

Post Rock Extension District Column

Week of November 1-5, 2021

By Sandra L. Wick

K-State Research and Extension-Post Rock District
Crop Production Agent

Now is the time to plan your fall-applied herbicides!

Now that row crop harvest is progressing and some fall moisture has been received, it is time to start planning fall herbicide applications to control winter annual broadleaf weeds and grasses ahead of corn, grain sorghum or soybeans.

Tillage is still a proven control for winter annuals, however, with the adoption of no-till systems, herbicides have proven to be an effective control if certain factors are kept in mind for the application including timing, the proper rates, herbicide selection and types of applications. According to Dr. Sarah Lancaster, K-State Research and Extension Weed specialist, fall weed control is associated with warmer soils and easier planting in the spring, however, it is important to remember that fall-applied herbicides may limit your crop options in the spring. Also remember that herbicides should not be applied to frozen ground.

Some of the key herbicides to consider for fall herbicide applications include chlorimuron (Classic, others), flumioxazin (Valor, others), sulfentrazone (Spartan, others), and Autumn Super, for residual activity. One thing to keep in mind about residual activity from fall herbicide applications is that weather conditions will influence the length of residual control and the weed emergence patterns. So, even though they provide some residual activity, additional spring application pre-emergence herbicides will likely be needed for season-long weed control.

Lancaster points out that for burndown activity, glyphosate, 2,4-D or dicamba are good options to consider. However, recent glyphosate price increases and limited quantities may make other products more attractive. Alternatives for grass control include Group 1 herbicides like clethodim (Select, others) or quizalofop (Assure II, others). Alternatives for controlling broadleaf weeds include paraquat (Gramoxone, others) or saflufenacil (Sharpen).

Some of the key weeds to target with fall herbicide applications are marehail, henbit, dandelion, prickly lettuce, pepperweed, evening primrose, and recently-emerged cool-season grasses. When higher rates of herbicides are used, some suppression of early spring-germinating summer annual broadleaf weeds such as kochia, common lambsquarters, wild buckwheat, and Pennsylvania smartweed can be achieved.

Fall applications have another side-benefit. While it is always important to manage herbicide drift, herbicide applications made after fall frost have less potential for drift problems onto sensitive targets along with most weeds still actively growing which allows for thorough coverage that is critical for effective control.

Soybeans, on the other hand, are a little more limited as far as herbicide options. No atrazine can be applied, so you must be more careful with your herbicide selection. Herbicides might include Valor, Authority or Classic or other pre-mixes labeled for soybeans. All these options do a good job of control of the winter annuals, so the more important issue is timing and getting the herbicide application done.

Atrazine residual should control germinating winter annual broadleaves and grasses. When higher rates of atrazine are used, there should be enough residual effect from the fall application to control early spring-germinating summer annual broadleaf weeds such as kochia, common lambsquarters, wild buckwheat, and Pennsylvania smartweed – unless the weed population is triazine-resistant. Even though kochia is not considered a winter annual weed, lately it has tended to germinate as early as February. So a higher rate of Atrazine along with Dicamba generally does a pretty good job of management.

Marestail, a winter annual, that can also germinate in the spring and summer, is an increasing problem in Kansas that merits special attention. “Where corn or grain sorghum will be planted next spring, fall-applied atrazine plus 2,4-D or dicamba have effectively controlled marestail rosettes and should have enough residual activity to kill marestail as it germinates in the spring,” states Lancaster. Atrazine alone will not be nearly as effective post-emergence on marestail as the combination of atrazine plus 2,4-D or dicamba. Dicamba is generally more effective than 2,4-D for marestail control. Sharpen can be very good on marestail, but should be tank-mixed with 2,4-D, dicamba, atrazine, or glyphosate to prevent regrowth.

Where fall treatments control volunteer wheat, winter annuals, and early-emerging summer annuals, producers should then apply a pre-emerge grass-and-broadleaf herbicide with glyphosate or paraquat at corn or sorghum planting time to control newly emerged weeds. Soils will be warmer and easier to plant where winter weeds were controlled in fall. The use of trade names is for clarity to readers and does not imply endorsement of a particular product, nor does exclusion imply non-approval. Always consult the herbicide label for the most current use requirements.

K-State Research and Extension has an excellent (free of charge) publication, “2021 Chemical Weed Control” that provides an extensive guide for weed management for field crops, pastures, rangeland and non-cropland. This is available online or at any of our Post Rock Extension District Offices.

If you have further questions on crop weed management, contact Sandra at any Post Rock Extension District Office in Beloit, Lincoln, Mankato, Osborne or Smith Center.

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Sandra may be contacted at swick@ksu.edu or by calling Smith Center, 282-6823, Beloit 738-3597, Lincoln 524-4432, Mankato 378-3174, or Osborne 346-2521. Join us on Facebook at “Post Rock Extension” along with our “Quick Friday Facts” on our website. Our website is www.postrock.ksu.edu and my twitter account is @PRDCrops.