

October 18, 2019

FALL WEED CONTROL

Finally a nice window of time this past week that was dry enough to harvest! With harvest going full speed ahead make sure and target fields for a fall spray program or the war on glyphosate resistant marestail. As fall temperatures will continue to drop, it is important for growers to decide as soon as possible about applying herbicides this fall.

The most common winter weeds in Nebraska are marestail, henbit, field pennycress, prickly lettuce, shepherd's-purse, downy brome, tansy mustard, and dandelion. Identification of winter annual weeds is important to select the proper herbicide for effective management. An excellent publication to identify weeds in the fall is at:

<http://extensionpublications.unl.edu/assets/pdf/ec304.pdf>

Fall herbicide application is not needed in each field. Herbicide timing to achieve the most effective control varies according to the weed species present. That's why field scouting is important before you decide about herbicide application. For example, if you see a lot of marestail, a fall herbicide application is needed.

Another issue besides marestail is those patches or fields of purple in the spring with henbit which can harbor a pest called soil cyst nematode. Several winter annual weeds have been identified as alternate hosts to soybean cyst nematode (SCN): henbit (strong host), purple deadnettle (strong host), and field pennycress (moderate host). SCN can reproduce in the field on henbit and purple deadnettle.

The likelihood of reduced weed control due to cool temperatures will vary depending on the target weed, herbicide, and rate of application. Herbicides can be applied at temperatures of 40°F to 60°F and at these temperatures weeds will be killed slowly. When the temperature is below 60°F, absorption of herbicides such as glyphosate and translocation of herbicides such as 2,4-D are lower compared with applications at higher temperatures, therefore, they act slowly.

Remember, herbicides applied in the fall will NOT provide control of summer annual weeds such as common waterhemp or palmer amaranth because they do not emerge until May. One of the best new strategies to delay and decrease waterhemp and palmer germination is to drill a cereal rye cover crop even now.

With late-fall herbicide applications be sure to add labeled adjuvants to improve herbicide efficacy. For example, if you are planning to apply 2,4-D, add crop oil concentrates at 1% v/v (1 gallon per 100-gallon spray solution) or non-ionic surfactant at 0.25% v/v (1 quart per 100-gallon spray solution). Spray volume should be 15 gallons per acre for better coverage when a dense weed population is present.

Winter annual weeds may tolerate a frost up to 20°F and continue growing when conditions improve, with little tissue damage. Growers should wait until new leaf tissue is produced, scout the field, and then consider applying herbicide. Generally, this would be when nighttime temperatures are 35°F or greater and daytime temperatures are at least 50°F for two consecutive days. Additionally, bright sunshine is needed for plants to recover. Targeting herbicide applications from late October to mid-November would be the strategy on non-cover crop fields.



If you graze stalks watch out with the grazing restrictions on the herbicide labels. Generally speaking you will be limited to 2,4-D or 2,4-D with dicamba if you graze stalks to be on label. I have scanned in our weed efficacy charts from our UNL herbicide guide for fall weed control at: <https://go.unl.edu/fallcontrol>

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