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## THREE FORMICID NAMES WHICH HAVE BEEN OVERLOOKED

Mr. S. A. Rohwer has kindly called my attention to two generic names which have been overlooked by all recent myrmecologists. including Dalla Torre, the author of the "Catalogus Hymenopterorum." One of these names is Typhlomyrmex, which was given by Gistel in 1856 to Myrmica typhlops Lund. On referring to Lund's paper<sup>2</sup> I find that M. typhlops is mentioned without a description, and since the insect is certainly not a Myrmica in the modern sense and can not be identified from the few notes on its habits (moving in files and carrying isopods), the name must be regarded as a nomen nudum and hence without any standing in nomen-And since Gistel cites no characters for his genus Typhlomyrmex but merely bases it on an invalid name, it, too, is without standing. Mayr, without knowing of Gistel's work, described in 1862 a genus Typhlomyrmex for a neotropical ant, T. rogenhoferi A few other species have since been added. It is clear that Typhlomyrmex Mayr is valid and not to be replaced by some other name on account of Gistel's Typhlomyrmex. which has not even the status of a synonym. More serious is the second case which involves Polyrhachis, an important genus comprising some 300 known species of paleotropical ants. The name Polyrhachis was first suggested by Shuckard in a volume which he

<sup>166</sup> Mysterien der europäischen Insectenwelt."

<sup>2&#</sup>x27;'Lettre sur les Habitudes de Quelques Fourmis du Brésil, addressée a M. Audouin,'' Ann. Sci. Nat., XXIII., 1831, p. 113-138.

published with Swainson in 1840.3 On page 172 of this work occurs the following sentence: "It is in the first division that we find the stingless genera, namely, Formica Linn. Formicina Shkd., Polyeraus Latr., Polyrhachis Shkd, and Dolichoderus Lund, besides several other vet uncharacterized genera which we shall shortly publish." As Shuckard did not live to give a description of Polyrhachis and cites no species as belonging to it, the name, is merely a nomen nudum. It was, however, either resuscitated or reinvented in 1858 by Frederick Smith. He described some twenty species of Polyrhachis, with Drury's Formica bihamata as the designated type. the same year 1858 Gerstäcker based a genus Hoplomyrmus on an African ant, H. schistaceus Gerst.. which is clearly congeneric with the forms included by Smith in Polyrhachis. As Emery has shown, there is some doubt as to which generic name was first published. Since Smith's paper was read before the Linnean Society in June, 1857, while Gerstäcker's was not read before the Berlin Academy till April, 1858, the genus Polyrhachis has been given precedence by subsequent writers. Emery has, however, adopted *Hoplomyrmus* as a subgeneric name for a number of species which he groups together as the cohort "Polyrhachides carinatæ."

Speculation on the validity of *Polyrhachis* and *Hoplomyrmus* loses all its significance in the light of Mr. Rohwer's discovery that Billberg in his "Enumeratio Insectorum" pubs' On the History and Natural Arrangement of Insects," London.

<sup>&</sup>quot;'Catalogue of the Hymenopterous Insects Collected at Sarawak, Borneo; Mount Ophir, Malacca; and at Singapore by A. R. Wallace," Journ. Proc. Linn. Soc. Zool., II., 1858, pp. 42-130, 2 pls.

<sup>&</sup>lt;sup>5</sup> Monatschr. Akad. Wiss. Berlin, 1858, p. 262.

<sup>&</sup>quot;'Saggio di un Catalogo Sistematico dei Generi Camponotus, Polyrhachis e Affini,'' Mem. R. Accad. Sci. Ist. Bologna, 1896, p. 776 nota.

lished in 1820, a work of which there seem to be only two copies in America, one in the Museum of Comparative Zoology, the other in the library of the Boston Society of Natural History, had many years previously established the genus under another name. In this work on p. 104 we find the following:

"G. MYRMA Eg.—Formica ol.
Carinata N. Chaled. Fbr.
militaris Afr. Aequin. — Hystrix Eg. 2"

The "Eg." in this citation stands for "Billberg." It is clear that this author cites the two valid Fabrician species Formica carinata and militaris as representatives of a new genus Myrma for what was formerly a portion of the genus Formica Linn. Both of these species have long been regarded as bonâ fide members of the genus Polyrhachis, which, as has just been shown, was not established till The hystrix cited by Billberg is a nomen nudum, if it be not the Formica hystrix of Latreille and Fabricius, which is in turn a synonym of Atta (Acromyrmex) octospinosa Reich. The "Eg." after the name would seem to preclude this latter supposition. Be this as it may, however, there can be no doubt concerning the two other species, one of which, F. militaris, may properly be regarded as the type of the genus Myrma. This case seems, therefore, to be quite clear and to require, in obedience to our code of zoological nomenclature, the substitution of Myrma for Polyrhachis. Although this is a deplorable change, owing to the large number of citations of ants under Smith's generic name, there is, nevertheless, a slight gain in brevity and I would suggest, however, that euphony. Polyrhachis Smith be retained as a subgeneric name for the type P. bihamata Drury and the small cohort of allied species (bellicosa F. Smith, ypsilon Emery, craddocki Bingham and lamellidens F. Smith) which Emery calls Polyrhachides hamatæ. The typical subgenus Myrma will replace Hoplomyrmus, since its type, M. militaris, is closely related to Gerstäcker's schistacea. The species of Myrma may then be grouped under several subgenera, names for two of which are here suggested for the first time, as follows:

Genus MYRMA Billberg (1820) = Polyrhachis F. Smith (1858).

- 1. Subgenus: Campomyrma subgen. nov.
  - = Cohors Polyrhachides camponotiformes Emery.
    Type: Polyrhachis clypeata Mayr.
- Subgenus: Myrma Billberg = Hoplomyrmus Gerst.
  - = Cohors Polyrhachides carinatæ Emery. Type: Formica militaris Fabr.
- 3. Subgenus: Polyrhachis F. Smith.
  - = Cohors Polyrhachides hamatæ Emery.

    Type: Formica bihamata Drury.
- 4. Subgenus: Hagiomyrma subgen. nov.
  - = Cohors Polyrhachides arciferæ Emery. Type: Formica ammon Fabr.
- 5. Subgenus: Hemioptica Roger.

  Type: Hemioptica scissa Roger.

A third generic name, Formicina Shkd., which has been overlooked, is mentioned in the foregoing citation from the work of Swainson and Shuckard. This citation and the context seem to show that Shuckard accepted Formica Linn. in a restricted sense as the equivalent of what we now know as Camponotus Mayr., probably with the type Formica herculeana Linn., but this is open to doubt since no species is cited. On the same page two wellknown ants are mentioned as species of Formicina, viz., F. rufa Linn. and F. flava Fabr. If only the former species had been mentioned, we might have been compelled to change our modern genus Formica to Formicina, but as Shuckard included also F. flava (which is at present Lasius flavus) in the same genus, we see that Formicina is merely

<sup>7</sup> According to Emery schistacea is merely a subspecies of militaris.

a synonym of Formica as used by Fabricius and his contemporaries, possibly minus the group now known as Camponotus. Under the circumstances I can see no reason to replace any of the modern subdivisions of the old Linnean genus Formica with Formicina Shuckard.

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