

Controlling Horseweed (Marestail)

HORSEWEED (A.K.A. MARESTAIL) is an annual weed that can follow a winter or summer annual life cycle. While the majority of horseweed emerges in the fall, it can also emerge in the spring and summer. Unlike other winter annuals horseweed does not mature until late summer, allowing for greater competition with crops compared with other winter annual weeds. Horseweed plants start out as a rosette, generally bolt in April/May, flower in July, and set and disperse seed from August to October. Each plant can produce up to 200,000 seeds that travel long distances in the wind. Up to 86% of seeds produced can germinate right off the plant. Of fall emerging seedlings 59 to 91% can survive the winter, causing problems in the next spring's crop.



HORSEWEED MANAGEMENT

Horseweed can be a problem in no-till or reduced tillage production systems. Therefore, herbicides are a major component for horseweed management. Many corn herbicides (e.g., atrazine and growth regulators) are very effective in controlling horseweed; as a result horseweed is generally not a problem in corn. However, control in soybeans can be difficult, especially with several populations of horseweed resistant to glyphosate, ALS-inhibiting herbicides or to both glyphosate and ALS-inhibitors. To effectively manage horseweed it is important to control horseweed prior to soybean planting. This can be done with fall or early-spring herbicide applications. Fall applications will only control emerged horseweed, unless a residual herbicide is included. If soybeans are planted early in the season a residual herbicide should also be used to control later-emerging horseweed. The following strategies should be followed for the most effective management of horseweed in soybean.

LIBERTYLINK SOYBEANS:

- Most effective management strategy for herbicide-resistant horseweed
- Use burndown and residual herbicides outlined below prior to soybean planting
- POST in LibertyLink soybean - apply Liberty (29 fl oz/A) before horseweed exceeds 6-inches tall. Liberty can be applied POST at rates up to 36 fl oz/A to control taller plants or additional escapes.

STEPS FOR EFFECTIVE HORSEWEED MANAGEMENT

1. USE FALL OR EARLY SPRING TREATMENTS

- The goal of this treatment is not to replace a spring burndown treatment, but to help manage emerged horseweed
- 2,4-D ester should be the base herbicide for this application and can be applied with glyphosate

2. APPLY AN EFFECTIVE BURNDOWN HERBICIDE IN THE SPRING PRIOR TO SOYBEAN PLANTING

- Horseweed needs to be managed prior to planting
- Preplant herbicide treatments should be applied when horseweed plants are less than 4-inches tall.
- Options for control include:
 - 2,4-D ester (1 pt) + glyphosate
 - 2,4-D ester + Gramoxone + *metribuzin*
 - Liberty (29 to 36 fl oz) or Liberty + *metribuzin*
 - Sharpen (1 fl oz) or Sharpen products (OpTill, OpTill PRO, or Verdict) + MSO + glyphosate or Liberty
 - Gramoxone + *metribuzin* (8 oz) + COC

- A minimum of 7 days is required between 2,4-D ester application at 1 pt/A and soybean planting
- In populations that are not resistant to ALS-inhibiting herbicides, including herbicides that contain the active ingredients *chlorimuron* or *cloransulam* will improve horseweed control.

3. INCLUDE RESIDUAL HERBICIDES WITH THE BURNDOWN TREATMENT

- Group 14 herbicides: Valor products (Envive, Fierce, Gangster, Trivence or Valor XLT) or Spartan products (Authority Assist/First/MAXX/MTZ/XL or Sonic) can be applied with any of the burndown treatments, except Sharpen products (OpTill, OpTill PRO, or Verdict).
- Group 5 herbicides: *metribuzin* and *metribuzin* premixes (i.e., Boundary, Canopy) can be applied with any of the burndown treatments. DO NOT exceed the recommended rate for the soil type.