i>macaria</i> , new species |
| 24. <i>epiblema</i> , new species | 30. <i>parva</i> , new species |
| 25. <i>gracilicauda</i> (Blair), new combination | 31. <i>samoensis</i> (Blair), new combination |

KEY TO THE GENERA

- Ridges of the hind legs confined to a single, subapical tibial ridge..... 1
 Additional ridges on both metatibiae and metatarsi..... 2
 1. Scutellum triangular; dorsal surface of metatibiae and basitarsi without a carina..... **Mordella** Linnaeus
 Scutellum twice as broad as long, broadly truncate at apex; dorsal surface of metatibiae and basitarsi each with a raised elongate keel or carina..... **Tomoxia** Costa
 2. Metatarsal ridges confined to the two basal segments; penultimate segment of pro- and mesotarsi narrow, filiform, not extending beyond base of ultimate segment..... **Mordellistena** Costa
 Metatarsal ridges on three basal segments; penultimate segment of pro- and mesotarsi short, broadly expanded, emarginate or bilobed at apex, extending well beyond base of ultimate segment..... **Dellamora** Normand

Genus **Mordella** Linnaeus

Mordella, Syst. Nat., 10th ed., 420, 1758.

This genus includes species in which the eyes reach the occiput, the scutellum is triangular, with the tip acute or rounded, the antennae are variably serrate or clavate, the terminal segment of the maxillary palpi is triangular, and the hind legs are without carinated ridges, except for the short subapical one on the metatibiae.

In *Glipa* the eyes do not reach the occiput and in *Tomoxia* the scutellum is transverse with the apex truncate or emarginate and the metatibiae and basitarsi each have an elongate keel, or carina, on their dorsal surfaces. It is with these two genera that *Mordella* is most often confused.

Any exception to the five characters enumerated above should readily exclude a species from this genus.

KEY TO THE SPECIES OF MORDELLA

- Species 10 mm. or more in length; humeri of elytra with an oblique callus extending diagonally into disk..... 1
 Species 6 mm. or less in length; humeral callus absent..... 3
 1. Base of pronotum with disconnected white spots..... 2
 Base of pronotum with a continuous narrow, white line..... **lachrymosa** Lea
 2. Four confluent white spots along base of pronotum; elytra with elongate white spots enclosing scutellum..... **decemguttata** Fabricius
 Two white spots along base of pronotum; elytra without spots enclosing scutellum..... **vitiensis** Blair
 3. Dorsum completely black; elytra with two oblique fasciae of whitish pubescence and a humeral patch; anal style more than twice length of hypopygium..... **veitchi** Blair
 Dorsum bicolored; anal style less than twice length of hypopygium..... 4

4. Head and pronotum black; elytra black, with a transverse castaneous fascia at one-fourth from apex; anal style one and one-half times length of hypopygium, broadly truncate at tip.....*nesiotica*, new species
 Head and apex of elytra black, remainder of dorsum obscurely rufous; anal style almost twice length of hypopygium, acute at tip
*nigroterminata* Blair

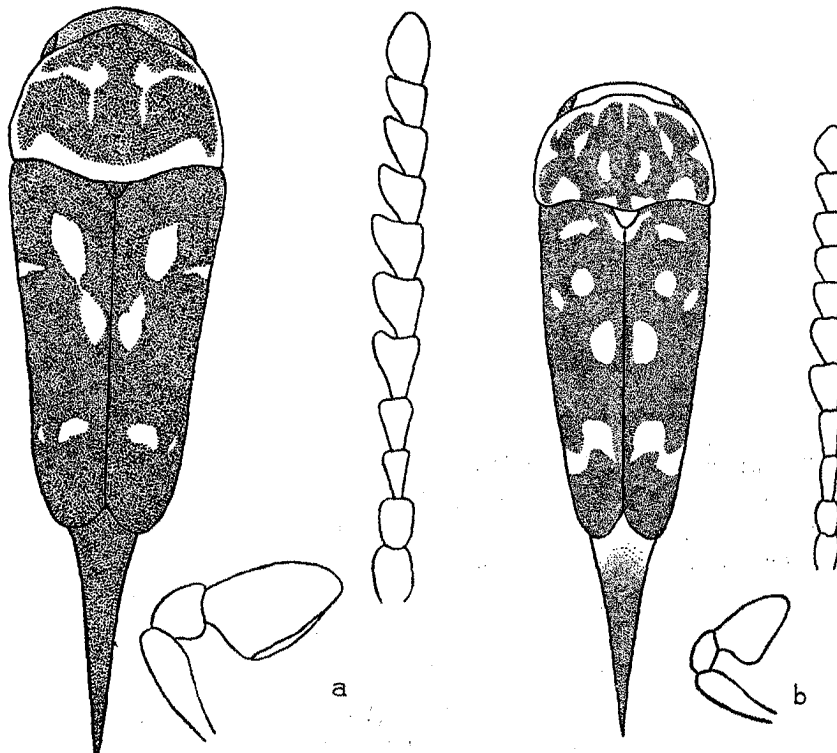


FIGURE 1.—a, *Mordella lachrymosa*; b, *M. decemguttata*: dorsal view, antenna, and maxillary palpus.

Mordella lachrymosa Lea, Ent. Soc. London, Trans. 79: 319, figs. 19, 21, 1931 (fig. 1, a).

Derm black, except eyes, which are flavocastaneous. Surface covered with fine, recumbent pubescence, partaking of ground color, except for the following whitish areas: head completely, densest along occipital margin; margins of pronotum completely, except along middle of apical margin, a transverse vitta extending mesad in apical half and ending in a clublike enlargement, but not reaching middle and a linear spot on either side of middle, connected with the latter; elytra with a pair of elongate spots on disk, first at basal third, second at middle, narrowly connected on left elytron, an irregular, transverse line at epipleurae opposite first discal spot, but not reaching it, and a pair of spots at apical fourth, the inner irregular, on disk, the outer

small, linear, equidistant between the latter and the margin; mesosternum, anterior angles of metasternum, basal margins and angles of abdominal segments, anal style sparsely above, anterior and middle legs and metafemora.

Form robust, subcuneate, sides broadest before base of pronotum. Eyes large, glabrous. Antennae 2.14 mm. long, reaching base of metasternum, broadly serrate; segment 1 longer and broader than 2; 3 equal to 2 in length but only half as broad, twice as broad at tip as at base; 4 slightly longer and distinctly broader than 3; 5-10 each but slightly longer than 4 and considerably broader, strongly serrate; 5-7 increasing in width, 8-10 decreasing, 10 no broader than 5, 5-10 gradually decreasing in length, 10 only two-thirds as long as 5; 11 three-fourths longer than 10, broadest at middle, sides and tip rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, mesal edge shortest, margins and angles rounded. Pronotum more than four-tenths broader than long (3.71×2.57 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, short, subtruncate. Scutellum large subtriangular, broader than long, sides concave, tip broadly rounded. Elytra less than twice as long as broad (6.63×3.71 mm.), cuneate, humeri and basal fifth of disk with a broad, oblique, rounded callus. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter broadly expanded, deeply emarginate at tip, extending well beyond base of ultimate segment. Spurs of metatibiae unequal, the inner one-half longer than the outer one. Anal style more than three times length of hypopygium (4.0×1.28 mm.), narrow, attenuate to tip, the latter acute, and bearing a distinct, narrow keel or carina on its dorsal surface. Length 9.2 mm.; including anal style, 13.2 mm.

Redescribed from a cotype in the F. J. Psota collection, Chicago Natural History Museum; collected on Moturiki in June by Lea.

This species may easily be separated from its closest ally in the Fijian fauna, *M. decemguttata* Fabricius, by the different pattern of whitish pubescence on the pronotum and elytra, the broader, more highly serrate antennae, the longer anal style, and the larger size.

Mordella decemguttata Fabricius, Syst. Eleuth. 2: 123, 1801 (Java?); Boisduval, Voy. Astrolabe 2: 289, 1835 (New Guinea); Montrouzier, Soc. Agric. Lyon, Ann. 7 (1): 34, 1855 (Woodlark I.); Blair, Ann. Mag. Nat. Hist. IX, 9: 563, 1922 (Fiji). (See figure 1, *b*.)

Mordella plurinotata Blanchard, Voy. Pôle Sud 4: 190, pl. 12, fig. 16, 1853 (Ceram); Blair, Ann. Mag. Nat. Hist. IX, 9: 563, 1922 (Fiji).

Derm black, four basal segments of antennae, pro- and mesotarsi and spurs of metatibiae fuscocastaneous. Surface covered with fine, recumbent pubescence, partaking of ground color, except for the following whitish areas: head completely; pronotum with distal margin and lateral margins narrowly, a short, narrow stub extending into disk from distal margin and 10 spots on either side, three on distal half of disk, one near side margin, the second median, the third on either side of middle near tip of distal stub,

the fourth near base at either end of midbasal lobe, the fifth at base on either side of scutellum; six spots on either elytron, one elongate, scutellar, three rounded, discal, one near base, one at basal third, one at middle, an irregular one on epipleurae opposite the second of the discal ones, and an arcuate band at distal third, touching side margins but not suture and apparently composed of two confluent spots; ventral surface with parts of meso- and metasternum and basal margins of abdominal segments, except for a narrow area on either side.

Form robust, subcuneate, sides broadest before base of pronotum. Eyes large, glabrous. Antennae 2.7 mm. long, reaching metasternum, strongly expanded, serrate; segments 1-2 large, subcylindrical, the former longer and broader; 3-4 equal, each longer but narrower than 1; 5-10 broadly expanded, serrate, broadest and rounded proximally, each no longer than 4, but slightly longer than broad; 11 no longer than 10, broadest medially, median margin and tip broadly rounded, lateral edge straight. Terminal segment of maxillary palpi enlarged, securiform, scalene, mesal edge shortest, but one-half longer than broad, sides and angles rounded. Pronotum almost one-half broader than long (3.0×2.06 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, short, rounded. Scutellum large, subtriangular, broader than long, sides concave, tip broadly rounded. Elytra less than twice as long as broad (5.66×3.0 mm.), cuneate, humeri and basal fourth of disk with a broad, oblique callus. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter shortest, the latter and antepenultimate segment expanded proximad, concave at tip. Spurs of metatibiae equal in length. Anal style but two and one-fifth times length of hypopygium (3.3×1.5 mm.), narrow, attenuate to tip, the latter acute. Length 7.72 mm.; including anal style, 11.12 mm.

Redescribed from two specimens in the F. J. Psota collection, Chicago Natural History Museum; collected at Esmeralda(?), Victoria, Australia.

I have seen no Fijian specimens of this species, nor of *M. vitiensis* Blair, to which it is most closely allied in the Fijian fauna. The notes in the key are, therefore, taken in part from the literature. *M. vitiensis* undoubtedly differs from *M. decemguttata* in other particulars than those enumerated above, but this I am unable to determine from the notes and descriptions of other writers.

Mordella vitiensis Blair, Ann. Mag. Nat. Hist. IX, 9: 563, 1922 (Fiji).

"Large, black, clothed with black pubescence, variegated with white spots and lines which are arranged as follows:— head, a narrow white margin on each side of base; thorax, four white spots in a slightly arcuate line a little before the middle, the outer pair near the sides, a round spot on each side of base opposite the middle of the base of each elytron; elytra, a round spot (No. 1) on each directly behind the basal thoracic spot nearly as far from it as the two latter are from one another, a minute spot (No. 2) a little behind this and halfway between it and the lateral margin, No. 3 rather further behind 2 than 2 is behind the basal thoracic, and very much nearer

the suture, No. 4 small, a little behind 3 and in direct line with the basal thoracic and No. 1, No. 5, towards apex, a little further from the suture than No. 3; an elongate spot on each side of base of pygidium; on the under side, one on the metathoracic epimeron, one in the middle of the lateral border of the posterior coxa, and one in the antero-lateral angle of each of the first three ventral segments. Style long, straight, acutely pointed at apex.

"Length $12\frac{1}{2}$ mm., including style; 8 mm. to tip of elytra.

"A single specimen, Labasa, xi. 14 (R. Veitch).

"Distinct among all these large, white-spotted forms in the lack of scutellar spots on the elytra, in conjunction with the lack of extensive white markings along the base of the thorax. Its nearest ally is probably *M. 16-guttata*, Montr., from New Caledonia, from which it differs in the number and distribution of the spots. It also resembles *M. funerea*, Pasc., from New Zealand, though in this the white spots are yet fewer. The position of the white spot on the posterior coxae is unusual, and is similar in *M. 16-guttata*; in most species it is situated on the antero-lateral angle. Of the Australian species *M. chrysophora*, Lea, is probably its closest ally."

Mordella veitchi Blair, Ann. Mag. Nat. Hist. IX, 9: 565, 1922 (Fiji).

(See figure 2, a.)

Derm black, labrum, maxillary palpi, profemora and metatibial spurs testaceous or castaneous, antennae varying from castaneous at base to black at tip. Surface covered with fine, recumbent pubescence, partaking of ground color, except for the following silvery areas: head completely, except on labrum; pronotum with distal and proximal margins, a pair of short, submedian lines extending into disk from the former, a small spot on either side between the submedian lines and the lateral margins, often enlarged to coalesce with the distal marginal line; scutellum completely; elytra with a broad basal area which extends caudad as a short stub mesad to the humeri, a premedian oblique spot reaching neither suture nor lateral margins, an oval, submarginal, postmedian spot that is confluent with an irregular, elongate sutural area at its inner margin; mesosternum, sides of metasternum, and bases of abdominal segments.

Form moderately elongate, narrow, broadest before base of pronotum. Eyes densely covered with moderately long, erect, silvery hairs. Antennae 1.05-1.43 mm. long, short, not reaching metacoxae, moderately narrow, subserrate; segment 1 no broader but two-thirds longer than 2; 3 as long as 2, but narrower, twice as broad at apex as at base; 4 one-third longer and distinctly broader than 3; 5-10 each slightly shorter than 4, but distinctly broader at base and slightly broader at tip; 11 slightly longer than 10, sides almost straight, angles rounded, distal edge diagonal. Terminal segment of maxillary palpi enlarged, form of an elongate scalene triangle, distal margin shortest, mesal and lateral edges straight, except that the latter is curved at tip, distal margin and angles rounded. Pronotum one-third broader than long in male (0.91×0.68 mm.), one-half broader in female (1.37×0.91 mm.), apex and sides broadly rounded, the former strongly produced at middle, basal angles obtuse, base arcuate, mid-basal lobe broad, short, rounded. Scutellum moderately large, triangular, broader than long, sides straight, tip broadly rounded. Elytra two and one-seventh times as long as broad in male (1.97×0.91 mm.), two and one-third times longer in female (3.0×1.28 mm.), sides subparallel on basal fourth, thence rounded to apex. Pro- and mesotibiae no longer than their tarsi, penultimate segment of the latter broadly expanded, emarginate at apex, extended beyond base of ultimate segment. Spurs of metatibiae unequal, the inner three times length of

outer one. Anal style two and one-fourth times length of hypopygium in male (0.91×0.37 mm.), but twice length in female (1.2×0.6 mm.), moderately robust, the tip distinctly truncate. Length 2.65-3.91 mm.; including anal style, 3.56-5.11 mm.

