

*SYNAPHRIS LEHTINENI*, MARUSIK, GNELISTA & KOVLIUK,  
2005 (SYNAPHRIDAE, ARANEAЕ) – NEW RECORD FOR THE  
ROMANIAN FAUNA

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*Abstract:* *Synaphris lehtineni* is presented for the first time in the Romanian fauna. The genus *Synaphris* and family *Synaphridae* are also new to the Romanian fauna. The currently known distribution of this species is also given.

*Key words:* Araneae, Synaphridae, *Synaphris*, Romania.

## 1. INTRODUCTION

Family Synaphridae Wunderlich, 1986, includes three genera with 13 species known from the Mediterranean area (Spain, Croatia, Israel, Egypt), Ukraine, Turkmenistan, Canary Islands and Madagascar (PLATNICK, 2014). The genus with the largest number of species in the family is *Synaphris* Simon, 1894, and has 11 species (MARUSIK AND ZONSTEIN, 2011). In the European fauna it is represented by three species, namely: *Synaphris dalmatensis* Wunderlich, 1980 (Croatia), *Synaphris lehtineni* Marusik Gnelista & Kovbliuk, 2005 (Crimea, Ukraine) and *Synaphris saphrynis* Lopardo, Hormiga & Melic, 2007 (Spain).

Studying the material collected using pitfall traps placed in Izvarna village, Gorj County (Romania) (Fig. 1), we identified one individual (male) belonging to the genus *Synaphris*. The sampling area is located near Fușteica Cave, exactly above it, and it is characterized by low and thin vegetation, with obvious anthropogenic influences, especially from grazing. As for the climate, the area is characterized by temperate climate with Mediterranean influences.

The specimen collected by us belongs to species *Synaphris lehtineni* Marusik, Gnelista & Kovbliuk 2005. The species, genus *Synaphris* and family *Synaphridae* are for the first time recorded in the Romanian fauna.

ABBREVIATION: ISER – Institute of Speleology “Emile Racovitza” Bucharest.



Fig. 1. Map showing the geographic distribution of species *Synaphris lehtineni* Marusik, Gnelista & Kovbliuk, 2005 in Europe.

## 2. MATERIAL AND METHOD

**Material:** 1 male, 06.26.2014, GPS coordinates: N 45.02946° E 22.902203°. Leg. Nitzu, E., Popa, I, Nae, A. The specimen is preserved in the collection of “Emile Racovitza” Speleological Institute Bucharest (ISER).

The material was conserved in 70% ethylic alcohol. The dissections were made in glycerol at a Zeiss Stemi 2000 stereomicroscope and mounted for observation in a mixture of gelatin Merck and glycerol anhydrous. An Olympys CH2 microscope with drawing attachment was used for microscopic examination and drawings. All measurements are in millimeters. The terminology used by us follow MARUSIK *et al.*, 2005 initial description of species, and LOPARDO *et al.*, 2007.

## 3. RESULTS AND DISCUSSIONS

Habitus and the male palp correspond to the description made by MARUSIK, GNELISTA & KOVB�IUK (2005).

Dimensions: Male. Total length: 1.12 mm. Cephalotorax: length 0.5 mm, width 0.45 mm. Abdomen: length 0.62 mm, width 0.4 mm. Stern: length 0.3 mm, width 0.3 mm.

Brown carapace with blackish edges and slightly weaved surface (irregular). In the dorso-median part has a darker lanceolated stain.

Carapace with four setae called ‘tubercles’ by the Marusik *et al.* 2005. In the dorso-median part, along the midline, are two setae, a third seta being situated behind the posterior median eyes (PME). The fourth seta is located in the median part of clipeus. Clipeus is high.

Sternum is dark brown, even blackish, darker than the carapace. It has hairs on the surface similar in length to those on the carapace.

Chelicera have the same color as the rest of the cephalothorax and has a strong tooth on the promarginal edge, the promarginal and lateral hairs (one) with large elevated bases.

The abdomen is oval (elongated), blackish. It presents a series of long hairs.

