

# *Jugatala cribelliger* (Berlese, 1904) a new oribatid mite species for the Romanian fauna

Ioana Nae<sup>‡</sup>, Augustin Ion Nae<sup>‡</sup>, Mark Maraun<sup>§</sup>

<sup>‡</sup> Romanian Academy, "Emil Racovitza" Institute of Speleology, Bucharest, Romania

<sup>§</sup> Georg-August-University Göttingen,, Göttingen, Germany

Corresponding author: Ioana Nae ([ioana.iser@gmail.com](mailto:ioana.iser@gmail.com))

## Abstract

*Jugatala cribelliger* (Berlese, 1904) = *Mycobates (Calypozetes) cribelliger* Subias, 2004 was found for the first time in the Romanian fauna. The species was identified using Electronic Microscope images. The species has an unknown habitat (Fischer and Schatz 2013) and is distributed in Northern Italy—Prov. Bolzano, Trento; Austria, Switzerland—Grisons; Iberian Peninsula. The specimen was collected from MSS (Mesovoid Shallow Substratum) from Piatra Craiului Mountains, Central Carpathians, Romania, in drillings used for sampling the alpine scree from Marele Grohotis, at an altitude of 1579 m. The combination of following characters of adults is considered as diagnostic features for *Jugatala*: rostrum rounded; lamella narrow to wide, with cuspides and translamella; lamellar cuspides without lateral and median dens or with minute lateral dens; bothridium cup shaped; sensillus with capitate or clavate head, rounded distally; tutorium narrow, with cusp pointed distally; notogaster with pteromorphs curved ventrally, line of desclerotization absent; lenticulus present or absent; 10 or 11 pairs of notogastral setae, *dp* present or absent; four to seven pairs of notogastral porose areas; six pairs of genital setae; all legs heterotridactylous; tibia I with dorsodistal apophysis bearing solenidion  $\phi 2$ ; seta *I''* of tibiae and genua I–IV thick, heavily barbed (Bayartogtokh and Schatz 2008).

With a distribution in Central and south-western Europe, *Jugatala cribelliger* (Berlese, 1904) is first recorded in the Carpathians, from Piatra Craiului Mountains in MSS, a subterranean environment.

## Keywords

*Jugatala cribelliger*, oribatid mite, new species, MSS, electronic microscopy, Carpathians

## Presenting author

Ioana Nae

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## Conflicts of interest

## References

- Bayartogtokh B, Schatz H (2008) Trichoribates and Jugatala (Acari: Oribatida: Ceratozetidae) from the Central and Southern Alps, with notes on their distribution. Zootaxa 1948: 1-35. [In english]. <https://doi.org/10.11646/zootaxa.1948.1.1>
- Fischer BM, Schatz H (2013) Biodiversity of oribatid mites (Acari: Oribatida) along an altitudinal gradient in the Central Alps. Zootaxa 3626 (4): 429-454. [In English]. <https://doi.org/10.11646/zootaxa.3626.4.2><http://zoobank.org/urn:lsid:zoobank.org:pub:6D8C178A-C46B-4595-84F5>