Redescribed from eight specimens. VITI LEVU: one, west slope, Navai-Nasonga Trail, Oct. 12, 1938, alt. 2,500-3,000 feet, beating, Zimmerman; one, Naivithula, Tailevu, Sept. 7, 1937, Valentine. ONEATA: one, Dakuiloa, Aug. 21, 1938, beating shrubs, Zimmerman. OVALAU: one, Andubangda, July 15, 1938, alt. 1,500-1,800 feet, beating, Zimmerman. LAU ISLANDS: one, Tuvutha, Sept. 11, 1924; one, Lakemba, Sept. 3, 1924; two, Vanua Mbalavu, Sept. 23, 1924, Bryan.

This species may easily be separated from its allies, *M. nesiotica*, new species, and *M. nigroterminata* Blair, by the distinctly longer anal style, the different pattern of elytral pubescence, and the smaller size.

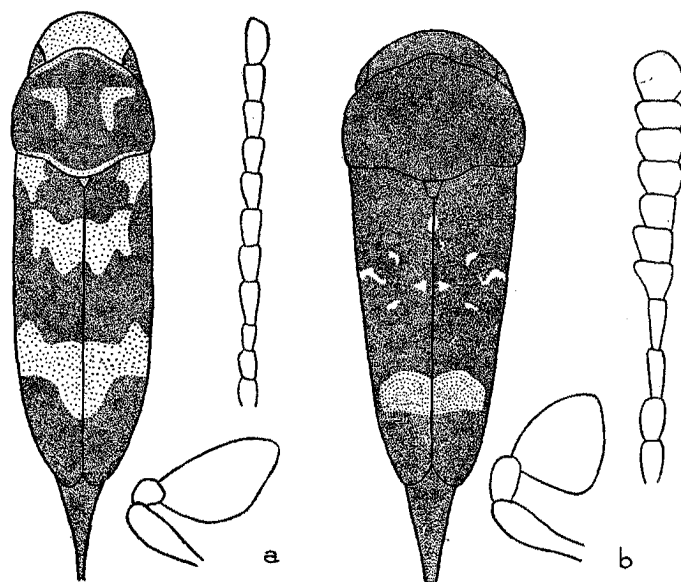


FIGURE 2.—a, *Mordella veitchi*; b, *M. nesiotica*: dorsal view, antenna, and maxillary palpus.

***Mordella nesiotica*, new species (fig. 2, b).**

Derm black, three basal segments of maxillary palpi and basal angles of first abdominal segment fuscocastaneous. Surface covered with fine, recumbent pubescence, partaking of ground color, except on elytra, where there are several whitish areas: a narrow streak along base, a small spot on the suture below

the scutellum, and four small, irregular areas before middle, one near suture, one near lateral margin and two on disk; a broad, dusky, orange-colored fascia at apical third of elytra, arcuate anteriorly, transverse apically, reaching suture but narrowly missing lateral margins; basal angles of the first two abdominal segments whitish.

Form robust, subcuneate, sides broadest before base of pronotum. Eyes glabrous, reaching occiput. Antennae 1.1 mm. long, reaching hind margin of mesosternum; segments 1-2 large, equal; 4 slightly longer than 3, equal in length to 2, but much thinner; 5-6 each no longer than 4, but broadly serrate, almost as broad as long; 7 distinctly shorter than 6, sides rounded; 8-10 each shorter than 7, broader than long, sides broadly rounded; 11 slightly longer than 10, sides and apex broadly rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, terminal edge slightly longer than lateral margin, shortest mesad, sides and angles rounded. Pronotum transverse, seven-tenths broader than long (1.75×1.06 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, short, truncate. Scutellum small, subtriangular, sides angular, broadly truncate at apex. Elytra less than twice as long as broad (3.06×1.7 mm.) distinctly narrower at base than pronotum, sides attenuate to apex. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter but slightly expanded, short, truncate at apex. Spurs of metatibiae very short, the outer but slightly longer than the inner one. Anal style but three-fourths longer than the hypopygium (0.97×0.56 mm.), robust, short, broadly truncate at apex. Length 4.12 mm.; including anal style, 5.09 mm.

Holotype, sex undetermined, Viti Levu, Navai Mill near Nandarivatu, Oct. 13, 1937, Valentine.

This species is not closely allied to any other Fijian member of the genus. The orange fascia on the apical third of the elytra and the distinctive antennae will adequately separate it from other members of the local fauna.

The closest ally of *M. nesiotica* is apparently *M. biauaronotata* Lea (11, p. 311), from Papua. It may be separated from the latter member of the genus by the absence of white pubescence on the pronotum; by the presence of the basal area and several small, irregular, whitish-pubescent spots on the elytra; by the absence of whitish pubescence on the ventral surface, except on the basal angles of the first two abdominal segments; by the different shape of the postmedian orange-colored spot on the elytra; by the broadly transverse and serrate antennae; and by the short, broad, truncate anal style.

Mordella nigroterminata Blair, Ann. Mag. Nat. Hist. IX, 9: 564, 1922 (Fiji).

"Small, stout, obscurely rufous above, with the head and apex of elytra black, antennae and abdomen paler, rufofulvous. Head, except a large space between the eyes, clothed with silvery-grey pubescence; thorax with a narrow

line along the anterior margin, a small spot near each anterior angle, and a larger spot on each side of the middle of the base of the same colour; scutellum strongly transverse but not emarginate at apex, clothed with silvery-grey pubescence; elytra with an elongate oblique spot behind each shoulder, an oval spot just before the middle and not far from the suture, and a squarish spot halfway between this and the apex silvery grey; the derm beyond this spot is distinctly blacker than that of the greater part of the elytron. Pygidium acute, almost twice as long as hypopygium.

"Length 4 mm. (style included).

"1 ex., Nausori, Oct. 20 (R. Veitch).

"In its short build this little species bears some resemblance to a *Tomoxia*, but the scutellum, though transverse, is bluntly rounded at the apex instead of being emarginate. Other species of similar form, but different coloration, are *M. graphiptera*, Champ., and some undescribed species from the Malay Archipelago."

Genus *Tomoxia* Costa

Tomoxia, Fauna Regno Napoli, Mordell., 8, 1854.

This genus is closely allied to *Mordella* and includes species which should properly be placed in the latter genus. Two easily distinguishable characters of *Tomoxia* are the scutellum, which is variably transverse and is either emarginate or truncate at the tip, and the metatibiae and basitarsi, each of which has, on the dorsal face, a distinct, elongate carination, or keel.

Tomoxia anotata, new species (fig. 3).

Derm black, antennae, maxillary palpi, anterior legs, and coxae of posterior legs castaneous. Surface covered with fine, recumbent, sericeo-cinereous pubescence, densest on dorsum and basal angles of abdominal segments, partaking of ground color on castaneous parts.

Form moderately robust, subcuneate, sides broadest before base of pronotum. Head almost as broad as adjoining margin of pronotum. Eyes entire, reaching occiput, sparsely covered with short, erect, whitish hairs. Antennae 1.06 mm. long, reaching mesosternum, moderately narrow, filiform; segments 1-2 large, equal; 3 but two-thirds as long as 2 and less than one-half as broad; 4-10 each one-third longer than 3 and almost twice as broad; 11 one-third longer than 10, broadest medially, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad, securiform triangle, sides subequal in length, angles rounded. Pronotum transverse, four-tenths broader than long (1.15 × 0.81 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, short, rounded. Scutellum transverse, sides angular, apex truncate. Elytra less than twice as long as broad (2.12 × 1.1 mm.), subcuneate, narrowly rounded to apex. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter broadly expanded, emarginate at apex, extending beyond base of ultimate segment. Metatibiae and basitarsi each with a distinct dorsal carina or keel; spurs of the former unequal, outer one three times length of inner one. Anal

style but slightly more than twice length of hypopygium (0.94×0.44 mm.), slightly curved ventrad, robust, attenuate, blunt at apex. Length 2.93 mm.; including anal style, 3.87 mm.

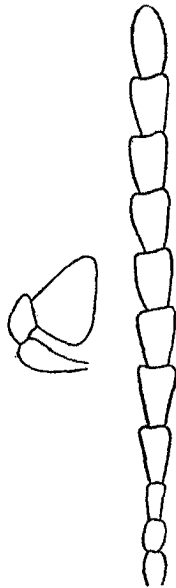


FIGURE 3.—*Tomoxia anotata*: maxillary palpus, antenna.

Holotype female, Viti Levu, ridge south of Nandarivatu, Sept. 9, 1938, alt. 2,600-3,000 feet, beating shrubbery, Zimmerman.

This species is somewhat allied to *T. oblongifera* Lea (11, p. 314), from Papua, but may easily be separated by the complete absence of vittae on the pronotum and elytra and the longer anal style.

Other points of differentiation undoubtedly exist, but this I am unable to determine from Lea's description.

Genus *Mordellistena* Costa

Mordellistena, Fauna Regno Napoli, Mordell., 16, 31, 1854.

This genus includes species which have a short, somewhat oblique subapical ridge on the metatibiae and in addition one or more ridges on the latter part and on the two basal segments of the metatarsi. The scutellum is triangular, but variable in width. In some cases, therefore, it may be described as transverse. The anal style is variable in length and breadth. The antennae range from filiform to serrate.

The terminal segment of the maxillary palpi is generally triangular in shape, but there also occur here species which have this segment oval or round, whereas in others it is sexually dimorphic, with a boat-shaped form in the male and a triangle in the female.

This genus may be separated from *Dellamora* on the basis of the two characters mentioned in the key, namely, the bilobed penultimate segment of the pro- and mesotarsi and the presence of oblique ridges on the third segment of the metatarsus in *Dellamora*, whereas in *Mordellistena* the penultimate segment of the pro- and mesotarsi is narrow and filiform and the ridges of the metatarsi are confined to the two basal segments.

KEY TO THE SPECIES OF MORDELLISTENA

- Basal ridge of metatibiae extending to middle of outer surface.....
*plouaria*, new species
- Basal ridge of metatibiae either completely crossing outer surface or extending to within a fourth of anterior edge..... 1
1. Only one of two tibial ridges long, the other not extending beyond middle of outer surface..... 2
 Both tibial ridges completely crossing outer surface..... 9
2. Antennal segment 3 longer than 4.....*acies*, new species
 Antennal segment 3 equal to or shorter than 4..... 3
3. Antennal segments 3-4 equal in length..... 4
 Antennal segment 4 longer than 3..... 6
4. Antennal segment 5 twice as long as 4; pronotal pubescence bicolored
*zimmermani*, new species
 Antennal segment 5 no longer than 4; pronotal pubescence unicolored 5
5. Apex of scutellum acute; antennal segment 3 shorter than 2.....
*dehiscens*, new species
 Apex of scutellum broadly rounded; antennal segment 3 longer than 2
*agalma*, new species
6. Antennal segment 5 distinctly longer than 4..... 7
 Antennal segment 5 no longer than 4..... 8
7. Anal style almost three times length of hypopygium; terminal segment of maxillary palpi with the form of an isosceles triangle
*poecila*, new species
 Anal style but twice length of hypopygium; terminal segment of maxillary palpi with the form of a scalene triangle.....
*bryani*, new species
8. Anal style four times length of hypopygium; outer spur of metatibiae three times length of inner one; terminal segment of maxillary palpi with the form of an isosceles triangle.....*variabilis*, new species
 Anal style three and one-third times length of hypopygium; outer spur of metatibiae two and one-half times length of inner one; terminal segment of maxillary palpi with the form of a scalene triangle.....*macilenta*, new species

9. Basitarsus with three ridges; antennae 2.23 mm. long; pro- and mesotibiae as long as their tarsi.....**angusticeps**, new species
 Basitarsus with two ridges; antennae 1.0-1.25 mm. long; pro- and mesotibiae shorter than their tarsi.....10
10. Postmedian elytral fascia in the form of a rounded spot or a transverse band; midbasal lobe of pronotum truncate **xanthocephala** Blair
 Postmedian elytral fascia in the form of an arcuate band; midbasal lobe of pronotum rounded.....**arcuata**, new species

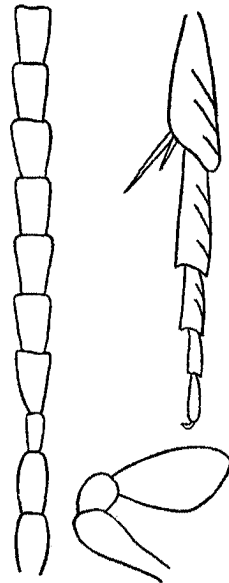


FIGURE 4.—*Mordellistena ploiaris*: antenna, metatibia and tarsus, and maxillary palpus.

***Mordellistena ploiaris*, new species (fig. 4).**

Derm of head and pronotum fuscocastaneous; elytra black, basal third of disk largely fuscocastaneous, the area not reaching base, humeri or lateral margin and separated from the suture by a narrow black line; ventral surface black; antennae, maxillary palpi, front legs, and spurs of metatibiae castaneous; middle and hind legs fuscocastaneous. Surface covered with fine, recumbent pubescence, whitish on the black areas, tinted with yellowish elsewhere.

Form moderately elongate, sides broadest at basal angles of pronotum and base of elytra. Antennae approximately 0.8 mm. long, moderately slender; segments 1-2 large, equal; 3 slightly more than one-half as long as 2 and distinctly narrower; 4-10 each as long as 2 and slightly broader; 11 missing. Terminal segment of maxillary palpi enlarged, form of a moderately broad, robust, scalene triangle, twice as long as broad, distal edge shortest, the latter and angles broadly rounded. Pronotum distinctly broader

than long (0.75×0.62 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, moderately produced, rounded. Scutellum small, triangular, broader than long, apex narrowly rounded. Elytra two and one-third times as long as broad (1.75×0.75 mm.), sides subparallel on basal fourth, thence rounded to apex. Pro- and mesotibiae slightly shorter than their tarsi, penultimate segment of the latter distinctly dilated and emarginate at apex. Spurs of metatibiae unequal, the outer two and one-half times length of inner one. Metatibiae with two equal, oblique ridges, each extending to middle of outer surface; basitarsi with three ridges, second segment with two. Anal style approximately two and two-thirds times as long as hypopygium (0.8×0.3 mm.), robust on basal half, abruptly constricted beyond tip of hypopygium, attenuate; tip missing. Length 2.37 mm.; including anal style, 3.17 mm.

Holotype male, Lau Islands, Kambara, Aug. 25, 1924, Bryan.

This species is the only known Fijian member of the genus which has a short basal ridge on the metatibiae. This and the obscurely castaneous fascia of the elytra, which fails to reach the humeri or suture and does not extend beyond basal third of disk, will serve as distinctive characters for what is apparently an isolated species.

Mordellistena acies, new species (fig. 5, *a*).

