queens, and their biology as obligatory guests in *Formica* mounds. Because of these characters both North American species in my opinion belong to the genus *Formicoxenus*. SMITH (1956) hesitated to propose this taxonomic correction only because in his opinion it should better be accomplished together with a complete revision of the tribe *Leptothoracini*.

Since up till now nothing was known about the functions of the " ergatoid females " in both *Formicoxenus diversipilosus* and *F. hirticornis*, it seemed desirable to make a similar study as in *F. nitidulus* (BUSCHINGER and WINTER, 1976) on either of the two species.

During a travel through the Rocky Mountains in August, 1977, which was in part devoted to the study of ants, I had the opportunity to collect some colonies or samples of *F. hirticonis*. The dissection of the material showed that this species in all probability is functionally monogynous like *F. nitidulus*.

METHODS AND MATERIALS

The ants were collected the 12th of August, 1977, near the Midway Geyser Basin in Yellowstone Park, Wyoming. 12 samples of *F. hirticornis* containing more or less complete colonies could be obtained from four thatchwork mounds of *Formica obscuripes* (the host species seems to be *F. obscuripes ravida* Wheeler). The colonies were found in small crevices and tunnels in the tree stump which mostly constitutes the center of the *Formica* nests in this area. Parts of these stumps were removed, and after shaking off most of the *Formica*, the wood was carefully cut in pieces. All *Formicoxenus* who seemed to belong to the same system of brood chambers and tunnels were sucked up with an aspirator, sealed in a vial, and kept separate from other such samples. Since it was a very hot day, and both the host ants and the guests quite active, I was not able to decide with certainty whether I always collected only ants belonging to one guest society or mixed up the members of two or more colonies. The samples also never contain a complete colony.

The very evening the guest ants were counted, and all females and " ergatoid females " as well as some workers were dissected. The method is described by BUSCHINGER and WINTER (1976).

RESULTS

In the following account the first number indicates the *Formica*-colony, the second numbers mark the different samples of *Formicoxenus* from one host nest.

I/1 : One dealate *F. hirticornis* female, alone with 3 larvae in a small chamber.

Dissection : Female with 6 rather short ovarioles, one developing egg, small corpora lutea present, spermatheca filled with sperm.
Apparently and incipient colony.

2 : 3 dealate females, 4 intermorphs, 43 workers, 2 ergatoid males, larvae and worker pupae.