

Scientists describe the deepest terrestrial arthropod ever found

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Scientists have recently described the deepest terrestrial animal ever found, together with 4 new species for science. These animals are springtails (*Arthropoda*, *Insecta*, *Collembola*), a minute primitive wingless insect with six-legs and without eyes that live in total darkness.

Described by Rafael Jordana and Enrique Baquero from University of Navarra (Spain), they are known for science as: *Anurida stereodorata*, *Deuteraphorura kruberaensis*, *Schaefferia profundissima* and *Plutomurus ortobalaganensis*. The last one is the deepest arthropod ever found, at the remarkable depth of 1.980 meters (2,165 yards) below ground surface.

These [animals](#) were collected during the biospeleological works of Sofia Reboleira, from the University of Aveiro (Portugal) and Alberto Sendra, from the Valencian Museum of Natural History (Spain), both who were members of the Ibero-Russian CaveX Team Expedition to the World's deepest [cave](#), during the summer of 2010.

The World's deepest cave, Krubera-Voronja, reaching nowadays the remarkable depth of -2.191 meters below ground level, is located in Abkhazia, a remote area near the Black Sea in the mountains of Western Caucasus, being the only cave in the World with more than 2 kilometres of depth.

The discovery of life in such deep systems launches new insights about the way we look at [life on Earth](#). In total absence of light and extreme low food resources, cave-dwelling animals have unique adaptations to subterranean life. They lack body pigmentation, they have no eyes and have been developing morpho-physiological strategies for survival at such depth, during millions of years. One of the species has, for example, a spectacular chemoreceptor, a highly specialised type of the habitual post-antennal organ of the springtails.

Schaefferia Absolon, 1900, Deuteraphorura Absolon, 1901, Plutomurus Yosii, 1956 and the Anurida Laboulbène, 1865 species group without eyes, with the description of four new species of cave springtails (Collembola) from Krubera-Voronya cave, Arabika Massif, Abkhazi, *Terrestrial Arthropod Reviews*, volume 5 (2012) pp. 1-51

Provided by University of Navarra

More information: Reviews of the genera

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