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THE MEDICALLY IMPORTANT VENOMOUS SPIDERS

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Abstract
This article discusses venomous spiders, their distribution, their significance in nature, the effects of spider venom, and the methods of studying them.

Keywords: Venomous spiders, types of venom, Karakurt, False Karakurt.

TIBBIYOTDA AHAMIYATGA EGA BO'LGAN ZAHARLI O'RGIMCHAKLAR

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Annotatsiya:
Ushbu mqolada zaharli o'rgimchalar, ularning tarqalishi ularning tabiyatdagi ahamiyati, o'rgimchaklar zaharining ta'sir etishi, va ularni o'rganish metodlari keltrilgan.

Kalit so'zlar: Zaharli o'rgimchaklar, zahar turlar, Qoraqurt, Soxta qoraqutr.

Introduction

It is known that the study of poisonous spiders is of great importance for understanding their role as important members of ecosystems. Until now, there is no complete information about the species composition, biology, ecology, behavior, many other processes, biological activity of these organisms. The diversity of natural climatic conditions of our republic determines the existence of a rich fauna of spiders, including poisonous spiders. Currently, in the era of intensive development of natural resources and the development of technology, the number of many species of animals is sharply decreasing, and in connection with the development of pastures, deserts and semi-deserts, many species of poisonous spiders are under threat of loss of their habitats and extinction.

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Currently, according to the International Spider Catalog, there are 49,791 species of this order belonging to 129 families and 4,234 genera. [5] There are more than 200 species of spiders worldwide that are dangerous to human life. Spider venom is mainly used to capture prey and protect itself. The effects of spider venom are of two types: The first effect is a necrotic effect. When spiders with such venom bite, swelling, rash, and tissue necrosis are observed in the tissues and cells at the affected site. The second effect is a neurotoxic effect.

When spiders with such venom bite, they mainly affect the nervous system. The connection in them destroys the synapses. Such damage can cause problems with the nervous system, and the venom of some spiders can have two effects. Spiders catch their prey in two different ways: some species catch food by weaving webs, while others catch their prey by stalking or stalking. In nature, there are species that feed on other spiders. They use a trick to catch spiders. They go to the spider's web and shake the web up and down with their legs as if it were a small insect that has fallen into the web, pretending to be prey, thus hunting other spiders [4]. Material and methodology The following methods are used in the process of collecting samples from spiders: Route method: in this, places for collecting material are determined and materials are collected. During the collection process, it is imperative to wear protective gloves when handling spiders. If it is possible to handle a spider by hand, it can be handled with gloves.

A Barbera trap is used to collect nocturnal spiders. In this case, a deep plastic container is buried in the ground and a small amount of water is placed inside to attract the spiders. Although spiders cause fear and phobia in many people, most of them are harmless to humans. However, improper “communication” with some spiders can pose a threat to human health. Of the 43,000 known species of spiders on Earth, almost all have venom glands. They use these glands to immobilize and digest their prey. The venom is delivered using chelicerae, small hook-like structures located at the front of the head. Venom can contain various substances, such as digestive enzymes, neurotoxins, or anticoagulants, which help the spider control its prey and absorb it more easily.

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However, it is worth noting that most spider species do not attack humans and their venom is harmless to us. Only a few species of spiders are considered extremely dangerous. These include the spider species Atrax, Latrodestus, Phoneutria, and Loxosseles.

The most dangerous spider on this list is the funnel-shaped Atrax spider, which belongs to the Agelenidae family. Atrax spiders can cause life-threatening effects. An example of this is the terrible Sydney funnel-web spider, Atrax robustus, which lives in Australia. Its extremely strong venom contains a neurotoxin that causes life-threatening symptoms. If immediate medical attention is not provided, such a spider can kill a small child in just five minutes, and a five-year-old child in 2 hours. However, deaths from Sydney funnel-web spider bites are rare. For example, no deaths have been recorded in Australia since the 1980s. bait is placed. The spider that falls into it cannot escape. The spider that falls into the trap can be carefully removed.

Figure 1. Catching spiders using a Barbera trap Catching method with a net. In this method, large spiders are caught using a one and a half meter long net. The method of C.O. Vysodskaya is also used to distinguish spiders [2].

This method is mainly one of the taxonomic methods for identifying spiders. This method determines the species using morphological signs of spiders. The number and location of their eyes are determined by signs such as claws on the legs. When collecting spiders, attention should be paid to their lifestyle. Spiders that live during the day are mainly found on the ground or around the web they weave. Nocturnal spiders, on the other hand, burrow into rocks or holes during the day. Wolf spider L. praegrandis (CL Koch, 1836) Another type of poisonous spider is the wolf spider. It lives in deserts, steppes and mountain ranges in Uzbekistan, although it can also be observed in cities, especially in parks and areas with a lot of vegetation. They can be found in meadows and deserts, they do not weave webs, therefore they are more common in open areas. They are considered nocturnal animals, mainly hiding in vertical burrows during the day and hunting at night. Their body structure is quite large, making them fast-moving. Therefore, it hunts and catches prey. It has 8 eyes, 2 pairs are large, the rest are small. Large eyes are useful during night hunting. They feed on large insects. They are found in many areas of Surkhandarya region. They are widespread in the regions of Sherabad, Kyzyrik, Kumkurgan, and Boysun districts, and care for offspring is highly developed [4].

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In Uzbekistan, 18 species of poisonous spiders belonging to 9 genera and 6 families have been identified.[3] Among them, representatives of the genus Latrodectus are distinguished by their strong poison and lifestyle. In Uzbekistan, 3 species are particularly dangerous in terms of the strength of their poison. These are the white spider (L. pallidus Cambridge, 1872), the Dal spider (L. dahli Levi, 1959) and the black spider (L. tredecimguttatus Rossi, 1790) belonging to the Theridiidae family [1]. These species are widespread in the southern regions of Uzbekistan, mainly found in deserts and hills, on mountain slopes. The most common of these species is L. tredecimguttatus [3;]. Black spider (L. Tredecimguttatus). The poison of the female spider is 160 times stronger than that of the male. This is very dangerous for human life. People sometimes confuse poisonous spiders with similar but harmless spiders. The phenomenon of mimicry is well-developed among spiders, one of which is the species Steatoda paikulliana of the Theridiidae family, known as the false blackworm. It resembles a blackworm, but has a bright yellow spot on the back of its abdomen, which is not found in blackworms. Its poison is much weaker and does not affect humans, and its bite is similar to a bee sting. [1] Conclusion. According to the results of our research, it became clear that poisonous spiders in the Surkhandarya region have not been studied enough and the number of species has not been determined. Their role in nature and importance in medicine are considered very important, and their poison can be widely used in medicine. The main task of our contributions is to more fully study the arachnids of the Surkhandarya fauna.

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