

one is very sure that they were taken along with the workers of their species. Very probably the specific determination of male ants in the future will be based almost, if not entirely, on a study of their genitalia. Even now there are certain species of ants, for example, *Paratrechina* (*Nylanderia*) sp. the workers and queens of which cannot be specifically determined except by the presence of males, and the determination of the males is based for the greater part on the genitalia.

This paper is being published with the idea that it will make known to some extent the approximate dates of the year in which the sexed forms of many Southern ants have been found. The dates of the appearance of the sexual phases of a given species will vary greatly, depending on the season, the latitude, the altitude, the topography of the soil, and other factors. However, in spite of all these, the records here given should offer some information in regard to the approximate periods in which the sexual phases are to be found.

As one will note in examining the records, the sexual phases have been taken under a number of variable circumstances, which might best be enumerated as follows: (a) periods in which both the pupae and adult stages of the sexual phases have been found in the colony or nest, (b) periods in which the male or the female, or both are found in the colony or nest, but not the sexed pupae, (c) nuptial flights, when either sex or both are leaving the nest, and (d) isolated individuals of one sex, or both, taken singly or in numbers away (remotely) from the nest, as at lights, crawling on the ground, etc. When the ants are found under condition (a) above then there is no doubt that the colony is producing its sexual phases at this time. When the ants are found under condition (b) cited above this seems to be indicative that virgin queens, and unmated males instead of taking their nuptial flight immediately are postponing it until late in the season or until the spring or summer of the following year. Colonies of certain species if examined during the winter will often be found to contain overwintering males or queens under the condition cited under (b). Nuptial flights are generally thought of as mating flights