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Growing Number of Grasshoppers

As we walk outdoors in late summer, we might be overwhelmed by the number of grasshoppers. This is usually due to warm, dry autumns and then hot, dry summers, which favor grasshopper survival and reproduction. Grasshoppers develop through simple metamorphosis with an egg, nymph and adult stage. The female grasshopper uses its long ovipositor to deposit eggs ½ to 2 inches into the soil in the fall. They will deposit eggs in such areas as weedy places, fence rows, and ditches. The eggs hatch into nymphs in the spring or early summer, depending upon species. The nymphal stage lasts for around 6 weeks before molting into an adult with fully developed wings. The adult grasshoppers will be found until late fall or until a frost occurs.

Grasshoppers feed mainly on weeds. However when the weeds begin to dry, the grasshoppers will go into other areas in search of food. This search may lead them to the plants in your landscape.

Some Control Options:

Non-Chemical Controls:

1) Controlling weeds will decrease the number of grasshoppers in an area. If weeds are eliminated, nymphs will starve and adults will be discouraged from laying eggs in the area.

2) Also tilling the soil in the late summer will discourage female grasshoppers from depositing eggs, since they like to lay eggs in undisturbed soil.

3) Floating row covers can be used to protect such areas as vegetable and flower gardens, and small fruit trees from grasshoppers. The fabric allows sunlight through, while protecting plants from insects and cold weather.

Chemical Controls:

Monitor grasshopper infestations and treat when grasshoppers are in the nymphal stage. The immature grasshoppers are more susceptible to insecticides. Some effective

insecticides include the active ingredients diflubenzuron, cyfluthrin, bifenthrin, acephate and permethrin. Also baits can be applied such as those containing carbaryl.

Insecticides typically do not persist in the environment more than a few days. This means grasshoppers may soon re-invade.

Differential grasshopper, *Melanoplus differentialis* (Thomas) (Orthoptera: Acrididae). Photo by Dr. Bart Drees, Professor and Extension Entomologist, Texas A&M University.