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ARMYWORMS IN FORAGES AND LAWNS

Some reports of armyworms around Central Texas in Lawn and Pasture Forages in the last few day. We have had recent rains and now lush forages and cooler temperature make conditions ideal for fall armyworms invasion on pastures and lawns.

The fall armyworm, Spodoptera frugiperda, is a common pest of bermudagrass, sorghum, corn, wheat, oats and rye grass and many other crops in north and central Texas. Larvae of fall armyworms are green, brown or black with white to yellowish lines running from head to tail. A distinct white line between the eyes forms an inverted "Y" pattern on the face. Four black spots aligned in a square on the top of the segment near the back end of the caterpillar are also characteristic. Armyworms are very small (less than 1/8 inch) at first, cause little plant damage and as a result often go unnoticed. Larvae feed for 2-3 weeks and full-grown larvae are about 1 to 1 1/2 inches long. Given their immense appetite, great numbers, and marching ability, fall armyworms can damage entire fields or pastures in a few days.

Once the armyworm larva completes feeding, it tunnels into the soil to a depth of about an inch and enters the pupal stage. The armyworm moth emerges from the pupa in about ten days and repeats the life cycle. The fall armyworm moth has a wingspan of about 1 1/2 inches. The front pair of wings is dark gray with an irregular pattern of light and dark areas. Moths are active at night when they feed on nectar and deposit egg masses. A single female can deposit up to 2000 eggs and there are four to five generations per year. The fall armyworm apparently does not overwinter in north Texas but survives the winter in south Texas. Populations increase in south Texas in early spring and successive generations move northward as the season progresses. 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

<u>Management</u></u>. Fall armyworm outbreaks in pastures and hay fields often occur following a rain which apparently creates favorable conditions for eggs and small larvae to survive in large numbers. Hay fields with a dense canopy and vigorous plant growth are often more susceptible to armyworm infestations than less intensely fertilized and managed fields. Irrigated fields are also susceptible to fall armyworm infestations, especially during drought conditions. Infestations that develop in volunteer wheat and weedy grasses in ditches and around fields can be a source of armyworms that can move into adjacent crops.

Look for fall armyworm larvae feeding in the crop canopy during the late evening and early morning and during cool, cloudy weather. During hot days, look for armyworms low in the canopy and on the soil surface where they hide under loose soil and fallen leaves. Kneeling on the ground and parting the grass can reveal armyworms. A sweep net is very effective for sampling hay fields for fall armyworms. When

fields are wet with dew or rain, armyworms can be detected by walking through the field with rubber boots as the worms will stick to the boots. Small larvae chew the green layer from the leaves, creating a "windowpane" effect and later notch the edges of leaves. Look for this feeding damage and if detected, look more closely to assess the infestation.

The key to managing fall armyworms is frequent inspection of fields to detect infestations before they have caused economic damage. Once larvae are more than ¾ inch long, the quantity of foliage they eat increases dramatically. During their final 2-3 days of feeding, armyworms eat 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. One the field is cut, most of the armyworm will die due to lack of food and exposure to high temperatures. In some cases, armyworms can move into an adjacent field and continue to feed. For the homeowner, Bermuda grass lawn are most preferred species of grass for the armyworms. Chemical control is easy but needs to be timely.

<u>Control.</u> Several chemicals are readily available for control of Armyworms. Be sure to check the grazing or haying or harvest restriction interval. Residual activity varies among products also, so be sure to consult the product label. Growth Regulator type products are also available as a different made of action. Homeowners need to consider pets in their yard if applying an insecticide. The product label will clearly state reentry intervals for people and pets. For complete listing of Control options, call the Bell County AgriLife Extension Office at 254-933-5305 and request the information. We will email, fax or mail the information. Feel free to also email us to be added to the Ag Email list L-Zoeller@tamu.edu