

Beet Leafhopper



The beet leafhopper is approximately 0.125 inches long, wedge shaped, and pale green to gray or brown in color. It may have dark markings on the upper surface of the body. It overwinters on rangeland weeds and migrates to sugar beet and other crops in spring as its overwintering hosts die. Direct feeding by beet leafhopper causes relatively minor damage. Its pest status derives from its transmission of Beet curly top virus and other related viruses. Beet curly top virus is an extremely destructive disease of sugar beet as well as other crops (e.g., tomatoes). The leaves of plants infected with this virus are dwarfed, crinkled, and rolled upward and inward. Veins are roughened and often swollen. Roots become distorted, often with a proliferation of hair roots (not to be confused with Rhizomania). Phloem tissue often becomes necrotic and appears as dark rings in cross sections or dark streaks in longitudinal sections of the root.



Weed control in areas surrounding the field can help reduce sources of Beet curly top virus inoculum. Removal of weeds and volunteer beets surrounding sugar beet fields can play an

important role in reducing sources of inoculum available to migrating leafhoppers. Foliar insecticides have not proven to be generally effective in controlling beet leafhopper and reducing the incidence of Beet curly top virus when applied directly to the sugar beet crop. Occasionally systemic insecticides have proven valuable in reducing the incidence of this virus. The effectiveness of these materials depends on the climatic factors affecting weed hosts of the leafhopper and the virus, timing of planting and application of materials relative to leafhopper migration, and proximity of fields to leafhopper/virus overwintering sites.



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