

red adult coloration. There can, of course, be no true nuptial flight, since the females are wingless. Most conclusive evidence in regard of the nature of these females has been furnished by my former pupil, Miss Margaret Holliday,¹ who found them to possess not only well-developed ovaries but a typical receptaculum seminis. It is interesting to note that the slight morphological differences separating these females from the workers are still further diminished by Miss Holliday's discovery that the latter have as many ovarian tubules as the former and may occasionally possess a receptaculum.

That the numerous tropical species of *Leptogenys* agree with the Texan species in having very ergatoid females, is indicated, first by the fact that no winged *Leptogenys* females have been seen, though many species of the genus have been known for years, and secondly by Wroughton's observations on the Indian *Leptogenys diminuta* Smith, recorded by Forel:² "At my request Mr. Wroughton has excavated an enormous formicary of *L. diminuta* to a considerable depth, but has looked in vain for a female among the many thousands of workers. All he could find was a worker whose abdomen was conspicuously distended with the ovaries. This worker differed in absolutely no particular from the others, and there is nothing very extraordinary even about its abdomen. This result would seem to confirm Emery's opinion."³

In my paper on the Texan Ponerinæ I failed to furnish conclusive proof of the identity of the males of *L. elongata*, as up to that time I had not taken this sex in the formicaries. More recently I have repeatedly seen the males in the natural nests and have bred them from larvæ and cocoons in captivity. They are of a rich yellow color, retaining throughout life the tint exhibited by the workers and females only during their callow stages. Even when quite mature the males are seized by the workers, when-

¹"A Study of Some Ergatogynic Ants," *Zool. Jahrb. Abth. f. Syst.*, Bd. XIX., Heft 4, 1903, pp. 295-297.

²"Les Formicides de l'Empire des Indes et de Ceylan," Part VII., *Journ. Bombay Nat. Hist. Soc.*, Vol. XIII., p. 312.

³Emery advanced the opinion that in the genus *Leptogenys* the function of the females may have been usurped by the workers. This is not strictly true, at least in *L. elongata*, since the petiole of the female is clearly different from that of the worker, as it is in the winged females of many other species of Ponerinæ.