

### ***Camponotus samius* Forel, 1889 (Hymenoptera: Formicidae) – at the north edge of its European distribution**

Despite intensive myrmecological studies undertaken in the last decades, the Romanian ant fauna is still understudied (Markó et al. 2006, Ionescu-Hirsch et al. 2009, Markó et al. 2009, Czekes et al. 2012, Tăușan & Pintilioaie 2016). Altogether 112 ant species are known up to date (Borowiec 2014, Seifert & Csósz 2015, Tăușan & Pintilioaie 2016). However this number is considered low if compared to the ant fauna of the surrounding countries: Hungary – 125 species (Csósz et al. 2011), Bulgaria – 175 species (Lapeva-Gjonova et al. 2010, Antonova et al. 2016), and Ukraine – 134 (Czechowski et al. 2012).

The *Camponotus* Mayr, 1861 genus comprises more than 1022 species worldwide distributed (Bolton 2016). Moreover, in the Palaearctic region more than 100 species are known to occur (Czechowski et al. 2012). However, the number of reported *Camponotus* species in Central and Eastern Europe seems low and stable (Markó et al. 2009), thus suggesting that the genus is well known for the region. Yet, new faunistic data are recorded from different European countries: Romania – *C. tergestinus* Müller, 1921 (Ionescu-Hirsch et al. 2009), Bulgaria – *C. aegaeus* Emery, 1915, *C. gestroi* Emery, 1878, *C. tergestinus* and *C. universitatis* Forel, 1890 (Lapeva-Gjonova 2011, Lapeva-Gjonova & Kiran 2012).

In Romania, 10 *Camponotus* species are reported: *C. herculeanus* (Linnaeus, 1758), *C. ligniperda* (Latreille, 1802), *C. vagus* (Scopoli, 1763), *C. atricolor* (Nylander, 1849), *C. dalmaticus* (Nylander,

1849), *C. fallax* (Nylander, 1856), *C. lateralis* (Olivier, 1791), *C. piceus* (Leach, 1825), *C. tergestinus* and *C. aethiops* (Latreille, 1798) (Markó et al. 2009). Recently, the former subgenus *Colobopsis* of *Camponotus* whose member is *C. truncatus* in Romania was elevated in a separate genus (Ward et al. 2015).

During a short field camping in May 2016 in Dobrogea region, we collected specimens of *Camponotus samius* Forel, 1889 from two sites: Consul Hill (284 a.m.l.) (N45.022058, E28.512330) and Priopcea Hill (305 a.m.l.) (N45.121554, E28.251655) (Măcin Mountain region). The species is first mentioned for the ant fauna of Romania.

According to Radchenko (1997) and Karaman et al. (2011), *C. samius* nests under stones and in the soil. Its habitat covers a wide range from oak forests, to mixed and coniferous between 250 to 800 m a.s.l.

We collected *C. samius* from south-exposed xerophilous grasslands with patches of oak. *C. samius* is a nocturnal species (Atanassov & Dlussky 1992, Radchenko 1997) in hot weather and is distributed in Southern Europe: Italy, Bulgaria, Serbia, Greece (type locality), Cyprus and Turkey (Karaman et al. 2011, Czechowski et al. 2012, Borowiec 2014).

The collected specimens are deposited in the collection of the Department of Environmental Sciences and Physics, Lucian Blaga University of Sibiu.

*C. samius* joins *C. aethiops* as the second member of the subgenus *Tanaemyrmex* in Romania. Unlike *C. aethiops*, the species is characterised by long erect hairs on the gaster and subdecumbent hairs on the tibiae (Fig. 1). Body is lighter colored on the thorax and base of gaster, whereas



Figure 1/A-B. *Camponotus samius*: A – male, head, lateral view; B – male, full-face view.



Figure 1/C-F. *Camponotus samius*: C – queen, lateral view, D – queen, full-face view; E – worker lateral view; F – worker, full-face view

in *C. aethiops* it is entirely black (Radchenko 1996, Ionescu-Hirsch 2009, Karaman et al. 2011).

Based on our finding, the total species number reach 113. Our results support the idea that more faunistic surveys are needed in order to increase the number of known ant species from Romania.