Derm of head and pronotum black; elytra black, with the base, a humeral fascia extending along lateral margin for one-fifth length, a median, discal stripe, extending caudad and uniting at suture before middle with a sutural line that ends at one-third from apex in meeting a transverse, arcuate band, castaneous; ventral surface black, apex of metasternum, base of first abdominal segment, and metatrochanters castaneous; antennae, maxillary palpi, pro- and mesotarsi and spurs of metatibiae flavous. Surface covered with fine, recumbent pubescence, whitish on head and pronotum, the latter with a dark area on either side of median line one-third from base and a lateral, subbasal, transverse area that almost reaches previous pair of spots; whitish on scutellum; yellowish on castaneous portions of elytra; whitish on meso- and metasternum and along bases of abdominal segments; partaking of ground color elsewhere.

Form narrow, elongate, sides broadest at bases of pronotum and elytra. Eyes covered with short, erect, whitish hairs. Antennae 0.6 mm. long, narrow, filiform, reaching metacoxae; segments 1-2 large, equal; 3 no longer than 4 and much narrower; 5-10 each two-thirds longer and one-third broader than 4, expanded distally, subserrate; 11 slightly longer than 10, oval, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a moderately elongate scalene triangle, distal edge shortest, straight, lateral and mesal margins strongly rounded. Pronotum distinctly broader than long (0.52×0.44 mm.), apex and sides rounded, basal angles slightly obtuse, base arcuate, midbasal lobe broad, moderately produced, broadly rounded. Scutellum small, triangular, broader than long, sides straight, apex acute. Elytra two and one-half times as long as broad (1.31×0.52 mm.), sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae slightly shorter than their tarsi, penultimate segment of the latter narrow, filiform. Spurs of metatibiae unequal, outer three times length of inner one.

Metatibiae with two oblique ridges, the basal one entirely crossing outer surface; basitarsi and second segment each with two ridges. Anal style three and one-third times length of hypopygium (0.7×0.21 mm.), slender, attenuate to apex, the latter acute. Length 1.75 mm.; including anal style, 2.45 mm.

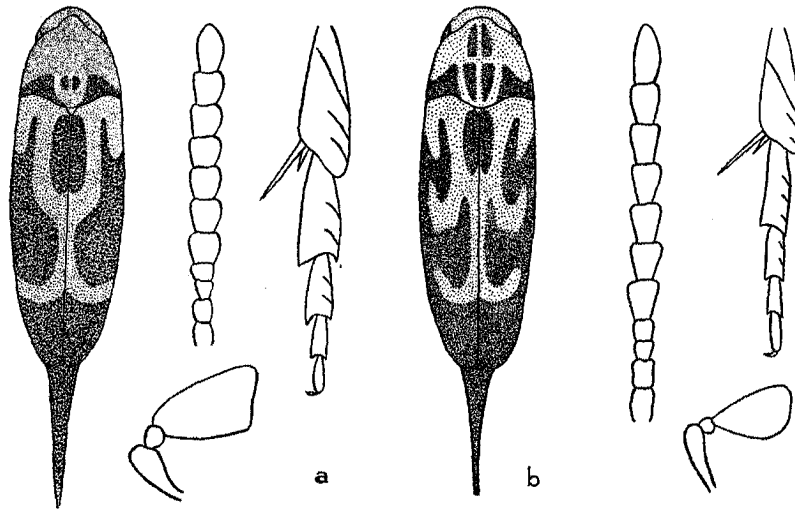


FIGURE 5.—a, *Mordellistena acies*; b, *M. zimmermani*: dorsal view, antenna, metatibia and tarsus, and maxillary palpus.

Holotype male, Viti Levu, Mt. Korombamba, Aug. 1, 1938, alt. 1,300 feet, beating shrubs; allotype female, Lau Islands, Munia Island, Aug. 3, 1938, alt. 800-900 feet; one paratype, Viti Levu, Tholo-i-Suva, July 25, 1938, alt. 500 feet; one paratype, Ovalau, Draiba Trail, July 8, 1938, alt. 800-1,000 feet. Collected by Zimmerman.

This species may be separated from *M. macilenta*, new species, described below, by the different color pattern of the pronotum and elytra, the much shorter, peculiar antennae, the narrower terminal segment of the maxillary palpi, the shorter elytra, the longer outer spur of the metatibiae, and the smaller size.

***Mordellistena zimmermani*, new species (fig. 5, b).**

Derm of head black, except clypeus and mentum, which are castaneous; pronotum and elytra black, the latter with fuscocastaneous areas as follows: base and humeri broadly, extending submarginally as a short stub and sub-suturally to a fourth from base, where they join to form a common sutural line that extends to within a fourth of apex, a recurved, hooklike fascia before middle and another one-third from apex; antennae, maxillary palpi,

anterior legs and bases of hind femora and tibiae castaneous, remainder black. Surface covered with fine, recumbent pubescence, silvery on head; silvery on pronotum, except on basal angles and two pairs of elongate spots on disk, one premedian, the other postmedian, which partake of ground color; silvery on fuscocastaneous parts of elytra, partaking of ground color on black areas; black on ventral surface, except at apex of metasternum and along bases of abdominal segments, which are silvery.

Form narrow, elongate, sides broadest at bases of pronotum and elytra. Eyes rather densely covered with short, erect, whitish hairs. Antennae short, but 0.65-0.75 mm. long, almost reaching metacoxae, fairly robust and flattened, distinctly serrate; segments 1-2 large, equal; 3-4 small, short, equal; 5-10 each as long as 3-4 together, distinctly broader, mesal margins serrate; 11 one-half longer than 10, broadest at middle, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad, scalene triangle, distal edge shortest, lateral margin broadly rounded. Pronotum distinctly broader than long (0.66-0.77 \times 0.57-0.64 mm.), apex and sides broadly rounded, basal angles rectangular, base arcuate, midbasal lobe broad, moderately produced, rounded. Scutellum small, broader than long, subtriangular, apex broadly rounded. Elytra more than two and one-half times as long as broad (1.69-1.94 \times 0.66-0.77 mm.), sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae distinctly shorter than their tarsi, segments of the latter filiform. Spurs of metatibiae unequal, the outer almost three times length of inner one. Metatibiae with two oblique ridges, the basal one extending completely across outer face, the other short; basitarsi with three short, oblique ridges, second segment with two. Anal style three and one-fifth times length of hypopygium (0.87-0.91 \times 0.27-0.29 mm.), moderately slender, attenuate to apex, the latter acute. Length 2.26-2.58 mm.; including anal style, 3.13-3.49 mm.

Holotype male, Viti Levu, Navai Mill near Nandarivatu, Sept. 16, 1938, alt. 2,500 feet, beating; allotype female, type locality, Sept. 12, 1938; two paratypes, type locality, Sept. 15 and 17, 1938; Viti Levu, Belt Road, 15 miles west of Suva, July 22, 1938, alt. 250 feet, beating dead branches; two, Lau Islands, Munia Island, Aug. 3, 1938, alt. 800-900 feet, beating shrubs, all collected by Zimmerman.

Named for the collector, E. C. Zimmerman, this species may easily be separated from its closest ally, *M. bryani*, new species, described herein, by the ornate derm and pattern of pubescence on the pronotum and elytra, the different structure of the antennae and maxillary palpi, the longer anal style, and the smaller size.

***Mordellistena dehiscentis*, new species (fig. 6, a).**

Derm of head and pronotum black, the former obscurely fuscocastaneous on front and clypeus in female; scutellum and elytra castaneous, the latter with the following black markings; suture broadly on basal sixth, narrowly posteriorly, a broad vitta including middle half of lateral margin, touching sides and extending more than one-half distance to suture, and a fascia covering apical eighth; ventral surface black in male, fuscocastaneous in

female, antennae and maxillary palpi flavous in both sexes, anterior legs in male and all legs in female castaneous, middle and posterior legs in male fuscocastaneous. Surface covered with fine, recumbent pubescence, generally partaking of ground color.

Form moderately narrow, elongate, sides broadest at bases of pronotum and elytra. Eyes densely covered with fine, short, erect hairs. Antennae 0.56-0.61 mm. long, reaching apex of metasternum, distal segments broad, subserrate, somewhat flattened; segments 1-2 large, equal; 4 distinctly longer and broader than 3; 5-10 each as long as 4 and as broad throughout as the latter is at apex; 11 one-half longer than 10, oval, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, mesal edge shortest, the latter and distal margin broadly rounded. Pronotum one-fourth broader than long in male (0.56×0.44 mm.), four-tenths broader in female (0.71×0.5 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, moderately produced, subtruncate. Scutellum small, triangular, broader than long, sides straight, apex acute. Elytra two and one-third times as long as broad in male (1.42×0.6 mm.), almost two and one-half times in female (1.7×0.69 mm.), sides subparallel on basal fourth, thence rounded to apex. Pro- and mesotibiae equal in length to their tarsi, penultimate segment of the latter narrow, filiform. Spurs of metatibiae unequal, the inner three and one-half times length of outer one. Metatibiae with two oblique ridges, the basal one entirely crossing outer surface; basitarsi with two ridges in male and three in female; second segment with two ridges in both sexes. Anal style three

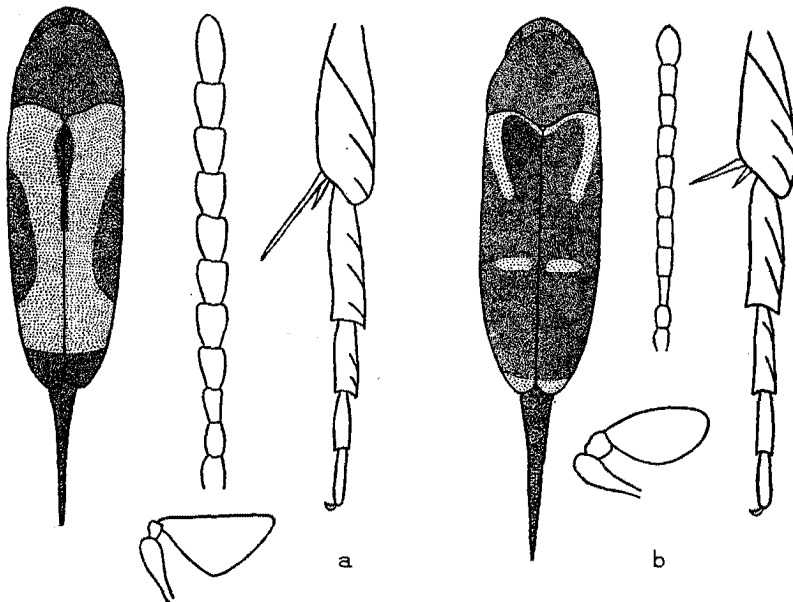


FIGURE 6.—a, *Mordellistena dehiscentis*; b, *M. agalma*: dorsal view, antenna, metatibia and tarsus, and maxillary palpus.

times length of hypopygium ($0.69-0.86 \times 0.22-0.27$ mm.), slender, attenuate, apex acute. Length 1.86-2.2 mm.; including anal style, 2.55-3.06 mm.

Holotype male and allotype female, Ovalau, Draiba Trail, July 8, 1938, alt. 800-1,000 feet, on ferns, Zimmerman.

This species may be separated from *M. macilenta*, new species, described above, by differences in the color of the derm and pubescence on the dorsum, the shorter, broader antennae and terminal segment of the maxillary palpi, the shorter elytra, the longer outer spur of the metatibiae and the shorter anal style.

As noted above, distinct sexual differences apparently exist in the width of the pronotum, length of the elytra, and in the ridges on the posterior basitarsi. In addition, the lateral elytral vitta in the male is indefinite mesad and is somewhat larger than in the female.

Mordellistena agalma, new species (fig. 6, *b*).

Derm of head, pronotum, and elytra black, the latter with castaneous markings as follows: the base narrowly, humeri and an oblique vitta reaching middle of disk at one-third from base, a postmedian transverse fascia on disk, narrowly missing suture but separated from lateral margins by one-half its length, and apex narrowly; maxillary palpi, protibiae, pro- and mesotarsi, spurs of metatibiae, and two basal segments of antennae flavous, remainder of latter ranging from castaneous to black; metatibiae and tarsi, apex of metasternum, bases of abdominal segments, and tip of anal style fuscocastaneous; remainder of ventral surface black. Surface covered with fine, recumbent pubescence, partaking of ground color except for a silvery area over the postmedian pair of elytral spots, on the ventral surface, where it has a yellowish tinge and at the basal angles of the abdominal segments, where it is whitish.

Form narrow, elongate, sides broadest at bases of pronotum and elytra. Eyes covered with fine, short, erect, whitish hairs. Antennae 0.6-1.04 mm. long, reaching metacoxae, distal segments somewhat broadened; segments 1-2 large, equal in length, the latter narrower; 3 distinctly longer than 2 and noticeably broader; 4-10 each no longer than 3 but broader, somewhat flattened, sides subparallel; 11 slightly longer than 10, oval, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad, scalene triangle, distal edge shortest, sides and angles rounded. Pronotum distinctly broader than long ($0.48-0.78 \times 0.42-0.62$ mm.), apex and sides rounded, basal angles obtuse, base arcuate, midbasal lobe broad, moderately produced, submarginate. Scutellum small, triangular, broader than long, apex broadly rounded. Elytra two and two-thirds times as long as broad ($1.27-2.06 \times 0.48-0.75$ mm.), sides subparallel on basal half, thence rounded to apex. Pro- and mesotibiae distinctly shorter than their tarsi, penultimate segment of the latter narrow, filiform. Spurs of metatibiae unequal, the outer four times length of inner one. Metatibiae with two oblique ridges, the basal one entirely crossing outer surface; basitarsi and second segment each with two short, oblique ridges. Anal style more than three times length of hypopygium in male (0.67×0.2 mm.), less than three times in female

(1.12×0.4 mm.), rather broad in the short basal portion, which has an indistinct dorsal carina, thence narrow and attenuate to apex, the latter acute. Length 1.69-2.68 mm.; including anal style, 2.36-3.8 mm.

Holotype male, Viti Levu, Tholo-i-Suva, July 25, 1938, alt. 500 feet, beating shrubs; allotype female, Viti Levu, Tholo North, west slope of Mt. Victoria, Sept. 16, 1938, alt. 3,000 feet; one paratype, Viti Levu, Nandarivatu, Sept. 5, 1938, alt. 3,600 feet, all collected by Zimmerman.

This species is most closely allied to *M. acies*, new species, described above, and may easily be separated by the different color pattern of the derm and pubescence on the elytra, the subemarginate basal lobe of the pronotum, the peculiar antennae, in which the third segment is longer than the second and the third to tenth are equal in length, the longer outer spur of the metatibiae, the shorter pro- and mesotibiae, and the anal style, which has a narrow, indistinct dorsal carina.

The only distinct difference between the sexes, in addition to a possible color separation, lies in the anal style, which is longer in the male than in the female.

