

THE SUBFAMILIES OF FORMICIDAE

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ABSTRACT—Eleven subfamilies are recognized and characterized. Ten of these are living—Dorylinae, Leptanillinae, Cerapachyinae, Myrmeciinae, Ponerinae, Pseudomyrmecinae, Myrmicinae, Aneuretinae, Dolichoderinae and Formicinae; one is extinct—Sphecomyrminae. An illustrated key is given for the workers of the ten living subfamilies.

Time was when a myrmecologist needed to know only five subfamilies of Formicidae. In 1910 W. M. Wheeler in his "Ants" recognized Ponerinae, Dorylinae, Myrmicinae, Dolichoderinae and Camponotinae. Emery kept this same scheme in the "Genera Insectorum" (1910-1925). It seems that the taxonomists of that day were averse to small taxa. The invertebrate zoologists, for example, were averse to small phyla; they preferred to tack a small group on to a large phylum as an appendix, i.e., with apologies, so to speak. The vertebrate zoologists kept the Agnatha, Chondrichthyes and Osteichthyes together as Class Pisces until fission was long overdue.

A sort of myrmecological independence was declared in 1920 when W. M. Wheeler split off the Cerapachyinae from the Ponerinae and the Pseudomyrmecinae (later emended to Pseudomyrmecinae) from the Myrmicinae. He also changed the name Camponotinae to Formicinae.

In 1923 W. M. Wheeler first suggested that the Leptanillini be separated from the Dorylinae; by 1932 their separation as Leptanillinae had been effected.

In 1951 Clark separated the tribe Myrmeciini from the Ponerinae to become subfamily Myrmeciinae. At the same time he suggested in a footnote that the Aneuretini in the Dolichoderinae be raised to subfamily rank. It was not, however, until 1956 that Wilson, Eisner, Wheeler and Wheeler made the promotion effective.

Finally, in 1967 Wilson, Carpenter and Brown described the extinct species *Sphecomyrma freyi* and based upon it the extinct subfamily Sphecomyrminae.

That makes 11 subfamilies.

CONSPECTUSES

In 1910 W. M. Wheeler had a conspectus of subfamilies and tribes (p. 134-144). In the "Genera Insectorum" Emery gave admirable characterizations of subfamilies, but they were scattered through 15 years and five fascicles. W. M. Wheeler (1922a) likewise gave excellent characterizations of seven subfamilies, but they were scattered