

No. 15: Six individuals could be dissected; one intermorph and four ergatomorphs had empty receptacula, one worker had no spermatheca.

The remaining specimens from these 5 colonies could not be dissected because they were too much decomposed when found dead. The same happened with all individuals from colonies no. 7, 8 and 10. However, among the 5 colonies we had again 3 with one functional queen (no. 4, 5, 14), and there were inseminated but sterile specimens in these colonies, always together with a functional queen. Thus we believe that the social organization of *Leptothorax provancheri*, like that of *Formicoxenus nitidulus* (Buschinger and Winter, 1976), and *F. hirticornis* (Buschinger 1979), is a "functional monogyny", with always one fully fertile queen in a colony unit, and with often several inseminated but sterile "replacement queens". Such queens could possibly found own colonies by budding, together with a few workers from the mother colony. However, founding of colonies by single newly inseminated females alone may also occur (cf. no. 1). It is interesting that a few intermorphs and ergatomorphs, without being

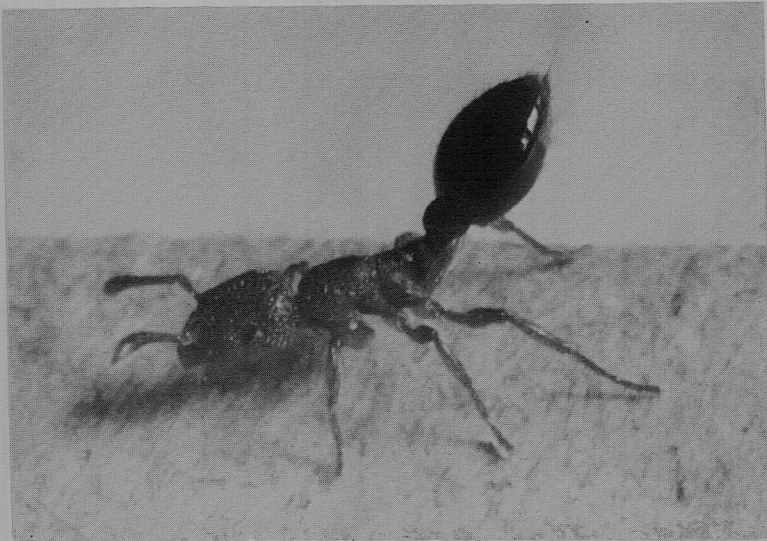


Fig. 1: Sexual calling behavior of a *Leptothorax provancheri* female (ocellate intermorph). The stinger is extruded.