

# *Psilochorus simoni* (Berland, 1911) (Araneae: Pholcidae), a new record for slovenian spider fauna from Postonjska jama cave

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**Abstract.** An adult female *Psilochorus simoni* (Berland, 1911) (Pholcidae) was found in Postojna Cave, Slovenia. The species, which originates from subtropical America, has been introduced to Europe where it is generally associated with synanthropic habitats. This is the first record of this rare species in Slovenia and the second from a cave environment in Europe.

Key words: *Psilochorus simoni*, spiders, Pholcidae, new species, Slovenia, cave

**Izvleček.** *Psilochorus simoni* (BERLAND, 1911) (ARANEAE: PHOLCIDAE), NOVA NAJDBA ZA FAVNO SLOVENIJE IZ POSTOJNSKE JAME - Prispevek obravnava najdbo odrasle samice pajka *Psilochorus simoni* iz družine Pholcidae v Postojnski jami. Vrsta je bila prinešena iz subtropske Amerike in je v Evropi praviloma vezana na sinantropne habitate. Najdba je prvi podatek o pojavljanju vrste v Sloveniji in šele drugi podatek iz jamskega okolja v Evropi.

Ključne besede: *Psilochorus simoni*, pajki, Pholcidae, nova vrsta, Slovenija, jame

During a survey of cave fauna, a single adult female of *Psilochorus simoni* (Berland, 1911) was found on February 27<sup>th</sup>, 2004, in pitfall trap placed on a pile of rocks in the Postojna Cave section known as Spodnji Tartarus, located 514 m a.s.l. approximately one kilometre from the main entrance (Gauss-Krüger coordinates: x: 5071250, y: 438482). The specimen is deposited in zoological collection of the Department of Biology, Biotechnical Faculty, University of Ljubljana.

*Psilochorus simoni* exhibits general features of the family Pholcidae, like remarkably long and slender legs, heart-shaped cephalothorax and six eyes arranged in two groups. In addition to the details of the male palpus and female epigynum, the species can be distinguished from other pholcids by the weakly elevated eye region, well developed anterior

median eyes and greyish, sometimes even bluish globular opisthosoma, with spinnerets close to epigastric fold. The body length of adult spider reaches up to 3 mm.

*Psilochorus simoni* is the only member of the genus *Psilochorus* Simon, 1893 in Europe. The genus originates from subtropical America, from where the species has been unintentionally introduced to Europe (Fürst & Blandenier 1991). Therefore, the description of *P. simoni* by Berland (1911) is based on a specimen found in the basement of the University of Sorbonne in Paris. From Central France, the species has presumably spread throughout France (e.g. Denis 1960), Switzerland (Comellini 1954), Germany (Moritz 1973), Poland (Dziabaszeński 1967), Austria (Kritscher 1970), Hungary (Szinetár 1992), the Netherlands (Voosen 1983), Belgium (Ranzy & Baret 1987), Britain (Bristowe 1933), Scandinavia (Klausen 1972, Johnsson 1990) and Italy (Brignoli, 1971). According to the current data, the find in Slovenia constitutes the south-easternmost record of the species in Europe.

According to autecology of *P. simoni* (Fürst & Blandenier 1991), the species can be considered troglophilic and, as many other members of the family Pholcidae, synanthropic. Therefore, *P. simoni* is associated with dark habitats with constant yearly temperatures between 10 and 18°C. It is tolerant to low humidity independently of altitude (Fürst & Blandenier 1991). In Europe, the species has been recorded in various environments resembling the conditions listed above, like wine or cheese cellars, basements, underground shelters and other similar indoor habitats in which the spiders are usually found hanging upside down on their distinctive tangled webs (Roberts 1985). Although the species is originally troglophilic, there is only a single record of *P. simoni* from cave environment in Europe (Brignoli 1979), comparing to over 30 synanthropic records, supporting the presumed man-assisted species distribution.

Our finding of *P. simoni* deep in Postojna Cave is congruent with the proposed spreading pattern of *P. simoni* throughout Central Europe (Fürst & Blandenier 1991) and indicates that species has most probably been overlooked in synanthropic habitats in Slovenia. It also suggests that single data on the presence of *P. simoni* in cave environment by Brignoli (1979) was not accidental and indicates that beside synanthropic environments the species can also inhabit its natural habitats in Europe.

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