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Descriptions of new Species of Ants (Hym., Formicidæ) from various Localities. By Horace Donisthorpe, F.Z.S., F.R.E.S., &c., Department of Entomology, British Museum (Natural History).

Subfamily $P_{SEUDOMYRMINÆ}$ Forel. Tribe PSEUDOMYRMINI Forel.

Pseudomyrma nigra, sp. n.

Deep black, dull, mandibles, funiculi, neck, tarsi, and apex of gaster brown. Whole body clothed with longer and shorter scattered erect black hairs or bristles.

Head very broad, rounded posteriorly, narrowed anteriorly, finely reticulately punctured; mandibles massive, with large deep scattered punctures which are oblong near masticatory border, slightly shining; clypeus very transverse and narrow, projecting in middle, suture

separating it from rest of head semicircular on each side: eyes very large, prominent, and kidney-shaped; ocelli very small, but distinct; antennæ thick, scapes reaching a little beyond centre of head, funiculi gradually thickened and then narrowed to apex, all the joints longer than Thorax rather long, pronotum sculpture as in head, transverse, dorsal surface quite flat, strongly rounded anteriorly but with distinct but very blunt shoulders, side-margins straight, very sharply defined; mesonotum transverse, raised but flat, similar puncturation as in head and pronotum, anterior border semicircular, sides rounded, posterior border nearly straight; mesoepinotal suture wide, with longitudinal not close raised ridges: epinotum long, the puncturation more rugose than that of rest of thorax, dorsum considerably longer than declivity, with distinct side-margins, longitudinally striate, declivity not abrupt, transversely striate; petiole pedunculate, widened posteriorly, with distinct sidemargins, transversely striate, armed beneath with a longitudinal ridge ending in a small pointed tooth at apex. sides very finely punctured; postpetiole considerably broader behind than petiole, narrowed in front, broadest just before apex, very finely longitudinally striate; gaster oblong-oval, sculpture as in postpetiole, broadest just before apex of first segment, somewhat smooth and shining beneath; sting moderate.

Long. 8.4 mm.

British Guiana: Essequibo River, Moraballi Creek.

Taken by O. W. Richards, 14. ix. 29. Oxford University Expedition. No. 2095.

This species comes nearest to *M. godmani* Forel from Panama, but is considerably larger, and its sculpture and structure is different.

Subfamily Myrmicinæ Lepeletier.

Tribe SOLENOPSIDINI Forel.

Liomyrmex froggatti, sp. n.

Q. Shining black, femora and coxæ brown, antennæ, tibiæ, tarsi, articulation of legs and wings, and apex of gaster yellow, apex of segments of gaster pale yellow. Body clothed with sparse longer and shorter outstanding yellow hairs, forming a short fringe at neck directed

backwards. Pubescence yellow, very short, sparse, and decumbent, more conspicuous on petiole and postpetiole.

Head subquadrate, posterior angles rounded, posterior border slightly sinuate, with a distinct margin before

Fig. 1.

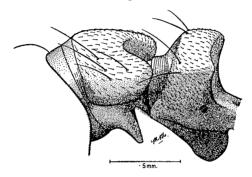
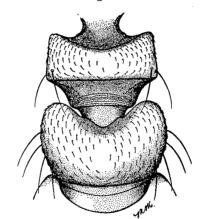


Fig. 2.



Liomyrmex froggatti, sp. n., Q.

Fig. 1.—Petiole and postpetiole in profile. Fig. 2.—Ditto from above.

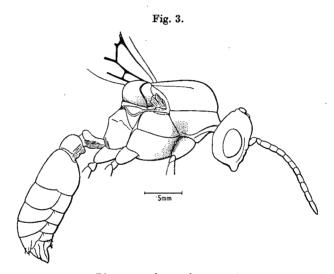
neck, very finely punctured, the punctures being very small and shallow; mandibles long, external border curved, masticatory border armed with teeth, the apical two being the longest, evenly punctured; clypeus flat,

