### Petar Beron

# CAVE FAUNA OF ALBANIA, NORTH MACEDONIA AND TURKEY

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# Cave Fauna of Albania, North Macedonia and Turkey

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# CAVE FAUNA OF ALBANIA, NORTH MACEDONIA AND TURKEY

In 2015 the Publishing House "East-West" in Sofia started the series "Cave Fauna of the Balkans". Two volumes have been published: Beron, 2015 (Bulgaria) and Beron, 2016 (Greece). Although the fauna of the Turkish caves is far from properly explored, it was decided to publish a preliminary survey of this fauna, following the patterns applied in the first two publications.

# CAVE FAUNA OF ALBANIA

**Key Words:** caves, Albania, animals, troglobites, stygobites, zoogeography

### Introduction

The longtime isolated and small, but very interesting country between Korab Mt. and the Mediterranean Sea attracted many explorers of its fauna after 1990. From the first Italian, Bulgarian and other caving expeditions appeared a real bonanza of new caves and unknown endemic taxa, this being only the beginning. Albania will be in the focus of speleologists and biologists for many years to come.

With an average elevation of 708 meters (2,323 ft.) above sea level, Albania has a mountainous terrain that covers over 70% of its total territory. Karstified rocks (carbonate,dolomite, gypsum and anhydrite) cover 6725 km², or approximately 1/4 of the country's territory. So far the deepest potholes in Albania are Shpella BB-30 (-610 m), Shpella Ru (-580 m) and Shpella e Celikokave (-505 m), all explored by Bulgarian cavers.

# THE BIOSPELEOLOGICAL EXPLORATION OF ALBANIA

- 1905. Rudolf Sturany explored caves in North Albania.
- 1906 and 1908. Adolf Winneguth studied some caves in North and South Albania.
- 1914. In May Carlo Lona from Trieste explored caves of Mount Cukali NE from Shkodër. Material studied by J. Müller.
- 1922. In July C. Lona and G. Ravasini explored caves in the Tomorrit chain. Material studied by J. Müller and others.
- 1930–1942. A. Bischoff, resident in Tirana, explored caves.
- 1931. A. Bischoff, C. Lona and A.Winkler explored caves south of Vlonë (Sazan zone).
- 1941. Leonida Boldori (at this time captain in the Italian Army) collected from January to October some animals from the caves Stera e Made (Dukati), Spela met Potzi-Mali j Krujes (Kruja) and others. Material studied by Paola Manfredi (Myriapoda) and Alceste Arcangeli (Isopoda).
- 1960. V. Hanák from Prague and Albanian zoologists (I. Zeko, Xh. Muraj and F. Lamani) have visited 9 caves and collected bats and bat parasites, identified by K. Hůrka (1962, 1963).
- 1961. The German Entomological Expedition to Albania (Gerrit Friese and Eberhard Königsmann) visited several caves, including Shpella Mezhgoranit between Tepelene and Pestan. It seems that this was the last foreign expedition in Albanian caves before 1989.
- 1989. First Italian speleological mission to Albania after WW II (18–30 May, G. Marzolla and S. Gambari).
- 1990. First Bulgarian speleological mission to Albania (November, A. Jalov, N. Gladnishki, N. Landzhev).
- 1991. 13 Bulgarian-Albanian expeditions between 1991–2004, with Petar Beron (Daaliev 1995; Zhalov 2005): 198 caves were explored and surveyed in the central and southern part of the Albanian Alps, as well as in the Dejes

mountain, Gollorbordes mountains and the south of the country. Most of the explored caves are potholes: e.g., Shpella e Majes te Arapit (length 3286 m. Depth +384, -50 m), and the BB-30 pothole (-610 m), explored by the Bulgarian club Studenetz in 2003.

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- 1992. Italian expedition explored three caves near Boga.
- 1993. Bulgarian expedition (including P. Beron and B. Petrov). Italian expedition (A. Gobetti, L.Latella and others) in Albanian caves.
- 1994. Bulgarian expedition (including P. Beron and T. Ivanova).
- 1997 An important review of the Diplopoda of Albania was published by Mauriès, Golovatch and Stoev, with many data of Diplopods collected in Albanian caves by P. Stoev, B. Petrov, P. Beron, S. Beshkov and other Bulgarians.
- 2007. Bulgarian expedition in Golo Bordo (including P. Beron).
- 2008. Cave exploration in Lurë mountain, East Albania (Speleoclub Helictit).
- 2010. Bulgarian expedition, including Nia Toshkova. International expedition (with M. Komnenov) in the caves of Hekurave Mts.
- 2013. 3rd expedition in Lurë mountain (Ivan Petrov).
- 2014. A. Gobetti in Dhiber-Burrel Mts.
- 2015. 3rd expedition in Lurë mountain (Speleoklub Helictit & Bulgarian Caving Society), including H. Dundarova.
- 2015. Vol. 58 of Berliner Höhlenkundliche Berichte features a detailed analysis of the series of the Bulgarian Speleological Expeditions to 268 Albanian caves from 1991 to 2013 (A. Zhalov Ed., biological results by N. Simov).
- 2016. Hungarian biospeleologists (J. Grego, Z.P. Erőss, Z. Fehér) have visited caves and springs in Albania and described new species of molluscs.
- 2021. Polish expedition in Dolina Valbona, including biospeology.

For many years Albania has been visited by Czech and Polish bat specialists. The contributions of the Italian, Bulgarian and other speleologists and biospeleologists in the exploration of the caves and cave fauna of Albania consist in collecting, but also in the scientific identification of the animals.

Most of the troglobites have been collected after WW II by P. Beron, but also by other collectors. According to Simov (2015), Bulgarians contributed to the biospeleological exploration of 32 Albanian caves, discovering two new genera and 10 new species of troglobites. The present paper includes 137 animal species from 120 caves of Albania. From 29 of these caves only bats are recorded.