

Dissection : One female with 6 long ovarioles (about the length of the whole body), with ample corpora lutea and developing eggs, functional queen. — Second female : 6 short ovarioles without developing eggs, no corpora lutea, spermatheca filled with sperm, wing muscles replaced by fat body. This indicates that the female was not just newly inseminated, but may have lived in the colony for several months, if not since the last year. — Third female : 6 short ovarioles, with developing eggs, inseminated. Since one antenna was cut off, presumably by workers of the colony, this female might have been a colony founding queen which was by chance aspirated together with the neighbouring colony. — 4 workerlike intermorphs with 6 short ovarioles each, but inseminated.

3 : 2 intermorphs, 1 worker.

Dissection : First intermorph with 3 ocelli, thoracic sutures like the "queenlike ergatoid female" described by SMITH (1939), 6 ovarioles of intermediate length (half the length of the body), with developing eggs and corpora lutea, inseminated. — Second intermorph : same external characters, ovary nearly of the same length, with corpora lutea, but no developing eggs, inseminated. — Worker : 3 short ovarioles, no spermatheca.

This sample seems to be a mixture of parts of two small colonies with ergatoid queens. The queens of most of the colonies had only a few white eggs in their ovaries, which means that yolk material was still deposited in the growing oocytes. Some highly fertile queens had already stopped the incorporation of yolk, which signals the end of the summer egg laying period. The oocytes then look transparent like the nutritive cell groups. Thus the second intermorph may already have stopped egg laying in this season, which doesn't mean that she was less fertile than the first intermorph in this sample.

4 : 2 dealate females, 4 intermorphs, 19 workers, 3 males, numerous larvae and worker pupae.

Dissection : Female one with 6 long ovarioles, ample corpora lutea, inseminated, transparent oocytes, queen of this colony. — Second female with 6 short ovarioles, no corpora lutea, but inseminated. Wing muscles replaced by little fat body and inflated tracheae. — Two "workerlike", and one "queenlike ergatoid females" (in the sense of SMITH, 1939), with 3 ocelli, all with 6 short ovarioles, without corpora lutea, the spermathecae filled with sperm. — Fourth intermorph with 6 short ovarioles, but spermatheca empty.

A rather complete colony with a composition like many *F. nitidulus* colonies !

5 : 2 dealate females, 1 intermorph, 45 workers, numerous eggs, larvae and worker pupae.

Dissection : Both females had long ovarioles, ample corpora lutea, and were inseminated. The oocytes in both queens were already transparent. — The intermorph, a "workerlike ergatoid female", had 6 short ovarioles, the spermatheca was empty. — 3 workers had 2 short ovarioles each and no spermatheca.

In this case two queenright colonies may have been mixed together. I prefer this interpretation instead of supposing a polygyny. The latter would not explain the presence of old, inseminated, but sterile females in so many colonies.

6 : 1 dealate female, 1 intermorph, 5 workers, larvae.

Dissection : Female with 6 short ovarioles, no corpora lutea, but inseminated. Wing muscles replaced by fat body. — Intermorph : workerlike except the 3 ocelli, 6 long ovarioles with corpora lutea, inseminated, but oocytes already transparent, functional queen ! An apparently complete society. Like in *F. nitidulus* a colony may have an ergatoid queen and one or several inseminated, but sterile, dealate "potential queens".