

LORDOMYRMA NIGER SP.N. (HYM., FORMICIDAE), WITH KEY AND NOTES ON THE GENUS.

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Lordomyrma niger sp.n.

♂. Jet black, shining, mandibles, antennae, apex of spines and legs reddish brown. Whole body clothed with outstanding yellow hairs. Funiculus of antennae, with exception of first joint, pubescent.

Head with mandibles subquadrate, slightly narrowed in front, posterior angles rounded; *mandibles* smooth and shining with a few scattered punctures, armed with three teeth at apex, unarmed behind; *clypeus* rounded anteriorly, convex, smooth and shining, narrowed posteriorly and extending between the frontal carinae; *frontal arca* indistinct; *cheeks* and anterior part of scrobes on each side finely longitudinally striate, the striation between eyes and scrobes consisting of three finely raised carinae, which extend beyond the eye; the space between the posterior portion of the clypeus and the antennal carinae is finely longitudinally striate; *scrobes* wide, smooth, and shallow; *antennal carinae* with a sharp, raised edge, divergent posteriorly and continued in a narrow raised line round base of scrobe; *eyes* kidney-shaped, not very projecting, situated in about the centre of sides of head; *antennae* 12-jointed; *scape* long, curved, extending about three-quarters of the length of the head; *funiculus* thickened to apex, first joint elongate, equal in length to the next three joints taken together, joints 2-7 transverse; *club* long, pointed, about as long as the three preceding joints taken together. *Thorax* longer than broad, contracted in middle, narrowed to base; *pronotum* narrowed to a neck anteriorly, margined at sides, terminating in a very short sharp tooth; *pro-mesonotal suture* obscure; *mesonotum* convex, with a few scattered small punctures, and traces of feebly raised striae on disc and sides; *epinotum* armed with two short sharp spines, divergent and pointing upwards, space between finely transversely striate; *declivity* abrupt, transversely striate, sides, and sides of thorax generally, with rugose transverse rugae. *Petiole* triangular in profile; *peduncle* moderate, smooth; *node* of petiole terminating in a short sharp tooth pointing slightly backwards, anterior surface smooth, posterior surface with coarse raised transverse rugae, sides with coarse rugae, underside crenulate; *postpetiole* short, oval, sides rounded, anterior part of upper surface smooth, posterior portion and sides with coarse raised lines, crenulate beneath with a small tooth at anterior end; *gaster* round-oval, smooth, with a few very fine small shallow punctures. *Long.* 4—4.7 mm.

Type in B.M. Coll.

Described from twenty-five workers taken by Miss L. E. Cheesman in Dutch New Guinea, Waigeu Island, Camp Nok, 2,500 ft., April, 1938.

In 1940, *Ent. mon. Mag.*, 76: 45-7, I described a new species of *Lordomyrma* taken by Miss Cheesman in Dutch New Guinea; the new species taken by the same collector on Waigeu Island brings the total of known species of this genus up to eight, as follows:—

- L. caledonica* André, 1889, *Rev. Ent. Caen*, 8: 225 (♂, New Caledonia).
L. crawleyi Menozzi, 1923, *Bull. Soc. ent. Fr.*, 1923: 209, fig. 1 (♂, New Guinea).
L. cryptocera Emery, 1897, *Természetr. Füzet.*, 20: 592, pl. 15, fig. 34 (♂, New

Guinea). *L. furcifera* Emery, 1897, *Természetr. Füz.*, 20: 591, pl. 15, figs. 32, 33 (♀, New Guinea). *L. infundibuli* Donisthorpe, 1940, *Ent. mon. Mag.*, 76: 45-7, 2 figs. (♀, New Guinea). *L. leae* Wheeler, 1919, *Psyche*, 26: 102-4, fig. 3 a & b (♂, Lord Howe Island). *L. niger* sp.n. (♀, Waigeu Island). *L. punctiventris* Wheeler, 1919, *Psyche*, 26: 105-6, fig. 4 a-d (♀, Queensland).

In 1919 Wheeler constructed a key for the workers of the then known species. This I have adopted, but with the necessary modifications to receive the three additional species described since that date. Males and females are omitted, as only the male of *L. leae* Wheeler and the female of *L. infundibuli* Donisthorpe are known. Stitz's var. *acuminata* of *L. cryptocera* Emery (1912, *Sitz. Gesell. naturf. Freunde Berlin*, 1912: 504, ♀) is also omitted, as it differs from the typical form only in a few unimportant particulars.

