

inseminated, may be fertile as is shown by the presence of corpora lutea in their ovarioles.

4) SEXUAL BEHAVIOR OF *LEPTOTHORAX PROVANCHERI*

The sexual behavior of *L. provancheri* is, as far as observed, identical with that of *Formicoxenus nitidulus* (Buschinger 1976), *Harpagoxenus sublaevis* (Buschinger 1972) and other species of the *Mychothorax* group and their social parasites. This means that sexually active females emerge from the nests, climb atop of the nest chamber or any other object in the formicary, raise the gaster and present, with the stinger extruded, a sexual pheromone. With *L. provancheri* we observed, in the morning between about 9 and 11 a.m., several intermorphs and ergatomorphs exhibiting this "Locksterzel" behavior (Fig. 1). After all males had died by 15 September in colonies no. 3 and 10, the females remained active until 29 September when the colonies were put into hibernation temperatures. The males are attracted by poison gland secretion of the females, as in the other species cited above. They mount the females (Fig. 2), and the copulation differs by no means from what was observed in *Formicoxenus*. The behavior of alate females could not be studied.

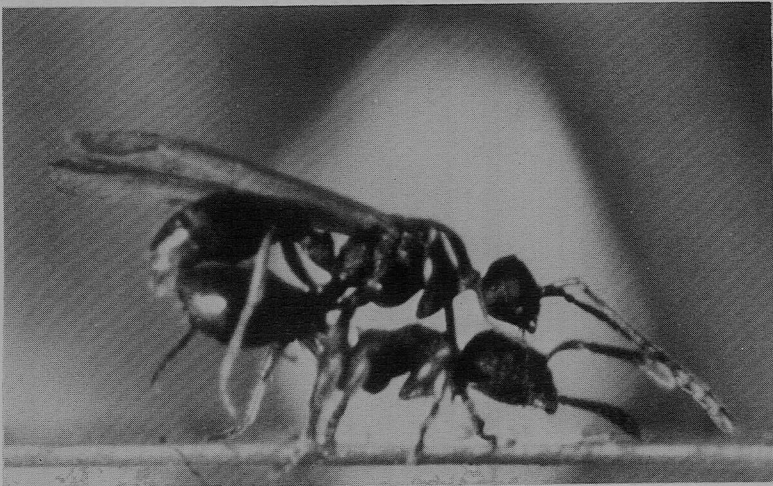


Fig. 2: *L. provancheri* male mounting a calling intermorph.