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Redescription of *Tetramorium hungaricum* RÖSZLER, 1935, a related species of *T. caespitum* (LINNAEUS, 1758) (Hymenoptera: Formicidae)

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Abstract

A lectotype is designated and a redescription made for *Tetramorium hungaricum* RÖSZLER, 1935, a Central European taxon. It is shown that this species can be reliably separated from three related morphospecies, i.e., *T. caespitum* (LINNAEUS, 1758), *T. ferox* RUZSKY, 1903, *T. semilaeve* ANDRÉ, 1881, using morphological characters. Diagnostic characters, both morphological and morphometric, are given for the four species.

Key words: *Tetramorium hungaricum*, redescription, morphometrical analysis, taxonomy

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Introduction

Ants are hardly the largest European insect group on the basis of the number of known species. So, given the high number of European myrmecologists, one would presume that there are not many new species left to discover in Europe. However, since the end of the 1980s, a considerable number of species have been described (or revived) often in genera which previously were considered to be well known: e.g., *Lasius* (see SEIFERT 1988, 1992, SCHLICK-STEINER & al. 2003) or *Myrmica* (see SEIFERT 1993, ELMES & al. 2002, RADCHENKO & ELMES 2003). Thus a large proportion of the recent "new" European species is the result of reconsideration of "old" taxa or names, e.g., *Stenamma debile* (FÖRSTER, 1850), *Myrmica lonae* FINZI, 1926, or redescriptions of poorly described species such as *Ponera testacea* EMERY, 1895 (CSŐSZ & SEIFERT 2003).

The genus *Tetramorium* is considered to be one of the most difficult groups within the family Formicidae. It consists of more than 400 species worldwide and over 50 in the Palaearctic Region (BOLTON 1995). Prior to the 1940s, several *Tetramorium* forms had been described, but SOMFAI (1959) and GALLÉ & al. (1998) listed only a few species from the Carpathian basin treating the great majority of taxa as junior synonyms of *T. caespitum*. Subsequently, new view was established and some of the "old" taxa were revived and some new species were described (AGOSTI & COLLINGWOOD 1987, SCHULZ 1996, SEIFERT 1996, RADCHENKO & al. 1998). Further refinements are expected on the basis of molecular and morphological studies (SCHLICK-STEINER & STEINER, pers. comm.).

Recently several nest series were collected in the Carpathian Basin, which did not match the features of *T. caespitum*, or any other currently accepted species. They did, however, appear to match the previously forgotten type material of *T. caespitum* ssp. *hungarica* RÖSZLER, 1935, deposited in the collection of the Natural History Museum, Sibiu (Romania). Although this species was described in 1935 and later elevated to species level (RÖSZLER 1951), it was probably ignored post-1950s because of the lack of information on the contents of the collection of the Natural History Museum of Sibiu (Romania). We have designated a lectotype of *Tetramorium hungaricum* from the Sibiu material and we redescribe this here because the superficial description given by Paul Röszler is inadequate to distinguish it from related species. Its relatives are *T. caespitum, T. ferox*, and *T. semilaeve*; the first two occur in and the third one near to the Carpathian Basin. We show that *T. hungaricum* can be separated from these three species using morphometrics. As *T. caespitum* seems to contain several cryptic species (SCHLICK-STEINER & STEINER, pers. comm.), we treated it as a morphospecies and only the morphologically closest populations to *T. hungaricum* were included in this analysis.

Material and Methods

Measurements

All measurements were carried out on dry mounted specimens. An Olympus SZX 9 stereomicroscope was used at a maximum magnification of × 100. The