

Abstract*

**Habitat preference of *Myrmica vandeli* Bondroit, 1920 (Hymenoptera: Formicidae)
and its place in the ant communities**

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The ant *Myrmica vandeli* is a rare species in Europe (SEIFERT 1988, RADCHENKO *et al.* 2003). Relatively few data are available on its biology, habitat preference and place in the ant community (SIELEZNIEW & STANKIEWICZ 2004, STANKIEWICZ & ANTONOVA 2005). Seemingly, one of the biggest European *M. vandeli* populations is located in the Giurgeului Depression, Eastern Carpathians, Romania. In our study we analyzed the habitat preference and population size of this species, and the composition of ant communities, where *M. vandeli* is present. Based on our results *M. vandeli* inhabits a variety of habitat types mostly all characterized by moist conditions. The abundance of *M. vandeli* nests was exceptionally high in two different habitat types: (1) in habitats characterized by the presence of *Carex elata*, and (2) in habitats characterized by high abundance of *Sanguisorba officinalis*. *M. vandeli* occurred together with six other *Myrmica* species: *Myrmica gallieni* BONDROIT, 1920, *Myrmica lobicornis* NYLANDER, 1846, *Myrmica rubra* (LINNAEUS, 1758), *Myrmica ruginodis* NYLANDER, 1846, *Myrmica scabrinodis* NYLANDER, 1846 and *Myrmica schencki* VIREECK, 1903. *M. vandeli* was the most abundant *Myrmica* species followed by *M. scabrinodis*. The two rival species showed different habitat preferences, though. We found only a few mixed nests of *M. vandeli* and *M. scabrinodis*, which could serve as proof for the facultative socially parasitic lifestyle of *M. vandeli*. Parasitic *Phengaris* (most probably *Ph. teleius*) larvae and pupae were found in three *M. vandeli* nests.

References

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