

MYRMECOLOGICAL NOTES

BY WILLIAM MORTON WHEELER

Biological Laboratories, Harvard University

1. NEW SUBGENERA OF DOLICHODERINÆ.

The genus *Dolichoderus* Lund (1831) now comprises more than 150 described species, subspecies and varieties. While revising these forms I have found it advisable to add to the number of subgenera recognized by Emery in his already somewhat antiquated fascicle on the Dolichoderinæ in the "Genera Insectorum" (1912). He accepted only three genera, *Dolichoderus sens. str.*, *Monacis* Roger (1862) and *Hypoclinea* Mayr (1855). The first and second restricted to tropical America, contain comparatively few species and are clearly defined. All the remainder were assigned to *Hypoclinea*, which is very heterogeneous and much more widely distributed, since it is represented in all the great zoögeographical regions, except Africa and Oceania. More recently (1926) Karawajew has established another subgenus, *Diabolus*, on what he erroneously supposed to be an undescribed species from Java. I adopt this subgenus, however, and propose three others for as many groups of East Indian, Papuan and Australian species formerly assigned to *Hypoclinea*. These subgenera, which are here listed are characterized like *Dolichoderus sens. str.* and *Monacis*, by peculiarities of the thoracic armature:

Monoceratoclinea subgen. nov. Stogenotype: *Dolichoderus (Hypoclinea) monoceros* Emery (1897). Other species: *D. (H.) tricornis* Emery.

Habitat: New Guinea.

Diabolus Karawajew (1925). Subgenotype: *Polyrchachis cuspidatus* F. Smith (1857) (This subgenus was based on *D. (Diabolus) bifurcatus* Karawajew, which is synonymous with *D. (H.) cuspidatus surbecki* Santschi (1925). Other species: *furcifer* Emery and *coniger* Mayr.

Habitat: Indonesia.

Diceratoclinea subgen. nov. Subgenotype: *Dolichoderus scabridus* Roger (1826). Other species: *beccarii* Emery, *angusticornis* Clark, *indrapurensis* Forel, *ypsilon* Forel.

Habitat: Australia and Indonesia.

D. cornutus Mayr of the Baltic Amber also belongs to this subgenus.

Acanthoclinea subgen. nov. Subgenotype: *Dolichoderus doriæ* Emery (1887). Other species: *edentata* Forel, *extensispinosa* Forel and *clarki* nom. nov. for *D. tristis* Clark (1930) nec. *D. (Monacis) tristis* Mann (1916).

Habitat: Australia.

Unfortunately, these subgenera only slightly reduce the number of species in Hypoclinea. We may follow Emery in distinguishing four geographical groups in this subgenus, a holarctic (to which the name Hypoclinea properly belongs, since the Eurasian *quadripunctatus* L. is the subgenotype) a Neotropical, an Indomalayan and an Australian, but I have not been able to discover in the workers any characters that would justify further subgeneric division. This may be possible when the sexual phases are better known. That the females may possess characters of taxonomic value is suggested by *Acanthoclinea*. Though colonies of this subgenus are not uncommon in Eastern Australia, no one has ever seen a winged female of any of the species. Very recently, however, Clark (Mem. Nat. Mus. Melbourne No. 8, 1934, p. 40, pl. 3, fig. 6) has described and figured a peculiar ergatoid female from a colony of *doriæ*. It is not improbable, therefore, that this is the typical and only form of female in the subgenus as it is in *Leptomymex* and several other Australian ant-genera.

2. THE TRIBE OF MELOPHORINI FOREL.

According to Emery, (Gener. Insect. 1927), this the most primitive tribe of Formicine ants comprises only two genera, *Melophorus* Lubbock and *Notoncus* Emery, but it needs revision both by subdivision of the old genus *Melophorus* and by addition of two other genera. One of these is *Myrmecorhynchus* for which I made a special tribe in 1917. In this I was followed by Emery, but I am now convinced that *Myrmecorhynchus* is a *Melophorine*. Clark has recently

added another genus, *Pseudonotoncus*, which is related to *Notoncus*. I find that specimens of the type, *Ps. hirsutus* Clark, which long awaited description in my collection, have a typical Melophorine gizzard. *Diodontolepis*, a genus, which I based on *Melophorus spinisquamis* Ern. André in 1922, was again merged with Melophorous by Emery in 1927, but this was a blunder, as any myrmecologist who has seen specimens of the insect will admit. According to Clark, its habits too, differ from those of *Melophorus*.

