

## FALL CONTROL OF WINTER ANNUALS

With harvest progressing there may be an opportunity to control weeds in your fields this fall. Do you have several winter annuals emerging in your fields now or in the spring blanketing your fields? Several winter annuals have been increasing in the region due to increasing adoption of reduced tillage or no-till systems. Winter annuals, such as henbit pennycress, chickweed, marestail and tansy mustard are problems in some fields, but generally can be controlled with most herbicides. Another weed that is showing up more in the southeast corner of Nebraska is field pansy. It is a tough weed to kill and has caused some problems in Kansas and Missouri. If you have a problem with these weeds, fall is an excellent time for control.

If you let these weeds overwinter, they will begin growing next spring and start robbing soil moisture from subsequent crops and create dry soil conditions and a poor seedbed especially for early planted corn. They also can have the opposite effect if springtime environmental conditions are cold and wet. A vegetative mat of winter annuals can slow drying and warming of soil before planting thus delaying planting. In the spring time, unfavorable weather conditions may also make it difficult to apply burndown herbicides in a timely manner and delay planting further. Under these types of conditions, a fall herbicide application can provide a wider window for planting.

So when is the best time to spray in the fall? The ideal treatment period is from late October through mid November. The later you wait the more weed seeds that will germinate and that you can control in the fall. Don't be concerned that it is too cool to control weeds in late October or November. These are cool season plants and are not killed by frost. They will be actively growing during mild weather and are susceptible to herbicides even after a hard freeze. Herbicides are more effective and economical to use on winter annuals in the fall than in the spring.

What are the most economical herbicides for fall treatment? Glyphosate, 2, 4-D and dicamba (Banvel) are very effective treatments on most winter annuals. Using chemicals other than glyphosate or a combination of glyphosate with another chemical is a good practice to reduce the potential for development of glyphosate resistant weeds. If you believe you have glyphosate resistant marestail, you will want to use 2, 4-D or dicamba for control in the fall.

For the field pansy, research at Kansas State University conducted in northeastern Kansas indicated prior to corn, fall application of glyphosate plus 2,4-D and Clarity provided good control. In the spring, any herbicide that contained atrazine controlled field pansy as well. Several herbicides provided good control with fall application before soybeans in combination with 2, 4-D and Clarity. These included: Authority, Valor, First Rate and glyphosate applied alone or in combinations. Fall control with these herbicides was generally more effective than spring control for field pansy. From the fall of 2009 to

the spring of 2011 the University of Nebraska-Lincoln conducted trials on various herbicides for control of field pansy in Nemaha and Richardson County. Results indicated that both 2, 4,-D and dicamba were not at all effective in controlling field pansy. So if you have fields that have a combination of henbit, penny cress, field pansy and other weeds, you may need to look at other options for control. Dicamba and 2, 4-D generally both provides excellent control of most winter annuals except field pansy. Results indicated that prior to soybeans, a fall application of Classic (chlorimuron) or other herbicides that contain chlorimuron, such as Canopy were most effective on field pansy. Glyphosate could also be tank mixed with herbicides such as Sharpen and Valor for good control. Results of this research have provided a better understanding of the best strategy for controlling field pansy and other winter annuals in the same field. The 2014 Guide for Weed Management (Extension Publication EC130) also has ratings for weed response to fall burndown herbicides for both corn and soybeans. It is accessible on the web at: <http://www.ianrpubs.unl.edu/epublic/live/ec130/build/ec130.pdf>.

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