***Mordellistena poecila*, new species (fig. 7, a).**

Derm of head and pronotum black, the former with apex of front and clypeus fuscocastaneous; elytra fuscocastaneous, with black markings as follows: an isolated, longitudinal, subbasal spot on middle of disk, the basal half of suture, most broadly just below scutellum, joining with an irregular, transverse, median fascia that is broadest on lateral half, extends basad submarginally as a short stub and along margins to within a fifth of base, and apical fourth completely; base of antennae and metatibiae and tarsi fuscocastaneous, the remainder of ventral surface black. Surface covered with fine, recumbent pubescence, whitish on head, pronotum, and along bases of abdominal segments, yellowish on elytra and metatibiae and tarsi, partaking of ground color elsewhere.

Form moderately slender, sides broadest at basal angles of pronotum and base of elytra. Eyes covered with short, erect hairs. Antennae 0.88 mm. long, reaching metacoxae, subfiliform, somewhat flattened distally; segments 1-2 large, equal; 4 one-half longer and distinctly broader than 3; 5-10 each no longer than 4, but as broad throughout as the latter is at apex; 11 slightly longer than 10, sides broadest at middle, the latter and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad, scalene triangle, distal edge shortest, more than twice as long as broad, the latter and angles rounded. Pronotum distinctly broader than long (0.75×0.62 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, strongly produced, rounded. Scutellum small, triangular, broader than long, apex rather widely rounded. Elytra two and one-third times as long as broad (1.77×0.75 mm.), sides subparallel on basal

fourth, thence rounded to apex. Pro- and mesotibiae distinctly shorter than their tarsi, penultimate segment of the latter narrow, filiform. Spurs of metatibiae unequal, the outer three times length of inner one. Metatibiae with two unequal, oblique ridges, the basal one completely crossing outer surface; basitarsi with three short, oblique ridges, second segment with two. Anal style two and eight-tenths times length of hypopygium (0.87×0.31 mm.), moderately slender, attenuate, narrowly truncate at apex. Length 2.39 mm.; including anal style, 3.26 mm.

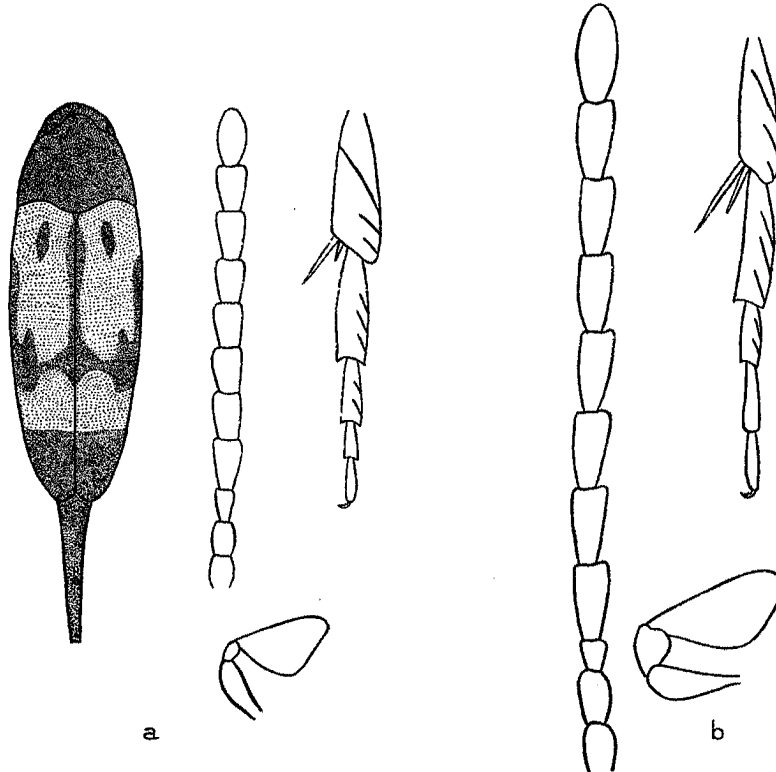


FIGURE 7.—a, *Mordellistena poecila*: dorsal view, antenna, metatibia and tarsus, and maxillary palpus; b, *M. bryani*: antenna, metatibia and tarsus, and maxillary palpus.

Holotype, sex undetermined, Ovalau, Draiba Trail, July 9, 1938, alt. 600-800 feet, Zimmerman.

The peculiarly variegated derm of the elytra, the longer outer spur of the metatibiae, the narrow, filiform, penultimate segment of the pro- and mesotarsi, and the longer anal style, will adequately separate this species from *M. bryani*, new species, described below, to which it is allied.

Mordellistena bryani, new species (fig. 7, *b*).

Derm of head and pronotum flavocastaneous, elytra fuscocastaneous, suture narrowly black; antennae fuscous, four basal segments somewhat lighter; ventral surface castaneous, except three basal abdominal segments, which are fuscous. Surface rather densely covered with fine, recumbent, yellowish pubescence.

Form moderately slender, sides broadest before base of pronotum. Eyes covered with short, erect, yellowish hairs. Antennae 1.1 mm. long, filiform, flattened, reaching metacoxae; segments 1-2 large, equal; 4-10 each twice as long and distinctly broader than 3; 11 one-fourth longer than 10, sides broadest at middle, rounded. Terminal segment of maxillary palpi enlarged, form of a rather broad, isosceles triangle, lateral margin longest, apical edge and angles rounded. Pronotum distinctly broader than long (0.96×0.8 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe short, broad, rounded. Scutellum small, triangular, sides straight, apex acute. Elytra two and one-fourth times as long as broad (2.1×0.94 mm.), sides subparallel on basal fourth, thence rounded to apex. Pro- and mesotibiae as long as their tarsi, penultimate segment of the latter somewhat expanded, truncate at apex. Spurs of metatibiae unequal, the outer almost twice length of inner one. Metatibiae with two oblique ridges, the basal one extending completely across outer face almost to base; basitarsi with three, second segment with two, oblique ridges. Anal style more than twice length of hypopygium (0.87×0.4 mm.), moderately robust, attenuate, apex narrowly truncate. Length 2.9 mm.; including anal style, 3.77 mm.

Holotype male and paratype, Lau Islands, Aiwa, Aug. 31, 1924, Bryan.

Named for the collector, E. H. Bryan, Jr., this species may be separated from its closest ally, *M. zimmermani*, new species, described above, by the distinct differences in color and the pattern of pubescence on the pronotum and elytra, the peculiar antennae, with the fourth segment one-half longer than the third, the isosceles terminal segment of the maxillary palpi, the acute apex of the scutellum, the shorter anal style, and the larger size.

Mordellistena variabilis, new species (fig. 8, *a*).

Derm of head, pronotum and elytra black, the latter with an obscure fuscocastaneous subhumeral vitta that extends obliquely to suture at one-third from base, continues along suture and combines with a transverse postmedian fascia; maxillary palpi and spurs of metatibiae castaneous; metatarsi and antennae fuscocastaneous, the latter somewhat lighter at base. Surface covered with fine, recumbent pubescence, generally partaking of ground color, with a yellowish tinge when viewed from certain angles.

Form narrow, moderately elongate, sides broadest at bases of pronotum and elytra. Eyes covered with short, erect, yellowish hairs. Antennae 0.81-0.87 mm. long, narrow, filiform, reaching base of abdomen; segments 1-2 large, equal; 4 one-half longer and distinctly broader than 3; 5-10 each one-

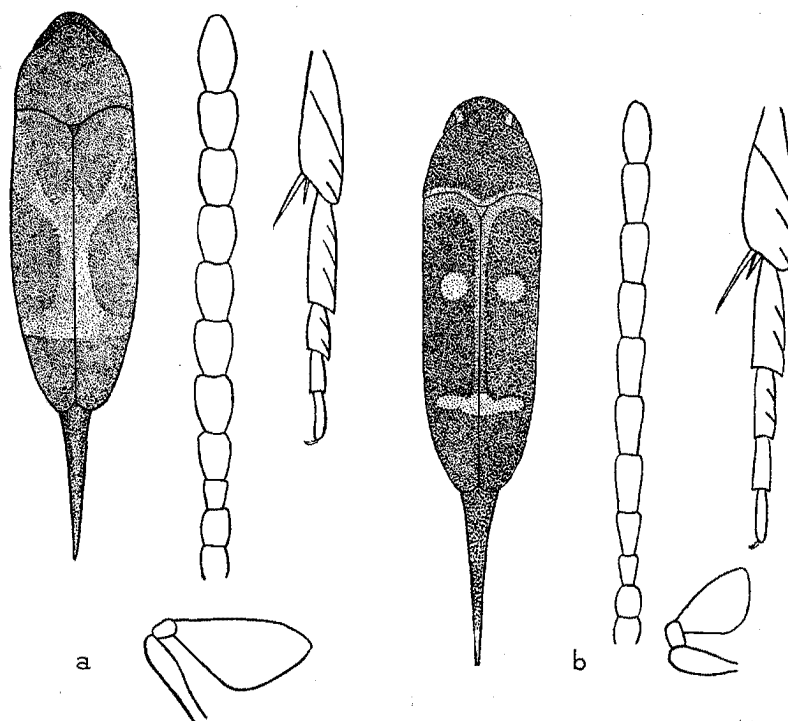


FIGURE 8.—a, *Mordellistena variabilis*; b, *M. macilenta*: dorsal view, antenna, metatibia and tarsus, and maxillary palpus.

fourth longer than 4 and slightly broader, sides subparallel, each more than twice as long as wide; 11 one-third longer than 10, sides subparallel, rounded at base and apex. Terminal segment of maxillary palpi enlarged, form of a broad isosceles triangle, lateral margin longest, distal edge and angles broadly rounded. Pronotum one-fourth broader than long ($0.56-0.78 \times 0.44-0.61$ mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, moderately produced, rounded. Scutellum small, triangular, broader than long, apex broadly rounded. Elytra two and six-tenths times as long as broad ($1.46-1.75 \times 0.56-0.78$ mm.), sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae distinctly shorter than their tarsi, penultimate segment of the latter narrow, filiform. Spurs of metatibiae unequal, the outer three times length of inner one. Metatibiae with two ridges, the basal one entirely crossing outer surface; basitarsi with three, second segment with two short, oblique ridges. Anal style four times length of hypopygium (0.75×0.18 mm.), moderately slender, attenuate, apex acute. Length 1.9 mm.; including anal style, 2.65 mm.

Holotype male, Lau Islands, Vanua Mbalavu, Loma Loma, on sea shore, Aug. 7, 1938; allotype female, Ovalau, Thawathi, July 12,

1938, alt. 600-900 feet; one paratype, Ketira, Aug. 23, 1938, beating shrubs; one paratype, Lau Islands, Kambara, Aug. 25, 1924, Bryan. Collected by Zimmerman unless otherwise indicated.

This species is most closely allied to *M. bryani*, new species, described above, and may be separated by the difference in the color of the derm, by the peculiar antennae, wherein the fifth to tenth segments are longer than the fourth, by the scutellum with its broadly rounded tip, by the narrower elytra, by the longer spurs of the metatibiae, and by the longer anal style with its acute tip.

The two males at hand indicate extremes of a series, with the females intermediate specimens as far as color is concerned. The holotype has a variegated color pattern, as indicated above, whereas in the paratype the color is completely fuscous.

***Mordellistena macilenta*, new species (fig. 8, b).**

Derm of head black, with a castaneous area around eyes, this extended in one specimen to include the greater part of the head; pronotum black, with a narrow castaneous line along base; scutellum castaneous; elytra black, base and humeri broadly and the suture narrowly castaneous, a round whitish or yellowish spot on disk one-third from base, a double, coalesced whitish or yellowish spot at one-third from apex, touching suture but free of lateral margin; antennae, maxillary palpi, pro- and mesotarsi, two terminal segments of metatarsi, spurs of metatibiae and tip of anal style flavocastaneous, remainder of ventral surface black. Surface covered with fine, recumbent pubescence, generally partaking of ground color, except for the rounded spots and transverse fascia of elytra and the bases of abdominal segments, where it is silvery.

Form narrow, slender, sides broadest at bases of pronotum and elytra. Eyes entire, densely covered with short, stiff, erect hairs. Antennae 1 mm. long, narrow, filiform, reaching base of abdomen; segments 1-2 large, equal; 3 as long as 2 but much narrower; 4 one-third longer than 3 and but slightly broader; 5-10 each one-fourth longer than 4 and slightly broader; 11 slightly longer than 10, oval, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a moderately broad scalene triangle, two and one-half times as long as broad, distal margin curved, angles rounded. Pronotum slightly broader than long (0.56×0.52 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, short, subtruncate. Scutellum subtriangular, broader than long, apex narrowly rounded. Elytra two and two-thirds times as long as broad (1.52×0.56 mm.), sides subparallel on basal half, thence rounded to apex. Pro- and mesotibiae distinctly shorter than their tarsi, penultimate segment of the latter short, narrow. Spurs of metatibiae unequal, the outer two and one-half times length of inner one. Metatibiae with two oblique ridges, the basal one completely crossing outer surface; basitarsi and second segment each with two oblique ridges. Anal style three and one-third times length of hypopygium (0.91×0.27 mm.), narrow, attenuate, apex acute. Length 2.04 mm.; including anal style, 2.95 mm.

Holotype male, Viti Levu, ridge west of Nandarivatu, Sept. 11, 1938, alt. 2,800 feet, beating shrubbery; allotype female, Viti Levu, Nandarivatu, Sept. 3, 1938, alt. 3,000 feet; one paratype, Viti Levu, Tholo North, Mt. Victoria, Sept. 13, 1938, alt. 3,000-4,000 feet; one, Moala Island, Ketira, Aug. 23, 1938, beating shrubs. Collected by Zimmerman.

This species bears a superficial resemblance to *M. xanthocephala* Blair, but may at once be separated by the single long ridge on the metatibiae, the extension of the basal castaneous area on the elytra to the suture and the double postmedian spot, the shorter anal style, and the obtuse basal angles of the pronotum.

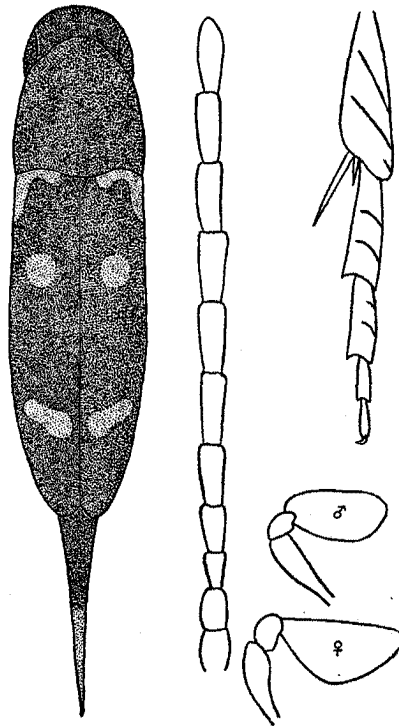


FIGURE 9.—*Mordellistena angusticeps*: dorsal view, antenna, metatibia and tarsus, maxillary palpus of male, and maxillary palpus of female.

