Foxtail Research

One of the more common hay field invaders on the increase over the past decade has been one (or more) of the three foxtail species we can have in Northeast Kansas – green, giant, or yellow. Some infestations are so heavy it’s difficult to believe there’s still brome present.

Northeast Area Extension Agronomist Dr. Stu Duncan looked at three different herbicide products focused on foxtail control during the 2020 growing season. Products were applied in late March and again post-harvest (mid-June), with ratings collected every other week to determine the degree of control, possible injury, and overall yield.

On the positive side, the late March applications all resulted in some level of control. Prowl H2O actually controlled over 90 percent of the foxtail as monitored through harvest.

On the negative side, post-harvest applications weren’t as successful, resulting in less than 35 percent control across treatments. Herbicide injury was present as well. Some of it was likely due to hard freeze events that occurred following application, and while it wasn’t always statistically significant, it was visible, resulting in removal of one of the products as this study continues in 2021 (including one site in the Meadowlark Extension District).

The most negative results came in the form of yields and late season infestations. No treatment combination reduced foxtail infestations at the end of the season, despite apparent suppression when ratings were taken in late June. In plots where herbicide injury was not significant, yields were still not statistically different between treated and untreated plots.


Preparing Garden Soil

According to the Kansas Mesonet, the areas that needed rain this past week, got it, meaning most of the state decent precipitation to start spring. As nice as that may have been for replenishing soil moisture, it may slow garden soil.

When summer ‘problems’ arise in the garden, we often blame insects, disease, or soil fertility. Sometimes, however, the problem is the soil we’re standing on – and how we managed it to start the growing season.

Working soil when wet destroys soil structure. Instead of natural soil particle sizes, we get clods, some of which last all summer. We can also get hard pans that prohibit moisture and roots from penetrating, resulting in plant growth issues all season.

If you want to check soil to see if it’s too wet to work, try the squeeze test. Start by grabbing a handful of soil, making sure it comes from the depth you plan to work the garden (deeper soils often contain more moisture than at the surface). If water comes out, it’s too wet – avoid tillage. If no water drips out, push a finger in to the squeezed soil. If it crumbles, it’s probably dry enough. If your finger just leaves an indentation, however, more time is needed.

Early planting tip: if more moisture is coming and you want to try to keep an area dry to plan a little earlier, try tarping the area. Uncover it when it’s dry and check soils again. Hopefully there will be enough protected area that you can get to dry out for early plantings.