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No. 87.

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Synonymy of some Genera of Ants.

[Reprinted from *The Ent. Record*, Vol. XXVIII., Nos. 11 and 12.]

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By HORACE DONISTHORPE, F.Z.S., F.E.S.

1. *Neomyrma*, Forel, and *Oreomyrma*, Wheeler.

Forel [*Rev. Suisse Zool.*, **22**, 274 (1914)] described an ant from Lake Takoe under the name of *Aphaenogaster calderoni*, and made it the type of a new subgenus, *Neomyrma*; but as pointed out by Wheeler [*Psyche*, **22**, 50 (1915)] it was not an *Aphaenogaster* but a *Myrmica*, and in fact the same species described by Wheeler under the name *Myrmica bradleyi* [*Journ. N.Y. Ent. Soc.*, **17**, 77 (1909)]

In 1914 Wheeler erected the subgenus *Oreomyrma* [*Psyche*, **21**, 118-122 (1914)], with type *Myrmica rubida*, Latr., which subgenus includes *M. bradleyi*.

As Forel's *Neomyrma* was published in May 1914, and Wheeler's

Oreomyrma in August 1914, the latter sinks as isonymous with the former, and will remain sunk so long as they are considered to belong to the same subgenus—but *Oreomyrma* is capable of revival should *rubida*, Latr., eventually be found not congeneric with *bradleyi*, Wheeler. The synonymy, therefore, is as follows:—

MYRMICA, Ltr.

=* *Aphaenogaster* (*nec* Mayr), Forel (1914); =NEOMYRMA, Forel (1914)=OREOMYRMA, Wheeler (1914).

Type 1: **Formica rubra**, L. (Latreille, 1810).

MYRMICA, Latr. (1804).

Type 2: **Myrmica bradleyi**, Wheeler (= *calderoni*, Forel; Forel, 1914).

NEOMYRMA, Forel (1914).

Type 3: **Myrmica rubida**, Ltr. (Wheeler, 1914).

OREOMYRMA, Wheeler (1914).

2. *Sima* or *Tetraponera* ?

Emery [*Zool. Anz.*, **45**, 265-66 (1915)] in a short paper under the above title, gives his views on this question of synonymy. As we are unable to agree with him, it seems best first to give a translation of his paper, and then to point out why we disagree.

“In his treatise on the Type-Species of the genera and subgenera of the *Formicidae*¹ Professor Wheeler gives as type-species of the genus *Sima*, Rog. (1863), the species *allaborans*, Walk., cited by Bingham (1903), and as type-species of the genus *Tetraponera*, F. Sm. (1852), the species *nigra*, F. Sm., cited by Wheeler himself (1911). As the species *allaborans* and *nigra* at present stand together in the genus *Sima*, and the name *Tetraponera* is eleven years older than *Sima*, therefore, in consequence, the name of the genus *Sima* must sink to the older name *Tetraponera*. The case, however, is not so simple as the Wheeler type-species list makes out.

“Frederick Smith, in the year 1852, published the descriptions of two species, one from India and the other from South America, on which he founded the genus *Tetraponera*: neither was brought forward as type; the generic diagnosis fits both, as it fits generally many *Pseudomyrma* and *Sima* females.

“But three years later the same author withdrew his own genus, as he declared that the genus *Tetraponera* was founded on females of *Pseudomyrma*.² At that time it was not for the reason that the Asiatic and African species should be separated from the American species.

“This was partly seen by Roger (1863) when he made the genus *Sima* for some not American *Pseudomyrma* species (für einige nicht amerikanische *Pseudomyrma*-Arten), and drew up a good generic diagnosis.

"First in the year 1877, F. Smith¹ thought of [redacted] published generic name, so he wrote a quite new [redacted] *Sima* as a synonym of *Tetraponera*.

"In Smith's 1877 diagnosis stands the sentence: 'There in male and female, obliterated in the worker.' This character does not, however, fit *T. rufonigra*, Jerd., *natalensis*, F. Sm., and *aethiops*, F. Sm., which, nevertheless, are brought forward in the same work.