***Mordellistena angusticeps*, new species (fig. 9).**

Derm black, sides and front of head, elytra with an elongate spot at humeri, a small rounded one at base near scutellum, a rounded, premedian discal area, an elongate diagonally placed area at apical third, antennae,

maxillary palpi, anterior legs, mesotarsi, two distal segments of metatarsi, metatibial spurs, middle of metasternum, distal margins of abdominal segments, and distal half of anal style castaneous. Surface covered with fine, recumbent pubescence, partaking of ground color, except on castaneous areas of head and elytra and at basal angles of abdominal segments, where it is silvery.

Form narrow, elongate, sides broadest at bases of pronotum and elytra. Head subglobular, narrow. Eyes densely covered with short, erect, whitish hairs. Antennae 2.23 mm. long, narrow, filiform, reaching second abdominal segment; segments 1-2 large, equal; 4 one-half longer and distinctly broader than 3; 5-10 each one-fourth longer but no wider than 4; 11 slightly longer than 10, broadest postmedially, sides and tip rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, distal margin shortest, lateral margin almost straight, tip and other sides broadly rounded. Pronotum as long as broad (0.71×0.71 mm.), apex broadly rounded, sides moderately so, basal angles right angles, base arcuate, midbasal lobe broad, moderately produced, rounded. Scutellum small, triangular, broader than long, apex narrowly rounded. Elytra more than two and one-half times as long as broad (1.8×0.7 mm.), sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae as long as their tarsi, segments of the latter narrow, filiform. Spurs of metatibiae unequal, the inner three times length of outer one. Metatibiae with two equal, oblique ridges, each completely crossing outer surface; basitarsi with three oblique ridges, each crossing three-fourths of outer surface and recurved slightly basad; second segment with two ridges, the basal one slightly recurved. Anal style three and four-tenths times length of hypopygium (1.17×0.34 mm.), slender, attenuate to tip, the latter acute. Length 2.51 mm.; including anal style, 3.68 mm.

Holotype male, Moala Island, Ketira, Aug. 23, 1938, beating shrubs, Zimmerman; one paratype, Viti Levu, Navai Mill near Nandarivatu, Sept. 17, 1938, alt. 2,500 feet, beating, Zimmerman.

From its closest ally, *M. xanthocephala* Blair, this species may be distinguished by the longer antennae, the additional ridge on the posterior basitarsi, by the longer pro- and mesotibiae in relation to their tarsi, by the longer pronotum, with its rounded midbasal lobe, and the longer anal style.

***Mordellistena xanthocephala* Blair, Ann. Mag. Nat. Hist. IX, 9: 566, 1922 (Fiji). (See figure 10.)**

Derm generally black, head, scutellum, basal fifth of elytra, a pair of rounded, subsutural spots at middle, a transverse, irregular band at one-fourth from apex, antennae, maxillary palpi, anterior legs, mesotarsi, and metatibial spurs flavous; mesosternum, middle of metasternum and abdominal segments and anal style castaneous. Surface covered with fine, recumbent pubescence, silvery on flavous elytral areas and basal angles of abdominal segments, elsewhere partaking of ground color.

Eyes covered with short, erect, whitish hairs. Antennae 1.0 mm. long, reaching metacoxae, moderately narrow, filiform; segments 1-2 large, equal; 4 no longer than 3 but distinctly broader; 5-10 each one-half longer than 4; 11 one-third longer than 10, pear-shaped, broadest postmedially, sides and tip rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, distal edge curved, sides and angles broadly rounded. Pronotum one-sixth broader than long (0.7×0.6 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, moderately produced, distinctly truncate at middle. Scutellum small, subtriangular, broader than long, broadly rounded at tip. Elytra more than two and one-half times as long as broad (1.8×0.7 mm.), sides subparallel on basal third, thence rounded to tip. Pro- and mesotibiae distinctly shorter than their tarsi, penultimate segment of the latter filiform, narrow. Spurs of metatibiae unequal, the inner three times length of outer one. Metatibiae with two equal, oblique ridges, each completely crossing outer surface; basitarsi with two oblique ridges, each crossing three-fourths of outer surface and distinctly curved basad; second segment with two ridges, both slightly recurved basad. Anal style more than three times length of hypopygium (1.2×0.37 mm.), slender, attenuate to tip, the latter acute. Length 2.4 mm.; including anal style, 3.6 mm.

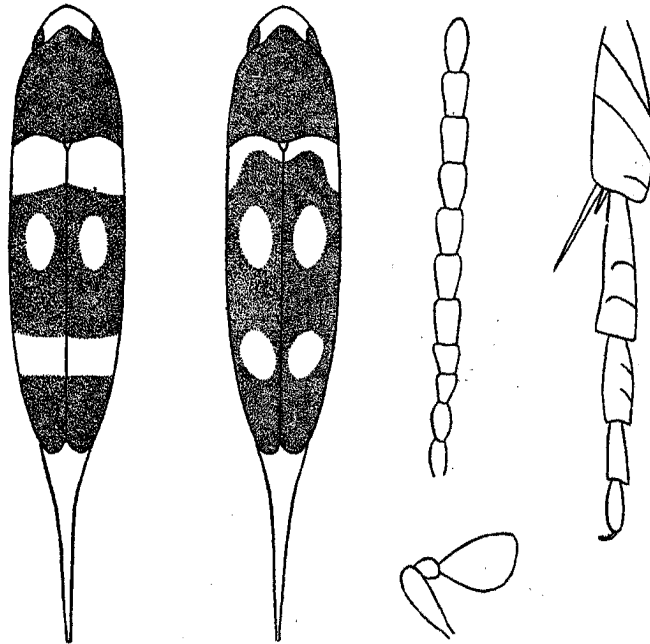


FIGURE 10.—*Mordellistena xanthocephala*: dorsal view, dorsal view (variation), antenna, metatibia and tarsus, and maxillary palpus.

Redescribed from 12 specimens. VITI LEVU: one, ridge west of Nandarivatu, Sept. 9, 1938, alt. 2,600-3,000 feet, beating shrubs,

Zimmerman; one, Vunindawa, May 2, 1941, Krauss. OVALAU: one, Thawathi, July 12, 1938, alt. 600-900 feet, beating, Zimmerman; two, Draiba Trail, July 9, 1938, alt. 600-800 feet, beating, Zimmerman. LAU ISLANDS: one, Tavunasithi, Aug. 28, 1924, Bryan; one, Kambara, Aug. 25, 1924, Bryan; three, Tuvutha, Sept. 11, 1924, Bryan; one, Oneata, Aug. 19, 1924, Bryan; one, Namuka, Aug. 12, 1924, Bryan.

This species may be separated from its allies, *M. angusticeps*, new species, and *M. arcuata*, new species, by the differences in the color pattern of the elytra, the equality in length of antennal segments three and four, the overall shorter length of the entire antennae, and the broader pronotum, with its truncate midbasal lobe.

***Mordellistena arcuata*, new species (fig. 11).**

Derm of pronotum fuscocastaneous; head and elytra black, the latter with fuscocastaneous areas as follows: base and basal tenth of suture, a humeral patch that extends caudad as a narrow line to join a transverse fascia at one-fourth from base, the latter touching neither suture nor lateral margins and continuing subsuturally as a narrow line to meet an arcuate, postmedian fascia that touches side margins but not suture; ventral surface black, except apex of metasternum and caudal margins of abdominal segments, which are narrowly castaneous; antennae castaneous, terminal segments variably darker; maxillary palpi flavous; anterior and middle legs and metatibiae castaneous, spurs of the latter flavous. Surface covered with fine, recumbent pubescence, partaking of ground color on head and pronotum, the latter with silvery pubescence in a complex pattern, as follows: middle half of anterior margin, a caudally directed line more than half length of disk, a premedian, irregular, transverse fascia crossing the preceding and broadening near side margins and a thin, diagonal line emanating from the latter, reaching base at lateral margin of midbasal lobe and extending almost to middle; scutellum silvery-pubescent; partaking of ground color on elytra, except on fuscocastaneous areas, where it is silvery; dark on ventral surface, except on basal angles of metasternum and abdominal segments, where it is silvery.

Form narrow, elongate, sides broadest at bases of pronotum and elytra. Eyes densely covered with short, erect, whitish hairs. Antennae 1.25 mm. long, reaching base of abdomen, moderately narrow, filiform; segments 1-2 large, equal; 4 one-third longer than 3; 5-10 each one-fourth longer than 4 and slightly broader; 11 one-third longer than 10, oval, broadest at middle, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, distal edge shortest, sides and angles rounded. Pronotum but slightly broader than long (0.65×0.62 mm.), apex and sides broadly rounded, basal angles rectangular, base arcuate, midbasal lobe short, broad, rounded. Scutellum small, subtriangular, tip broadly rounded. Elytra two and seven-tenths times as long as broad (1.75×0.65 mm.), sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae distinctly shorter than their tarsi, penultimate segment of the

latter narrow, filiform. Spurs of metatibiae unequal, the outer two and one-half times length of inner one. Metatibiae with two oblique ridges, both completely crossing outer face, the basal one reaching anterior margin close to base; basitarsi with two ridges, each semicircular, entirely crossing outer face; second segment with two short, oblique ridges reaching middle. Anal style three times length of hypopygium (1.21×0.42 mm.), slender, attenuate to apex, the latter acute. Length 2.37 mm.; including anal style, 3.58 mm.

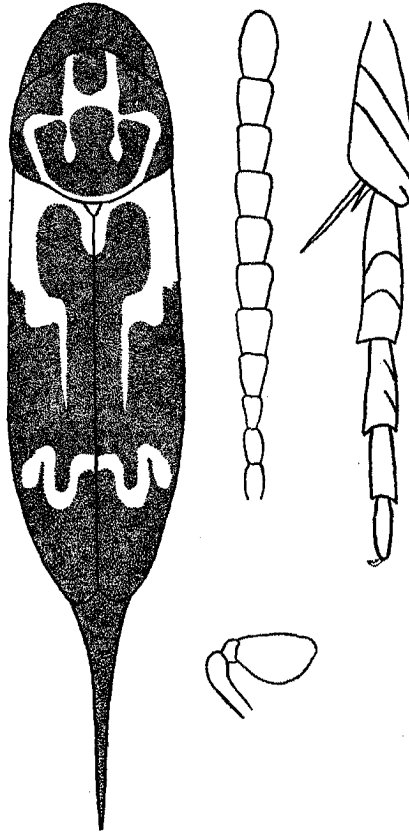


FIGURE 11.—*Mordellistena arcuata*: dorsal view, antenna, metatibia and tarsus, and maxillary palpus.

Holotype male, allotype female, and eight paratypes, Ovalau, Thawathi, July 12, 1938, alt. 600-900 feet; one paratype, Viti Levu, Navai Mill near Nandarivatu, Sept. 15, 1938, beating shrubbery, alt. 2,500 feet; one, Viti Levu, Belt Road, 15 miles west of Suva, July 22, 1938, alt. 250 feet, beating dead branches; one, Viti Levu,

Vunindawa, May 3, 1941, Krauss. Collected by Zimmerman unless otherwise indicated.

This species may at once be separated from its closest ally, *M. xanthocephala* Blair (1, p. 566), by the striking pattern of silvery pubescence on the pronotum and elytra, the rounded midbasal lobe of the pronotum, the shorter anal style and a somewhat larger size.

The ground color of the derm is variable. The elytra are occasionally fuscocastaneous and the pronotum and ventral surface are sometimes darker than indicated above. The pubescent patterns of the dorsum also vary, occasionally being reduced, so that the various fasciae are isolated; the subsutural line on the elytra is absent in several specimens.

Genus **Dellamora** Normand

Dellamora, Soc. ent. France, Bull., 284, 1916.

This genus was based upon a single species, *D. palposa* Normand (15, p. 285), the type, taken in Tunisia at Teboursouk. The characters upon which the generic separation from *Mordellistena* was based were the strongly incised fourth or penultimate segment of the pro- and mesotarsi, the transverse pronotum and the strongly dilated terminal segment of the maxillary palpi. Since the second and third of these characters can be found in most members of the genus *Mordellistena*, the only apparent valid means of separation lies in the incised penultimate segment of the tarsi.

In the Fijian fauna the incised or bilobed condition of this tarsal segment is apparently accompanied by the presence of comblike ridges on the three basal segments of the metatarsi. These two characters have, therefore, been used in the present study for generic placement, although in the genotype the ridges of the metatarsi are limited to the two basal segments.

On this basis the following species have been transferred to the genus *Dellamora*: *inscripta* (Lea), *greenwoodi* (Blair), *gracilicauda* (Blair), *consimilis* (Blair), *samoensis* (Blair), and *castanea* (Boheman). Many additional transfers to this genus from species found in neighboring faunal areas will undoubtedly be found necessary, since the incised or bilobed character of the penultimate tarsal segment apparently has not been too closely examined in the past.

KEY TO THE SPECIES OF DELLAMORA

- Elytra with rounded spots of silvery pubescence.....*epiblema*, new species
 Elytra without rounded spots of silvery pubescence..... 1
1. Dorsum bicolored 2
 Dorsum unicolored 7
 2. Head and pronotum black..... 3
 Head and pronotum castaneous or rufocastaneous..... 6
 3. Metatibiae with four ridges; length 3-4 mm..... 4
 Metatibiae with two ridges; length 2 mm.....*homora*, new species
 4. Elytra unicolored; pubescence of elytra also unicolored; anal style
 twice length of hypopygium.....*aesura*, new species
 Elytra and overlying pubescence both bicolored; anal style distinctly
 more than twice length of hypopygium..... 5
 5. Metatibiae with four subequal ridges; elytra with a narrow sub-
 sutural vitta on basal half; length 2 mm.....*inscripta* (Lea)
 Metatibiae with two ridges, the basal one crossing entire surface;
 elytra without a narrow subsutural vitta on basal half; length
 5 mm.*greenwoodi* (Blair)
 6. Elytra black, suture and sides rufocastaneous; metatibiae with 2
 ridges; terminal segment of maxillary palpi triangular.....
 *parva*, new species
 Elytra black, with basal third rufocastaneous; metatibiae with 3
 ridges; terminal segment of maxillary palpi subquadrate.....
 *macaria*, new species
 7. Dorsum completely black.....*homora*, new species
 Dorsum castaneous or rufocastaneous..... 8
 8. Anal style less than twice length of hypopygium, stout, broadly
 truncate at tip; inner spur of metatibiae less than twice length
 of outer one.....*curticauda*, new species
 Anal style two to three times length of hypopygium, slender, at-
 tenuate to tip; inner spur of metatibiae two or more times
 length of outer one..... 9
 9. Anal style two and one-half to three times length of hypopygium,
 broad at base, abruptly constricted at one-third from base, thence
 very slender, attenuate to apex.....*gracilicauda* (Blair)
 Anal style two to two and one-fourth times length of hypopygium,
 broad at base, with a very slight constriction at one-third from
 base, thence broad and attenuate to apex.....10
 10. Third and fourth antennal segments approximately equal in length
 *consimilis* (Blair)
 Fourth antennal segment from one and one-half to two times length
 of third.....11
 11. Basitarsus with three ridges and occasionally the rudiment of a
 fourth; length 2.82-3.94 mm., including anal style 3.97-5.2 mm.
 *castanea* (Boheman)
 Basitarsus with four or five ridges; length 4.87-5.53 mm., including
 anal style, 6.24-7.23 mm.....*samoensis* (Blair)

Dellamora epiblema, new species (fig. 12).

