News Column

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Fall control of bindweed

Field bindweed is a deep-rooted perennial weed that severely reduces crop yields and land value. This noxious weed infests just under 2 million acres and is found in every county in Kansas. Bindweed is notoriously difficult to control, especially with a single herbicide application. The fall, prior to a killing freeze, can be an excellent time to treat field bindweed -- especially in a year when good fall moisture has been received. This perennial weed is moving carbohydrate deep into its root system during this period, which can assist the movement of herbicide into the root system.

The most effective control program includes preventive measures over several years in conjunction with persistent and timely herbicide applications. The use of narrow row spacings and vigorous, competitive crops such as winter wheat or forage sorghum may aid control.

Dicamba, Tordon, 2,4-D ester, Facet L (also generics) and glyphosate products alone or in various combinations are registered for suppression or control of field bindweed in fallow and/or in certain crops, pastures, and rangeland. Apply each herbicide or herbicide mixture according to directions, warnings, and precautions on the product label(s). Single herbicide applications rarely eliminate established bindweed stands.

Applications of 2,4-D ester and glyphosate products are most effective when spring-applied to vigorously growing field bindweed in mid to full bloom. However, dicamba and Tordon applications are most effective when applied in the fall. Herbicide treatments are least effective when applied when bindweed plants are stressed.

Facet L, at 22 to 32 fl oz/acre, a new quinclorac product which now replaces Paramount at 5.3 to 8 oz or QuinStar quinclorac products, can be applied to bindweed in fallow prior to planting winter wheat or grain sorghum with no waiting restrictions. All other crops have a 10-month preplant interval. Quinclorac products can be used on a sorghum crop to control field bindweed during the growing season. In past K-State tests, fall applications of Paramount have been very effective as shown below (Tables 1 and 2).

Additional noncropland treatments for bindweed control include Krenite S, Plateau, and Journey.

Considerable research has been done on herbicide products and timing for bindweed control. Although the research is not recent, the products used for bindweed control and the timing options for those products haven’t changed much since this work was done. As a result, the research results in the tables below remain very useful today.

Table 1. Fall vs. spring and summer herbicide application for control of field bindweed in the Texas Panhandle: 1976-1982.

		Season of application		
	Rate (lbs ai/acre)	Spring (April or May)	Summer (June, July, or Aug.)	Fall (Sept. or Oct.)
Treatment	**% Control one year after treatment**			
Roundup	2.9	83	77	60
Banvel	1.0	56	41	71
2,4-D ester	1.0	65	49	55
Tordon + 2,4-D ester	0.25 + 0.5	55	56	84
Tordon + Banvel	0.25 + 0.25	47	73	87
Tordon + Roundup	0.20 + 1.6	52	73	79
	% Control two years after treatment			
Roundup	2.9	67	63	32
Banvel	1.0	31	37	34
2,4-D ester	1.0	46	42	10

Source: Field Bindweed Control in Field Crops and Fallow, MF-913
http://www.ksre.ksu.edu/bookstore/pubs/MF913.pdf

Table 2. September-applied treatments for control of field bindweed: Randall Currie, Southwest Research-Extension Center 1992-1997.

Treatment	Rate	Average % Control in Spring
Banvel	4 oz	19
Banvel	8 oz	65
Banvel	1 pt	89
2,4-D	1 pt	72
2,4-D	1 qt	81
Glyphosate	1 qt (IPA)	68
Paramount	5.3 oz	90
Tordon	8 oz	75
Tordon	1 pt	98

For more information on controlling bindweed, see 2017 Chemical Weed Control for Field Crops, Rangeland, Pastures, and Noncropland, K-State publication SRP-1132.

Information provided by Curtis Thompson and Dallas Peterson, Extension Weed Management Specialists