

proportions vary slightly from series to series. Color in this caste varies from ferruginous yellow to reddish-brown, and in the worker minor, the head is often more brownish than is the rest of the yellowish-ferruginous body. The soldier mandibles also vary in color from yellow to piceous. Part of the color differences appear to be due to varying quality of preservation of the tissues under the integument. One of the distinctive characters of the species is the enlarged and uptilted frontal lobes of the soldier, which stand out in side-view silhouette to different degrees as the viewing angle changes slightly. There is also some real variation in the prominence of the lobes, and it is easy to see why, with the very restricted samples then available, Emery (1890a:Pl. 5, figs. 12–14) saw fit to set up *cornutula* as a species apart from *subarmata*.

Forel had a sample with more elongate head than usual when he described var. *elongatula*, but in this respect, as well as in pilosity and color, a type soldier (MCZ) falls within the variation we now know to hold for this species. There is little excuse for Wheeler's slight color varieties *nassavensis* and *borinquenensis*, judging from types in MCZ, and types of Mann's *hondurensis* fit well in *subarmata* also; obviously, Mann failed to compare his types with *subarmata* or *cornutula* samples, because he thought he had in *hondurensis* a member of the *aberrans* group ("subgenus *Elasmopheidole*").

The types of *P. subarmata* var. *nefasta* and *P. cornutula* var. *dentimentum* were reviewed briefly by Brown in the Santschi Collection (Basel) in 1973. Var. *nefasta* is a slightly larger, somewhat more brownish variant, and var. *dentimentum* is like the ordinary *subarmata* in size and color. Types of *cornutula* var. *imbecillis* in the Santschi Collection appear to belong to the same species as the *dentimentum* types, and *P. cornutula* and var. *elongatula* in the same collection.

Pheidole tristis

Myrmica tristis F. Smith, 1858b:132, ♀. Type loc.: Tijuca (Rio de Janeiro), Brasil.

Atta fumipennis F. Smith, 1858b:169, ♀ ♀. Type loc.: Brasil, Rio de Janeiro. *N. syn.*

In his revisionary note of 1965, Kempf showed that *Pheidole tristis* is the senior synonym of *Atta rubra* and *Pheidole emeryi*, and he further stated his belief that, "It is possible that *fumipennis* [will] fall eventually as a synonym of *tristis*." He had based his opinion on a hasty examination of a type queen of *fumipennis* in the British Museum, reserving final judgement because he found that this type had the lateral postpetiolar conules somewhat shorter and more obtuse than in *tristis*.

The *fumipennis* queen is large and stout, with brownish wings and a