Derm of head black, apex of front broadly fuscocastaneous; pronotum black, occasionally with the apical margin fuscocastaneous; elytra black, humeri and

epipleurae somewhat lighter; maxillary palpi and two basal segments of antennae flavous, the remainder castaneous; front legs and mesofemora flavous; meso- and metasternum, sides of basal abdominal segment, hypopygium, and anal style (except at tip) fuscous, intermediate abdominal segments fuscocastaneous. Surface covered with fine, recumbent pubescence, generally partaking of ground color, except along sides of pronotum, where it is sparsely silvery, and on elytra, where it is condensed to form dense silvery areas, as follows: a narrow line along basal half of suture, which is enlarged somewhat to form two small spots, one postscutellar, the other median; a lateral, premedian oval area, reaching margins but not sutural stripe; an irregular area on suture one-fourth from apex, and a narrow fascia covering extreme apex; and bases of abdominal segments.

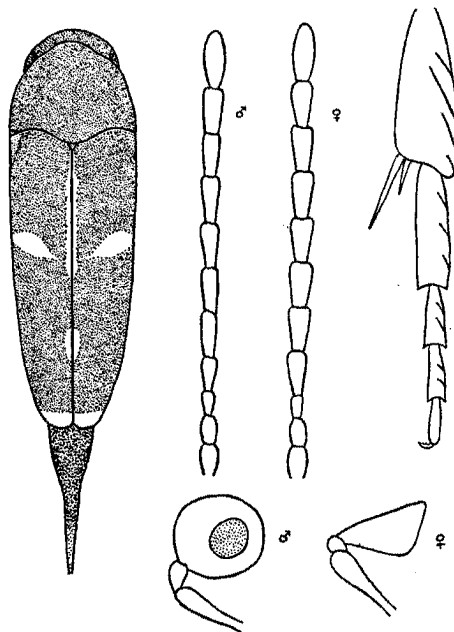


FIGURE 12.—*Dellamora epiblema*: dorsal view, antenna of male, antenna of female, metatibia and tarsus, maxillary palpus of male, and maxillary palpus of female.

Form moderately elongate, narrow, sides broadest before base of pronotum. Eyes densely covered with short, erect, whitish hairs. Antennae 1.06 mm. long, reaching metacoxae, narrow, filiform; segments 1-2 large, equal; 4 one-half longer than 3 in male, twice as long as 3 in female; 5-10 each one-third longer than 4 in male, but slightly longer than 4 in female, distinctly broader and somewhat flattened; 11 one-fourth longer than 10, oval, broadest postmedially, rounded along sides and at tip. Terminal segment of maxillary palpi enlarged, subcircular in male, with a shallow, circular depression on the mesal surface; triangular in female, twice as long as broad, terminal margin shortest, sides straight, angles rounded. Pronotum one-third broader than long (0.93×0.73)

mm.), apex and sides broadly rounded, basal angles broadly obtuse, base arcuate, midbasal lobe moderately produced, rounded. Scutellum large, subtriangular, apex broadly rounded. Elytra more than twice as long as broad (2.0×0.9 mm.), sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae as long as their tarsi, penultimate segment of the latter broadly expanded, bifurcate on apical half, extending beyond base of terminal segment. Spurs of metatibiae unequal, the inner almost three times length of outer one. Metatibiae with three, equal, oblique ridges, each extending approximately halfway across outer surface; basitarsi with three ridges, second and third segments each with two. Anal style two and two-thirds times length of hypopygium (0.8×0.3 mm.), slender, attenuate to apex, the latter acute. Length 2.73 mm.; including anal style, 3.53 mm.

Holotype male and allotype female, Ovalau, Wainiloka, July 11, 1938, alt. 200 feet, beating; two paratypes, Viti Levu, Belt Road, 16 and 18 miles west of Suva, July 22 and 29, 1938, beating ferns; one, Viti Levu, Lami Quarry, near Suva, July 24, 1938, alt. 10-250 feet, beating shrubs; one, Lau Islands, Kambara, Aug. 25, 1924, Bryan. Collected by Zimmerman unless otherwise indicated.

This species may be separated from all other Fijian members of the genus by the presence of several rounded silvery spots of pubescence on the elytra. It is most closely allied to *D. homora*, described below, and may be separated by the shorter distal segments of the antennae, the broader pronotum and the shorter elytra, the additional ridge on the metatibiae and the longer anal style, with its acute tip.

D. epiblema exhibits considerable sexual dimorphism in the relative lengths of the third and fourth antennal segments and in the shape of the terminal segment of the maxillary palpi. It is similar in these respects to *Mordella maxillaris* Ray (18, p. 64) and *M. abrupta* Ray (18, p. 65), described from the Solomon Islands.

***Dellamora homora*, new species (fig. 13, a).**

Derm variable in color, head varying from black to castaneous, pronotum from black to fuscocastaneous with occasionally a thin rufocastaneous line at base, elytra from black to fuscocastaneous, with sides and suture variably rufocastaneous, ventral surface from black to castaneous, with the abdomen and tip of anal style often lighter than the remainder and the former occasionally with the distal half of the segment lighter than the proximal half, antennae and maxillary palpi vary from flavous to castaneous and legs from black to castaneous, with the tarsi often lighter than the tibiae and femora. Surface covered with fine, recumbent pubescence, golden in color, often condensed along suture and sides of elytra to form a thin line.

Form narrow, elongate, sides broadest near base of pronotum. Eyes densely covered with short, erect, whitish hairs. Antennae 0.94-1.58 mm. long, reaching base of abdomen, narrow, filiform; segments 1-2 large, subequal; 4 one-half longer and distinctly broader than 3; 5-10 each twice as long as 4, narrow,

slightly broader at apex than at base; 11 slightly longer than 10, oval, broadest at middle, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, distal margin shortest, straight, other margins and angles rounded. Pronotum less than one-fifth broader than long ($0.68-1.03 \times 0.6-0.88$ mm.), apex and sides broadly rounded, basal angles obtuse, base strongly arcuate, midbasal lobe short, broad, rounded. Scutellum small, triangular, broader than long, sides curved, tip broadly rounded. Elytra two and seven-tenths times as long as broad ($1.85-2.8 \times 0.68-1.03$ mm.), sides subparallel on basal half, thence rounded to apex. Pro- and mesotibiae slightly shorter than their tarsi, penultimate segment of the latter broadly expanded and emarginate on distal margin, bifurcate on distal half, extending to middle of ultimate segment. Spurs of metatibiae unequal, the inner three times length of the outer one. Metatibiae with two equal, oblique ridges; basitarsi with three, second and third segments each with two ridges. Anal style approximately two and one-fifth times length of hypopygium ($0.91-1.37 \times 0.38-0.63$ mm.), moderately robust on basal fourth, thence slender to tip, the latter narrowly truncate. Length 2.45-3.68 mm.; including anal style, 3.36-5.05 mm.

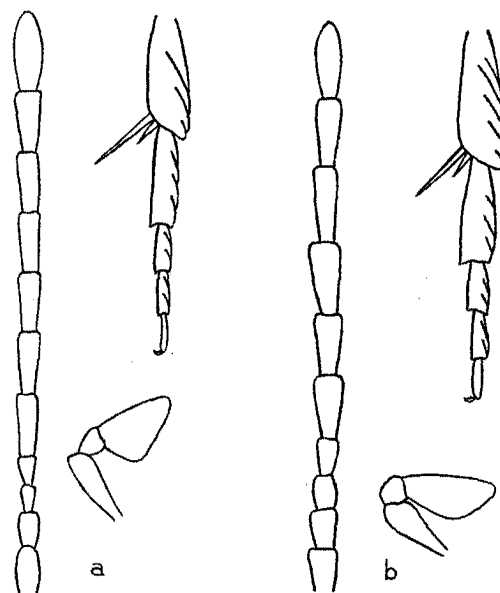


FIGURE 13.—a, *Dellamora homora*; b, *D. aesura*: antenna, metatibia and tarsus, and maxillary palpus.

Holotype male and one paratype, Viti Levu, Navai Mill near Nandarivatu, Sept. 17, 1938, alt. 2,500 feet, beating; allotype female and one paratype, Viti Levu, Mt. Korombamba, Aug. 1, 1938, alt. 1,300 feet, beating shrubs; one, Viti Levu, Belt Road, 45-50 miles west of Suva, July 26, 1938, beating shrubs; one, Vanua Mbalavu, Bavatu, Aug. 16, 1938, alt. 200-250 feet, beating shrubs; one, Viti

Levu, Navai Mill, Oct. 13, 1937, Valentine; one, Viti Levu, ridge west of Nandarivatu, Sept. 9, 1938, alt. 2,600-3,000 feet, beating shrubbery; one, Viti Levu, Lami Quarry near Suva, July 24, 1938, alt. 10-250 feet, beating; one, Ovalau, Thawathi, July 12, 1938, alt. 600-900 feet, beating; one, Vanua Mbalavu, Bavatu, Aug. 16, 1938, 200-250 feet, beating shrubs. Collected by Zimmerman unless otherwise indicated.

This species may be separated from its closest ally, *D. aesura*, new species, by the smaller size, the longer fifth to tenth antennal segments, which are each twice as long as the fourth, the narrower pronotum and longer elytra, the shorter pro- and mesotibiae, the smaller number of ridges on the metatibiae and the longer anal style.

Dellamora aesura, new species (fig. 13, *b*).

Derm fuscous, margins of pronotum, suture and margins of elytra and distal margins of metasternum and abdominal segments narrowly, vaguely rufocastaneous, the elytra broadly so near tip, antennae, maxillary palpi, and forelegs castaneous, middle and hind legs fuscocastaneous. Surface covered with fine, recumbent golden pubescence.

Form moderately elongate, narrow, sides broadest before base of pronotum. Eyes moderately densely covered with fine, short, erect, yellowish-white hairs. Antennae 2.14 mm. long, almost reaching base of abdomen, narrow, filiform; segments 1-2 large, equal; 4 one-half longer than 3 and slightly wider at tip; 5-10 each one-half longer than 4 and distinctly broader throughout; 11 slightly longer than 10, oval, broadest postmedially, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, twice as long as broad, distal edge shortest, lateral margin straight, other margins and angles rounded. Pronotum three-tenths broader than long (1.51×1.17 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe short, broad, subtruncate at middle. Scutellum small, subtriangular, broader than long, broadly rounded at tip. Elytra two and three-tenths as long as broad (3.65×1.4 mm.), narrower at base than pronotum, sides subparallel on basal fourth, thence rounded to apex. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter broadly expanded, bifurcate on distal half, extending to middle of ultimate segment. Spurs of metatibiae unequal, the inner almost three times length of outer one. Metatibiae with four oblique ridges, the basal one somewhat smaller than the others; basitarsi with three and a rudimentary fourth ridge, second and third segments each with two ridges. Anal style but twice length of hypopygium (1.23×0.65 mm.), moderately slender, attenuate, narrowly truncate at tip. Length 4.82 mm.; including anal style, 6.05 mm.

Holotype female, Viti Levu, Navai Mill near Nandarivatu, Sept. 7, 1938, alt. 2,500 feet, beating, Zimmerman.

This species may be separated from its closest ally, *D. greenwoodi* (Blair), by the lack of discal spots on the elytra, the shorter anal

style, the additional ridges on the metatibiae and tarsi, and the much larger size.

Dellamora greenwoodi (Blair), new combination.

Mordellistena greenwoodi Blair, Ann. Mag. Nat. Hist. IX, 9: 566, 1922 (Fiji); Lea, Ent. Soc. London, Trans. 79: 320, 1931.

"Black, with parts of the elytra, the antennae, and anterior legs rufo-fulvous. Head slightly emarginate behind, covered with ashy-grey pubescence; prothorax as long as wide, with variegated black and ashy-grey pubescence, the black forming a large patch in each of the angles and two median pairs of dart-like marks, with point directed backwards, the anterior pair before the middle smaller than the posterior pair; elytra fulvous with suture narrowly and apex broadly black, a large black patch behind the scutellum and two lateral patches on each nearly meeting the sutural streak also black; the pubescence on the black parts is black, that on the fulvous parts mostly silvery grey, but in parts, *e. g.* a streak from the anterior lateral dark patch to the base, and also between the posterior lateral dark patch and the suture, is also black. Style slender, fuscous, about three times as long as hypopygium. Posterior tibiae fulvous at base, with two short comb-ridges near apex, and a third strongly defined ridge running from the middle of the posterior edge across the outer face almost to the base; the tarsal ridges 3.2.1, are very short and indistinct.

"Length 2 mm. without ($2\frac{1}{2}$ mm. with) style.

"1 Ex., Loliti, 18.ix.21 (W. Greenwood).

"A very distinct little species, the pattern of the thorax is very characteristic, and the incomplete coincidence between the colour-pattern of the derm of the elytra and that of the pubescence is very striking."

Dellamora parva, new species (fig. 14, *a*).

Derm castaneous, elytra black, except suture and sides, which are castaneous, mesosternum and sides of metasternum black. Surface covered with fine, recumbent golden pubescence, except on black parts, where it is yellow-fulvous in color.

Form narrow, elongate, sides broadest before base of pronotum. Eyes densely covered with short, erect, fuscous hairs. Antennae approximately 1.1 mm. long, reaching metacoxae, narrow, filiform; segment 1 one-half longer but no broader than 2; 3-4 small, equal in length, the latter somewhat broader; 5-10 each distinctly longer than 3-4 together; 11 one-third longer than 10, broadest at one-fourth from tip, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, mesal edge shortest, margins and angles rounded. Pronotum almost eight-tenths broader than long (0.91×0.51 mm.), apex and sides broadly rounded, basal angles distinctly obtuse, base strongly arcuate, midbasal lobe moderately narrow and produced, rounded. Scutellum triangular, small, sides straight, tip distinctly rounded. Elytra two and eight-tenths times as long as broad (2.4×0.85 mm.), slightly narrower at base than pronotum, sides subparallel on basal half, thence rounded to apex. Pro- and mesotibiae no longer than their tarsi, penultimate segment of the latter broadly expanded, bifurcate on distal half, extending to middle of ultimate segment. Spurs of metatibiae unequal, the inner three times length of the outer one. Metatibiae with two equal, oblique ridges; basitarsi with three, second and third segments each with two ridges. Anal style but two and six-

tenths times length of hypopygium (1.05×0.4 mm.), slender, attenuate to apex, the latter acute. Length 2.91 mm.; including anal style, 3.96 mm.

