Date: 13th September-2025

PARASITIC MITES, THEIR STRUCTURE, DEVELOPMENT AND ROLE IN DISEASE TRANSMISSION

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Annotation: Ticks (Acari) Order. Ticks are small, sometimes microscopic animals that live in a variety of ways. Among them, there are parasitic, saprophytic and predatory species that live on animals, humans and plants. The body of the tick is segmented to varying degrees. Among them, there are representatives with a body divided into many segments, as well as representatives with a single body. The chelicera and pedipalps of most ticks together form a stinging sucking proboscis. A number of species do not have respiratory organs. Most ticks have developed tracheae. The intestine of the blood-sucking tick is greatly expanded, forming a lateral pouch.

Keywords: Mites, Ixodidae, argasidae, hyalomma, Central Asian, phytoseiid, omidhodorus, Eriophyidae

Introduction. Predatory mites are representatives of the parasitiform and acariform mites. They live on the leaves of fruit trees, mulberry, vine, cotton, alfalfa and vegetable crops, weeds and plant debris. Activity. They feed on spider mites, eggs, larvae, nymphs and adults, flat-bodied mites and other small arthropods. They are widespread in Central Asia, and about 50 species belonging to 11 families are known. They are often found in weeds in arable fields and adjacent lands. Like herbivorous mites, they also overwinter in fallen leaves, cracks in tree bark, bedding and other plant debris. They emerge from their wintering grounds when the average daily temperature is above 10°. In the agrobiocenosis of irrigated agriculture, it mainly accumulates in weeds and mulberry trees. The cottonworm follows the spider mite in late May - early June. Their seasonal development period is the same, which creates good conditions for the feeding of the predatory spider mite. Predatory spider mite can be used as a biological control method against the herbivorous pest Spider mite. The most active predatory spider mite are species belonging to the phytoseiid and other families. They are used against spider mites on cucumbers grown in greenhouses, as well as in gardens and vineyards.

Main part. Parasitic mites feed on the blood, body fluids, skin or fur of their host. Among the parasites of humans and animals, the most common are the Ixodidae and Argasidae ticks. In addition to sucking blood, these ticks also transmit microorganisms that cause diseases such as rash and recurrent sweating, tick-borne encephalitis, tularemia, and piroplasmosis, which are dangerous for humans. The itch mite Sarcoptes scabei parasitizes on the skin of humans and animals. The mite is microscopic (0.15-0.3 mm) and burrows into the stratum corneum of the skin.

Skin affected by the itch mite is very itchy and forms sores. The acne mite Demodex folliculorum parasitizes the sebaceous glands and hair follicles of human skin. Sometimes the glands proliferate, causing acne to form on the face and various parts of the skin. Among the parasitic ticks, the taiga tick (Ixodes persulcatus) is widespread in the Far East, and the castor bean tick (I. ricinus) is widespread in European countries. Adult ticks crawl up grass and bushes and throw themselves on the host.

After sucking blood, the ticks fall to the ground and lay eggs under the bark. The larvae that hatch from the eggs feed on lizards, birds and small mammals, and the nymphs feed on slightly larger animals. The main hosts of the adult tick are large mammals and humans. Thus, the tick parasitizes on three hosts during its development. However, the larval and nymphal stages of some ticks develop on one host, and the adult stage on a second host. Some ticks do not leave their host during their development. That is, they develop on one host. In Central Asia, species belonging to the genera Hyalomma and Omithodorus are widespread among parasitic ticks. These ticks are found in cracks in the walls and floors of barns and houses.

Viruses, bacteria, spirochetes that cause various diseases. parasitic unicellular animals spread by ticks or insects. Diseases transmitted by ticks and insects are called transmissible. Russian scientist E. N. Pavlovsky founded the doctrine of the existence of a natural source of transmissible diseases in nature. Due to the development of immunity against transmissible diseases in the body of wild animals, the disease does not cause them much harm.

Humans or domestic animals that have come into contact with a natural source can become infected with these diseases through ticks or insects. To prevent transmissible diseases, it is necessary to observe measures to avoid ticks and insects. 320 Several species of mites are also associated with plants. Spider mites (Titianenchidae) parasitize on the leaves of various plants and cause great damage. Mites (Eriophyidae) that form bumps on various organs of plants cause damage.

O. P. Bogdanov, prof. G. S. Sultanov, dos. V. I. Taryannikov are of great merit.

Conclusion: Ticks have a very negative impact on plants, animals, and especially humans. They can cause very serious diseases. To protect themselves from them, people need to follow sanitary and hygienic rules and a healthy lifestyle. Even today, our scientists are conducting a lot of research on measures to combat these parasites.

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