

and last segments of funiculus distinctly longer than broad. Eye small, approximately 0.13 mm. in its greatest diameter, usually with 8 or 9 ommatidia in this diameter. Petiolar node in profile thick and with blunt, nontapering summit. Body hairs rather abundant, erect or suberect, slender and long, apparently longest on gaster. Hairs present on cheeks, gula, and petiolar node. Distinguished especially by the thick petiolar node with blunt summit and the long, suberect or erect body hairs. There seems to be considerable variation in *latipes*. Specimens I consider typical have heads distinctly longer than broad with subparallel sides and emarginate posterior border.

Biology and Economic Importance

A. latipes is one of the less common species of *Acanthomyops* treated in this paper. The ants usually nest in open woodlands, grassy fields, meadows, and pastures in rather dry to moist soils. Nests may be constructed in the exposed soil, under stones or other objects, or at the base of stumps. Weber believes that its habit of nesting under large rocks affords it, as well as other ants, protection during severe drouth periods such as occurred in South Dakota in the thirties. Quite often soil nests are in the form of earthen mounds a foot or more in diameter and several inches high, with grass growing from them; they contain a large number of entrance and exit holes. Workers are largely subterranean and nocturnal and feed almost exclusively on honeydew which they obtain from subterranean plant lice and mealybugs on the roots of wild and domesticated plants. No detailed biological studies of *latipes* have been made, but numerous and scattered observations appear to indicate that males and winged females are produced in early to mid summer, and that these adult forms, common in nests during July and August, take their nuptial flights in August and September, but it is believed that some of the males and winged females can overwinter in parental nests and make nuptial flights the following year. The species is unique in possessing two forms of females, an alpha and a beta. The beta form, which is the more common of the two, but also the more aberrant, is yellowish red, heavily pilose, with short, thick antennae and extraordinarily broadened and flattened femora and tibiae. The alpha form is darker and somewhat intermediate in structure between *claviger* and the beta form. One of the theories explaining the dimorphism of the females is that it may be a hybridism between *claviger* and *latipes*. To support this theory Wheeler mentions the occurrence of nests of the two species within 20 feet of each other producing nuptial flights at the same time (Sept. 17, 1902).

Limited data suggest that the female of *latipes* probably founds her colony by becoming a temporary parasite on some other species of ant, most probably a *Lasius*. To support this belief, Wheeler found mixed colonies of *latipes* and *L. alienus* (= *americanus*) in the field on five occasions. Tanquary, in a large series of experiments with *latipes* and eight species of *Lasius* and *Acanthomyops*, induced *latipes* to obtain adoption in one colony of *alienus* and one colony of *A. interjectus*. One of the requisites of a parasitic species is that it produce an abundance of females; this is true of *latipes*. Another is that the parasitic species seek one or more common, widespread hosts. The two forms of *Lasius* in the eastern United States most accessible and satisfactory as hosts