KEY TO THE WORKERS OF THE GENUS *LORDOMYRMA*.

1. Spine on post-petiole. Length 4 mm. *crawleyi* Menozzi.
- No spine on post-petiole 2.
2. Apex of petiolar node produced into a spine above; epinotal spines very long, curved and diverging. Length 3.5 mm. *furcifer* Emery.
- Apex of petiolar node angular, acuminate, or acutely conical above; epinotal spines much shorter, nearly straight 3.
3. Antennal scrobe anteriorly divided by a short median longitudinal carinula into separate depressions for the scape and funiculus. Length 3 mm. *cryptocera* Emery.
- Antennal scrobe not thus divided 4.
4. Upper surface of head, except the cheeks and spaces between the eyes and frontal carinae, smooth and shining. Length 4.5—5 mm. 5.
- Upper surface of head between the frontal carinae rugose. Length 3—3.6 mm. 7.
5. Thorax with coarse transverse rugae above. Length 4.5—5 mm. *caledonica* André.
- Thorax smooth and shining above 6.
6. Darker or lighter brown; epinotal spines and peduncle of petiole longer. Length 3.7—4 mm. *infundibuli* Donisthorpe.
- Jet black; epinotal spines and peduncle of petiole shorter, Length 4—4.7 mm. *niger* sp.nov.
7. Epinotal spines rather short; metasternal spines long; antennal scrobes incomplete behind; gaster not coarsely punctate. Length 3.4—3.6 mm. *leae* Wheeler.
- Epinotal spines longer; metasternal spines short; antennal scrobes complete behind; gaster coarsely punctate. Length 3—3.2 mm. *punctiventris* Wheeler.

Little is known concerning the habits of these interesting ants. Wheeler records taking nearly an entire colony (twenty-one specimens) of *L. punctiventris* from a small cavity in a rotten log in the dark tropical 'scrub' at Kuranda, Queensland. He says that these ants are sluggish and timid in life. Miss Cheesman discovered *L. infundibuli* nesting in clay among the roots of an uprooted tree.

The nest was on a horizontal face, with a funnel entrance. Her notes concerning *L. niger* read: 'Trail on wet rocks of a waterfall; nest in crack of a large rock in clay, with a small entrance. Unless this is a temporary nest, they must be submerged in rainy weather.'

British Museum (Nat. Hist.),
London, S.W.7.

December 10th, 1940.

Colour variation in Larvae of Selenia bilunaria Esp. (Lep., Geometridae) in the Isle of Rhum.—I have known, of course, for many years that larvae of *S. bilunaria* were light sensitive, and have carried out long series of experiments with them. However, the most remarkable larvae I have encountered in Nature were (1) coal-black larvae beaten from birch on Waldridge Fell, Co. Durham, and (2) almost white specimens taken from *Salix atrocinerea* Brot. at Kinloch in the Isle of Rhum. On Rhum, as is often the case in the Hebrides, the various *Salices* are generally flattened and wind-distorted. However, at Kinloch, sheltered by the woods and huge protective walls, *Salix atrocinerea* grows into magnificent, if not large, specimens with unusually light-coloured stems and leaves. Influenced by their environment during the growth period, the *Selenia bilunaria* in turn become so light in the ground that 'bone-coloured' would correctly describe them.—J. W. HESLOP HARRISON, King's College, Newcastle upon Tyne: December 20th, 1940.

The Hebridean Distribution of Cerura furcula L. (Lep., Notodontidae).—As far as our researches are concerned, my acquaintance with this species began with larvae and ova taken from *Salix aurita* L. in the islands of South Rona and Raasay, and from *Salix repens* in the Island of Soay. The resulting imagines called for no special remarks as they were quite typical; nor were the captures, either on Rona, Raasay or Soay, of great biogeographical importance, as all three islands may be regarded as detached portions of the adjacent mainland. However, this season I came across a colony of *Cerura furcula* in the north-east of Coll on the rocky moorlands between Bousd and Sorisdale. This is significant, inasmuch as the affinities of the Coll flora and fauna lie toward those of the Outer Isles.—J. W. HESLOP HARRISON, King's College, Newcastle upon Tyne: December 20th, 1940.

