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BIOTSENOTIC RELATIONS OF REPTILES ANIMALS IN THE DESERT ECOSYSTEMS OF THE SOUTHERN REGION OF UZBEKISTAN

Annotation. The study of the structure and life cycles of reptile helminths is important in determining the circulation patterns of free-living helminths in different biogeocenoses. It also allows you to determine the laws of free, intermediate-reservoir master, defensive master systems. Because reptiles have close biocenotic relationships with various vertebrates and invertebrates that make up the biogeocenosis complex in their range, they spread various helminthic pathogens into the environment and among other animals. As a result, various helminths cause natural sources to be preserved.

Key words: Reptiles, various helminths, Mammals, parasitic worms, food chains, insects, ecosystems.

The helminths are distinguished by their diversity of species and their extreme adaptability to living in different ecological conditions. Almost all of the 59 species of reptiles found in Uzbekistan are characterized by their living conditions, the role of trophic connections in the food chain, comprehensive study of parasites of the Reptilia class, including helminths, infested with helminths in the diet. and in humans) due to the induction of various helminthiases. The helminthiasis found in the bodies of these animals causes great epizootiological and epidemiological problems in the national economy and among the population.

Therefore, a comprehensive special study of reptile helminths in Uzbekistan began in 1975, and research in this area is mainly devoted to the study of the fauna of helminths and the life cycle of some species. In this regard, T.Q. Kobilov (1977)*Oocoristica truncata*, the first fast-lizard parasite in Uzbekistan, studied the life cycle of the parasite and determined that the intermediate host of the parasite is Scarabaeus sacer (*Scarabaeidae*) and Podhomala fausti *(Tenebrionidae*). Later, TK

Kobilov (1978, 1980) studied the life cycle of the parasitic *Abbreiata kazachstanica* in the yellow snake (Ophisaurus apodus) and found that this helminth develops through an intermediate host (straight and hard-winged insects) and a reservoir (some small lizards and frogs). (2)

It is now known that in nature there are reservoir hosts of parasites, which retain helminths in their bodies for a long time and then transfer them to other animals. As a result, it is possible to preserve biodiversity in the biogeocenosis. Representatives of the Reptilia class are of great importance in this regard. The study of the structure and life cycles of reptile helminths is important in determining the circulation patterns of parasitic helminths in different biocenoses. It also allows you to determine the laws of free, intermediate-reservoir master, defensive master systems. Historically, reptiles have adapted to living in Uzbekistan in different ecological conditions, living different lifestyles. In the long-term system of evolution, *the parasite-host reptiles* are free-ranging and the study of their hosts has become an important object of study.

So far, the species composition and development cycles of helminths in different biogeocenoses of Uzbekistan have not been fully studied in the functional system of cestodes, trematodes, nematodes and acanthocephala as parasitic hosts of reptiles. From a systematic point of view, helminths belong to 3 types and 4 classes of fauna. These invertebrates have evolved to be parasitic on various organs of plants, humans and animals, causing helminthic diseases with various pathological features.

In order to study the biocenotic relationships of reptile helminths in 2018-2020, helminthological materials were collected in Nishan, Mubarek, Mirishkor districts of Kashkadarya region. Preliminary results of scientific studies have shown that 59 species of helminths are found in reptiles in desert ecosystems. These species are classified as follows: cestode (8 species), trematode (9 species), nematode (35 species), acanthocephala (7 species). Based on the analysis of the results of our research comparing helminths in the literature with life cycles, defensive,

ecological helminths with intermediate and reservoir hosts, free-circulating helminth circulatory pathways were identified. Determination of the life cycle of helminth intermediate host, reservoir host defensive host system, functional laws in the system of population structure, as well as the ways of circulation of amphibians in biogeocenosis in natural conditions and in a separate territory of Uzbekistan anthropogenesis.

Helminths, like any other organism, live in a separate specific biogeocenosis in connection with the interaction of all its components with biocenotic (trophic, topical, etc.). Various invertebrates, which are intermediate hosts of reptiles and helminths, distributed in the natural conditions of the republic, provide a variety of parasitic worms. Biocenotic relationships between reptiles and their helminths, ie members of the "parasite host" ecosystem, distributed in the existing natural ecosystems of the territory of the Republic of Kazakhstan. found to live a moderate life.

As a result of the analysis of life cycles of parasitic worms, definitive, intermediate and ecological features of reservoir hosts, the ways of circulation (rotation) of these parasitic worms in natural conditions were identified:

I. Circulatory pathway of cestodes:

1. Mammals (predators) - eggs (external environment) - hard-winged - reptiles. Circulatory pathway of species of the genus Duplophilidium.

2. Mammals (predators) - eggs (external environment) - oribatid canals - reptiles. Circulatory pathway of representatives of the genus Mesocestoides.

3. Reptiles - eggs (external environment) - hard-winged - reptiles. The circulatory pathway of the Oochoristica genus.

4. Reptiles - eggs (aquatic environment) crustaceans Circulatory tract of the genus Spirometra.

II. Circulatory pathway of trematodes:

1. Mammals (domestic, wild) - eggs (aquatic environment) dogs, amphibians, reptiles. Circulatory pathway of representatives of the genus Alaria.

III. Circulatory pathways of acanthocephalus:

1. Mammals (domestic, wild) - eggs (external environment) - hard-winged - reptiles. Circulatory pathway specific to members of the genus Macracanthorhyuchus.

2. Mammals (rodents) - eggs (external environment) - hard-winged - reptiles. Representatives of the genus Moniliformis circulatory path.

3. Birds - eggs (external environment) - hard-winged - reptiles. Circulatory pathway of the Mediorhynchus genus.

IV. Circulatory pathway of nematodes:

1. Mammals (domestic, wild) - eggs (external environment) - hard-winged - reptiles - mammals. Circulatory system of Ascarops, Physocefalus, Vigisospirura, Spirocerca genera. (4)

From this it can be concluded that the reproduction, development and distribution of biohelminths depends in many respects on the presence or absence of host populations in this biogeocenosis. In most cases, it is the definitive host that is the main factor that ensures the spread of helminths in nature. In this case, the host “searches” and swallows animals (intermediate host) or plants infected with invasive elements of helminths (eggs or larvae) in a specific way. Therefore, it is important to know the laws of the mechanisms of transmission of helminths to the host organism in the prevention of helminthiasis. The reptile was found to serve as a reservoir for helminths belonging to 12 species and an intermediate host for 14 species. Because reptiles have close biocenotic relationships with various vertebrates and invertebrates within the biogeocenosis complex in their range, they spread various helminthic pathogens into the environment and among other animals. As a result, various helminths cause natural sources to be preserved. In

this process, the ability of reptiles to keep infectious elements (helminth eggs, larvae) alive in their bodies for different periods, even years, leads to the spread of helminthiasis and the long-term preservation of their natural sources. Studying the bioecological properties of parasitic helminths in the body of reptiles is the most convenient way to combat them.

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