

LIFE HISTORY

Worker number

In none of the 10 field collected colonies of *Epimyrma adlerzi* any worker had been found. In a total of 24 laboratory culture colonies, of which some were maintained for two breeding seasons, a total offspring of 745 females were obtained. Only one of these, descended from a colony collected at Bassai, was a worker, all others were alate females. We therefore conclude that *E. adlerzi* is a workerless species.

Host species

All the 10 field collected colonies had workers of *Leptothorax exilis* as host species. This species was also frequent at the collecting sites, and our laboratory experiments on *E. adlerzi* colony foundation were carried out with this species.

Sexual behaviour

We never saw alates of *E. adlerzi* outside their nests, except for males who sometimes leave the nest just a few hours before they die. Mating occurs within the mother nest, among siblings, as in some other *Epimyrma* species which we have studied during the past years (*E. krausseii*, *corsica*, *bernard-*

di, *algeriana*). Mating attempts can often be seen when an artificial nest with alates is uncovered and exposed to light, but mating occurs also when the colonies are observed in damp red light. Dealate females taken out of the nests are usually inseminated. On 27 October 1985, we could observe the complete mating behavior in one of the colonies collected in 1984.

Three dealate and two alate females, and one male were present in the nest which was kept in an incubator. Between 9.00 and 11.00, after the

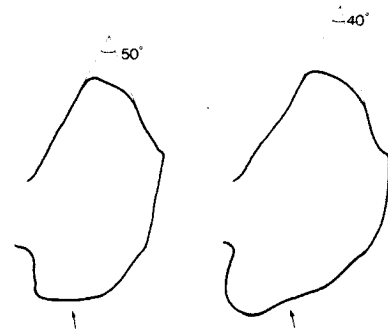


Fig. 3. Petiolus in profile of *Epimyrma adlerzi* sp. n. (left) and *E. ravouxi* (André) (right) females, showing the petiolus angle and the outline of the ventral projection (lamella).