1.2 ABSTRACT

Interaction between *Liometopum microcephalum* (Formicidae) and other dominant ants of sympatric occurrence. The relation of the arboricolous ant *Liometopum microcephalum* (Formicidae: Dolichoderinae) with other behaviorally and ecologicaly dominant sympatric species with similar requirements on their environment was studied. The field study was conducted in several localities near the town of Břeclav (South Moravia, Czech Republic), where the species reaches the northern border of its distribution. The species occurs here with two other territorial species – *Lasius fuliginosus* and *Formica rufa*. Several methods were used to study their interactions: lines of pitfall traps were placed between the trees colonized by *Liometopum microcephalum* and *Lasius fuliginosus*; the character of the foraging area was studied by means of mapping trails connecting nest trees and foraging trees and using food baits; direct encounters were observed in the field and under laboratory conditions. All three species tend to use stable food resources and at least part of their territories was fixed during and among seasons. The species are able to coexist at places with abundant resources. The results from pitfall traps show that the ants do not move near the nesting tree of their competitor. Trunk trails of all three dominant species mostly had different direction than nest of competitor. Individual workers rather avoided contacts with heterospecific workers.