anterior border straight; frontal area indistinct; frontal carinæ wide apart, anterior angles rounded, sides straight, divergent posteriorly, frontal furrow indistinct, terminating in an oblong shallow fovea in centre of front; antennal foveæ large and deep; eyes large, circular, not verv prominent, situated a little in front of middle of sides of head: ocelli moderate: antennæ 11-jointed, scape short, thickened to apex, not reaching halfway to posterior angles of head, funiculus gradually thickened to apex, first joint triangular, longer than broad, broader than the next four or five joints, longer than the following two taken together, joints 2-7 transverse, last joint pointed at apex, about as long as the two preceding taken together. Thorax long, rather flat above, puncturation very fine, similar to that of head in pronotum and mesonotum, that of præscutellum, scutellum, and epinotum being closer and stronger; pronotum narrow, projecting over neck, rounded anteriorly, divided from mesonotum by a deep suture and encircling the same at sides in front; mesonotum longer than broad; scutellum not very convex, metanotum narrow; metanoto-epinotal suture deep; epinotum convex, sides rounded and narrowed to base, declivity concave and tranversely striate, sides of declivity margined and very bluntly tuberculate at apex; episternite and sternite of metathorax longitudinally striate; petiole very transverse, narrow, and flat above, sides straight, anterior border evenly and slightly excised, posterior border rounded, peduncle short, anterior face of petiole concave, smooth and shining, underside of petiole consisting of a narrow long ridge ending in a blunt round point anteriorly, posterior portion of petiole behind and below dorsal surface just before junction with postpetiole narrow, round, and finely transversely striate; postpetiole, dorsal surface flat, very deeply excised anteriorly, forming two bluntly pointed lobes, rounded at sides and posteriorly, junction with gaster behind and below dorsal surface very finely punctured and transversely striate, underside armed with a rather long sharp tooth pointing downwards; gaster long, cylindrical, very slightly narrowed to apex, apex of last segment pointed; sting not visible. Legs moderate, femora compressed, anterior pair concave on inner surface. Wings yellow, one discoidal cell, one cubital and

long closed radial cell present; pterostigma and veins brown.

Long. 9.2 mm.

3. Black, shining, whole body very finely coriaceously punctured and with very small scattered punctures; mandibles, tibiæ, tarsi, first joint and end of last joint of funiculus and genitalia yellowish. Head without eyes, not as long as broad, posterior border and cheeks rounded, inserted on a short neck at the centre of the gula; mandibles small, masticatory border armed with three small teeth; clypeus convex in centre, which is round,



Liomyrmex froggatti, sp. n., 3.

and surrounded by an impressed line; frontal area narrow, triangular and margined; frontal furrow fine, shallow, reaching median ocellus; eyes large, prominent, situated on sides of head; ocelli placed on posterior border of head; antennæ 12-jointed, scape and first joint of funiculus glabrous and shining, rest of antennæ pubescent, scape very short, but longer than broad, funiculus with very small round first joint, shorter and narrower than scape and rest of antennæ, rest of joints of funiculus longer than broad and of equal breadth,

last joint as long as the two preceding joints taken together, pointed at apex. Thorax: pronotum narrow, transverse, posterior border round, encircling the mesonotum at sides in front; mesonotum high, arched, convex, flatter on dorsum, no mayrian furrows present, parapsidal furrows very faint, a double impressed line occurs on anterior portion of mesonotum, and a fine narrow carina on posterior half; præscutellum more distinctly and closely punctured; scutellum high, rounded, very convex; epinotum with abrupt declivity longer than the dorsal surface, and with similar very blunt tubercules or points as in Q at apex; petiole pedunculate, node with two round blunt projections on upper surface; postpetiole transverse, considerably broader than petiole, sides and anterior border rounded, posterior border almost straight, armed beneath with a blunt short tooth; gaster elongate, truncate at base, rounded and narrowed to apex, pygidium pointed; genitalia elongate, stipes long, narrow, angled on external border, sinuate interiorly, sagittæ long, compressed. Wings as in Q, but shorter.

Long. 3.6 mm.

New Guinea.

Described from a winged female and a male, taken by J. L. Froggatt in New Guinea.

Type and allotype in B.M. Coll.

The female comes nearest to L. carinata Stitz, but is somewhat smaller, and the construction of the petiole and postpetiole is different.

