Sucking Insects That Affect Vegetable Plants

Bulletin #5039

The mouthparts of sucking insects are developed for piercing and sucking. These pests damage plants by inserting their mouthparts into plant tissue and removing juices. Heavily infested plants become yellow, wilted, deformed or stunted, and may eventually die. Some sucking insects inject toxic materials into the plant while feeding, and some transmit disease organisms. The following are some examples of sucking insects:

**Aphids**: Often called plant lice, are small, soft-bodied insects. They range in color from black to green to yellow. Their numbers may greatly increase in a short time and crowding stimulates the production of winged forms. They may cover the entire surface of a leaf or stem. They can be vectors of viruses. Encourage natural predators, such as ladybird beetles or lacewing larvae. Lacewing eggs can be purchased from seed companies. These eggs soon hatch and give good aphid control. Rotenone or malathion can be used to control aphids.

**Leafhoppers**: Leafhoppers are small, green, wedge-shaped insects that attack many garden, forage and fruit crops. They suck out plant juices causing yellowing, leaf-curving and stunting. They also transmit several disease organisms, especially associated with yellows. Use rotenone, carbaryl, malathion or methoxychlor as controls. The potato leafhopper occasionally makes it into Maine, inflicting heavy damage.

**Stink bugs**: These bugs feed on the fruit of a wide range of plants including beets, beans, pears, squash, tomatoes and corn, causing the fruit to become shrivelled and deformed. One of the most common species attacking home gardens is the green stink bug. Hand-picking may lower number sufficiently for damage control. To control, use rotenone or malathion.

**Tarnished plant bugs**: Tarnished plant bugs feed on the leaves of many plants, causing them to curl, reducing growth, and transmitting diseases. These pests also deform apples and cause corky, deformed strawberries. They become active early in the spring. To control use rotenone, malathion, or methoxychlor.

**Squash bugs**: Mature squash bugs are about an inch long and are gray-black in color. While still immature, they are strikingly colored with white and black. Squash bugs suck juice from the leaves and stems of squash, pumpkins, melons and related plants, and thus spread disease. Hand-picking may be effective. To control, use rotenone or malathion. Leaving boards or shingles out overnight between the rows of cucurbits is a way to "harvest" squash bugs. The bugs tend to use the boards and shingles for cover. They can easily be gathered and disposed of early in the morning.
Thrips: Thrips are minute insects that feed on pollen and tender plant tissue. They rasp the tissue and suck up the exuding sap. The leaves take on a silvery appearance after the thrips feed, and plants become stunted and deformed. Thrips are usually a pest of seedling plants but may attack plants in any stage, especially gladiolus, onions and blueberries. To control, use malathion or rotenone.

Spider mites: Spider mites are not insects, but are closely related to ticks and chiggers. They suck out juices from leaves and stems, causing plants to become deformed or have a bronze or yellow appearance. Heavy infestations can cause leaf and flower bud drop and death of the plant. Use insecticidal soap, kethane, or malathion to control the mites.

Management
Control of sucking insects with insecticides is often difficult because of the insects' capacity to reproduce rapidly. Also, they may develop resistance to the chemicals. Often a blast of water from a garden hose will knock the pests off the plant.

Observe the waiting periods listed on the labels for insecticides (number of days from applying or using an insecticide to when the crop can be harvested or used).

If possible, protect bees by spraying only in late afternoon or evening. Do not spray plants when flowers are present.

When Using Pesticides
ALWAYS FOLLOW LABEL DIRECTIONS!

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