

Wavy Leaf Thistle

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. When most people here the word thistle the hair on the back of their neck starts to bristle up and they immediately think of musk thistle and all the time that they've spent spraying, chopping and digging that blanketly blank blank plant over the years. Well, musk thistle is a nasty noxious weed but it isn't native to Kansas and that's part of the problem. In fact there's 3 or 4 other non-native thistles such as Canada thistle, Scotch thistle and plumeless thistle that are also non-native and a potential issue, but we don't have them around here. We do, however, have three thistles that we see every year that cause some property managers consternation but generally aren't really a problem. Tall, bull and wavyleaf thistle are readily found in our area. Bull was brought over from Europe but the other two are native. Tall and bull are biennials, just like musk, Wavy-leaf is a perennial. Wavy-leaf will sometimes become rather dense in some areas but this is usually because pastures have been overgrazed or cattle continually congregate in one area because of waterers, feeders or oilers. Being a perennial it can be a little bit tougher to kill complicated by the fact that the leaves are gray in color - that color caused by the very hairy leaf surface. If you have large patches of this gray leafed thistle and want to get it under control, now is a good time. Straight 2,4-D isn't going to do it so look at some of the stronger products. Anything with picloram (i.e. Tordon) is going to provide better control. What's important, because of the very hairy leaves, is to be sure to use a surfactant. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Prussic Acid

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. We never know what the year is going to be like but once we get into July and August we are often looking at using corn and sorghum as a whole plant forage feed for cattle. It may be from grazing to chopping for silage or cutting and baling as hay. Regardless of the type of growing season we've had I am frequently asked about prussic acid and nitrate issues in these summer annual forages. Prussic acid I'll tackle today, nitrates tomorrow. Prussic acid is only found in sorghum or sudan (seeing as how sudangrass is in the sorghum family). Millet and corn will not have prussic acid concerns. Prussic acid precursors can accumulate in the plant cells and when eaten they break down and release hydrogen cyanide which is rapidly absorbed directly into the blood stream. Forages with high levels of prussic acid can kill mature animals in minutes. If caught in time it can be treated, but it is rarely caught in time. Prussic acid is usually highest in young rapidly growing plants. Drought stressed plants can also have very high levels. Basically any stress condition that slows plant growth can cause an accumulation. Fortunately, anything that physically damages the plant will release prussic acid. Cutting and crimping the whole plant for forage basically allows the cyanide to dissipate quickly. Chopping and ensiling will also drop prussic acid to safe levels. A hard freeze can create issues for a few days but once the plant has dried down it shouldn't be an issue. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Nitrates

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. As we talked yesterday about prussic acid and their fairly limited group of plants that can be a problem, nitrates are potentially a problem in almost any plant. What happens is that growing plants take up nitrogen as a crucial component of proteins and chlorophyll. When first taken up the nitrogen is sort of a free form that under normal growing conditions will be quickly converted to some normal plant compounds. If stress occurs at the wrong time a plant can be caught with excessive levels of nitrate. Nitrate reacts quickly in the blood system of livestock and renders it impossible for the animal's blood to transport oxygen. Unlike prussic acid poisoning that results in death in a matter of minutes, nitrate toxicity usually won't take an animal for a couple of hours. If a vet can get to an animal quickly enough, they can be saved. Nitrate levels in plants can bounce up and down depending on when rainfall occurs and even cloudy days vs sunny days. Unlike prussic acid, nitrate doesn't go away after harvesting. If a forage is ensiled, this will often reduce nitrate levels by about one half. Nitrates, and prussic acid can be tested for to determine if a feed is safe or needs to be diluted with other feeds. If you wind up with drought stunted forage corn or sorghum, testing is certainly recommended. Interestingly, cattle can develop a quite high tolerance to high nitrate feeds if they are given forage with slowly increasing levels of nitrates. A high nitrate level forage given without warning may kill a cow. But slowly work them up to it and they'll eat it without trouble! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Probably time to stop foliar spraying brush

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Foliar spraying for controlling woody brush and trees in pasture is best done from mid May to late June. This is a time when many plants have just hit full leaf and food reserves in the root system are lowest making the plant most susceptible to damage from the herbicides. As we move out of June and into July or August some interesting things start to happen with woody plants. Food reserves in the roots have been restored so the plant won't move the herbicides to the root as quickly or readily. As the summer progresses the leaves change as well. The leaf surfaces get thicker and tend to develop waxy coatings which reduces water loss in the heat of summer and also reduces how much herbicide is absorbed by the leaf. Even later into the summer the plant starts to develop an abscission layer to stop the flow of water to the leaf and the flow of nutrients, or herbicides, back into the vascular system of the plant. So herbicides applied very late in the season frequently have little to no impact. But all is not lost however. From mid July to January is a good time for cut stump herbicide treatments or basal bark treatments. Species that are very prone to root sprouting, like honeylocust, black locust or hedge can be basal bark treated in mid to late summer and then left standing to die. Treat it again the following year if necessary. Once the tree is obviously dead, then go ahead and cut it down. You will have greatly reduced, and often times no root sprouts coming up. Rates and recommendations for basal bark treatments can be found in our chemical weed control bulletin. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Perennial Weed Control in pastures

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I am regularly asked about treating weeds in pastures and I shudder every time one of those calls come in. I shudder because often the plants that the pasture manager wants to control either aren't really a problem OR they are becoming more abundant because the pasture is being abused through over-grazing. Often a simple adjustment in stocking rates or simply moving salt, mineral or feeders can reduce grazing pressure in an area making it un-necessary to spray. Or, the case arises where the perceived weeds are actually very beneficial plants that cattle will in fact graze and they add a lot of value to the soil and plant species mix. What I find is that too many land managers don't worry about the plants that they should worry about. They worry about the flashy and highly visible, not the obscure plants that really are an issue like crownvetch, sericea lespedeza, even old world bluestem. But occasionally you may have to spot treat a few areas of a pasture that have gotten over run with ironweed, goldenrod, vervain, maybe even western ragweed. Although western ragweed, even if there looks to be a lot of it, is short and doesn't really compete with the native grass. For many species, just before they start to bloom is a good time to treat. While many folks tend to fall back on 2,4-D and dicamba, tordon added to either of these can give better results or even one of the many newer herbicides like ForeFront, Milestone Redeem, Overdrive, Yukon, Cimarron, Surmount and Grazon can all give excellent results. Read and follow label for mixing rates and additives like surfactants. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.