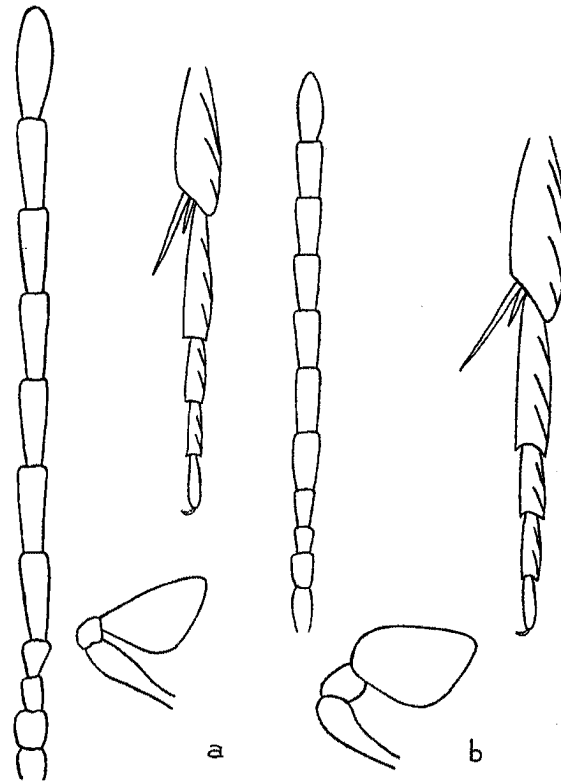


FIGURE 14.—a, *Dellamora parva*; b, *D. macaria*: antenna, metatibia and tarsus, and maxillary palpus.

Holotype male, Viti Levu, ridge west of Nandarivatu, Sept. 18, 1938, alt. 2,600-3,000 feet, beating shrubbery, Zimmerman.

From its closest ally, *D. macaria*, new species, described below, this species may be separated by the black elytra with its rufocastaneous suture and sides, the equality in length between antennal segments three and four, the greater length of the fifth to tenth segments, by the triangular terminal segment of the maxillary palpi, the much broader pronotum and the fewer ridges on the metatibiae.

Dellamora macaria, new species (fig. 14, b).

Derm rufocastaneous, distal two-thirds of elytra fuscous, the latter color obscurely extending basad along the suture but not reaching the scutellum.

Surface covered with fine, recumbent pubescence, yellowish on entire body, except on fuscous portion of elytra, where it partakes of ground color.

Form narrow, elongate, sides broadest before base of pronotum. Eyes densely covered with short, erect, whitish hairs. Antennae 1.57 mm. long, reaching base of abdomen, moderately narrow, filiform; segments 1-2 large, equal in width, the former one-half longer than the latter; 4 one-third longer and broader at tip than 3; 5-10 each two-thirds longer and distinctly broader than 4, distal two-thirds of each with subparallel sides; 11 one-fourth longer than 10, broadest at one-third from tip, sides and apex rounded. Terminal segment of maxillary palpi enlarged, subquadrate in form, twice as long as broad, angles rounded, lateral margin shortest, distal margin longest, the latter with a deep longitudinal groove extending its entire length. Pronotum three-tenths broader than long (1.14×0.88 mm.), apex and sides broadly rounded, basal angles distinctly obtuse, base strongly arcuate, midbasal lobe broad, moderately produced, rounded. Scutellum moderately large, broader than long, sides slightly, tip moderately rounded. Elytra almost three times as long as broad (3.05×1.14 mm.), as broad at base as pronotum, sides subparallel on basal fourth, thence rounded to apex. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter broadly expanded, bifurcate on distal half, extending to middle of ultimate segment. Spurs of metatibiae unequal, the inner more than three times length of the outer one. Metatibiae with three subequal, oblique ridges; basitarsi with three, second and third segments each with two ridges. Anal style two and one-third times length of hypopygium (1.34×0.57 mm.), slender, attenuate to apex, the latter acute. Length 3.93 mm.; including anal style, 5.27 mm.

Holotype male, Viti Levu, Navai Mill near Nandarivatu, Sept. 7, 1938, alt. 2,700 feet, beating shrubbery, Zimmerman.

This species may be separated from its closest ally, *D. parva*, new species, by the difference in the color pattern of the elytra, the presence of an additional ridge on the metatibiae, the longer fourth antennal segment, the shorter fifth to tenth segments, the subquadrate terminal segment of the maxillary palpi, the much narrower pronotum and the shorter anal style.

***Dellamora curticauda*, new species (fig. 15, a).**

Derm fuscocastaneous, antennae and middle and hind legs castaneous, maxillary palpi and forelegs flavous. Surface covered with fine, recumbent pubescence, generally partaking of ground color but with an admixture of yellowish hairs.

Form moderately elongate, sides broadest at base of pronotum. Eyes densely covered with short, erect, very fine, fuscocastaneous hairs. Antennae 1.51-1.68 mm. long, short, not reaching much beyond base of metasternum, moderately expanded, subserrate; segments 1-2 large, equal; 3-4 smaller than 2, equal; 5-10 each one-third longer and broader at tip than 4, each one-half broader at tip than at base; 11 slightly longer than 10, pear-shaped, broadest at one-third from tip, basal two-thirds of sides straight, remainder rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, distal edge the shortest, margins slightly rounded, angles moderately so. Pronotum approximately four-tenths broader than long, slightly wider in male than in female ($1.63-1.94 \times 1.14-1.4$ mm.), apex and sides broadly rounded, basal angles dis-

tinctly obtuse, base arcuate, midbasal lobe short, broad, moderately produced, rounded. Scutellum moderately large, broader than long, subtriangular, rounded at tip. Elytra two and one-fourth times as long as broad ($3.57-4.23 \times 1.57-1.85$ mm.), distinctly narrower at base than pronotum, sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae longer than their tarsi, penultimate segment of the latter broadly expanded, bifurcate on distal half, extending to middle of ultimate segment. Spurs of metatibiae unequal, the inner one but one-half longer than outer one. Metatibiae with four or five oblique ridges, the basal one occasionally shorter; basitarsi with four or five ridges, second and third segments each with two ridges. Anal style one-half longer than hypopygium ($1.08-1.28 \times 0.74-0.85$ mm.), stout, sides straight, apex distinctly truncate. Length 4.71-5.63 mm.; including anal style, 5.79-6.91 mm.

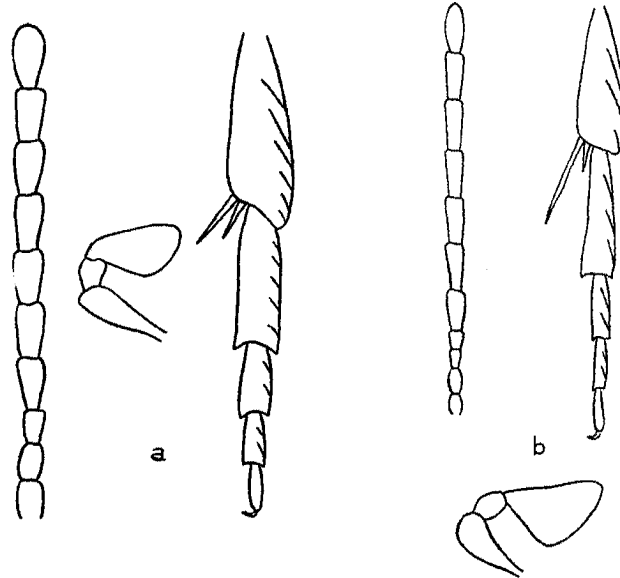


FIGURE 15.—a, *Dellamora curticauda*; b, *D. gracilicauda*: antenna, metatibia and tarsus, and maxillary palpus.

Holotype male and allotype female, Viti Levu, Suva, Feb. 1933, Edmondson; July 7, 1937, Valentine; two paratypes, Viti Levu, Tailevu, Korovou, Aug. 3, 1937, Valentine; one, Lau Islands, Tuvutha, Sept. 11, 1924, Bryan; one, Viti Levu, Tailevu, Korovou, July 23, 1937, Valentine.

This species has the shortest anal style of any Fijian member of the genus. It may be confused superficially with *D. samoensis* (Blair), but can easily be distinguished from that member of the genus by the much shorter elytra, the much shorter inner spur of the meta-

tibiae, which is unique in being less than twice length of outer one and by the shorter anal style, which is less than twice length of hypopygium and is distinctly truncate at tip.

Dellamora gracilicauda (Blair), new combination (fig. 15, *b*).

Mordellistena gracilicauda Blair, Ann. Mag. Nat. Hist. IX, 9: 568, 1922 (Fiji).

Derm flavous or castaneous, eyes and ridges of hind legs black. Surface covered with fine, recumbent, golden pubescence.

Eyes covered with short, fine, erect, whitish hairs. Antennae 1.14-1.48 mm. long, reaching to second abdominal segment, narrow, filiform; segments 1-2 large, equal in length, the latter somewhat narrower; 3-4 small, equal in length, the latter broader; 5-10 each distinctly longer than 3-4 together; 11 but slightly longer than 10, broadest postmedially, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, distal edge shortest, the latter and angles rounded, lateral and mesal margins straight. Pronotum three-tenths broader than long in male (0.83×0.63 mm.), one-fourth broader in female (1.34×1.06 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, short, rounded. Scutellum small, triangular, broader than long, sides slightly concave, tip distinctly rounded. Elytra two and six-tenths times as long as broad in male (2.0×0.77 mm.), slightly less in female (3.46×1.34 mm.), sides subparallel on basal third, thence rounded to tip. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter broadly expanded, deeply emarginate at tip, extended beyond base of ultimate segment. Spurs of metatibiae unequal, the inner almost three times length of outer one. Metatibiae and basitarsi each with three, equal, oblique ridges extending to middle of outer surface; second and third segments each with two short ridges. Anal style three times length of hypopygium in male (1.0×0.34 mm.), two and seven-tenths times in female (1.63×0.6 mm.), slender, attenuate to tip, the latter acute. Length 2.7-2.95 mm.; including anal style, 3.45-4.0 mm.

Redescribed from six specimens. VITI LEVU: one, Belt Road, 42-44 miles west of Suva, July 23, 1938, alt. 300 feet, beating shrubs, MOALA ISLAND: one, Naroi, Aug. 25, 1938, alt. 700 feet, beating shrubs. OVALAU: one, Wainiloka, July 1, 1938, alt. 100-200 feet, Kondo. PAPUA: three, Mt. Lamington, alt. 1,300-1,500 feet, Mc-Namara. Collected by Zimmerman unless otherwise indicated.

This species, with its narrow, elongate anal style, is most likely to be confused with *D. consimilis*, but may easily be separated from that member of the genus by the longer pro- and mesotibiae, the narrower, more elongate form, the longer inner spur of the metatibiae and the narrow, longer anal style.

D. gracilicauda indicates a sexual dimorphism in width, the male being slightly broader both in the pronotum and elytra than the female.

Dellamora consimilis (Blair), new combination (fig. 16, a).

Mordellistena consimilis Blair, Ann. Mag. Nat. Hist. IX, 9: 568, 1922 (Fiji); Lea, Ent. Soc. Lond., Trans. 79: 321, 1931.

Derm castaneous or fuscocastaneous, meso- and metasternum and base of antennae somewhat darker because of the subcuticular musculature, eyes and ridges of hind legs black.

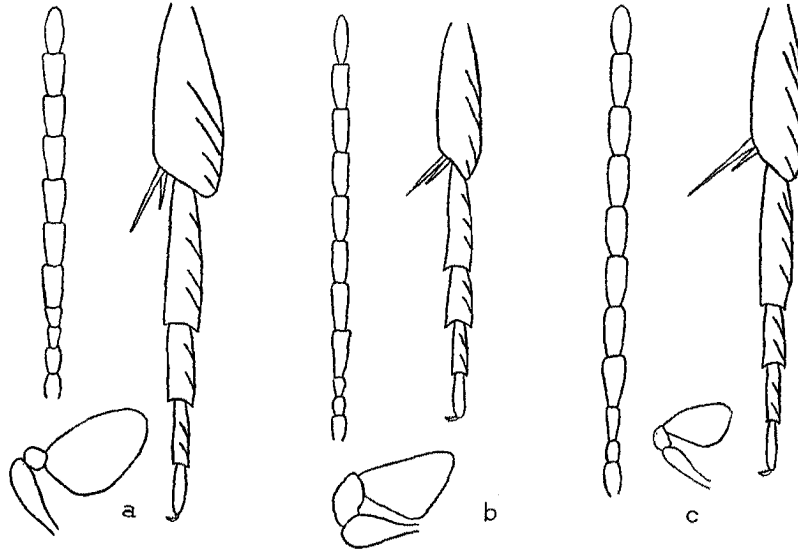


FIGURE 16.—a, *Dellamora consimilis*; b, *D. castanea*; c, *D. samoensis*: antenna, metatibia and tarsus, and maxillary palpus.

Eyes covered with fine, short, erect, whitish hairs. Antennae 1.08-2.14 mm. long, narrow, filiform, reaching base of abdomen; segments 1-2 large, equal; 3-4 equal, each distinctly narrower than 2; 5-10 each as long as 3-4 together, each but slightly expanded distally; 11 slightly longer than 10, oval, sides and tip rounded, the former broadest at middle. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, distal edge shortest, sides but slightly curved, angles rounded. Pronotum three-tenths broader than long in male (0.83×0.63 mm.), almost one-half broader in female (1.43×0.97 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, short, rounded. Scutellum moderately large, triangular, broader than long, tip distinctly rounded. Elytra almost two and one-half times as long as broad in male (2.05×0.83 mm.), slightly more than two and one-third times as long in female (3.4×1.43 mm.), sides subparallel on basal third, thence rounded to apex. Pro- and mesotibiae no longer than their tarsi, penultimate segment of the latter broadly expanded, bilobed, extending to middle of ultimate segment. Spurs of metatibiae unequal, the outer two and one-half times length of inner one. Metatibiae with 2-4 equal, oblique ridges, each extending to middle of outer surface; basitarsi with 3-4 ridges, second and third segments each with 2 ridges. Anal style but twice length of hypopygium in both sexes ($0.83-1.37 \times 0.41-0.65$ mm.), moderately slender, attenuate, narrowly truncate at tip. Length 2.68-4.37 mm.; including anal style, 3.51-5.74 mm.

