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To: Rains County Leader

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Be On the Lookout for Armyworms

If you are in the forage business whether it is the hay business or forage to feed beef or dairy cattle, horses, sheep or goats, then you need to be on the watch for armyworms. With the recent rain, producers need to be diligent in watching their pastures and fields.

The armyworm has four life stages: egg, larva, pupa and adult. The armyworm has not shown the ability to diapause so its ability to survive winter depends on the severity of the temperature. The armyworm does overwinter in the southern regions of Texas in the pupa stage. The adult is a moth that migrates northward as temperatures increase in the spring. The adult moth has a wingspan of about 1.5 in. The hind wings are white; the front wings are dark gray, mottled with lighter and darker splotched. Each forewing has a noticeable whitish spot near the extreme tip.

Eggs are very small, white lay in clusters of 50 or more and are covered with grayish, fuzzy scales from the body of the female moth. The eggs are seldom seen and are laid at the base of appropriate host plants.

Larvae hatch from the eggs and when full-crown larvae are green, brown, or black and about 1 to 1.5 in. long when full grown. The larva has a dark head capsule usually marked with a pale, but distinct, inverted "Y." The larvae have five stages or instars and usually hide in debris on the soil surface in the middle of the day. When full grown, larvae will enter the soil and form the pupa stage. Adult moths emerge from pupae. Moths mate and lay eggs, thus starting the life cycle over again. Lush plant growth is preferred by the adults for egg laying.

Several generations (A generation is the development from egg to adult stage.) occur each

year and typically the life cycle from egg to adult takes 28 days. The life cycle can be extended if cooler temperatures occur and can last up to several months. Armyworms in the spring and summer occur in more distinct groups than later in the season. Populations of larvae often blend together several generations and may appear to be continually occurring.

When feeding, larvae strip foliage and then move to the next available food. High populations appear to march side by side to the new food. Thus, the name armyworms have been applied. Armyworms attack many different kinds of plants. When food is scarce, they will move to plants that are not normally attacked. Thus, armyworms can be found on nearly any plant as they migrate in search of edible foliage. Plants attacked by armyworms include: Bermuda grass, grain and forage sorghum, corn, small grains, sweet potato, beans, turnip, clover, spinach, cucumber, potatoes, tomatoes, and many more.

Damage consists of foliage consumption. The small larvae will chew the green layer from the leaves and leave a clearing or "window pane" effect. The first three instars do very little feeding while the last two instars consume 85% of the total foliage consumed.

Armyworms should be controlled when they occur in large numbers or plant damage is becoming excessive. Preventive treatments normally are not justified because attacks are sporadic and egg mortality is usually high. During favorable seasons, a number of parasitic enemies keep fall armyworm larvae down to moderate numbers. Early detection works best and is achieved by frequent, thorough inspection of plants. Outbreaks seem to occur shortly after a rain or supplemental irrigation. Armyworms feed any time of the day or night, but are most active early in the morning or late in the evening. Susceptible fields or lawns should be scouted by counting the number of armyworms in a square foot area in 8 different sites. Divide the total worm count by 8 to find the average number of armyworms per square foot. Be sure to take samples in the interior of the field because this pest is often heaviest near the field margins. Sometimes, only the field margins require treatment.

The threshold level ranges from two to three larvae per square foot for young tender growth. For older plants, three to four larvae and obvious foliage loss justify control measures. Thresholds in improved pastures and lawns vary with conditions but treatment should be considered when counts average three or more small worms per square foot.

Insecticide choices have changed. Here is what we recommend for pastures and hay fields:

Malathion_57% and Malathion ULV. Zero days to harvest or grazing.

Mustang Max (9.6% zeta-cypermethrin). The first pyrethroid insecticide labeled on pastures and hay fields. Applications may be made up to 0 days for forage and hay, 7 days for straw and seed screenings. Labeled for a large number of insect pests, including armyworms, grasshoppers

Tracer. Do not allow cattle to graze until spray has dried. Do not harvest hay or fodder for 3 days after treatment. There is no pre-harvest interval for forage. Treat when eggs hatch or when larvae are small. Use higher rates for larger larvae.

Sevin 4F, Sevin XLR, Sevin 80S, Generic Carbaryl. When applied to pastures, there is a 14 day waiting period before grazing or harvesting.

Dimilin 2L. Wait one day until harvest. Label does not list a restriction on grazing. To be effective, Dimilin must be applied before larvae reach inch or longer. Will not control larger larvae. Provides residual control for up to 2-3 weeks, as long as forage is not removed from field. Dimilin acts as an insect growth regulator.

Intrepid 2F. Do not harvest hay within 7 days of application. There is no pre-harvest interval for forage. Begin applications when first signs of feeding damage appear. Use higher rates for heavier infestations. Intrepid is an insect growth regulator.

Lannate. Bermudagrass only. Do not apply within 7 days of feeding forage or allowing livestock to graze. Do not apply within 3 days of cutting for hay. Lannate is a highly toxic POISON and all label precautions must be carefully followed. A restricted use pesticide.

Karate, Warrior, Lamba Cy (and other lambda cyhalothrin products) Pasture and rangeland grass, grass grown for hay and silage and grass grown for seed. Pasture and rangeland grass may be 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.

Baythroid XL. Pasture, rangeland, grass grown for hay and seed. Labeled for control of small (1st and 2nd instar) fall army worms. Zero days to grazing or harvesting hay.

NEW : Prevathon. No grazing restrictions. No harvesting restrictions on hay crop. Must wait 7 days between treatments.

Be sure and follow label directions when using any pesticide. The label is the law when dealing with any pesticide. If you have any question, please contact the Rains County Extension Office located at 410 Tawakoni Drive or call 903-473-4580.