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THE OCCURRENCE OF WINGED FEMALES IN THE ANT GENUS *LEPTOGENYS* ROGER, WITH DESCRIPTIONS OF NEW SPECIES¹

BY WILLIAM MORTON WHEELER

In a recent paper² Dr. J. W. Chapman and I have shown that among the ponerine ants of the genus *Diacamma* the winged female, so characteristic of the Formicidæ, is no longer represented but is replaced by a fertile worker externally indistinguishable from her sterile sisters. A similar condition is known to exist also in the larger and more important genus *Leptogenys*, but specimens I have recently received show that the development of the female in this group exhibits a much greater "morphological restlessness," to use Osten Sacken's expression, than we had supposed. I therefore undertake in this paper to review our knowledge of the subject and to describe and discuss the new data.

The genus *Leptogenys* comprises 120 described species and extends over the tropics of both hemispheres. One species, *L. elongata* Buckley, occurs in the Gulf States from Texas to Florida and north to Colorado and the District of Columbia. In the 'Genera Insectorum' Emery has divided the genus into four subgenera: *Leptogenys* Roger *sensu stricto*, which is tropicopolitan; *Machærogenys* Emery, peculiar to Madagascar; *Odontopelta* Emery, peculiar to Australia; and *Lobopelta* Mayr, which is tropicopolitan. The described species are distributed among the subgenera as follows: *Leptogenys sensu stricto*, 37; *Machærogenys*, 3; *Odontopelta*, 1; *Lobopelta*, 79 (exclusive of the species described in this paper). The structure of the mandibles shows that the species of *Lobopelta* constitute the more primitive, the three other subgenera the more specialized portion of the genus. The genetic relationships of the subgenera are therefore distorted by the rules of taxonomy, since, except for them, the *Lobopelta* group would naturally bear the name of the genus. Hence we should expect to find the more primitive types of female in *Lobopelta*, the more specialized in the other subgenera.

¹Contributions from the Entomological Laboratory of the Bussey Institution, Harvard University. No. 227.

²'The Mating of *Diacamma*,' 1922, *Psyche*, XXIX, pp. 203-211, 4 figs.

WILLIAM L. BROWN