

Weed Management in Seed Corn Production

II Why is it important to control weeds in seed corn production?

Weeds can be more competitive in seed production fields than in conventional corn fields because inbred corn plants typically do not have the vigor and strength of commercial corn products. The goal is to prevent weeds from emerging in seed production fields. If weeds emerge, it is important to eliminate them in an efficient manner that does not affect the overall production of seed corn.

II What are the challenges of controlling weeds in seed corn production?

Controlling weeds in seed production fields can be more challenging than in conventional corn fields due to reduced canopy closure and potential herbicide sensitivities of specific inbred lines. Seed corn does not produce a tight canopy, particularly after de-tasseling, allowing light to penetrate to the soil resulting in the potential for further weed flushes later in the season. Some inbred corn lines can also be sensitive to various herbicides, which can reduce the potential herbicide options for managing weeds. However, most herbicides registered in field corn are likely safe to use on seed corn inbreds, but screening should be conducted to prevent injury. Some corn herbicide labels have precautionary statements regarding the use of the product on corn inbred lines. Labels may state to verify the selectivity of the product on the inbred line before using.

What is a successful weed management program in seed corn production?

To control weeds in seed corn, a successful program involves an integrated weed management approach, which includes herbicide use along with early-season tillage, the use of cover crops, and diversified rotations. It is important to use herbicides that provide good soil residual activity on the weeds being targeted in a particular seed production field. Starting with a clean seedbed, a preemergent herbicide with residual activity should be used at planting to provide early-season weed control. This should be followed up with postemergence herbicide applications to control weed escapes and provide residual weed control later into the season. Rotation of herbicides with different sites of action and tankmixing whenever possible should be practiced to reduce the selection of herbicide-resistant weeds. It is imperative to read and follow the herbicide product labels and communicate with seed production company representatives as they may have additional guidelines and testing results relating to specific corn inbred lines.

IV What Bayer herbicide products should you consider using for weed management in seed corn production fields?

The following Bayer herbicide products are labeled for use in seed corn and should be applied at the preferred timings in the listing:

Herbicide Product	Active Ingredient (Group)	Preferred Application Timing
Degree Xtra®	acetochlor (15) atrazine (5)	preplant, preemergence, or early postemergence up to 11-inch corn
Harness® Xtra	acetochlor (15) atrazine (5)	preplant, preemergence
Harness® Xtra 5.6L	acetochlor (15) atrazine (5)	preplant, preemergence
Harness®	acetochlor (15)	preplant, preemergence
Harness [®] MAX	acetochlor (15) mesotrione (27)	preplant, preemergence
Balance® Flexx	isoxaflutole (27)	preplant, preemergence
Corvus®	thiencarbazone methyl (2) isoxaflutole (27)	preplant, preemergence
Warrant [®] Herbicide	acetochlor (15)	postemergence up to 30-inch corn
Laudis®	tembotrione (27)	postemergence up to V9 stage of corn

Read the herbicide product label for weeds controlled, use instructions, precautions, and restrictions.

Legal Statements

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Performance may vary, from location to location and from year to year, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on the grower's fields.

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