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Research Article

SPECIES COMPOSITION OF DEROCERAS RAFINESQUE, 1820 GENERATION FOUND IN SURKHAN-SHEROBAD VALLEY

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Abdulazizova Shoira Karimovna
Termez State University, Docent. Termez. Uzbekistan

Kalandarova Oyimjon Muzaffarovna
Termez State University, Master. Termez. Uzbekistan

Yakubova Mutabarhon Taibjon Kizi
Termez State University, Master. Termez. Uzbekistan

Abduvaliyev Javohir Ulugbek Ugli
Termez State University, Student. Termez. Uzbekistan

ABSTRACT

The article provides information on the species composition of the representatives of the genus "Deroceras rafinesque, 1820" found in the Surkhan-Sherabad valley.

KEYWORDS

Surkhan-Sherabad valley, Deroceras rafinesque, gastropod molluscs, economic significance, distribution.

INTRODUCTION

It is known that in recent years, great attention has been paid to faunistic research in our republic, including the study of the diversity of molluscs, the assessment of their current state, the analysis of the processes of change in them, the development of measures to protect rare species and fight against harmful species. is being conducted.

Most gastropods have an external shell, but some have a reduced shell and are called nudibranchs because they secrete a lot of mucus from their bodies.

The beautiful and colorful shells of bivalve molluscs attract not only zoologists, but also collectors, and as a result, they are now very well studied. However, slime worms have not yet been fully studied in this regard.

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Currently, more than 150 species of slime worms are found in the fauna of the world, of which 24 species are distributed in Central Asia, and 18 species are distributed in Uzbekistan.

Therefore, the study of slime worms is of great theoretical and practical importance. The reason: firstly, they are a heterogenous group, forming a complex of animals of different origin and playing an important role in studying the evolution of systematically distant groups.

From this point of view, we aimed to determine the taxonomic composition of slime worms distributed in the Surkhan-Sherabad valley, ecological-faunistic analysis, and to determine the composition of economically important species.

Research materials in the Surkhan-Sherabad valley in 2021 - 2023: Termiz city and surrounding parks and stream banks, Uchkizil and Oktepa reservoirs, along the right and left banks of the Surkhandarya river, the areas from the village of Jairakhona to the South Surkhan reservoir, Laylakkhana, Azod, Khursand, It was collected from various biotopes around the Beshtom villages and from the gardens of the surrounding villages.

Collection of research materials was carried out according to the methods of A.Y. Viktor and I.M. Likharev [3], T.S. Rymzhanov and A.A. Shileyko [5].

According to the results of the conducted research, the following species of naked slime belonging to the genus Deroceras were identified from the research area.

family AGRIOLIMACIDAE Wagner, 1975

DEROCERAS Rafinesque, 1820 generation

Body size does not exceed 60 mm when moving. When the body shrinks, its expansion corresponds to the mantle part. The mantle is 1/3 of the entire body.

The body consists of the same colored or black spots, and sometimes it looks like sprinkles.

It is distributed in the Northern Hemisphere.

Deroceras (Deroceras) laeve Muller, 1774

Material: 18 copies. Picked from the Surkhan-Sherabad valley, especially from the gardens of the village of Zhairankhana.

Body structure. This slime worm is mobile, and its body structure is cylindrical, and when it is contracted, it has a glove-like appearance. The mantle is rather large, circular from the back when alive, and triangular after fixation. During movement, the head and neck are stretched forward. The keel is short and slightly blunt, visible only during movement.

The length of the body is up to 25 mm during movement, 13-15 mm when shortened. When the mantle is reduced to 10 mm, it is 5-7 mm [4].

Ecology. Common in all biotopes. It lives mainly among the grasses on the banks of the ditches and among the rice crops in the irrigated lands [3].

Spread. Common in all regions of the Commonwealth of Nations. Many countries in the Southern Hemisphere have been "introduced" by human activity.

Deroceras (Agriolimax) agreste Linnaeus, 1758

Material: 14 copies were collected from the village of Jairakhana, South Surkhan reservoir and its surroundings.

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Body structure. The back of the body is slightly convex or semi-rounded. The mantle occupies 1/3 of the body. The color of the body is light yellow, and sometimes it consists of liver-like stripes, there are no black stripes on the body, if it is blinar - it is unknown.

The length of the body during movement is 35-40 mm [3].

Ecology. It is found mainly in the plains, in the pre-mountain region it lives among various grasses on the banks of streams or under small stones.

Spread. Widespread in all regions of the Commonwealth of Nations.

Economic importance. In addition to damaging various crops, the helminth plays an important role as an intermediate host of diseases.

Deroceras reticulatum Muller, 1774

Material: 19 copies. Collected from different biotopes in more than 15 places of the study area.

Body structure. The body is rather thick, the back is convex, and the back part is shortened as a "cline". Mantle covers 2/5 of the body. The color of adult animals is light brown. Most of its body is covered with black-brown, black-brown, spotted stripes.

The length of the body is 35-45 mm, 25 mm in the reduced state [4].

Ecology. Lives mainly in open biotopes. Avoids woodland and scrub. Widespread in more anthropogenic biotopes. During the day, it hides under branches, rocks, in cracks [4].

Spread. Widespread in the territories of the Commonwealth of Nations, it is considered an "introducer" brought to the Central Asian countries [4].

Economic importance. Its main food is the green part of plants, and it also eats ground fruits. Butterflies cause great damage to various vegetable crops.

Deroceras sturanyi Simroth, 1889.

The structure of the body and reproductive organ corresponds to the literature [1, 2, 4, 5].

Morphological structure. The body is thin, the back end is sharply narrowed. The skin is thin and delicate. The mantle is relatively long: its back part is located on the back half of the body. The color is uniform, light or straw yellow. When fixed, the length is 18-25 mm.

Ecology. Lives in biotopes not far from parks and police fields [4].

Spread. It is distributed in Central and Eastern Europe and spread to Central Asian countries under the influence of anthropogenic forces [4].

Deroceras (Liolytopelte) caucasicum Simroth, 1901

Material: 17 copies. It was collected from various biotopes around the villages of Laylakkhana, Azod, Khursand, Beshtom and the gardens of the surrounding villages.

Body structure. The size of the mantle is 1/3 of the body. There are 16-18 rows of wrinkles in the middle part of the body with a hole in the mantle. The color of the body is variable: brownish-yellow, whitish, sometimes brownish-black. The neck of the tentacles is dark, the legs are pale yellow. The front part of the body is black. The color change of his body directly depends on the biotope where he lives. Those living in shady areas have a pale dirty color, and those living in bright areas have a brownish-yellow color.

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The length of the body during movement is 45-50 mm. 30-35 mm when fixed.

Ecology. Widespread in flat areas. It lives mainly under the leaves of various plants, among herbaceous plants [4].

Spread. It is considered an "introductory" species for the territory of the Caucasus, Central Asia [4].

Economic importance. It causes great damage to potato, cabbage, and tomato plants.

As a result of the conducted research, it became known that 5 species are distributed in the Surkhan-Sherabad valley.

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