Clostera pigra Hufn. (Lep., Notodontidae) in Eilean Ornsay.—For the sake of precision I must commence by stating that the Eilean Ornsay in question lies off the Isle of Coll just south-west of Loch Eatharna, a fact that rendered it necessary to compare its flora and fauna with those of its larger neighbour. Since I discovered that beating really did pay in the 'treeless' western isles, I have always taken my tray with me. In consequence, I have beaten birches, willows, junipers, aspens, roses, etc., from one end of Coll to the other. However, *Clostera pigra* has never turned up, and it may be safely assumed that it is absent from the island. Hence, when I crossed Caolas an Eilein to Ornsay, I had little hope of finding it there. None the less, the first larva knocked from *Salix aurita* L. appertained to *C. pigra*, and, moreover, the species proved not uncommon. This occurrence is the more important as it supplies another zoogeographical link in the chain connecting the Tíree-Coll group of islands with southern members of the Outer Isles.—J. W. HESLOP HARRISON, King's College, Newcastle upon Tyne: December 20th, 1940

Mountant for insects.—Nearly all entomologists who want their specimens on card, coleopterists and others, use gum tragacanth for that purpose. Dr. N. Joy gives a prescription for preparing it in his 'Practical Handbook of British Beetles, 1: xiv (Lond., 1932). I used to do so, until I found Mr. T. H. Edmonds always used gum arabic, as being easier and quicker to work with. So some years ago I tried it, and now I never use tragacanth, except perhaps for the smallest and most delicate species. For larger species gum arabic is a much stronger adhesive, and dries very quickly. The one drawback to its use, so I believe, is that it is apt in time to go a cloudy brown colour, staining the card, while tragacanth remains quite colourless. But this can be overcome by filtering it. To prepare it, put half an ounce of the best gum arabic tied up in a small muslin or linen bag into a glass stoppered bottle, and add four tablespoonfuls of water. Close the stopper tightly and leave it for two or three days, occasionally giving it a shake up. It dissolves very slowly, but the solution will be found to be perfectly clear. If found too thin, it can be thickened by warming up, but it should be used quite liquid. A collector with a large number of beetles or bugs, etc., to set will find that he can do the work in about half the time that he took with gum tragacanth. It may be someone else can improve on my method. I should like to know if any, and if so what, preservative should be added to the solution. I have not yet found any necessary.—H. LANGFORD LEWIS, Newlands, Russell Road, Moor Park, Northwood: December 26th, 1940.

Reviews.

'THE SCIENTIFIC PRINCIPLES OF PLANT PROTECTION WITH SPECIAL REFERENCE TO CHEMICAL CONTROL.' By H. MARTIN, D.Sc., A.R.C.S., F.I.C. 3rd edition, $8\frac{1}{2} \times 5\frac{1}{2}$ in., x + 385 pp. London: Arnold & Co. 1940. Price 22/6.

Author and publishers are to be congratulated on the fact that this book has proved so useful that a new issue has been demanded within four years of publication of the second edition. The former arrangement of the text is again followed, but the work has been reset so as to allow adequate treatment of those subjects in which great advances have been made recently, e.g. the nature and control of virus diseases, the factors determining the degree of attack, and the practical utilisation of the results of laboratory examination of insecticides and fungicides. The less technical parts of the book may be recommended to the general naturalist who wishes to be well-informed on such diverse matters as plant resistance, biological control, insecticides, weed killers, traps, etc. To economic entomologists and mycologists, as well as chemists and physicists concerned with the materials and instruments used in pest control, it is indispensable. The 72-page index is as near perfection as any we are accustomed to use, and may well serve as a model of all that an index should be.—B.M.H.

'PLASTER BEETLES.' British Museum (Natural History). Economic Leaflet No. 6, 8vo, 3 pp., 3 figs. 1940. Price 1d.

The term 'Plaster Beetles' is applied to *Enicmus minutus*, *Lathridius nodifer*, *Cryptophagus acutangulus* and other beetles which with their grubs feed on the moulds and mildews growing on the walls of damp buildings, especially those newly-built or reconditioned. Control measures suggested are deferring papering until the plaster has matured, keeping rooms warm and well-aired, applying pyrethrum or derris powders to damp patches or treating them with industrial spirit containing 2 per cent formalin.—B.M.H.