

MITE BIOLOGY AND PLANT DAMAGE

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Abstract: The demand for agriculture in our republic is increasing year by year. Our fruits and vegetables are being grown by the farmers and are reaching the world markets. But harmful organisms cause serious damage to agricultural products. Harmful and sucking mites are among them. In order to fight against mites, it is necessary to have information about mites. In this article, you can get acquainted with the biology of mites and measures to combat them.

Key words: mites, type, family parasite, body, oral apparatus, idiosome, bisexual, reproduction.

Like insects, ticks go through embryonic and postembryonic development periods in their individual development. And ticks jump like insects. It will be able to fly after the last time. Some species need additional nutrition during this period. Temperature and humidity greatly affect how long a mite lives, while the optimum range can vary widely for different species. Ticks can produce fifteen or more generations during the year. Most mites do not move from place to place very quickly, so they are adapted to slow dispersal by means of spider webs, hypropyl period. In terms of nutrition, ticks can be parasites and predators of various

animals. There are many types of mites that damage crops. Phytocelium mite living in Uzbekistan is used in the fight against spider mite in greenhouses.

Ticks are unisexual creatures, but in some species, eggs develop without fertilization, and often male mites hatch from such eggs, which is considered a type of reproduction in the form of parthenogenesis (arrenotochy). The number of mites can be drastically reduced by acariphages. Of these, coccinellid beetles and larvae (stetorus), golden-eye larvae, mite-eating thrips, candals and predatory mites are particularly important. Mite eggs are often oval or round in shape. Egg development is similar to insect eggs in many respects. Post-embryonic development of mites takes place without metamorphosis. A mite larva has three pairs of legs. Due to the absence of the fourth pair of legs, hysterosomes are poorly developed in larvae, external genitalia are often underdeveloped, and sensory organs are simplified. Larvae and adults of the mite are also distinguished by the location and number of hairs covering the body.

Grouping: It is divided into 3 groups depending on the type of nutrition: herbivores, carnivorous mites. and the parasitic mite. Some mites. feeding on plant remains (saprophages) and playing an important role in the process of soil formation (eg, representatives of the shield mite belonging to the Oribalidae family and AcaroideaHHHr); others feed on plant sap (phytophages) and cause great damage to agricultural crops (maybe, species of the Tetranychidae family); some feed on simple fungi (mycophages) and parasitic mites. harms farm animals and humans (mites of the family Ixodidae, Argasidae, Dermanyssidae, etc.). A tick that is harmful in nature. along with a number of useful ones, it prevents the increase of agricultural pests. Most mite larvae have 3 pairs of legs, other stages of development have 4 pairs of legs, but a group of 4-legged mites have 2 pairs of legs. it increases. In some mites, increased parthenogenesis is also observed.

During individual development, mites go through the following stages: egg, larva, nymph, and mature mite. Some representatives of acaroid mites living in food reserves also have a hypopyal (hypopus) period between the nymph and deutonymph periods, which have a simplified digestive system and oral apparatus. This period serves for the spread of the mite species and for it to withstand the nocturnal conditions. In resting hippos, the legs are underdeveloped, the sensory organs are simplified, the epidermis is thickened and yellow or brown in color. Resting (sleeping) hippos can lie still for a long time (up to several years). During this time, they survive on the substances they accumulated during the previous nymphal period. When favorable conditions occur, the life of the mite normalizes, and the period of hypopus is completed.

Predatory mites are representatives of the parasitic and acariform K. families. It lives on leaves of fruit trees, mulberry, vine, cotton, alfalfa and vegetable crops, weeds and plant residues. Serkarakat. Spider mite eggs, larvae, nymphs and adults, flat-bodied mites, etc. feeds on small arthropods. Widely distributed in Central Asia, about 50 species belonging to 11 families are known. It is often found in cultivated fields and adjacent weeds. Like herbivorous mites, they also live in fallen leaves, cracks in tree bark, bedding, etc. winters in plant remains. It leaves rural areas when the average daily temperature is above 10°. Irrigation is collected in agricultural agrobiocenosis, mainly in weeds and mulberry trees.

Plant-eating mite. Two sarcoptiform mites (Sarcoptifomes) and thrombidiform mites. (Trombidiformes) is divided into a subfamily. Of the sarcoptiform mite, representatives of 2 families of warehouse mites: flour mite and hairy mite cause great damage (warehouse pests). Trombidiform mites are mites that harm plants by sucking sap during growth and development. enters. The species of the spider mite family, including the spider mite, cause a lot of damage

to agricultural crops. The largest (up to 2 mm) and active mite belonging to the Briobind family not only causes damage to plants, but also enters human habitations and contaminates food reserves. The brown fruit mite is a serious pest. Fruit flat mite from the family Tenuipalpidae is harmful in Central Asia. Most species of the various claw mite family (Tarsonemidae) are herbivores, but there are also carnivores and saprophages. The most harmful is the earthworm mite. Live births are characteristic of the family Pycnotidae. All their development phases take place in the mother's womb; the belly swells up to 100-500 times. A member of this family causes damage to wheat, oats, rye, barley and corn during the growing season. The bellied mite is parasitic on the stock-damaging insect worm; if they get into the human body, the skin disease hay fever occurs. Representatives of the four-legged mite or swelling mite (Eriophyidae) family feed on the plant, change its shape, color of leaves and fruits, kill buds. Some species are free-living on plants, while others form tumors.

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