und andere Arten der Untergattung *Myrmoteras* sind, eine spezielle Anpassung für das Collembolenjagen sind. Rekrutierung zu Futter und Nestplätzen scheint nicht vorzukommen.

INTRODUCTION

Myrmoteras belongs to a loose assemblage of genera which have been considered the most primitive members of the subfamily Formicinae (WHEELER, 1910). These genera, which include *Gesomyrmex, Gigantiops, Myrmecorhynchus, Myrmoteras, Opisthopsis* and *Santschiella,* remain among the least studied ants, in spite of their obvious phylogenetic significance. The only genera for which there is any behavioral and ecological information are *Gesomyrmex* (WHEELER, 1930; COLE, 1949) and *Gigantiops* (WHEELER, 1922; WILSON, 1984).

Myrmoteras is among the most distinctive of the tropical Asian ant genera, and represents perhaps the most aberrant genus in the subfamily Formicinae worldwide. Workers and gynes are easily recognized by their enormous eyes and elongate mandibles armed with acicular teeth (MOFFETT, 1985). These remarkable ants are seldom collected, and virtually no observations have been made on living material.

Two subgenera of *Myrmoteras* are recognized (MOFFETT, 1985). *Myagroteras* workers and gynes lack the long, paired trigger hairs characteristic of the subgenus *Myrmoteras.* I here report observations on one species in each subgenus: *M. toro* Moffett in the subgenus *Myagroteras,* and *M. barbouri* Creighton in *Myrmoteras.* My observations confirm that *Myrmoteras* ants are trap-jaw predators, as CREIGHTON (1930) first proposed.

MATERIALS AND METHODS

I collected a colony of *M. toro* on 15 July 1983 in forest near the village of Toro, 82 km south of Palu in Central Sulawesi. The colony is the type series for the species (MOFFETT, 1985). The captive colony was housed in a 13.5 × 8.5 cm box with a clear plastic top. The bottom of the box was covered with compacted soil which was kept slightly moist; a wad of moistened cotton served as a water source. After a month in captivity the ants moved into a test tube with a stoppered water supply.

The *M. barbouri* colony was collected at Bukit Timah Nature Reserve in Singapore on 15 April 1985. The colony was provided a 18 × 13.5 cm clear plastic box with a moistened plaster of Paris bottom. At one end shallow nest chambers were carved in the plaster of Paris surface and covered with red glass. As in *M. toro,* there was little worker mortality, but there was a gradual attrition of brood. Only eggs and small larvae remained after three weeks.

Behavioral repertories for *M. barbouri* workers and gynes were compiled during 12 hours of observations during daylight hours over a three day period. At one minute