



Leafhoppers in the Home Garden

Fact Sheet No. 56

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Life Cycle

Leafhoppers are common problems in home gardens and orchards throughout the state of Utah. There are many species of leafhoppers, several of which attack apples, roses, grapes, and potatoes. Most species overwinter in the egg stage in the bark of the host plant or among the fallen host plant leaves.

Eggs hatch in the spring and 5 nymphal stages are passed before the adult stage is reached. Adults are generally less than 0.1 inch long and are similar in shape to the immature forms except the wings are fully developed. There are commonly 2 generations per year, with the second generation emerging about early to mid-August.

Example Species

Species of leafhoppers which have been submitted and identified from Utah ornamentals and food plants include the aster leafhopper on ornamentals, Colladonus leafhoppers on cottonwood, grape leafhopper on grape, white apple leafhopper on apple, and an unidentified leafhopper species (one or more) on raspberries.

Numerous other leafhopper specimens have been identified from collections of rangeland insects. These collections also include many leafhoppers that remain unidentified. Rangeland species may be a nuisance problem (or may possibly cause plant damage) if they are abundant and move into populated areas.

Damage

Leafhoppers damage the plant by extracting sap from infested leaves. Damage to the leaves is detectable as white stippled areas which appear to be devoid of chlorophyll. This damage is similar in appearance to that of spider mites but much more noticeable. As populations build up, foliage may become speckled with dark excrement. On apples, this may be objectionable in commercial situations, but for the home orchard, the excrement can be easily removed by washing the fruit.

High populations in apples can also make picking the fruit a problem because of the

annoyance factor associated with high populations of flying insects. On certain crops, the most important damage associated with the leafhopper is its ability to vector various plant diseases. When this occurs, control is generally of minimal value since a single leafhopper can infect the plant.

Control

Control of the various leafhoppers depends upon monitoring their development. Sprays should be applied before adults appear. Sprays applied after adults are present are less likely to be effective.

Numerous formulations of the following are labeled for leafhopper control on various ornamental plants: acephate, azadirachtin, bifenthrin, chlorpyrifos, cyfluthrin, deltamethrin, diazinon, disulfoton, endosulfan, imidacloprid, lambda-cyhalothrin, malathion, neem oil, permethrin, phenothrin, pyrethrins, resmethrin, and tetramethrin. Consult the label of specific products to be sure the plant or other site you want to treat is listed on the label.

Systemic insecticides (those taken into the plant directly) are sometimes more effective against sap-feeding insects such as leafhoppers. Systemic insecticides included above are acephate, disulfoton, and imidacloprid. Uses of systemic insecticides are often limited to ornamental plants.

Precautionary Statement

All pesticides have both benefits and risks. Benefits can be maximized and risks minimized by reading and following the labeling. Pay close attention to the directions for use and the precautionary statements. The information on pesticide labels contains both instructions and limitations. Pesticide labels are legal documents, and it is a violation of both federal and state laws to use a pesticide inconsistent with its labeling. The pesticide applicator is legally responsible for proper use. Always read and follow the label.

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