

AG NEWS AND REVIEWS

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Thistle Control . . .

As a result of last year's drought, we experienced an abundance of thistles this year. Many of the thistles are native species while others are introduced. As with any other weed, proper identification is key to developing a control strategy. Another consideration for good thistle control is the timing of the chemical application. Thistles may require a little different strategy than most weed problems.

Normally we don't consider weed control in pasture during the fall of the year, since most of our pasture weed problems are associated with spring and summer growth. One exception to this are the thistles. Many of our native and introduced thistles germinate from seed in the fall (September and October). They then over-winter in a rosette form and, depending on the species, can either be annuals, biennials or perennials. Once warm weather occurs in the spring the plant will normally send up a bolt or large stem the will produce a flower and most have large spiny leaves that cattle will not graze. Most of the native species occur in relatively small populations and are not viewed as large problems in pasture situations. There are, however, two species that are introduced species that, left unchecked, can produce severe enough infestations that they can render a pasture virtually useless for grazing purposes. These two species are the musk thistle and the scotch thistle. Identifying these two species can be difficult since most thistles are characterized by similar plant parts. OSU Extension Fact Sheet F2776, available at your county OSU Extension office or on line, has excellent color photos that can assist you in identifying these species relatively easily.

Chemical control for all the thistle species is relatively the same with the exception of some of the perennial species. We can assist you with specific chemical recommendations and rates of application for the species you intend to control. Generally, for the best control, we recommend that the herbicide application for control of thistles be done in the fall (October and November), rather than spring. This gets the herbicide on the seedling rosettes, which is when they are easiest to kill. This treatment, when done properly, should control most of the thistle present. Treatment in the spring can also be effective but normally requires higher chemical application rates, and thus more expense. This can be a good strategy if summer pasture weed control is needed in the pasture with thistle problems. However, it does need to be done prior to the thistles initiating seed production and after pasture weeds like ragweed, broomweed and bitter sneezeweed germinate, to timing is critical.

Be Ready for Fall Armyworms . . .

As small grains fields are planted and begin to emerge, be aware that fall armyworm populations may pose a threat until frost. There have already been some reports in Eastern Oklahoma of fall armyworms in pastures, so it would be wise to be on the lookout for fall armyworms that could potentially damage seedling small grains fields.

Fall armyworms are caterpillars that directly damage seedling wheat or bermudagrass pastures. The fall armyworm does not overwinter in Oklahoma, but result from adult moths that migrate northward from Texas or Mexico. The moths usually reach the state by late June. Each female lays

about 1,000 eggs in masses of 50 to several hundred. Larvae are present by early July. After feeding for 2 to 3 weeks, the larvae dig into the soil to pupate. A new generation of moths emerge about 2 weeks later. There are several overlapping generations extending into October and even November, depending on weather conditions. Mature fall armyworms measure about 1 ½ inches in length with a body color that ranges from green, to brown to black and have a prominent inverted “Y” on their head. However, it is best to detect them long before they reach mature size. Small larvae do not eat through the leaf tissue, but instead, scrape off all of the green tissue and leave a clear membrane that gives the leaf a “window pane” appearance. Larger larvae feed voraciously and can completely consume leaf tissue.

To scout for fall armyworms, examine plants in several locations within the field or pasture. Examine plants along the field margin as well as the interior. Look for “window paned” leaves and count all sizes of larvae. Dr. Tom Royer, OSU Extension Entomologist, suggests using a treatment threshold in seedling wheat of 2 or 3 ½ inch-long larvae per linear foot of row in wheat, and three or four ½ inch long larvae per square foot in pastures. Dr. Royer also says that it is critical that you target smaller caterpillars (1/2 inch or less) for good control, for two reasons. First, the caterpillars don’t cause really severe damage until they reach 1 inch in length and, secondly, smaller caterpillars are much more susceptible to insecticide control than larger caterpillars.

“Aquifer: a mysterious, magical and poorly defined area beneath the surface of the earth that either yields or withholds vast or lesser quantities of standing/flowing water, the quantity and/or quality of which is dependent on who is describing it or how much money may be at stake.” – R. Radden, “Watershed Resources”, Jan. 2002

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