TRANSACTIONS

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I. List of the Australian and Tasmanian Mordellidæ, with Descriptions of New Species. By Arthur M. Lea, F.E.S.

[Read October 6th, 1901.]

PLATES I. and II.

As numerous additions have been made to this family since the publication of Masters' Catalogue, I have considered it advisable to preface the descriptions of a number of new forms with a list of the species hitherto recorded from Australia and Tasmania.

For some of the species additional localities are given, and a few previously referred to *Mordella* are now first placed in *Mordellistena* and *Tomoxia*. Several synonyms are also now first noted.

Mordella æmulu, Lea.

- " alboscutellata, Lea.
- " albosparsa, Gemm. = albosignata, Boh.
 - , australis, Boisd. Hab. W. A.
- " baldiensis, Blackb. Hab. W. A.
- " bella, Waterh. Hab. W. A.
- " cara, Blackb.
 - , curoli, Lea = waterhousei, Lea, n. preoc.
- " communis, Waterh. Hab. W. A.; V.

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Mordella distincta, Lea = fulvonotata, Champ., n. preoc.
         dumbrelli, Lea. Hab. V.
         elegans, Waterh.
         elongatulu, Macl.
         exilis, Germ.
            var. obscurior, Blackb.
            var. rufimanus, Blackb.
         felix, Waterh.
         festiva, Lea.
         fluvicans, Macl.
         fugitiva, Lea.
   ,,
         fuscipilis, Champ.
         graphiptera, Champ. = H. fasciata, Lea. Hab.
               W. A.; V.
         hamatilis, Macl.
         humeralis, Waterh.
         ignota, Lea.
         inusitata, Blackb.
         lepida, Redt.
         leucostictu, Germ. = abdominalis, Bless. Hab.
               W. A.
         limbatu, Waterh.
            var. w-album, Champ.
         mastersi, Lea,
         multiguttata, Waterh. Hab. Q.
         nigrans, Macl.
         notabilis, Macl.
         obscuripennis, Macl.
         18-maculata, Lea.
                              Hab. W. A.
         8-maculata, Macl.
         ornata, Waterh.
         ovalisticta, Macl.
         pallida, Lea.
         parra, Champ.
         promiscua, Er.
         pulchra, Lea.
         pulverulenta, Macl. = maculatissima, Blackb.
         pygmxa, Champ. = uniformis, Lea.
          14-muculata, Macl.
         raymondi, Lea.
         ruficollis, Waterh.
         rufipes, Lea.
         subvittata, Macl.
    ,,
                               Hab. V.
         sydneyana, Blackb.
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Mordella tomentosa, Boisd.

tristis, Lea.

, trivialis, Waterh.

" undosa, Macl.

" v-fasciata, Lea.

, var. modesta, Lea.

" var. venusta, Lea.

,, waterhousei, Champ. = obliqua, Waterh., n. preoc.

wiburdi, Lea.

Mordellistena aspersa, Champ.

austrina, Champ. = Mordella setipes, Lea.

" brunneipennis, Macl. (Mordella).*

" cuspidata, Macl. (Mordella). " fusca, Lea (Mordella).

jucunda, Champ. = Mordella longipes, Lea.

Tomoria aterrima, Macl. (Mordella).

flavicans, Waterh.

" laticeps, Lea (Mordella). " 6-lincata, Lea (Mordella).

MORDELLA 8-MACULATA, Macl. (Plate II, figs. 28, 47.)

Mr. Champion † queries this species as being a synonym of *M. leucosticta*; it appears, however, to be sufficiently distinct, although allied to that insect. Compare figures 28 and 47 with 26, 27 and 48.

Mordella Limbata, Waterh. (Plate I, figs. 7, 8, 9.)

This is a widely distributed and very variable species; *M.* w-album is one of its varieties and possibly *M. promiscua* is another.

Mordella 18-maculata, Lea. (Plate II, figs. 30, 31, 49.)

A specimen from Western Australia under examination belongs to this species, but its elytral markings are very different to those of the type. On the prothorax, however, the unusual markings are identical.

^{*} Mr. W. J. Rainbow kindly examined the type of this species at my request, and informed me that it has the apical hinder-part of the posterior tibiæ furnished with two ridges; it is, therefore, a Mordellistena, and is probably the M. austrina of Champion.

† Trans. Ent. Soc. Lond., 1895, p. 267.

Mordella Graphiptera, Champ. (Plate I, figs. 3, 4.)

This species occurs in all the Australian colonies, and is somewhat variable. One specimen under examination has the markings reduced to five disconnected spots on each elytron.

Mordella Australis, Boisd. (Plate I, fig. 12.)

The specimens I described (Proc. Linn. Soc. N.S.W., 1895, p. 288) as probably belonging to this species were sent to Mr. Champion for examination and returned by him as being "= M. albosparsa, Gemming." As, however, the specimens I described are typical of the species, and which can be recognized by means of my description, I have considered it advisable to refer to them as M. australis, in comparison with several forms described below. The species is common in Tasmania, besides New South Wales and Queensland.

