

Discover the Fauna of Our Campus

Cotton aphid (*Aphis gossypii*)

Order: Hemiptera (True Bugs)

Family: Aphididae (Aphids)

Genus: *Aphis*

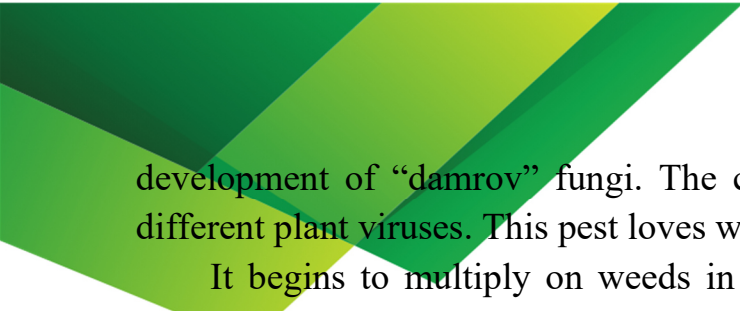
Species: *Aphis gossypii* (Cotton Aphid və ya Melon Aphid)

Cotton aphid (*Aphis gossypii*) is considered one of the most dangerous pests in agriculture, especially in cotton growing. This small insect is polyphagous, meaning it damages not only cotton, but also melons (cucumbers, melons, watermelons), citrus fruits, and many ornamental plants. In Azerbaijan, the cotton aphid is widespread in almost all cotton-growing regions. The cotton aphid is very small (1.2 – 2.1 mm). Its color can vary depending on food and temperature. It can be dark green, yellowish-green, or almost black. It has a pear-shaped body structure. The most distinctive feature of this insect is its very rapid reproduction through parthenogenesis (reproduction without fertilization). One female can produce up to



20 offspring during the season. Aphids feed on plant sap. They form colonies mainly on the underside of leaves, young shoots and buds. They weaken the plant by sucking its cell sap. As a result, the leaves shrivel, turn yellow and fall prematurely. Damaged cotton plants stop growing, the cones remain small or fall before opening. While feeding, the aphids secrete a sweet, sticky liquid. This liquid

covers the leaves, disrupts the photosynthesis process and creates conditions for the



development of “damrov” fungi. The cotton aphid is a carrier of more than 50 different plant viruses. This pest loves warm and mildly humid weather.

It begins to multiply on weeds in the summer months, and after the cotton sprouts emerge, it moves to the fields. There are also winged forms that can easily spread over long distances by wind. The fight against the cotton bollworm should be carried out in a comprehensive manner. After the bollworms emerge from winter, they first multiply in weeds (for example, nettles, centipedes). Keeping the field clean reduces the source of infection.

Maintaining crop rotation. Excessive nitrogen fertilizer makes the plant tissue too soft and increases the attraction of bollworms. Phosphorus and potassium fertilizers increase the plant’s tolerance. In nature, bollworms have many natural enemies. Ladybugs (Ladybugs), leafhoppers (Chrysopa) and sinephids are very effective in destroying bollworm colonies. In order to maintain biological balance, unnecessary chemical spraying should be avoided. If the number of bollworms exceeds the threshold of economic damage (for example, when 10-15% of plants are infected), insecticides are used.

Imidacloprid Note: Insects quickly develop resistance to chemicals, so it is not recommended to use drugs from the same group consecutively.

