To simplify and shorten this paper, I have used the reference indications to the Bibliografia of Kempf's (1972) Catálogo abreviado das Formigas da Regiáo Neotropical, Studia Entomol., (N.S.) 15:267–298. References for forms outside the neotropical region are given in full with the discussion of the names.

This is the first of a projected series of papers on *Pheidole*, begun originally together with the late Frei Walter Kempf, who had already moved to clear up some of the confusion in neotropical *Pheidole* complexes.

## Pheidole punctatissima

Pheidole punctatissima Mayr. 1870a:400, soldier \u2204. Type loc.: Mexico. Pheidole punctatissima subsp. napaea Wheeler, 1934b:165, soldier \u2204. Type loc.: Mexico, Veracruz: Mirador. N. syn.

This is a very distinctive small species, commonly found in epiphytes, under bark, and in other arboreal nest sites in tropical Mexico and Central America. Most of the dorsal surface (vertex) of the head of the soldier is yellowish-white in life, contrasting with the dark brown color of the rest of the body. The whitish color often darkens somewhat in preserved specimens, but the contrast is still apparent. The erect hairs of the head and promesonotum are rather short (even the longest ones of promesonotum usually <0.12 mm long) and have truncate or blunt tips. The scrobal impressions (to receive the folded antennae) are fairly well developed, especially their inner margins. The sides of the postpetiole as seen from above are rounded, or at most bluntly angulate. The subspecies napaea, based on a very small series (MCZ), is just a minor variant within the P. punctatissima population of Veracruz. It is a little smaller than usual (soldier HW 0.85 mm vs. a usual head width of 0.87 to 0.95 mm or even more for punctatissima soldiers) but I am unable to appreciate the other differences described by Wheeler, even though I reviewed the material he had in his collection.

The other forms assigned to punctatissima as subspecies and varieties by Wheeler (annectens, insulana, jamaicensis, j. var. barbouri and J. var. praetermissa) do not belong to the same species as punctatissima, and will be dealt with later. These forms have a rather uniform ferruginous or brown body color without contrastingly lighter cranial disc, the erect hairs of head and promesonotum are longer and tapered to a fine point (longest promesonotal hairs 0.15–0.20 mm or more), and the sides of the postpetiole are produced as distinct conules. The heads of these forms also seem to be more evenly convex across the vertex because the antennal scrobes are a little less strongly marked than in P. punctatissima, but this is a very difficult character to judge, especially against different color backgrounds. They are attached temporarily as forms of P. annectens.