Mordella Baldiensis, Blackb.

From Geraldton and Rottnest Island (W. A.) I have numerous specimens that I cannot distinguish from this species; they are very closely allied to *M. fuscipilis*, but differ in possessing red, instead of black spurs.

Mordella v-Aureum, n. sp. (Plate II, fig. 34.)

Black; anterior legs and posterior spurs reddish; basal joints of antennæ dull piceous-brown. Head and prothorax with golden-grey pubescence, the latter with an indistinct median and two lateral dark vittæ; elytra with black pubescence variegated with golden-grey as follows: along suture to near apex, three basal stripes of which the humeral one is most distinct, but joined to the median one, a median fascia irregular at each side, but forming a distinct median V, and two angular subapical spots almost conjoined. Under surface with greyish-white pubescence, variegated with large spots of black at the sides of abdomen.

Aculeus moderately long and rather thin, regularly decreasing in width, apex slightly obtuse. Posterior spurs unequal, the longest scarcely half the length of first tarsal joint.

Length 5 m.m.*

^{*} The lengths given include the aculeus.

Hab. W. A.: Vasse.

The markings are very different to those of any other species with which I am acquainted, although the insect approaches some of the varieties of *M. bella*.

Mordella obsoleta, n. sp. (Plate I, fig. 20.)

Black; anterior legs, posterior spurs, muzzle and basal joints of antennæ reddish-testaceous. Pubescence purplish-black, on prothorax and head indistinctly variegated with white; each elytron with an angular white median fascia: extending obliquely upwards from suture, then almost at a right angle downwards and then again upwards to suture; near apex a white spot always largest near suture and frequently semilunar in shape. Under surface with silvery, variegated with black pubescence.

Aculeus moderately long, stout at base but strongly lessened from about middle, apex thin but truncate. Posterior spurs not quite equal in length, the longest fully half the length of first tarsal joint.

Length $4-4\frac{3}{4}$ m.m.

Hab. N. S. W.: Sydney.

In the five specimens under examination the elytra are entirely without basal markings, nor are any of the markings variable. The species approaches rather closely to some of the varieties of *M. bella*, but the spurs are very decidedly red.

Mordella simillima, n. sp. (Plate II, fig. 32.)

Black; anterior femora, posterior spurs and basal joints of antennæ reddish-testaceous. Head and prothorax with grey, golden-grey or golden pubescence; the prothorax with a median and two lateral dark vittæ, which, however, are sometimes feeble or not at all traceable; elytra with purplish-black pubescence, variegated with similar pubescence as on prothorax, and which is distributed on each as follows: along suture almost to apex, at base and on shoulder, between shoulder and suture a stripe (often conjoined with humeral pubescence and seldom distinctly separated from it), an angular median fascia which extends obliquely upwards from suture, then downwards and then upwards for a variable distance but never to margin, the third portion being sometimes entirely absent, a large subapical spot of variable size and shape but always concave internally and convex outwardly. Under surface with silvery or golden grey, variegated with black pubescence.

Aculeus rather short and stout, but apical two-fifths much narrower, apex truncate. Posterior spurs unequal, the longest more than half the length of the first tarsal joint.

Length $4\frac{1}{2}$ -6 m.m.

Hab. W. A.: Mount Barker (Andrew Muir), Garden and Rottnest Islands (Lea).

Very close in general appearance to M. cara.

Mordella Brevis, n. sp. (Plate II, fig. 33.)

Black; anterior legs, posterior spurs, muzzle, palpi and basal joints of antennæ reddish-testaceous. Head with greyish pubescence; prothorax with silvery pubescence, with a large median and two large lateral vittæ (these sometimes occupy almost the entire surface so that the white markings are entirely marginal); each elytron with white markings as follows; along base, where between side and suture a stripe (sometimes entirely disconnected) projects downwards; along suture to before middle, where it curves outwards and downwards, then upwards and then almost straight outwards to margin; near apex a large semilunar patch. Under surface with silvery and black pubescence.

Aculeus rather short and stout, but apical half much narrower than basal, apex obtuse. Posterior spurs unequal, the longest more than half the length of first tarsal joint.

Length $2\frac{1}{2}$ -3 m.m.

Hab. W. A.: Mount Barker (R. Helms), Bridgetown,

Garden Island (Lea).

This species is rather close in general appearance to the one I have supposed to be *M. australis*, but it may be at once distinguished from that species by the shape of the median fascia and the absence of an oblique scutellar stripe. The markings are much more sharply defined in some specimens than in others, the basal stripe being especially liable to partial obliteration.

MORDELLA CUNEATA, n. sp.

Black; legs (except the posterior femora and apex of tibic and tarsi, which are black) red; basal joints of antennæ obscure red. Uniformly clothed with greyish pubescence—no darker on the under than on the upper surface.

Aculeus not very long and stout, sides regularly diminishing in width to apex, which is obtusely rounded. Posterior spurs unequal, the longest less than half the length of the first tarsal joint.

