

LIOMYRMEX RENEAE SP.N. (HYM., FORMICIDAE) WITH A LIST OF THE SPECIES OF AND SOME NOTES ON THE GENUS *LIOMYRMEX* MAYR.

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Liomyrmex reneae sp.n.

♂. Reddish testaceous, mandibles darker red; smooth and shining with some very small shallow scattered punctures on head and thorax; pubescence very fine and sparse, and a few fine longer and shorter outstanding yellow hairs are present, chiefly towards apex of gaster.

Head subquadrate, slightly narrower in front than behind, posterior angles bluntly rounded, posterior border almost straight; mandibles powerful but narrow, triangular, masticatory border armed with four teeth, the apical one being long and sharp, the one preceding it shorter but sharp, the two last blunt and short; maxillary palpi two-jointed, labial palpi two-jointed; clypeus convex, anterior border almost straight, posterior border bluntly pointed, extending between the frontal carinae; frontal carinae short, with sharp edges; frontal area very indistinct; antennal foveae round and rather deep; eyes wanting; antennae eleven-jointed, scape extending slightly beyond middle of head, first joint of funiculus broader and longer than the six following joints, which are narrow and transverse, club three-jointed, considerably broader than the preceding joints, last joint slightly longer than the two preceding taken together. Thorax longer than broad, slightly convex and constricted in middle, broadest at humeral angles, which are rounded; pro-mesonotal suture wanting; meso-epinotal suture well-defined; epinotum on the same level as pro-mesonotum, sides rounded, angle between dorsal surface and declivity very gradual. Petiole with a fairly long peduncle, node flat above, transverse, anterior border almost straight, posterior border slightly rounded, armed with a rather large pointed tooth beneath, pointing downwards and forwards; post-petiole flat above, transverse, slightly broader than node of petiole, anterior border excised, posterior border rounded, armed beneath with a shorter and blunter tooth than the petiole; gaster oval, considerably rounded to apex, epipygium pointed; sting well developed; hypopygium pointed. Legs

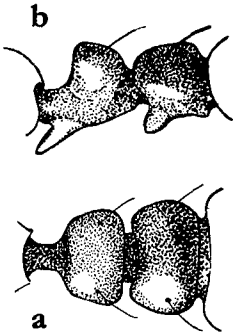


FIG. 1.—*Liomyrmex reneae* sp.n.; petiole and post-petiole; a, seen from above; b, in profile.

rather short; femora incrassate, but compressed at sides. Long. 2.7 mm.—4 mm.

Described from thirteen workers, Maffin Bay, New Guinea, June 10th and 20th, 1944. E. S. Ross Coll.

This new species comes near to *L. coecus* F. Smith, but the latter differs in having the club of the antennae less broad, and in not having a tooth beneath the petiole; its colour is lighter, being pale yellow, etc.

Mayr described the genus *Liomyrmex* in 1865 (*Reise Novara*, Zool., 2 (1A) Formicidae: 23) for the reception of F. Smith's *Myrmica caeca*, which was taken by Alfred Russell Wallace at Dory, New Guinea.

When F. Smith described *M. caeca* he pointed out that it was probably not a true *Myrmica*, but that having endeavoured to extract the palpi without success he left the insect in the genus *Myrmica* for the time being. Neither Mayr nor Emery gives the number of joints to the palpi.

The habits of the species of *Liomyrmex* are not really known. Emery (1922, *Gen. Ins.*, fasc. 174b: 191) gives 'Dans les termitières'; but there is no mention of this in the literature. The workers are blind and no doubt subterranean, but I imagine Emery gives 'termite' nests' because Forel described *Machomyrma* as a subgenus of *Liomyrmex* with species *L. (M.) dispar* ♂, ♀ (1895, *Ann. Soc. Ent. Belg.*, 39: 425) taken by Gilbert Turner in Queensland. He says that Turner found the species making a vigorous subterranean war on termites, and that probably *dispar* is a termite-eater. *Machomyrma* is now, however, considered to be a good genus.

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

1. *L. coecus* F. Smith (sub *Myrmica*), ♀, 1860, *J. Proc. Linn. Soc. Lond.*, 4 (suppl): 108.* New Guinea: Dory.

2. *L. gestroi* Emery (sub *Laparomyrmex*), ♀, 1887, *Ann. Mus. stor. nat. Genova*, **25**:461. New Guinea.
3. *L. aurianus* Emery, ♀, 1889, *Ann. Mus. Stor. nat. Genova*, **27**:504. Burma: Malacca. ♀ and ergatogyne Forel, 1913, *Zool. Jahrb., Syst.*, **36**:26. Malacca.
4. *L. carinata* Stütz, ♀, 1911, *S.B. Ges. naturf. Fr. Berl.*, **1911** (8): 366, figs. 13 and 14. Dutch New Guinea.
5. *L. tagalanus* Menozzi, ♀, 1925, *Philipp. J. Sci.*, **28**:445. Philippines.
6. *L. froggatti* Donisthorpe, ♂ and ♀, 1940, *Ann. Mag. nat. Hist.* (11) **5**:40-45, figs. 1-3. *L. froggatti* Donisthorpe, subsp. *major* Donisthorpe, ♀, 1941, *Ann. Mag. nat. Hist.* (11) **8**:204.
7. *L. reneae* Donisthorpe, ♂, *huj. ref.* Dutch New Guinea. *L. buttelli* Forel (sub *Promyrma*), ♀, 1912, *Rev. Suisse Zool.*, **20**:764 = *L. aurianus* Emery.

* Bound as an integral part of Volume 5 in the copies belonging to the Hope Department of Entomology, Oxford University Museum, and the Bodleian Library, Oxford. The former has a MS. pencil note on p. 57 in the handwriting of J. O. Westwood reading: 'Publ. as a suppl. pt. to Vol. 5 but misstated on wrapper to be suppl. to V. 4. Zool.—B.M.H.

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