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Research Article

TAXONOMY, ECOLOGY AND DISTRIBUTION OF REPRESENTATIVES OF THE FAMILY ENIDAE WOODWARD, 1903 IN THE KOHITAN MOUNTAIN

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ABSTRACT

In this article, the diversity of land molluscs of Kohitang was studied. Malacafauna with 4 species belonging to 3 genera were described in the Kohitang mountain range and explored the unexploited lands of desert hilly mountain regions.

KEYWORDS

Kohitang, ottarozenia varenzovi, pseudonapaeus (chondrulopsis), maydanica, turanena martensiana, altitude, region, biotope.

INTRODUCTION

It is known that land mollusks include more than 35,000 species and are the most common invertebrates in natural ecosystems, as well as in areas occupied by humans. Here, taking into account the survival of land molluscs of the Buliminidae family in desert, hilly mountain regions and urbanized areas, as well as their adaptability to different stations, the interpretation of changes in mollusc populations, the basis of population biology, the determination of the degree of pollution of natural biocenoses, and the determination of anthropogenic pressure in the foothills and mountain landscapes. In this regard, we focused our research on the species composition of terrestrial molluscs belonging to the Enidae family found in Kohitang Mountain, and analyzing their ecology and distribution.

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Land molluscs collected from 2020 to 2022 from the areas belonging to the "Surkhan" state reserve of the Kohitang mountain range served as material in the research work.

Fixation of typed materials, camera processing is studied by A.A. Shileyko [4], anatomical studies were used by A.A. Shileyko, T.S. Rimzhanov [6].

Shells of terrestrial molluscs belonging to the Enidae family are medium in size, oval, tower-shaped or lanceolate in shape, and have a spheroidal, spiral structure. The mouth of the shell is simple or toothed. Representatives of this family are widely distributed throughout Eurasia, Africa and northern Australia [3].

As a result of the conducted research, it was found that the following species of this family are distributed in the research area.

Ottorozenia Muratov, 1992 generation

Ottarozenia varenzovi Rosen, 1893

Material: 7 pieces, collected from the southern slopes of the Kohitang mountain range, in the territory of the Surkhan state reserve, among semi-shrub plants.

All the morphological features of the shell fully correspond to the information in the literature [2]. The shell is cylindrical, oval-cylindrical or tower-shaped. The number of whorls is 8 - 8.5, the last whorl rises strongly towards the mouth of the shell. The color is reddish-horned to white with dark radial stripes. The sculpture is composed of radial lines that are clearly visible when magnified 30-40 times. The mouth of the shell is upright and oval, the edges are not curved and slightly thickened.

Dimensions: Shell height: 8 - 10 mm, large diameter: 2.8 -3.1 mm

Ecology. 1300-1800 m above sea level. high, lives among semi-shrub plants [2].

Spread. Kopettog and Kohitang mountain range [2].

Pseudonapaeus Westerlund, Generation of 1887

The shell has different shapes, the mouth of the shell is toothless or toothed.

Spread. Asia Minor and Central Asia, Iran, Afghanistan, North-West India [2].

Pseudonapaeus (Chondrulopsis) sogdianus Martens, 1874

The material, 120 pieces, was collected from more than 15 places of the Kohitang mountain range, among semi-shrub plants.

All the morphological characteristics of the shell fully correspond to the information in the literature [2, 6]. The shell is round-oval, oblong-oval or cylindrical, shiny. Wraps 6.5-8, convex, separated by a deep seam. There are many purple radial lines on a white background (the three embryonic whorls are brown). Sculpture - the embryonic whorls are smooth, the remaining whorls are irregularly radially wrinkled. The mouth of the shell is slightly curved, the joints are close to each other, and the edges are strongly sharpened.

The species is extremely variable, and all its characteristics can change according to environmental conditions.

Dimensions: Shell height: 13-17 mm, large diameter: 5.5-6.5 mm.

Ecology. Found in the foothills, it lives on the stems of young bushes and under stones between them [4].

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Spread. Central Asia is a region of hills and mountains [4].

Pseudonapaeus (Chondrulopsis) maydanica Gaibnazarova et Pazilov, 2015

Material: 100 pieces, collected from semi-bush and bushy vegetation on the southern slopes of hills in the north-western part of Khatak village, north slope of Maidan Hill, Kohitang mountain range.

All morphological features of the shell fully correspond to the literature [7]. The shell is elongated, shiny, thick-walled, the upper part is conical. The number of coils is 6-6.5, moderately convex. The upper part of the shell is light brown, the rest of the parts are horn-like. The mouth is elongated oval, the edges are slightly curved.

Dimensions: Shell height: 15-18 mm, large diameter: 7-8 mm.

Ecology. It lives between semi-shrubs and shrubs at an altitude of 1300-1700 m above sea level and under large piles of stones.

Spread. Kohitang mountain range [3]. It was first recorded by Abdulazizova from the Boisun mountain range [1].

Turanena Lindholm, Generation of 1922

The shell is cube-shaped, the folds are strongly bulging, the joint of the edges of the shell mouth is strongly close to each other.

Spread. Trans-Caucasus regions, Northern Iran, Kopetdog, Pamir-Aloy, Hisar-Darvaz mountain ranges [2].

Turanena martensiana Ancey, 1886

Material: 23 specimens, collected from a crevasse of rocky rocks around Kampirtepa, Kohitang mountain range.

The shell is conical or oval-conical, the walls of the shell are medium thick, not shiny. Shell whorls 5-6, moderately convex, deep suture. The last shell of the shell is raised in the mouth part. The color is yellow or light brown. The sculpture, the definitive part is covered with wrinkles of various degrees. The mouth of the shell is oval, the edges are evenly beveled, the joint is close and joined by a thin packing.

Shell height 8-12 mm, large diameter 4-5 mm.

Ecology. 1500-2100 m above sea level. It lives in rocky slopes and rock crevices at high altitudes [2].

Spread. Chotkal, Aloy, Talas, Pskom, Hisar mountain ranges [2]. It was first recorded by Sh. Abdulazizova from the Kohitang mountain range [2].

CONCLUSION

As a result of the research conducted in this way, it was found that 4 species of land molluscs belonging to the Enidae family belonging to 3 genera are distributed in the regions of the Kohitang mountain range belonging to the "Surkhan" state reserve.

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