one or the other of the ovarioles, whereas none of the encrusted workers possessed eggs and their ovaries were furthermore considerably regressed. Two callows were found to lack eggs, while a single partially encrusted worker dissected had a small egg. In addition the poison gland reservoirs of the fully encrusted workers had volumes 2-3X those of the younger ants. We concluded that the greater ovarian development of the younger workers contributed to their role as nurses, in which they provided eggs for the queen and possibly for the larvae also, while the larger poison gland reservoirs of the older workers enhanced their abilities as the principal huntresses of the colony.

Queen size and behavior

An unusual feature of the colonies we collected is that the nest queens were approximately the same size as the average workers and were overall smaller than many of these individuals, exceeding them only in their more bulky thorax (*fig. 4*). In one of the two colonies measured, for example, the Head Width (maximum head width measured in full face) of the queen was 1.37 mm; that of 10 workers selected haphazardly ranged from 1.20 to 1.42 mm, with mean and standard error 1.37 $\pm$ 0.02 mm.

The queens were also singularly timid and inconspicuous, typically remaining hidden from view at the edge of the brood area or even well away from it. They escaped quickly when the nest was disturbed and showed no inclination to rescue brood. In each nest the queen was observed on single occasions to approach the brood pile and to eat an egg lying on the nest floor. Because workers were observed to lay eggs onto the floor on two occasions, we considered it likely that the egg eaten originated from a worker and hence was trophic in nature. A virgin queen was observed feeding directly on a termite worker lying in the brood chamber.

Trophallaxis

No instance of this behavior, so important in most other myrmicine ants, was observed during the study. During allogrooming workers were occasionally seen to be vigorously licking the mouthparts of nestmates, perhaps in response to the presence of the scent of prey. The movements could easily be mistaken for liquid food exchange, but did not include the true movements of the latter behavior, which include the persistent application of the glossae, opening of the donor's mandibles and closure of the recipient's mandibles, the play of the recipient's antennae around the glossae, and (often) the presence of a visible droplet of liquid.

Emigration

A total of 3 emigrations were induced in the two mature colonies of *Basiceros manni* by the simple expedient of placing them in the exposed