larvae chew the green layer from the leaves and leave a clearing or "window pane" effect and later notch the edges of leaves.

The key to managing fall armyworms is frequent inspection of fields to detect fall armyworm infestations before they have caused economic damage. Once larvae are greater than ¾ inch long, the quantity of foliage they eat increases dramatically. During their final 2-3 days of feeding, armyworms consume 80% of the total foliage consumed during their entire development.

The density of armyworms sufficient to justify insecticide treatment depends on the stage of crop growth and value of the crop. Seedling plants can tolerate fewer armyworms than established plants. Infestations of more than 2-3 armyworms (1/2 inch or longer) per square foot may justify an insecticide application. If practical, apply insecticides early in the morning or late in the evening when armyworm larvae are most active and therefor most likely to come into contact with the insecticide spray. If the field is near harvest, an early harvest, rather than an insecticide treatment, is an option.

Parasitic wasps and flies, ground beetles, and insect viruses help suppress armyworm numbers. However, these natural enemies can be overwhelmed when large numbers of migrating moths move into an area and weather conditions favor high survival of eggs and larvae.

## Insecticides Labeled for Armyworm Control in Pastures and Hayfields.

Always read and follow all label instructions on pesticide use and restrictions. Information below is provided for educational purposes only. Read current label before use.

**Karate Z.** 13.1% lambda cyhalothrin. Fall armyworm and grasshoppers. Pasture and rangeland grass, grass grown for hay and silage and grass grown for seed. Pasture and rangeland grass may be used for used for grazing or cut for forage 0 days after application. Do not cut grass to be dried and harvested for hay until 7 days after the last application. Restricted use insecticide.

Lambda-Cy. 11.4% lambda cyhalothrin. Fall armyworm and grasshoppers. Pasture and rangeland grass, grass grown for hay and silage and grass grown for seed. Pasture and rangeland grass may be used for used for grazing or cut for forage 0 days after application. Do not cut grass to be dried and harvested for hay until 7 days after the last application. Restricted use insecticide.

**Mustang Max.** 9.6% zeta-cypermethrin. Fall armyworm and grasshoppers. Applications may be made up to 0 days for forage and hay, 7 days for straw and seed screenings. Restricted use insecticide.

**Tombstone Helios.** 25% cyfluthrin. Fall armyworm and grasshoppers. Pasture, rangeland, grass grown for hay and seed. Zero days to grazing or harvesting hay. Restricted use insecticide.

Warrior II. 22.8% lambda cyhalothrin. Fall armyworm and grasshoppers. Pasture and rangeland grass, grass grown for hay and silage and grass grown for seed. Pasture and