"Therefore I allowed myself⁴ to again use Smith's name *Tetraponera*, but in no way as the older generic name in the place of *Sima*, but rather to form a new subgenus, made up of Smith's later diagnosis. I held the use of the name *Tetraponera*, 1852, invalid, being withdrawn by the author, and I sank it as a synonym of the genus *Pseudomyrma* (*sensu lato*); the description of 1877 had made the name again applicable, but not with the date 1852, but rather the much younger 1877.

"I also divided the genus *Sima* into the subgenera *Sima* and *Tetraponera*. The subgenus *Sima* included the species with developed ocelli; *Tetraponera* those species without or with rudimentary ocelli. I did not, unfortunately, name types for the two subgenera. Still, for a few years in Continental Europe the signification of genotype had not become the mode, or at least the necessary custom! At any rate I believe that my proposition (1900) to divide the genus *Sima* into subgenera, still had priority over Bingham's (1903) type-naming.

"In my mentioned work two species were placed in the subgenus *Sima*: *rufonigra*, Jerd., and *pilosa*, F. Sm. As *pilosa* does not stand under *Sima* in the meaning of Rogers, only *rufonigra* remains, which must stand as the type of the genus and subgenus. The fixing of the type-species of the genus *Sima* is therefore implicitly shown by me in the year 1900."

We are unable to agree with Emery, who does not seem to realise the actual facts of the case. The question is entirely a matter of nomenclature. It is immaterial what part of the world the species came from, whether Smith was in error over the presence or absence of the ocelli, or as to what he thought he had founded *Tetraponera* upon at a later date. We can only follow the laws of nomenclature, and it is quite clear that *Sima*, Roger (1863), must sink as an isonym of *Tetraponera*, F. Smith (1852) (the types being congeneric), and no one can use them in any other sense.

F. Smith [*Ann. Mag. Nat. Hist.*, (2) 9, 44 (1852)] founded his genus *Tetraponera* on the two species *atrata* and *testacea*, and Wheeler (1911) gives as the type of *Tetraponera*—*T. atrata*, F. Sm. (= *Eciton nigrum*, Jerd., = *Sima nigra*, Emery).

Smith's second species, *testacea*, is not congeneric with *atrata*, but belongs to the genus *Pseudomyrma*; he was, therefore, in error when he stated in 1855 that his genus *Tetraponera* was founded on *Pseudomyrma* ♀ ♀, and he doubtless misled Emery, who incorrectly sunk *Tetraponera* as a synonym of *Pseudomyrma* in 1900. Emery states that *Sima* was founded for more than one species, whereas Roger [*Berlin Ent. Zeitschr.*, 7, 178 (1863)] founded his genus on a single

¹ *Ann. N. York Acad. Sc.*, 21, 157-175 (1911).

² *Trans. Ent. Soc. Lond.* (2), 3, 168 (1855).

³ *Trans. Ent. Soc. Lond.*, 68 (1877).

⁴ *Ann. Mus. Nat. Genova*, 40, 673, (1900).

Sima compressa, Roger, 1863 = *Pseudomyrma?*
allaborans, Walker (1859)], which is therefore the type and cannot be
 changed. The synonymy is therefore as follows:—

TETRAPONERA, F. Smith.

TETRAPONERA, F. Smith (1852); = SIMA, Roger (1863) = *PSEUDO-
 MYRMA (*nec* Lund), Emery (p.) (1900).

Type 1: **Eciton nigrum**, Jerd. (= *atrata*, F. Smith; Wheeler,
 1911).

TETRAPONERA, F. Smith (1852); F. Smith (1877); Wheeler (1911).

Type 2: **Pseudomyrma? allaborans**, Walk. (= *compressa*,
 Roger; Roger, 1863).

SIMA, Roger (1863); Bingham (1903); Wheeler (1911) = *TETRA-
 PONERA (*nec* F. Smith), Emery (1900).

Type 3: **Eciton rufonigrum**, Jerd. (*Sima rufonigra*, Emery, 1900).
 *SIMA (*nec* Roger); Emery (1900).