

relationship among the guest ants than between these and other Leptothoracini. On the other hand, the observations clearly confirm that *L. provancheri* at least belongs to a group of Leptothoracini assembling around the subgenus *Mychothorax* (= *Leptothorax* Smith), a group among which also *Formicoxenus*, *Harpagoxenus* and *Doronomyrmex* have to be classed.

SUMMARY

L. provancheri was collected from a site in the municipality of St-Augustin, Comté de Portneuf, Québec. This guest ant was living together with *M. incompleta* Provancher (= *brevinodis* Emery). We found several nests within the nesting areas of large, polygynous *Myrmica* colonies. From dissecting representative samples we conclude that *L. provancheri* has a social organization similar to that of *Formicoxenus*, a "functional monogyny". This means that each colony unit contains one fully fertile queen, which may be a deälate, an intermorphic, or even ergatomorphic specimen; and several fertilized, but sterile females. We can confirm the observations of Holliday (1903) stating that nearly all female individuals, most ergatomorphs, intermorphs of various degrees, and alate females, possess a well developed spermatheca. Sexually active females exhibit a sexual calling behavior (Locksterzeln) like the one described for *Formicoxenus* and other social parasites related to the subgenus *Leptothorax* (= *Mychothorax* Ruzsky). The haploid chromosome number is 11. This is different from *Formicoxenus nitidulus* (n=15). Whether *L. provancheri* belongs to the genus *Formicoxenus* cannot yet be decided.

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