The male of this genus was unknown hitherto.

The following species of *Liomyrmex* have now been described:—

- 1. L. cœcus Smith (sub. Myrmica), ♥, Journ. Proc. Linn. Soc. Lond., Zool. iv. Suppl. p. 108 (1860). New Guinea: Dory.
- 2. L. carinata Stitz, Q, Ber. Naturf. Freunde, Berlin, p. 366, figs. 13, 14 (1911). Dutch New Guinea.
- 3. L. aurianus Emery, \(\xi\), Ann. Mus. Stor. Nat. Genova, xxvii. p. 504 (1889). Berman: Malacca. \(\xi\) and ergatogyne, Forel, Zool. Jahrb. Syst. xxxvi. p. 26 (1913). Malacca.
 - L. buttelli Forel, \mathcal{Q} (sub Promyrma), Rev. Suisse, Zool. xx. p. 764 (1912)=L. aurianus Emery.

- 4. L. gestroi Emery (sub Laparomyrmex), ♀, Ann. Mus. Stor. Nat. Genova, xxv. p. 461 (1887). New Guinea.
- L. tagalanus Menozzi, ♀, Phil. Journ. Sci. xxviii.
 p. 445 (1925). Philippines.
- 6. L. froggatti Donisthorpe, ♂& ♀. New Guinea.

Stitz's L. carinata was evidently a female by the size, 10·1 mm., and description; but he gave the sign "Q" at the head of his description and "\u03c4" for the locality. Emery gives it as a worker, as he does for Forel's female of Promyrma buttelli and also for his own female of Laparomyrmex gestroi! [Gen. Ins. 174 B, p. 191 (1922)].

Tribe LEPTOTHORACINI Emery.

Leptothorax wollastoni, sp. n.

\$\times\$. Lighter or darker brown, head and gaster darker, tarsi tibiæ, base, and apex of femora, articulations of legs, scapes, and apex of funiculi lighter, shining, pubescence yellow, decumbent, very short, sparse and scattered, blunt hairs or bristles, pale yellow, very sparse, very

irregularly situated, probably rubbed.

Head subrectangular, longer than broad, slightly narrower posteriorly, posterior angles rounded, mostly smooth and very shining, but with some very small, faint, and shallow punctures: mandibles finely striate and punctate; clypeus very finely and sparingly longitudinally striate; frontal carinæ, cheeks, and borders of antennal foveæ verv finely striate; eyes situated about the middle of sides of head; antennæ long, scapes scarcely reaching posterior angles of head, club not as long as rest of funiculus. Thorax slender, a little longer than head, finely punctured, not as shining as head, sternite of meso- and metathorax somewhat coriaceously punctured; mesoepinotal suture very slight and indistinct; epinotum armed with very small short teeth, not as long as the space between them; petiole finely punctured, peduncle not long, node rounded and bluntly pointed; postpetiole finely but slightly more distinctly punctured than petiole, quadrate, convex above, sides straight, rounded anteriorly and posteriorly, considerably broader than node of petiole; gaster short, truncate anteriorly, sides and apex rounded. Femora spindle-shaped.

Long. 2.6 mm.

Described from two workers taken by Wollaston in Madeira (B.M. 1858–21).

Type in B.M. Coll.

One specimen is labelled, in Kirby's handwriting, "subterranea \(\neq \) minor ??"; he evidently thought it was an \(Aphænogaster \), the colour being similar to that of dark specimens of \(Aphænogaster \) (Attomyrma \) subterranea Latr. This species comes in the Palæarctic group rottenbergi Emery; and in Santschi's table for this group—"5. Epinotum inerme, tout au plus une très petite dent bien plus courte que l'intervalle de leur base." Its sculpture, practically nil, is totally différent to any other species in the group.

This is the first record of a *Leptothorax* for Madeira (although there are several specimens of *S. unifasciata* in the general collection at the B.M., taken at Madeira by Wollaston); but Wheeler lists seven species and four vars. for the Canary Islands. For Madeira Wheeler gives fifteen forms of ants, only three of which are

endemic.

