



BIOLOGICAL PROPERTIES OF TOXIC AND POISONOUS ANIMALS

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Annotation: This article discusses the biological properties of toxic and poisonous animals, their mechanisms of venom secretion, and their ecological significance. The impact of toxic and poisonous animals on human life, their protective mechanisms, and their role in nature are highlighted based on the results of scientific research.

Keywords: Toxic animals, poisonous animals, snakes, spiders, frogs, marine animals, venom, toxin, ecology, defense mechanisms, medicine, neurotoxin, hemotoxin, biological hazard, poisonous insects, sting, painful sting, defense system, nature, biosecurity, venom secretion mechanism, predators, prey, chemical defense, effects of venom, medical research, drugs, balance of nature, hunting strategies, animal adaptation.

TOKSIK VA ZAHARLI HAYVONLARNING BIOLOGIK XUSUSIYATLARI

Annotatsiya: Ushbu maqolada toksik va zaharli hayvonlarning biologik xususiyatlari, zahar ajratish mexanizmlari va ularning ekologik ahamiyati haqida soʻz yuritiladi. Toksik va zaharli hayvonlarning inson hayotiga taʼsiri, ularning himoya mexanizmlari hamda ilmiy tadqiqotlar natijalari asosida ularning tabiatdagi roli yoritiladi.

Kalit soʻzlar: Toksik hayvonlar, zaharli hayvonlar, ilonlar, oʻrgimchaklar, qurbaqalar, dengiz hayvonlari, zahar, toksin, ekologiya, himoya mexanizmlari, tibbiyot, neyrotoksin, gemotoksin, biologik xavf, zaharli hasharotlar, chaqish, ogʻriqli chaqish, himoya tizimi, tabiat, bioxavfsizlik, zahar ajratish mexanizmi, yirtqich hayvonlar, oʻlja, kimyoviy himoya, zaharning taʼsiri, tibbiy tadqiqotlar, dori vositalari, tabiat muvozanati, ov qilish strategiyalari, hayvonlarning moslashuvi.

Introduction: In nature, many animals produce various substances for defense and hunting. Such animals are divided into two main groups: toxic and



venomous animals. The poisons produced in their bodies have different effects, some serve only to protect against predators, while others are used for attack.

Main part: Toxic animals produce poisons in their bodies and cause harm when ingested or ingested.

For example, some frogs secrete toxins from their skin to help ward off predators. Poisonous animals, on the other hand, actively attack by injecting poison through special teeth, stingers, or other structures.

For example, snakes and spiders secrete poison to paralyze or kill their prey.

The most famous toxic and poisonous animals

1. Venomous snakes - Species such as the black mamba, the sunflower snake, and the cobra secrete a very strong neurotoxin or hemotoxin

2. Marine animals - Jellyfish, stonefish, and octopuses produce a strong poison that they use for hunting and defense.

3. Frogs - The substance secreted by the golden poison frog, which lives in South America, is also extremely dangerous to humans.

4. Spiders - The black widow and the Brazilian wandering spider have a strong neurotoxic effect, damaging the nervous system.

Some species of poisonous spiders have a poison that is twice as strong as cyanide! Just one bite can kill even an adult. The most poisonous representatives of the Hexathelidae family live in Australia. Here they like to settle next to human habitation. They are very easy to recognize by their web-like nests, reminiscent of a whirlpool. There are more than enough species of poisonous animals on this continent that pose a mortal danger

Poisons can have different effects depending on their chemical composition.

Neurotoxins - paralyze the nervous system (for example, the venom of cobras and black mambas).

Hemotoxins - disrupt the circulatory system (for example, the venom of the sunflower snake).

Myotoxins - destroy muscle tissue (e.g., some snake and insect venoms).

Cytotoxins - destroy cells and damage tissue. Habitat of toxic and venomous animals Tropical and equatorial regions - Most of the animals that live here can be toxic or venomous (e.g., dart frogs, red ants).

The taipan - This is the second most venomous snake in the world. An adult can die within 30 minutes of being bitten. The taipan's venom disrupts blood clotting and has a neurotoxic effect, and arid regions - Animals such as snakes and scorpions have adapted to survive by poisoning their prey.

Marine environment - Jellyfish, stonefish and octopuses are distinguished by their strong poison. Dangers and protective measures for humans



When traveling in nature, you should be careful of poisonous animals. It is necessary to observe precautions in areas where spiders and snakes live. If poisoning occurs, you should immediately seek medical help. The ecological importance of toxic and poisonous animals Toxic and poisonous animals play an important role in the ecosystem. They help maintain the balance between predators and prey. For example, snakes control the number of rodents, while spiders limit the population of insects. Their poisons are also used in the medical field, including in the creation of medicines.

Conclusion: Toxic and poisonous animals are an integral part of nature, and their role is important not only in the stability of the ecosystem, but also for scientific research. Toxic and poisonous animals play an important ecological role in nature. They produce or accumulate toxic substances to protect themselves, hunt, or evade competitors. By studying their behavior, it is possible to identify substances useful for the human body and understand the mechanisms of action of poisons. Poisonous animals can pose a threat to human health, but their poison is used in medicine, in particular in the production of medicines. For example, bee venom can cause allergic diseases, but it can also be used in the pharmaceutical industry. Thus, toxic and poisonous animals are not only dangerous, but also have scientific and medical significance, and through their study, humanity can find new methods of treatment.

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