Length $4\frac{1}{2}$ - $6\frac{1}{2}$ m.m.

Hab. W. A.: Pinjarrah.

A narrow species, in general appearance suggestive of a *Mordellistena*, but the posterior tibiæ and tarsi are of normal form. Numerous specimens were taken by means of the sweeping-net.

MORDELLA VERTICORDIÆ, n. sp.

Black; densely clothed with grey, silvery-grey, golden-grey, or greyish-brown pubescence of an uniform shade on the upper surface, except that on the scutellum and suture it is almost white. Under surface and legs with greyish-white pubescence.

Aculeus rather short, sides strongly and not regularly decreasing in width to apex, which is finely but very distinctly emarginate. Posterior spurs decidedly unequal, the longest half the length of first tarsal joint.

Length 51-7 m.m.

Hab. W. A.: Mount Barker (R. Helms), Mogumber (Lea). A very distinct species, on account of the emargination of the apex of the aculeus. In general appearance it is close to the preceding, except that the pubescence is denser. Numerous specimens were seen on the blossoms of various species of Vertieordia.

MORDELLA INORNATA, n. sp.

Black; base of antennæ and posterior spurs reddish-piceous. Pubescence black; on the head and front part of prothorax appearing greyish-brown in certain lights; on sides of sterna and abdominal segments with a silvery gloss in certain lights.

Aculeus long, thin and regular, apex very acute. Posterior spurs equal and less than half the length of first tarsal joint.

Length 9- $11\frac{1}{2}$ m.m.

Hab. N. S. W.: Victoria (C. French).

The largest black species hitherto recorded from Australia, and with a remarkably sharp aculeus. The pubescence from most directions appears to be entirely black.

MORDELLA APICATA, n. sp.

Black; upper surface densely clothed with greyish or reddishbrown pubescence, except on apical fifth of elytra, where it is black; sides of sterna, sides and middle of each of the abdominal segments, and base of aculeus, with greyish-white pubescence. Aculeus moderately long, base stout and rapidly diminishing to near the tip, thence feebly diminishing to the apex, which is almost truncate. Posterior spurs almost equal and less than half the length of first tarsal joint.

Length 7 m.m.

Hab. Q.: Brisbane.

A rather robust species, that may be readily distinguished by the black apex of the elytra, the pubescence elsewhere on the upper surface is midway in colour between that of *M. exilis* and *M. inusitata*. The type specimen has been kindly presented to me by Mr. C. French, in whose collection it was unique.

Mordella 9-maculata, n. sp.

Black; basal half of antennæ, posterior spurs, and anterior legs of a dingy red colour. Head with greyish-white pubescence; prothorax with black pubescence, but marked with white along the apex, base, sides, and on each side of middle; scutellum with silvery pubescence; each elytron with four distinct silvery spots: three close along the suture, nearly equal in size and at almost equal distances, the first slightly longer than wide, the second roughly rounded, and the third feebly transverse; the fourth spot is on the side midway between the first and second; each shoulder and the suture with a feeble sprinkling of greyish hairs. Sides and middle of sterna and abdominal segments and parts of legs with silvery pubescence.

Aculeus long and rather thin, but scarcely regular, apex somewhat acute. Posterior spurs almost equal and less than half the length of the first tarsal joint.

Length 8 m.m.

Hab. N. S. W.: Victoria (C. French).

A narrow species of medium size. The elytral markings are very distinctive, and at a glance appear to consist of three pairs of rounded spots. The clothing on the prothorax of the (two) specimens under observation appears to be somewhat abraded (quite possibly it should have been described as "white with a median and two lateral dark vitte"). The white clothing of the scutellum causes the elytra to appear to be 9-spotted.

TOMOXIA MACULICOLLIS, n. sp.

Black; basal joints of antennæ dull red. Pubescence of a glossy purplish-black; head with greyish pubescence, parted in the middle;

apex of prothorax with an indistinct grey margin, across middle with four or six greyish-white spots (very distinct from some directions, but indistinct from others); scutellum, base of aculeus, sides and middle of basal segment of abdomen, and mesosternal episterna with silvery pubescence.

Aculeus short and stout, strongly diminishing in width to near apex, which is very decidedly truncate. Posterior spurs unequal,

the longest less than half the length of the first tarsal joint.

Length 5-8 m.m.

Hab. W. A.: Pinjarrah.

Closely allied to *T. aterrima*, but the clothing of the upper surface is not entirely uniform.

MORDELLISTENA CONCOLOR, n. sp.

Piceous-black; posterior spurs testaceous. Clothing of an uniform

and dingy greyish or brownish-black.

Aculeus long, thin and regular, the apex very acute. Posterior tibiæ with one feeble and two very distinct oblique ridges; spurs decidedly unequal in length, the longest less than half the length of first tarsal joint.

Length $3\frac{2}{3}$ m.m.

Hab. W. A.: Geraldton.

In appearance, except that it is narrower, remarkably close to *Mordella baldiensis*. It is the first black species of its genus to be recorded from Australia.