Pasture Herbicide Stewardship

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Introduction
Troublesome annual and perennial broadleaf weeds must be managed to optimize pasture quality and productivity. In most cases, broadleaf herbicides are necessary ingredients in a pasture weed management program. While most pasture herbicide applications are effective and have no impact on adjacent properties, instances of movement of herbicides such as 2,4-D and dicamba onto nearby sensitive crops are well-documented over the past several decades. These unfortunate episodes may result in expensive fines and/or lawsuits; lost time, productivity and profitability for affected producers; crop rejection; and bad publicity for our industry. Clearly, proper herbicide stewardship should be important to cattle producers and other pasture herbicide applicators.

Aminopyralid and Picloram Persistence
Fortunately, while herbicides such as 2,4-D and dicamba are highly active on most broadleaf crops even in minute doses, these materials are relatively short-lived in soil and in treated pasture grasses and harvested hay. This is not the case with two other herbicide active ingredients, aminopyralid and picloram.

Residues of herbicides that contain aminopyralid (ForeFront R&P, Milestone and Chaparral) or picloram (Grazon P+D) are persistent in soil, grass and manure. Aminopyralid is a member of the substituted pyridine family of herbicide chemistry. Picloram is also a member of this family. Producers therefore are encouraged to plan ahead regarding use of treated pastures and hay, in the movement of animals that have been grazing in treated pastures or fed treated hay, and in the use of manure from animals that have been grazing in treated pastures or fed treated hay. **Herbicides that contain aminopyralid or picloram are for use in permanent grass pastures and grass hay fields only. They should not be used in fields that will be rotated to broadleaf crops.**

Management of Cattle and Manure, Use of Treated Hay
Aminopyralid and picloram remain intact in treated pasture grasses or hay, and when these forages are consumed by animals, the chemical passes through their digestive and urinary systems without change and into the manure and urine. It takes several days for aminopyralid and picloram to pass through the digestive and urinary systems of an animal. Because of this, manure from animals that have been grazing treated pastures or fed treated hay should not be used to fertilize broadleaf crops or home gardens unless the animals have been withdrawn from treated pastures or hay for three days (aminopyralid), or seven days (picloram). Likewise, treated hay should not be used for mulch in vegetable production, gardens or landscape beds. Animals that have been grazing treated pastures or fed treated hay should not be moved to fields that will be rotated to sensitive crops unless they have been withdrawn from treated pastures or hay (three days for aminopyralid, seven days for picloram).
Sprayer Contamination and Spray Drift
Aminopyralid and picloram are more difficult to rinse from a sprayer than many other pasture herbicides. It is particularly important to have a dedicated sprayer for use of these materials in pastures and hay fields and not to use this sprayer to apply other chemicals on sensitive crops. Also, avoid spraying these and other herbicides in windy conditions where drift to adjacent cropland is likely. For more information on spray drift prevention, please see Publication 1580, Weed Control Manual for Tennessee. A copy of this publication may be obtained at your local UT Extension office. It is also available online at weeds.utk.edu.

So, all it takes is careful thought and planning. Producers are fortunate to have these highly effective tools for weed control in pastures, and good product stewardship as described above will help to keep these materials available for the foreseeable future. As is the case with all agricultural chemicals, be sure to read, understand and follow all label directions.

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