

Pests of geranium

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Aphids

The main species encountered are the **green peach aphid** (*Myzus persicae*), **cotton aphid** (*Aphis gossypii*) and *Macrosiphum* spp. They prefer young and succulent tissues, concentrating on the leaves, stems and flower buds, forming large colonies. They appear under conditions of high temperatures and lack of air currents. Aphids cause damage by sucking sap from plant tissues. Damaged plants lag in growth and development. During feeding they excrete a sticky exudate known as "honeydew". It is the cause of the appearance of sooty mould fungi on the leaves of the plants.

Control

Due to their rapid reproduction, control is prolonged. The plants are treated periodically with an appropriate insecticide. The plant protection products Mospilan 20 SP 0.0125%; Picador 20 SL 0.05% (11.06.2021 - grace period for sale and distribution); Confidor Energy OD 0.06% (11.06.2021 - grace period for sale and distribution) may be used.

Greenhouse whitefly (*Trialeurodes vaporariorum*)

Whiteflies are small insects with piercing-sucking mouthparts. They live on the underside of the leaves and are white in colour, as their name suggests. Dry and hot summer months are favourable for their rapid development. Damage is caused by the larvae and nymphs, which feed on the underside of the leaves. They suck plant sap and cause yellowing and drying of the leaves. Adults and larvae cannot completely digest the sugars in the plant sap and excrete the excess in the so-called "honeydew", on which sooty saprophytic fungi develop, contaminating the leaves. When the plants are touched, the adult whiteflies fly off. In areas with mild winters the whitefly can develop year-round, with eggs, larvae and adults being observed simultaneously.

Control

Effective products for the control of whitefly are Mospilan 20 SP 0.02%; Confidor Energy OD 0.08%; Admiral 10 EC 0.05%; or yellow sticky boards (strips).

Two-spotted spider mite (*Tetranychus urticae*)

Dry and hot summer air is the ideal environment for mite development. In case of low infestation, they are found on the underside of the leaves and resemble small moving dark dots. The pest sucks sap and at the puncture site a pale green pin-point spot is formed. Later the spots merge and the leaf becomes marbled. Under heavy infestation they spin thread-like webs between leaves and stems, as a result of which the plants develop more slowly. Characteristic leaf curling and drying is observed. Spider mites prefer older leaves with reduced water content, as well as senescent, drought-stressed plants.

Control

In the presence of mites, the plants are washed with water and placed in a well-ventilated but cool place. They are watered regularly. Infested flowers can be treated with the acaricides: Nissorun 5 EC 0.06%; NeemAzal T/S 0.3%; Bermetin 15–100 ml/da (50–100 ml/hl);

Western flower thrips (California thrips) (*Frankliniella occidentalis*)

Damage is caused by the adults and the larvae. Thrips feed by piercing plant cells and sucking out the plant sap. On the attacked parts small whitish spots with black dots appear, which are the pest's excrements. At a later stage they turn into grey or black spots covering the entire leaf blade. When flowers and buds are damaged, the spots have a silvery colour. As a result of the damage, flowers and leaves become deformed. In addition to the direct damage from feeding, thrips can cause indirect damage by transmitting viruses to non-infected plants. Young plants are particularly susceptible to infection and there is no cure once it appears. Immediate removal of infected plants must be combined with strict thrips management to prevent serious losses.

Control

The plant is thoroughly washed with lukewarm water. They can be treated with the insecticides: Fury 10 EC 0.015% (11.06.2021 - grace period for sale and distribution); Mospilan 20 SP 0.02%.

Defoliating caterpillars (*Noctuidae*)

Damage is caused by the caterpillars of various cutworm species. The caterpillars that feed on geraniums can be green, reddish or pale brown. While adult moths do not pose a threat to plants, the caterpillars cause serious damage by feeding on the leaves, buds and flowers of the plant. Initially they make irregular holes in the leaves. Later they eat out the entire leaf blade and the plant may die.

Control

Mechanical removal of caterpillars. Treatment with some broad-spectrum insecticides: Decis 100 EC 0.05%; Confidor Energy OD 0.08% (11.06.2021 - grace period for sale and distribution).

Leaf-mining flies (*Liriomyza spp.*)

Adult females, during oviposition, make numerous punctures with their ovipositor, mainly on the upper side of the leaf, and feed on the exuding plant sap. The damage is easily noticeable, as the tissue dries out and small white pin-point spots are formed, which later turn brown. The main damage is caused by the larvae. They feed on the parenchyma of the leaves, forming serpentine mines without affecting the upper and lower epidermis. They destroy chlorophyll, thereby reducing the photosynthetic capacity of the leaves. Under heavy infestation the mines may cover the entire leaf blade and the damaged leaves dry out.

Control

Infested leaves are removed and the flower is treated with Vaztak Nov 100 EC 0.03%; Trigard 75 WP 0.02%
(11.06.2021 - grace period for sale and distribution).