Blister Beetles and Grasshoppers
By: Kelly Feehan, Extension Educator
Release: Week of August 15, 2022

Grasshoppers and blister beetles are appearing in gardens. These two insects have a connection and grasshoppers thrive in dry weather so this is not a surprise. Both insects cause chewing damage to plants. If populations are high, the damage may not be acceptable.

Keep in mind chewing damage to leaves at this time of year is often aesthetic more than harmful. This is especially true of trees, shrubs and perennials. Unless a plant is over 50 percent defoliated by mid-summer, healthy plants tolerate leaf feeding. It's part of being outdoors. Excessive leaf feeding on vegetables may reduce yields and damage to edible parts is less acceptable.

Blister beetles are three-fourths inch long, narrow beetles ranging in color from ash gray, striped or black. Avoid handling blister beetles with bare hands. They exude a chemical called canthardin which causes painful blisters on skin.

The larvae of blister beetles feed on grasshopper eggs helping to reduce this pest. Adult beetles feed on a number of plants. Carrots, cabbage, eggplant, pepper, potatoes, tomatoes, squash, Hosta and rose are some favorites.

Management of blister beetles includes handpicking adults while wearing gloves and dropping them into a bucket of soapy water. When beetles are present, organic insecticides like neem, pyrethrins and Spinosad provide short term control and multiple applications may be needed.

Synthetic insecticides provide a longer period of control and include bifenthrin, permethrin and carbaryl. Be sure to follow label directions on how often to apply and heed waiting periods required between application and harvest for both organic and synthetic insecticides.

Grasshopper damage is most common in hot, dry years. Extended cool temperatures, less than 65 degrees Fahrenheit, and rainy weather during hatching can result in starvation of young nymphs. This is why hot, dry summers leads to higher populations.

Grasshoppers lay eggs in soil, usually untilled weedy areas like ditches or vacant lots. More eggs are laid when we have an extended warm fall. Depending on the species, hatching begins in May. Grasshopper nymphs feed immediately on plants in hatching areas before moving into gardens.

If weedy areas are near gardens, young grasshoppers more readily move into gardens to feed. Only adults develop wings and are able to fly into garden areas located farther away.

To reduce grasshopper damage, avoid planting gardens near weedy areas. If nearby, some gardeners irrigate the weedy area to keep it green and delay grasshoppers moving into gardens.

A trap crop, such as zinnias, can be planted around the border of a garden. Grasshoppers will feed on the trap crop to help delay movement into a garden.

If populations are high and insecticides warranted, these are most effective on grasshopper nymphs. Adults are difficult to kill. Apply them to weedy areas once hatching begins or apply them to trap crops. The same products recommended for blister beetles can be used.