

First Record of the Dacetine Ant *Strumigenys argiola* (Emery, 1869) (Hymenoptera: Formicidae) from Romania

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Abstract. The Romanian ant fauna is poorly known. It seems that many cryptic and parasitic species are missing from the checklist, including species with their ranges primarily outside of the Mediterranean. Herein, *Strumigenys argiola* (Emery, 1869) is a newly recorded species for the ant fauna of Romania, one male being collected in North–Eastern Romania. *Strumigenys argiola* lives in the soil, and hunts for small arthropods. For the time being, a total of 112 ant species are known from Romania.

Key words: hypogaecic ants, check–list, male, distribution, Europe.

Dacetini ants belong to a tribe of small predatory ants of the subfamily Myrmicinae. The tribe is large and diverse, containing more than 900 species in eight genera, most of them tropical or subtropical (Bolton, 2013). The systematic status of the tribe has been the centre of a debate, and Ward et al. (2015) conclusively demonstrated that the group is non–monophyletic, joining the *Daceton* genus group (“Dacetini” *sensu stricto*). Moreover, all of the *Pyramica* species were moved into the *Strumigenys* genus (Ward et al., 2015). Five of the eight West Palaearctic species were classified as *Pyramica* by Bolton (2000): *P. argiola* (Emery, 1896), *P. baudueri* (Emery, 1875), *P. membranifera* Emery, 1869, *P. tenuipilis* Emery, 1915 and *P. tenuissima* (Brown, 1953). Three were classified as *Strumigenys*: *S. lewisi* Cameron, 1886, *S. rogeri* Emery, 1890 and *S. silvestrii* Emery, 1906 (Boieiro et al., 2009). Out of these eight *Strumigenys* species, *S. baudueri* and *S. argiola* are present in Eastern Europe (e.g. Hungary, Bulgaria, Serbia and Montenegro). In Romania to date, only *S. baudueri* is known to be present, being recently recorded by Markó (2008). Moreover, in Romania, data regarding hypogaecic ant species are scarce (Markó 2008; Tăușan & Rădac, 2014).

The first record of *Strumigenys argiola* for the Romanian ant fauna is reported herein. This record adds to the list of Romania’s ant fauna, comprising 111 known ant species (Markó et al., 2006; Czechowski et al., 2012; Czekes et al., 2012; Seifert & Csoşz, 2015). One male of *Strumigenys argiola* (Emery, 1869) was collected during a myrmecological survey near locality Comănești (N 46.426229°, E 26.443224°, ca. 410 m a.s.l., Bacău County) on 21.08.2014. The specimen was collected by white pan traps in a ruderal habitat (urban garden). The identification of the species was carried out according to Arnold’s (1917) translation of the expanded description given by André (1883). Furthermore, the identification was also based on the morphological characters within European Dacetine males: bi–colouration and a strongly developed spine under the post petiole (Espadaler *pers comm.* 10.09.2014). The collected specimen is

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

Strumigenys argiola is a member of the tribe Dacetini within the subfamily Myrmicinae. The species is a wide-spread and most common dacetine species in Europe. Its known distribution range covers the Channel Islands (Radchenko, 2015), Austria (Fellner et al., 2009), Croatia (Bračko, 2006), Turkey (Kiran & Karaman, 2012; Karaman et al., 2014), France (Casevitz–Weulersse & Galkowski, 2009), Germany (Buschinger, 1997), Greece (Borowiec & Salata, 2012), Hungary (Csösz et al., 2011), Italy (Baroni Urbani, 1971), Portugal (Boeiro et al., 1999), Russia (Yusupov, 2009), Spain (Espadaler, 1979; Guillem et al., 2010), Switzerland (Kutter, 1973; Baroni Urbani, 1998; Bolton, 2000). Moreover, according to Fellner et al. (2009), *Strumigenys argiola* is considered to be distributed around the Mediterranean basin implying a thermophilic of open habitat species (e.g. calcareous lean grassland, dry pine forests). Regarding the tribe biology, most species feed on a broad range of smaller arthropods including: Diplura, Symphyta, Entomobryomorpha, Chilopoda, Pseudoscorpiones, Acarina, Araneae, Collembola, Isopoda and larvae of many Insecta orders (Masuko 1985; Dejean 1987; Yusupov, 2009).

Nowadays, in Romania, two *Strumigenys* species occur: *S. baudueri* and *S. argiola*. Using different sampling methods (Wilkie et al., 2007; Guillem et al., 2010; Schmidt & Solar, 2010), both occurrence and distribution information for cryptic ants in Romania could be improved. The species could show up in far more sites once we looked for it.

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