Legs dark-yellowish brown. Formula: 1.4.2.3. Tibiae I-II with 2 trichobothria, tibiae III-IV with 3 trichobothria. Metatarsi I-II with one trichobothrium. TmI: 0.5.

| Leg | Femora | Patella | Tibia  | Metatarsus | Tarsus | Total  |
|-----|--------|---------|--------|------------|--------|--------|
| I   | 0.3625 | 0.125   | 0.3    | 0.2        | 0.2375 | 1.225  |
| II  | 0.3375 | 0.125   | 0.2625 | 0.175      | 0.2375 | 1.1375 |
| III | 0.3375 | 0.1125  | 0.225  | 0.175      | 0.225  | 1.075  |
| IV  | 0.35   | 0.1125  | 0.3    | 0.2        | 0.225  | 1.1875 |

The male palp (Figs. 2 – 3) is relatively short. Tibia has no apophysis, it's approximately circular in shape, widened and adheres closely to the cimbyum. Cimbyum (Fig. 3) is complicated and consists of two distinct parts. The lower part is round and covered with hairs and the upper part is semicircular, hairless, membranous and transparent. The retrolateral edge of cymbium that separates the two areas, shows a formation called by MARUSIK *et al.* (2005) and LOPARDO *et al.* (2007), ‘paracymbium’.

Palp. Femora 0.1125 mm, patella 0.05 mm, tibia 0.1 mm.

Embolar is long, thin, filiform, with the starting point on the embolar basis. Embolar tip slightly widened.

Embolar base flat, with a flat membranous translucent expansion, called ‘lamella’ by MARUSIK *et al.*, 2005 and ‘embolar expansion’ by LOPARDO *et al.*, 2007.

Lamella is transparent, hardly visible and has lanceolated form. It has more almost parallel grooves along its length and starts under (near) embolar basis. The base of embolar expansion (lamella) is much narrower than the rest of the blade.

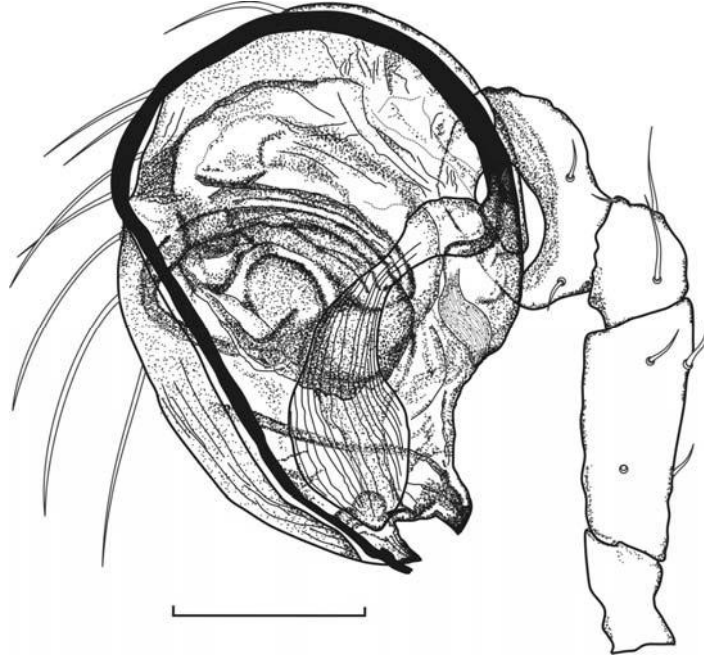


Fig. 2. Male palp, ventral view. Scale bar 0.1 mm.



Fig. 3. Male palp, dorsal view. Scale bar 0.1 mm.

At the embolar basis, the seminal duct is clearly observed. Tegulum is separated in the terminal part in ‘subterminal apophysis’ and ‘terminal apophysis’ after MARUSIK *et al.* (2005). A long notch is observed along the tegulum, with the role of leading the embolus.

#### 4. CONCLUSIONS

This is the first species of the genus *Synaphrys* recorded for the Romanian fauna. We specified the measurements of the collected individual and the data is compared with the information from references. Following MARUSIK *et al.*, 2005 the total length of the body lies between 0.96–1.09 mm.

The specimens that we have collected have the total length of the body between 1.12 mm, and TmI: 0.5 it is close to the upper limit of the values registered by MARUSIK *et al.* 2005 on captured specimens (TMI: 0.39–0.52). The feature characteristics of the species do not differ from those mentioned in the original description of the species.

The species is rare, although the material was collected during one year using Barber traps, was captured only one male. Finding this species in Romania confirms that the range of the species *Synaphris lehtineni* is larger and localized not only in Crimea (Ukraine).

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