

DISTRIBUTION OF SOIL COLLEMBOLAE IN APRICOT GARDEN AND CLOVER AGROSENOSES

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Annotatsiya. Determine the representatives of soil fauna diversity of the world, they are holding meetings with the fertility of the soil, the form of the introduction of the production of assess the importance of the position and the group paid special attention to the issues. In this regard, various representatives associated with the spread of mikrofauna agrosenoz soil to determine the soil nutrient relations with the environment they work and who have undergone evaluation and crisis mainly affected agrosenozlar is one of the tasks prove the role of urgent condition.

Key words: Collembola, family Isotomadae, microfauna, soil, Isotomuras palustris type, agrosenoz.

Collembola, the main representative of the soil microfauna, are organisms with a unique specialized system in the soil food chain. Research is being conducted on the species composition, diversity, morphological characteristics, ecology of collembola distributed in the soil layers of different agrosenoses, as well as improving soil fertility.

Collembola have highly specialized morphological characters. These are: a sacropod, a hook that holds the sacropod, and a ventral tube. The habitat of this microfauna is the top layer of soil where organic material has accumulated. Their distribution limit can be found in high mountains and latitudes, in mountains covered with permanent glaciers, and even in the ice layers of the earth. Also, soil collembola can be found at a depth of up to 1 m², where it is convenient to absorb the humus and mineral part of the soil.

For the first time in 2022-2024, research was conducted on the species composition and distribution of soil collembola in the apricot orchard and clover agrosenoses of the Botanical Garden of the National University of Uzbekistan. In this case, the generally accepted "Berleze-Tulgren apparatus" was used to extract collembola from soil samples, permanent preparations were prepared, and one family, 6 genera, and 23 species were identified using the microscopic (DN-300M 18x100 binocular) method and collembola detector.

Class: Entognatha

Genus: Collembola Lubbock, 1870

Suborder: Entomobryomorpha Börner, 1913

Family: Isotomidae Martinova, 1971

This family belongs to the suborder Entomobryomorpha, and the family is traditionally divided into three subfamilies: Anuroforinae, Proisotominae, and Isotomidae. According to Gisin, the family Isotomidae was derived from the inclusion of three subfamilies [1]. Studies by Stach found that Actaletes is not the only species belonging to the family Isotomidae [4]. A second subfamily, Anurophorinae, was discovered by Gisin from Keich and included in the science.

The body of representatives of the Isotomidae family is covered with fine hairs, most of them have a postantennial organ (with the exception of two species), the thoracic segment is round or elongated, the abdominal segments are of the same length, the third abdominal segment is characterized by the back being covered with hairs without tufts, the fourth abdominal segment being only slightly longer, and having a long and well-developed furca (complete or partial) in most species [2].

This family was found for the first time in the apricot and alfalfa agrocenoses of the Botanical Garden of the National University of Uzbekistan. Also, it was found that the upper side of the I thorax segment does not have setae, and it has a reduced tergite that partially closes the II segment. The Isotomidae family is distinguished from other families by these characteristics.

Members of this family are distributed throughout the world, some in extreme habitats such as deserts and other regions. Belonging to this family, *Isotomurus palustris* is one of the most common and frequently recorded species of collembola, which can always be found among the marginal vegetation of ponds and rivers [4].

The male antennae of *Isotomurus palustris* have adhesive organs, and both sexes have lost the outer jaws, such as the mandible and maxilla. The body is elongated and the head is rounded, probably to enter the narrow spaces between the moss leaves in search of food particles. Most species live in soil, in coastal crevices, or in association with freshwater [5].

This family includes 28 genera and they are as follows: Agrenia, Anurophorus, Archisotoma, Axelsonia, Bliss, Bonetrura, Ciforga, Coloburella, Cryptopygus, Dagamaea, Folsomia, Folsomides, Isotoma, Isotomiella, Isotomodes, Isotomurus, Metisotoma, Micranurophorus, Micrisotoma, Pentacanthella, Proisotoma, Pseudanurophorus, Semicerura, Subisotoma, Stachanorema, Tetracanthella, Hub, Weberacantha [4].

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