

# ***Psyllipsocus ramburii* Selys-Longchamps, 1872 (Insecta: Psocoptera) from Andaka Cave – first record of the species from Bulgaria**

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**Abstract:** The first record of the species *Psyllipsocus ramburii* Selys-Longchamps, 1872 from Bulgaria was reported from the Andaka Cave, Stara Planina Mts., Dryanovski Manastir Area, N42° 56' 52.5" E25° 25' 54.1", 280 m a.s.l.

**Key words:** Psocoptera, cave, troglophilous, Bulgaria

## **Introduction**

The species *Psyllipsocus ramburii* Selys-Longchamps, 1872 (Insecta: Psocoptera) is polymorphic and occurs in three forms: macropterous, brachypterous, and micropterous. It is distributed worldwide, parthenogenetic species occurring mainly in houses and caves, tending to be troglophilous (NEW, 1974; LIENHARD, 1998). Until now, *Psyllipsocus ramburii* was never recorded from Bulgaria (LIENHARD & SMITHERS, 2002) but BERON (2015) suggested that representatives of the family Psyllipsocidae Lienhard & Smithers, 2002 were likely to inhabit some Bulgarian caves.

## **Material and Methods**

Specimens were collected by hand and by using a brush from the Andaka Cave between 6.00-7.30h in the morning on 09.10.2016. They were preserved

in ethanol. During examination in the laboratory pictures were taken of specimens mounted in glycerin using microscope Zeiss and a Canon camera. The species was determined mainly by LIENHARD (1998). The material is deposited in the collection of the author.

## **Results**

A population of micropterous form was found in Andaka Cave, among stones and gravel, mixed with clay and dry bat guano (Fig. 1).

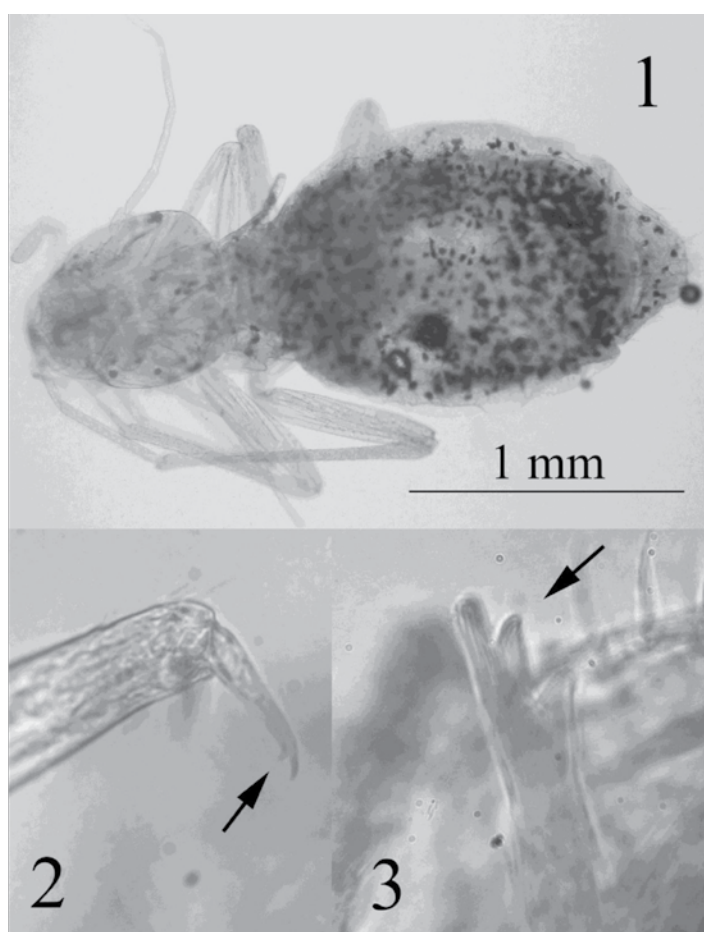
**Material examined:** four ♀, six nymphs, 09.10.2016, Bulgaria, Stara Planina Mts., Andaka Cave, Dryanovski Manastir Area, among stones and gravel, about 50 meters from the entrance in the first, left gallery, near the cave wall, N42° 56' 52.5" E25° 25' 54.1", 280 m a.s.l., D. Georgiev leg. (Figs. 1, 2).

## **References**

- BERON P. 2015. Cave fauna of Bulgaria. East-West & National Museum of Natural History Publ., 434 p.
- LIENHARD C. 1998. Psocoptères Euro-Méditerranéens. Faune de France 83. Fédération Française des Sociétés de Sciences Naturelles, Paris, France, 517 p.
- LIENHARD C., SMITHERS C. 2002. Psocoptera (Insecta): world catalogue and bibliography. Instrument Biodiversitatis V. Muséum d'histoire naturelle, Genève, Switzerland, 745 p.
- NEW T. 1974. Handbook for the identification of British Insects, Vol I, Part 7: Psocoptera. Royal Entomological Society of London, London, 146 p.



**Fig. 1.** The collection locality of *Psyllipsocus ramburii* in the Andaka Cave



**Fig. 2.** *Psyllipsocus ramburii*, ad. ♀ from Andaka Cave: 1 – general view (light microscope photograph, x20), 2 – tarsal claw of the front leg, 3 – apex of the lacinina (x100)

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## ***Psyllipsocus ramburii* Selys-Longchamps, 1872 (Insecta: Psocoptera) от пещера Андъка – първо съобщение в България**

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### **(Резюме)**

На 09.10.2016, между 6.00 и 7.30 часа сутринта, при първата галерия на лявото разклонение на пещера Андъка събрах 10 индивида (4 възрастни женски и 6 нимфи) от вида *Psyllipsocus ramburii*, неустановяван до сега в нашата страна. Този вид сенояд е широко разпространен в жилищата на човека и в пещерите почти по цял свят и намирането му в България е очаквано. Намерената в пещерата популация принадлежи към микрокрилата, нелетяща форма, като индивидите бяха събрани сред малки камъни, примесени с глина и сухо прилепно гуано от пода на пещерата, в близост до нейната стена.