The old genus *Melophorus* was divided by Emery into three subgenera: *Melophorus sens. str.*, *Prolasius* Forel and *Lasiophanes* Emery. In this he followed Forel (1911) who had declined to split the genus though he was impressed by the heterogeneity of the species, some of which he characterized as *Cataglyphis*-like, others as *Pheidole*-like and still others as *Formica*- and *Lasius*-like. I believe that *Prolasius* and *Lasiophanes* which have monomorphic lasiiform or formiciform workers should be regarded as distinct though very closely related genera of Antarctic origin. Up till 1934 only one species had been assigned to *Prolasius*, namely *P. advena* of New Zealand, but I found in 1931 that several of the Australian species placed by Forel and Emery in *Melophorus* clearly belong to *Prolasius*, and Clark has very recently described several others. The true *Melophori*, thus restricted to species with polymorphic workers, may be divided into three subgenera mainly on thoracic structure, namely *Melophorus sens. str.* comprising the *Cataglyphis*-like forms, *Erimelophorus* subgen. nov. the *Pheidole*-like forms with huge-headed maxima workers, and *Trichomelophorus* subgen. nov. for *M. hirsutus* Forel and its varieties. This subgenus is characterized also by peculiar sculpture and very long dense pilosity. The following therefore represents my conception of the generic and subgeneric composition of the tribe Melophorini:

Genus *Lasiophanes* Emery (1895).

Genotype: *Formica nigriventris* Spinola (1851). Other species: *bruchii* Forel, *bolivari* Santschi, *hoffmanni* Forel, *perplexus* Santschi, *picinus* Roger, *sauteri* Forel, *uxorius* Emery, *valdiviensis* Forel, *edwardsi* Donisthorpe, *negrensis* Donisthorpe, *rufoniger* Donisthorpe.

Habitat: Patagonia, Argentina, Chile.

Genus *Prolasius* Forel (1892).

Genotype: *Formica advena* F. Smith (1862) of New Zealand. Australian species: *depressiceps* Emery, *formicoides* Forel, *mjöbergiellus* Santschi, *nitidissimus* Ern. André, *scipio* Forel, *abruptus* Clark, *pallidus* Clark, *hemiflavus* Clark, *niger* Clark, *flavicornis* Clark, *hickmani* Clark, *rotundiceps* Clark.

Genus *Melophorus* Lubbock (1883).

Habitat: Australia.

Melophorus (subgen. emend.). Subgenotype: *M. bagoti* Lubbock (1883). Other species: *aeneovirens* Lowne, *curtus* Forel, *constans* Santschi, *iridescens* Emery, *insularis* Wheeler.

Erimelophorus subgen. nov. Subgenotype: *M. wheeleri* Forel (1910). Other species: *biroi* Forel, *fieldi* Forel, *marius* Forel, *mjöbergi* Forel, *omniparens* Forel, *pillipes* Santschi, *laticeps* Wheeler, *turneri* Forel.

Trichomelophorus subgen. nov. Subgenotype: *M. hirsutus* Forel (1902).

Genus *Diodontolepis* Wheeler (1922).

Genotype: *Melophorus spinisquamis* Ern. André (1896).

Habitat: Eastern Australia.

Genus *Pseudonotoncus* Clark (1934).

Genotype: *Ps. hirsutus* Clark (1934).

Habitat: Southeastern Australia.

Genus *Notoncus* Emery (1895).

Genotype: *Notoncus ectatommoides* Forel (1892). Other species: *capitatus* Forel, *enormis* Szabó, *foreli* Ern. André, *gilberti* Forel, *mjöbergi* Forel, *politus* Viehmeyer.

Habitat: Australia.

Genus *Myrmecorhynchus* Ern. André (1896).

Genotype: *M. emeryi* Ern. André (1896). Other species: *carteri* Clark, *musgravei* Clark, *nitidus* Clark, *rufithorax* Clark.

Habitat: Eastern Australia.

3. SOME PREOCCUPIED NAMES.

In addition to Karawajew's and Clark's homonyms cited above, I would call attention to the following, which I have discovered in my own writings on other genera:

- Acropyga (Rhizomyrna) indosinenis* nom. nov. for
A. (R.) silvestri Wheeler (1927) nec. *A.*
(Malacomyrma) silvestri Emery (1915).
- Nylanderia consuta* nom. nov. for *N. dicroa* Wheeler (1934).
nec. *N. dichroa* Karawajew (1933).
- Camponotus (Myrmocladoecus) sanctae-fidei weberi* nom.
nov. for *C. (M.) sanctae-fidei darlingtoni* (Nov. 1934).
nec. *C. (Myrmophyma) darlingtoni* Wheeler (Oct.
1934).
- Ponera leæ norfolkensis* nom. nov. for *P. leae oculata*
Wheeler (1927) nec *Ponera oculata* F. Smith (1858).