Redescribed from 192 specimens. VITI LEVU: 30, Nandarivatu, Sept. 1-15, 1938, alt. 2,600-3,000 feet, beating, except one at light, Zimmerman; 14, Navai Mill near Nandarivatu, Sept. 7-17, 1938, beating shrubs, except one at light, Zimmerman; one, same locality, Oct. 13, 1937, Valentine; six, ridge west of Nandarivatu, Sept. 9-11, 1938, alt. 2,600-3,000 feet, beating shrubs, Zimmerman; eight, ridge west of Vatuthere, Nandarivatu, Sept. 8, 1938, alt. 2,600-3,000 feet, Zimmerman; two, Tholo North, Nandarivatu, Sept. 18 and Oct. 18, 1937, Valentine; eight, Mt. Korombamba, Aug. 1, 1938, alt. 1,800 feet, beating shrubs, Zimmerman; eight, Tholo-i-Suva, July 21-27, 1938, alt. 500-600 feet, beating, Zimmerman; one, Colo[Tholo]-i-Suva, July 24, 1924, Bryan; Bulu near Sovi, April 21, 1941, Krauss; two, Suva, July 7, 1937, Valentine; one, Mt. Victoria, Tholo North, Sept. 13, 1938, alt. 3,000-4,000 feet, beating shrubs, Zimmerman; two, west slope Mt. Victoria, Tholo North, Sept. 16, 1938, alt. 3,000 feet, beating, Zimmerman; one, Navai-Nasonga Trail, Sept. 12, 1938, alt. 3,400 feet, summit, beating shrubs, Zimmerman; two, Tailevu, Naivithula, Aug. 13, 1937, Valentine; two, Tailevu, Korovou, Aug. 3, 1937, Valentine; 18, Belt Road, 16 to 50 miles west of Suva, July 22-26, 1938, beating shrubs or dead branches, Zimmerman. OVALAU: two, Wainiloka, Sept. 27, 1937, dead branches, Valentine; 13, Wainiloka, July 11, 1938, alt. 3,200 feet, beating, Zimmerman; 23, Draiba Trail, July 8-9, 1938, alt. 600-1,000 feet, beating except one on fern, Zimmerman; three, Thawathi, July 12-16, 1938, alt. 600-900 feet, beating on dead branches, Zimmerman; four, Andubangda, July 18, 1938, alt. 1,000-1,500 feet, beating, Zimmerman. LAU ISLANDS: six, Wangava Island, Aug. 27, 1924, Bryan; two, Tuvutha, Aug. 11 and Sept. 10, 1924, the former on Yangava [Yangasa] Cluster, Bryan; three, Kambara, Aug. 25, 1924, Bryan; three, 1 mile south of Mango Island, Marona, Aug. 14, 1938, alt. 20-300 feet, beating shrubs, Zimmerman; two, Vanua Mbalavu, Loma Loma, Aug. 5, 1938, alt. 200-500 feet, beating shrubs, Zimmerman; one, Vanua Mbalavu, near Loma Loma, Aug. 7, 1938, seashore, Zimmerman; one, Aiwa Island, Aug. 31, 1924, Bryan; one, Navutu-i-loma Island, Aug. 10, 1924, Bryan; two, Vanua Mbalavu, Mvana, Aug. 9, 1938, alt. 200 feet, beating shrubs, Zimmerman; three, Vanua Mbalavu, Buthalevu, Aug. 10, 1938, alt. 200-300 feet, Zimmerman; three, Vanua Mbalavu, Bavatu, Aug. 16, 1938, alt. 200-250 feet, beating shrubs, Zimmerman; nine, Munia Island, Aug. 3, 1938, alt. 800-900 feet, beating

shrubs, Zimmerman; one, Ongea Island, Aug. 2, 1924, Bryan. MOALA ISLAND: one, 1 mile west of Naroi, Aug. 25, 1938, alt. 700 feet, beating shrubs, Zimmerman; one, July 9, 1924, Bryan; four, Ketira, Aug. 23, 1938, beating shrubs, Zimmerman; two, Naroi, Aug. 24, 1938, alt. 500-800 feet, beating shrubs, Zimmerman; four, Vunuka, Aug. 23, 1938, alt. 100 feet, beating shrubs, Zimmerman. LAKEMBA ISLAND: two, Toumbo, Aug. 20 and 21, 1938, beating shrubs, Zimmerman. MATUKU ISLAND: three, July 4, 5, and 7, 1924, Bryan. KADAVU [KANDAVU] ISLAND: one, Wai Salima, April 30, 1941, Krauss. TAVEUNI: two, May, Lea.

M. consimilis (Blair) is most closely allied to *M. castanea* (Boheman) and *M. samoensis* (Blair). It may be separated by the fifth antennal segment being one-half longer than the fourth, with the fifth to tenth each as long as three and four together and by the equality in length between the pro- and mesotibiae and their tarsi.

This species exhibits considerable variation in the number and length of the ridges on the metatibiae and tarsi, the former ranging from two to four and the latter either three or four.

Dellamora castanea (Boheman), new combination (fig. 16, *b*).

Mordella castanea Boheman, *Eugenies Resa*, Ins. Col., 108, 1858 (Guam).

Mordella dodonaeae Montrouzier, *Soc. Ent. France*, Ann. III, 8: 306, 1860 (New Caledonia).

Mordellistena dodonaeae (Montrouzier), Blair, *Ann. Mag. Nat. Hist.* IX, 9: 567, 1922 (Fiji); *Insects of Samoa* 4 (2): 86, 1928 (Samoa).

Mordellistena castanea (Boheman), Blair, *B. P. Bishop Mus.*, Bull. 172: 59, 1942.

Derm castaneous or rufocastaneous, antennae, maxillary palpi and clypeus flavous, eyes and ridges of hind legs black.

Eyes covered with fine, short, erect, castaneous hairs. Antennae 1.34-2.46 mm. long, narrow, filiform, reaching base of abdomen; segments 1-2 equal in length, the latter distinctly narrower; 4 approximately twice length of 3, 5-10 decreasing slightly in length, 10 only one-half longer than 3; 11 one-fourth longer than 10, oval, broadest at middle, sides and tip rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, twice as long as broad, distal margin shortest, sides almost straight, angles rounded. Pronotum one-third broader than long in male (0.88 × 0.65 mm.), one-half broader in female (1.71 × 1.14 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, short, rounded. Scutellum

small, triangular, broader than long, tip broadly rounded. Elytra two and six-tenths times as long as broad in male (2.31×0.88 mm.), but two and one-tenth times in female (3.71×1.71 mm.), sides subparallel on basal third, thence rounded to tip. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter broadly expanded, emarginate at apex, extending beyond base of ultimate segment. Spurs of metatibiae unequal, the outer but twice length of inner one. Metatibiae with three equal, oblique ridges, each extending to middle of outer surface; basitarsi with three and occasionally a rudimentary fourth ridge present; second and third segments each with two ridges. Anal style twice length of hypopygium ($1.0-1.54 \times 0.65-0.83$ mm.), moderately robust on basal third, thence attenuate, distinctly truncate at tip. Length 2.82-3.94 mm.; including anal style, 3.97-5.2 mm.

Redescribed from 44 specimens. VITI LEVU: three, Nandarivatu, Sept. 3, 1938, alt. 3,000 feet, beating shrubs, Zimmerman; one, Tholo North, Nandarivatu, Oct. 18, 1937, Valentine; three, Belt Road, 4 to 44 miles west of Suva, July 22, 23, 1938, beating, Zimmerman; two, Nandarivatu, ridge west of Vatuthere, Sept. 8, 1938, alt. 2,600-3,000 feet, beating shrubs, Zimmerman; one, Tholo North, Mt. Victoria, Sept. 13, 1938, alt. 3,000-4,000 feet, beating shrubs, Zimmerman; one, Lami Quarry near Suva, July 24, 1938, alt. 10-250 feet, beating shrubs, Zimmerman; one, Mt. Korombamba, Aug. 1, 1938, alt. 1,300 feet, beating shrubs, Zimmerman. MOALA ISLAND: two, Ketira, Aug. 23, 1938, beating shrubs, Zimmerman. MATUKU ISLAND: one, July 4, 1924, Bryan. LAU ISLANDS: one, Mango Island, Marona, Aug. 13, 1938, Zimmerman; one, Mango Island, 1 mile south of Marona, Aug. 14, 1938, alt. 200-300 feet, beating shrubs, Zimmerman; one, Munia Island, Aug. 3, 1938, alt. 800-900 feet, beating shrubs, Zimmerman; two, Wangava, Aug. 27, 1924, Bryan. GUAM: 24, Oca Point, May 27, 28, 1945, Dybas.

D. castanea (Boheman), *D. consimilis* (Blair), and *D. samoensis* (Blair) constitute a closely allied group of species, the limits of which cannot at this time be completely defined. The length of the antennal segments, particularly the third, fourth, and fifth, is variable; the carinated ridges on the metatibiae and tarsi are not constant in number; and the anal style varies somewhat in width and length. More material is needed to ascertain the limits of variation of these species, as well as to expand our knowledge of the distribution.

Dellamora samoensis (Blair), new combination (fig. 16, c).

Mordellistena samoensis Blair, *Insects of Samoa* 4 (2): 87, fig. 6, 1928 (Samoa); Zimmerman, B. P. Bishop Mus., *Occ. Papers* 16 (7): 162, 1941.

Derm castaneous or fuscocastaneous, eyes and ridges of hind legs black. Eyes covered with fine, short, erect, yellowish hairs. Antennae 1.77 mm. long, narrow, filiform, reaching base of abdomen; segments 1-2 large, equal; 4-10 from but slightly longer than 3 to twice length of 3, 4 distinctly broader than the others; 11 one-fourth longer than 10, pear-shaped, broadest beyond middle, sides and apex rounded. Terminal segment of maxillary palpi enlarged, form of a broad scalene triangle, distal edge shortest, curved, other margins almost straight, angles rounded. Pronotum almost four-tenths broader than long (1.77×1.28 mm.), apex and sides broadly rounded, basal angles obtuse, base arcuate, midbasal lobe broad, moderately produced, rounded. Scutellum triangular, small, broader than long, tip distinctly rounded. Elytra two and four-tenths times as long as broad (4.28×1.77 mm.), sides subparallel on basal fourth, thence rounded to apex. Pro- and mesotibiae distinctly longer than their tarsi, penultimate segment of the latter broadly expanded, strongly incised at tip, extending beyond base of ultimate segment. Spurs of metatibiae unequal, the inner two and one-half times length of outer one. Metatibiae and basitarsi each with 4-5 equal, oblique ridges, each extending to middle of outer surface, the basal one often rudimentary; second and third segments each with two ridges. Anal style twice length of hypopygium (1.6×0.8 mm.), moderately robust at base, thence attenuate, narrowly truncate at tip. Length 4.87-5.53 mm.; including anal style, 6.24-7.23 mm.

Redescribed from 33 specimens. VITI LEVU: eight, Nandarivatu, Sept. 3, 1938, alt. 3,000 feet, beating shrubs, Zimmerman; one, Navai Mill near Nandarivatu, Sept. 7, 1938, alt. 2,700 feet, beating shrubs, Zimmerman; one, Lami Quarry near Suva, July 24, 1938, alt. 10-250 feet, beating shrubs, Zimmerman; one, Belt Road, 16 miles west of Suva, July 29, 1938, beating ferns, Zimmerman; three, Belt Road, 42 to 44 miles west of Suva, July 23, 1938, alt. 300 feet, beating shrubs, Zimmerman; one, Belt Road, 45 to 50 miles west of Suva, July 26, 1938, beating shrubs, Zimmerman; one, Nandronga, Singatoka, Nov. 4, 1937, on *Sophora*, Valentine; one, ridge west of Nandarivatu, Nov. 11, 1938, alt. 2,800 feet, beating shrubs, Zimmerman; three, Mt. Korombamba, Aug. 1, 1938, alt. 2,700-2,800 feet, beating shrubs, Zimmerman; three, Tailevu, Naivithula, Aug. 13, 1937, Valentine; two, Tailevu, Korovou, Aug. 3, 1937, one on *Bixa oreillana*, Valentine; one, Tailevu, Korovou, Sept. 20, 1937, Valentine. OVALAU: one, Draiba Trail, July 9, 1938, alt. 600-800 feet, beating, Zimmerman. ONEATA: one, Dakuiloa, Aug. 21, 1938, beating shrubs, Zimmerman. MOALA ISLAND: one, Ketira, Aug. 23, 1938, beating shrubs, Zimmerman; one, Vanuka, Aug. 23, 1938, alt. 100 feet, beating shrubs, Zimmerman. LAU ISLANDS: one, Vanua Mbalavu, Loma Loma, Aug. 5, 1938, alt. 200-500 feet, beating shrubs, Zimmerman; one, Kambara, Aug. 24, 1924, Bryan. MATUKU ISLAND: one, July 4, 1924, Bryan.

This species is the largest member of the genus yet to be taken in the Fiji Islands. It can be confused with atypical specimens of *D. castanea* (Boheman), to which species it is allied; but here there are more ridges on the metatibiae and basitarsi, the size is generally larger, and the form is somewhat broader.

BIBLIOGRAPHY

1. BLAIR, K. G., The Mordellidae of the Fiji Islands, *Ann. Mag. Nat. Hist.* IX, 9: 562-568, 1922.
2. BLAIR, K. G., *Insects of Samoa* 4 (2): 85-90, 5 figs., 1928.
3. BLAIR, K. G., *Coleoptera Heteromera*, IN *Insects of Guam—I*, B. P. Bishop Mus., *Bull.* 172: 58-59, 1942.
4. BLANCHARD, EMILE, *Insectes*, *Voy. Pôle Sud, Zoologie* 4, 1853.
5. BOHEMAN, C. H., *Coleoptera*, *Freg. Eugenies Resa . . . 2, Zoology*: 1-112, pl. i, 1858.
6. BOISDUVAL, J. B. A. D., *Faune Entomologique de l'Océan Pacifique . . .*, *Voy. l'Astrolabe . . .*, 1826-29, 1835.
7. CHAMPION, G. C., On the heteromorous Coleoptera collected in Australia and Tasmania by Mr. James J. Walker . . . *H. M. S. Penguin, Ent. Soc. London, Trans.* (2): 213-275, pl. 6, 1895.
8. COSTA, A., *Fauna del Regno di Napoli, Mordellidea*, 1854.
9. FABRICIUS, J. C., *Systema Eleutheratorum . . . 1*, 1801.
10. LEA, A. M., Some miscellaneous Coleoptera, pt. 3, *Roy. Soc. South Australia, Trans.* 41: 121-322, 4 pls., 1917.
11. LEA, A. M., On some Mordellidae from New Guinea and Fiji, *Ent. Soc. London, Trans.* 79: 311-321, 21 figs., 1931.
12. LINNAEUS, CARL VON, *Systema Naturae*, 10th ed., 1758.
13. MONTROUZIER, P., *Essai sur la Faune de l'Île Woodlark ou Moïou*, *Entomologie, Soc. Agric. Lyon, Ann.* 7: 1-114, 1855.
14. MONTROUZIER, P., *Essai sur la Faune entomologique de la Nouvelle-Calédonie (Balade) et des îles des Pins . . .*, *Soc. Ent. France, Ann.* 8: 229-308, 1860.
15. NORMAND, H., *Coléoptères nouveaux de la faune tunisienne*, *Soc. Ent. France, Bull.*, 284-286, 1916.
16. PASCOE, F. P., *Descriptions of new genera and species of New-Zealand Coleoptera*, pt. 2, *Ann. Mag. Nat. Hist.* IV, 17: 48-60, 1876.
17. PIC, M., *Nouveaux Coléoptères exotiques*, *Ann. Mag. Nat. Hist.* X, 16: 470-473, 1935.
18. RAY, E., Notes and descriptions of Mordellidae from the Solomons, *Pan-Pac. Ent.* 20 (2): 61-67, 15 figs., 1944.
19. RAY, E., Three new mordellid beetles from the Pacific, *B. P. Bishop Mus., Occ. Papers* 19 (5): 167-170, 3 figs., 1948.
20. ZIMMERMAN, E. C., Report on a collection of Samoan Coleoptera, *B. P. Bishop Mus., Occ. Papers* 16 (7): 159-176, 1946.