Santschi, F., Rev. Suisse, Zool. xvii. p. 460 (1909). Wheeler, W. M., Proc. Amer. Acad. Arts. Sci. lxii. pp. 91-8, 109-11 (1927).

Tribe DACETINI Forel.

Orectognathus versicolor, sp. n.

ĕ. Head, antennæ, and gaster reddish yellow, front and vertex of head and middle of gaster brownish, thorax, petiole, and postpetiole brown, apex of spines on thorax reddish yellow, madibles and legs yellow, teeth and inner margins of mandibles reddish, eyes black. Whole

body more or less shining.

Head triangular, posterior border deeply excised, forming two long bluntly pointed lobes on each side; clypeus slightly concave, anterior margin straight, finely and closely punctured; frontal area distinct, impressed, smooth and shining; frontal carinæ divergent, raised, with a sharply pointed tooth on each side in middle; frontal furrow short, narrow, ending in a long shallow oblong pit or fovea; vertex of head raised, upper surface of lobes slightly concave; vertex of head and lobes furnished with more or less longitudinal raised ridges,

enclosing shallow circular pits; mandibles parallel, sinuate on inner margin before teeth and at base, armed with three strongly curved teeth at apex, the one above being the longest, the inner one the shortest; antennæ: scape long but not reaching posterior border of lobes, funiculus with short first joint broader than second, second joint longest, long and narrow, third not as long as half the second, increasing in width to apex, last joint long, thickened in middle, pointed at apex. Thorax very finely rugosely punctured, armed with six spines, two at sides of pronotum, projecting outwards and slightly curved forwards, a shorter blunter pair on mesonotum projecting upwards, and a long narrow divergent pair on epinotum slightly projecting upwards, dorsal surface of pronotum flat; meso-epinotal suture deeply impressed; dorsal surface of epinotum convex, twice as long as declivity, which is abrupt; petiole with long peduncle, finely rugosely punctured, with shining small circular spots, node and postpetiole less finely punctured, the latter rounded, broader than node of petiole; gaster short-oval, smooth and shining; sting moderate.

Long. 4.3 mm. with mandibles; mandibles .7 mm.

Described from a worker taken by R. E. Turner in S.E. Queensland, Tambourine Mts., 18–25. v. 1935.

Type in B.M. Coll.

This distinct species does not agree with the descriptions of any of the known species.

Subfamily $F_{ORMICIN\mathscr{L}}$ Lepeletier.

Tribe CAMPONOTINI Forel.

- ~~ Camponotus (Colobopsis) newzealandicus, sp. n.
- Q. Brown, shining, anterior portion of head reddish yellow, scapes of antennæ and legs dirty yellow, margins of scutellum, insertions of wings, and posterior borders of segments of gaster very narrowly, apex of second segment broadly, yellow.

Head cylindrical, slightly longer than broad, apex circular, abruptly truncate, almost completely margined, including the mandibles in the circle and cutting off part of the clypeus, which is continued on dorsal surface of head, the margins crenulate especially at sides and

upper border. The truncate part of head, including mandibles, the cheeks, the rest of clypeus and front of dorsal surface of head strongly and coarsely punctured. posterior portion of head very finely coriaceously punctured and with small, shallow, rather close punctures; frontal area indistinct; frontal furrow narrow and shallow, reaching small fovea in front of median ocellus; eyes large, situated at back of head; antennæ inserted at centre of frontal carinæ, scape reaching beyond posterior angles of head by about quarter of its length, all the joints of funiculus longer than broad, gradually thickened to apex. Thorax with similar puncturation to posterior portion of head; pronotum transverse, narrow, promesonotal suture round, deep; mesonotum convex, longer than broad, very narrowly margined anteriorly; scutellum transverse, convex; epinotum convex, narrowed to base, no angle between dorsal surface and declivity; scale of petiole thick, transverse, not high, rounded above; gaster longer than broad, slightly longer than thorax, base and sides evenly rounded, pygidium bluntly pointed. Wings wanting. Legs moderate, femora compressed.

Long. 5.8 mm.

New Zealand (ex Coll. Cameron).

Type in B.M. Coll.

This is the first species of *Colobopsis* to be described from New Zealand.