

**THE GENUS *Ponera* LATREILLE, 1804 IN ROMANIA AND THE FIRST RECORD  
OF *Ponera coarctata* (LATREILLE, 1802) (HYMENOPTERA: FORMICIDAE) FROM  
MOLDOVA (EASTERN ROMANIA)**

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**Abstract.** The *Ponera* genus includes hypogaeic species that usually forage cryptically in leaf litter on the ground. In Romania, the genus is represented by at least two species: *P. testacea* and *P. coarctata*. Scarce data is available on the distribution and biology of both species. However, *P. coarctata* is well known from Transylvania, lacking from other regions of the country. Herein, we report the first record from Moldova, together with other records of the species.

**Keywords:** new records, hypogaeic species, faunistics, insects.

**Rezumat.** Genul *Ponera* include specii hipogee care au un stil de viață criptic căutând hrana în litieră. În România, genul este reprezentat de cel puțin două specii: *P. testacea* și *P. coarctata*. Există puține date disponibile privind distribuția și biologia celor două specii. Totuși, în cazul speciei *P. coarctata*, se știe că este prezentă în Transilvania, cu puține alte semnalări în afara acestei regiuni. În prezenta lucrare semnalăm această specie din Moldova, alături de alte locații în România.

**Cuvinte cheie:** semnalări noi, specii hipogee, faunistică, insecte.

The genus *Ponera* belongs to the Ponerinae subfamily alongside different and interesting genera that includes *Cryptopone*, *Hypoponera* and *Pachycondyla*. Because these genera have the same overall body shape they are often confused. However, *Ponera* is unique in having the lower surface of the petiole elaborate, with a thin, circular spot near the front and a sharp angle or small pair of spines towards the rear and also having an anterior fenestra in the subpetiolar process (Schmidt, Shattuck 2014).

However, a few species of *Hypoponera* appear to also have a fenestra, but they lack the paired posterior teeth on the subpetiolar process that are typical of *Ponera*, and *Hypoponera* has only a single maxillary palp segment while *Ponera* has two. Some *Belonopelta* and *Emeryopone* also have an anterior fenestra in the subpetiolar process, but these genera have narrow mandibles with long attenuated teeth, while *Ponera* has typical triangular mandibles with only short teeth (Schmidt, Shattuck 2014).

Species of *Ponera* form small nests with less than 100 workers in protected places on the ground. They forage cryptically in leaf litter on the ground and are often collected using Berlese funnels.

In Europe, *Ponera* is represented by at least three species: *P. coarctata* (Latreille, 1802), *P. testacea* Emery, 1895 and *P. sysphinctoides* Bernard, 1950. The most common of these three species is *P. coarctata*. This species appears to have its center of distribution in the northern Mediterranean part of Europe. The records from North Africa and the Middle East are too sparse to allow a conclusion to the abundance of the species there, or to whether it is distributed also across North Africa. The records from Britain, Germany, and the former U.S.S.R. indicate a probable distributional limit at a latitude of about 52°N (note that the northern English records are questionable). *P. coarctata* has not been recorded from Scandinavia, although several active myrmecologists have resided there. The lack of records from some other areas (e. g., Turkey) is no doubt due to deficient collections (Taylor 1967).

Seifert (2018) stated his concern regarding the species distribution based on the taxonomic issues regarding the separation from *P. testacea*. Bearing this in mind, the range of *P. coarctata* extends from Iberia to the northern part of Africa and all the way to the Caucasus and Kopet Dag.

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In Romania, two *Ponera* species occur, namely *P. coarctata* and *P. testacea* (Markó *et al.* 2006). For both species, few records are available (Csősz 2003, Markó *et al.* 2006). However, *P. testacea* seems even more rare, being recorded only from five localities up to now: Bucharest (Montandon & Santschi 1910), Deva, Sibiu, Cluj-Napoca (Csos, Seifert 2003) and Arad (Markó 2008). In the case of *P. coarctata*, it seems that the species is widely distributed in Transylvania, including the Carpathian basin (Csősz 2003).

The new myrmecological material of *Ponera coarctata* was collected from several location from Romania, as follows: 2 workers, 07.2015, from Cheile Sohodolului (Gorj county), leg. V. Gheoca; 2 workers, 09.2016, from Comănești (Bacău county), leg. A. Pintilioaie; 10 workers, 04.2020, from Băbeni (Sălaj county), leg. D. Scoarță and 1 queen 09.2020 leg. I. Tăușan from Sibiu (Sibiu County).

