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BEHAVIOR OF THE GROUP-PREDATORY ANT *PROATTA BUTTELI* (HYMENOPTERA : FORMICIDAE) : AN OLD WORLD RELATIVE OF THE ATTINE ANTS

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SUMMARY

1. Morphological evidence indicates the Southeast Asian genus *Proatta* is phylogenetically close to the Attini. The gyne of *Proatta* is described for the first time.

2. Colonies of *Proatta butteli* are polygynous, with numerous queens present. There is no evidence for aggression between queens or differential treatment of queens by workers. Also, there is no sign of intraspecific aggression : the ants readily accepted workers transplanted from distant sites.

3. Workers search for food solitarily, foraging only a short distance (invariably less than a meter) from each nest entrance. Within the limited foraging area worker density tends to be high, and clumps of as many as 50 foragers are sometimes present. This foraging pattern allows for rapid exploitation of discovered food. Recruitment occurs along odor trails formed from a pheromone originating in the poison gland.

4. In addition to small prey and scavenged arthropod corpses, the ants capture prey larger than themselves. Such prey are taken by an inchoate form of group predation. The first worker to encounter the prey attempts to restrain it. Because of the high forager density, additional workers soon arrive seemingly by chance and aid in pinning the prey in place. Unlike attine ants, *Proatta butteli* does not feed on fungi.

5. The worker repertoire, temporal division of labor, and emigration behavior are discussed. Although workers vary little in head width (0.51 to 0.70 mm), they show a modest division of labor by size, with smaller individuals being relatively numerous in the brood area.

ZUSAMMENFASSUNG

Verhalten der gruppen-räuberischen Ameise Proatta butteli
(Hymenoptera : Formicidae) : Eine Altwelt-Verwandte der Neuwelt-Tribus Attini

1. Morphologische Belege legen den Schluss nahe, dass die südostasiatische Ameisengattung *Proatta phylogenetisch* der Tribus Attini nahe steht. Die Königin von *Proatta* wird erstmals beschrieben.

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