

THE ANT LARVAE OF THE SUBFAMILY  
LEPTANILLINAE (HYMENOPTERA, FORMICIDAE)

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The Leptanillinae are a small subfamily comprising 14 species in 3 genera: *Leptanilla* Emery, 11 species; *Leptomesites* Kutter, 1 species; *Phaulomyrma* G. C. & E. W. Wheeler, 2 species.

This subfamily has been recorded only from the warmer parts of the Old World: Corsica, Sardinia, North Africa, India, Malaya, Java, Queensland, Western Australia and Japan. Seemingly it is rare, but the paucity of the records may be due to minute size and hypogeic habits. As W. M. Wheeler optimistically remarked (1932, p. 54): "We should expect careful collecting with the Berlese funnel to bring additional forms to light in South Africa, Madagascar, Asia Minor and India, or even, perhaps, in the warmer parts of the New World." Brown (1954, p. 28) noted: "The habits of the species are such as to render their discovery highly fortuitous under present collecting methods." In the 30 years since Wheeler wrote, only two species have been discovered (one in India and one in Japan), which would rather support another statement by Wheeler in the same article (p. 57-58): "The Leptanillinae . . . must be very ancient, like many other components of the microgenton. . . . *L. swani* is particularly interesting in this connection, because the extreme south-western corner of Australia, in which it was taken, is known to possess the oldest and least disturbed fauna of any portion of the continent." Antiquity is compatible with a disjunct distribution and with rarity.

The genus *Leptanilla* was established by Emery in 1870 and then for half a century was kicked about over the taxonomic table. Originally Emery placed it in the "Dorylidae" near *Typhlopone*. Mayr, however, in a letter to Emery (date not given—see Emery 1904) dissented, maintaining that it belonged with the Myrmicinae. Emery was evidently convinced, for in 1875 he removed it to the "Mirmicidei" in the neighborhood of *Stenammas* and *Liomyrmex*. In 1877 he moved it to the vicinity of *Monomorium* and *Leptothorax* in the "Myrmicidei genuini" but marked it with a query to signify uncertain position. In 1881 Ern. André had it in the first tribe, "Myrmicidae verae," of the "Myrmicidae" but mentioned its affinities with the "Dorylides."

Forel in 1893 did not mention the genus but might have meant