Based on our findings, the known distribution of the species includes the first record of *Ponera coarctata* for the Moldova region and suggests that the species could occur more frequently than thought before.

Concerning the species requirements, it prefers eurythermic, moist to dry, open or woodland habitats on mineral soil. It may occur even in urban areas in quite disturbed places such as the ballast bed of railway lines, soil disc of street trees, etc. Still, there is a clear preference for moist soil spots with mull or raw humus (Seifert, 2018).

*Ponera coarctata* is distributed in Transylvania, including the rest of the Carpathian basin, yet our new records suggest that this species may be more frequent in Romania. More specific trapping techniques should be undertaken to have a better understanding of the *Ponera* genus distribution in Romania.

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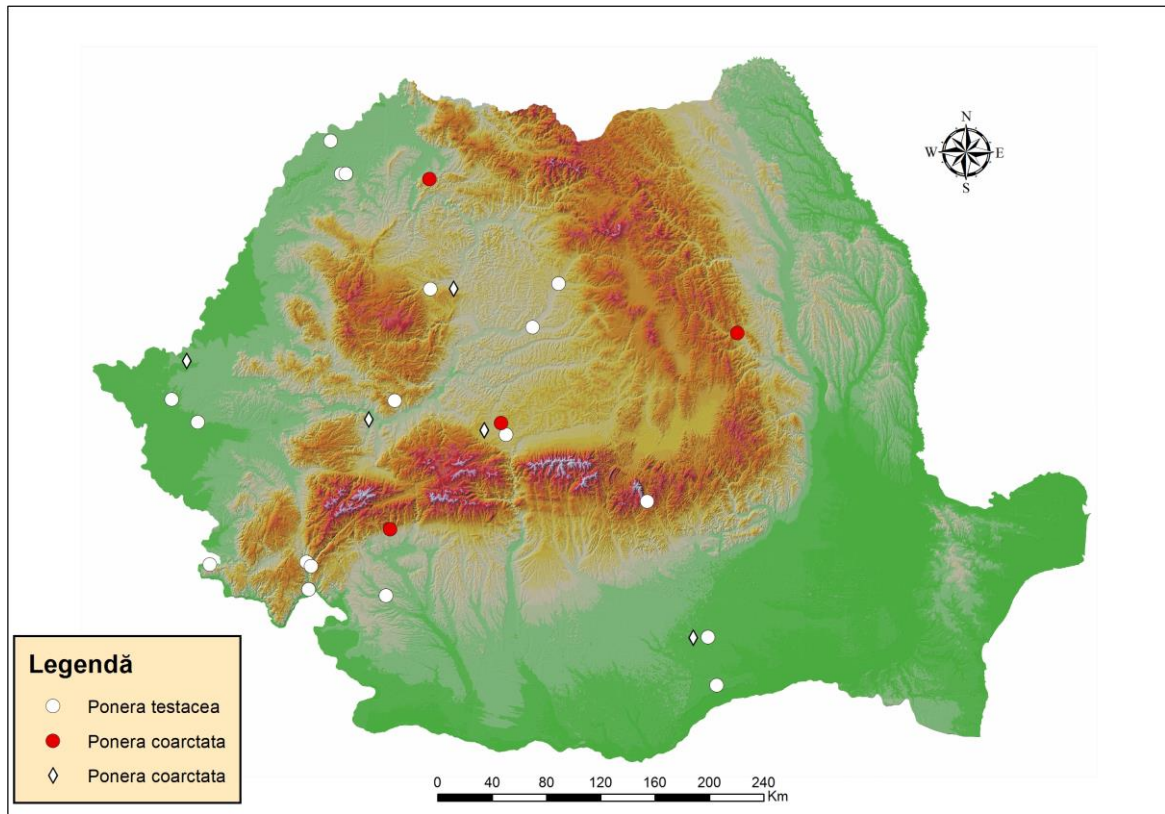
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**Fig. 1.** *Ponera coarctata* – lucrătoare (foto: Maximilian Teodorescu)

**Fig. 2.** Distribuția cunoscută a genului *Ponera* în România (coduri: cercuri albe *Ponera testacea* – data publicate; romburi albe – *Ponera coarctata* – published data; cercuri roșii – *Ponera coractata* – date noi)



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