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#### References

- Antonova, V., Lapeva-Gjonova, A., Gradinarov, D. (2016): Ants (Hymenoptera: Formicidae) from Vrachanska Planina Mountains. pp. 155-161. In: Bechev, D., Georgiev, D. (eds.), Faunistic diversity of Vrachanski Balkan Nature Park. ZooNotes, Supplement 3, Plovdiv University Press, Plovdiv.
- Atanassov, N., Dlussky, G.M. (1992): Fauna of Bulgaria. Hymenoptera, Formicidae. Aedibus Academiae Scientiarum Bulgariae, Sofia.
- Bolton, B. (2016): AntCat. <<http://www.antcat.org>> accessed at: 2016.09.16.
- Borowiec, L. (2014): Catalogue of ants of Europe, the Mediterranean Basin and adjacent regions (Hymenoptera: Formicidae). Genus 25: 1-340.
- Csász, S., Markó, B., Galle, L. (2011): The myrmecofauna (Hymenoptera: Formicidae) of Hungary: an updated checklist. North-Western Journal of Zoology 7: 55-62.
- Czechowski, W., Radchenko, A., Czechowska, W., Vepsäläinen, K. (2012): The ants of Poland with reference to the myrmecofauna of Europe. Fauna Poloniae (New Series) Vol. 4. Museum and Institute of Zoology PAS, Warsaw.
- Ionescu-Hirsch, A. (2009): An annotated list of *Camponotus* of Israel (Hymenoptera: Formicidae), with a key and descriptions of new species. Israel Journal of Entomology 39: 57-98.
- Ionescu-Hirsch, A., Markó, B., Csász, S. (2009): *Camponotus tergestinus* Müller, 1921 (Hymenoptera: Formicidae): first records of a rare species for Romania and Hungary. Entomologica Romanica 14: 19-22.
- Karaman, C., Aktac, N., Kiran, K. (2011): Ants of the genus *Camponotus* Mayr, 1861 (Hymenoptera: Formicidae) in the Kaz Mountains, Turkey, with descriptions of sexuals of *Camponotus candiotes* Emery, 1894 and *Camponotus ionius* Emery, 1920. Turkish Journal of Zoology 35: 183-197.
- Lapeva-Gjonova, A., Kiran, K. (2012): Ant fauna (Hymenoptera, Formicidae) of Strandzha (Istranca) Mountain and adjacent Black Sea coast. North-Western Journal of Zoology 8: 72-84.
- Lapeva-Gjonova, A., Antonova, V., Radchenko, A. G., Atanasova, M. (2010): Catalogue of the ants (Hymenoptera, Formicidae) of Bulgaria. Vol. 62. PenSoft Publishers LTD, Sofia.
- Markó, B., Ionescu-Hirsch, A., Szász-Len, A. (2009): Genus *Camponotus* Mayr, 1861 (Hymenoptera: Formicidae) in Romania: distribution and identification key to the worker caste. Entomologica Romanica 14: 29-41.
- Radchenko, A.G. (1996): A key to the ant genus *Camponotus* (Hymenoptera, Formicidae) in Palaearctic Asia. Zoologicheskij Zhurnal 75: 1195-1203.
- Radchenko, A.G. (1997): Review of Ants from the Subgenera *Tanaemyrmex*, *Colobopsis*, *Myrmanblis*, *Myrmosericus*, *Orthonotomyrmex*, and *Paramyrmanblis* from the Genus *Camponotus* (Hymenoptera, Formicidae) in the Asian Palaearctic. Zoologicheskij Zhurnal 76: 806-815.
- Seifert, B., Csász, S. (2015): *Temnothorax crasecundus* sp. n. – a cryptic Eurocaucasian ant species (Hymenoptera, Formicidae) discovered by Nest Centroid Clustering. ZooKeys 479: 37-64.
- Tăușan, I., Pintilioaie, A. (2016): First record of the Dacetine ant *Strumigenys argiola* (Emery, 1869) (Hymenoptera: Formicidae)

from Romania. Travaux du Muséum National d'Histoire Naturelle Grigore Antipa 58: 47-49.

Ward, P.S., Brady, S.G., Fisher, B.L., Schultz, T.R. (2015): The evolution of myrmicine ants: phylogeny and biogeography of a hyperdiverse ant clade (Hymenoptera: Formicidae). Systematic Entomology 40: 61-81.

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