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 is estimated to infest 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. During the fall, but prior to a hard 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. No-till has been very beneficial for managing bindweed by providing routine herbicide treatments through time and not breaking up the root system and dragging root segments around the fields. No-tillage maintains much of the bindweed seed soil bank at a depth too deep to germinate. It is common to see a resurgence of bindweed after tilling fields that have been in long-term no-till.

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 that replaced 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 pre-plant interval. Quinclorac products can be used post-emergence in sorghum to control field bindweed during the growing season. In past K-State tests, fall applications of Paramount, now replaced by Quinclorac (Facet L, QuinStar) have been very effective as shown below in the table.

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 table below remain very useful today.

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

Treatment	Rate	Average % Control in Spring
Dicamba	4 oz	19
Dicamba	8 oz	65
Dicamba	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