

Options For Burndown Control Of Marestalk In No-Till Soybean This Spring

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Marestalk (also known as horseweed) continues to challenge many Kentucky soybean growers. The fact that many marestalk populations in Kentucky are resistant or highly tolerant to glyphosate, makes it especially difficult to manage in burndown applications. (see Figure 1). The good news is there are other burndown herbicide options that are capable of controlling this problem weed. Plants that emerge in the fall and overwinter may be especially difficult to control compared to plants that emerge during late winter or early spring. In order to increase the likelihood of success, certain requirements must be met.

The following are examples of burndown herbicide options and factors to consider when they are applied for marestalk control prior to planting no-till soybeans:

OPTION 1: 2,4-D Ester 0.5 to 1 lb ae/A +

Glyphosate 0.75 to 1.125 lb ae/A

- Weather conditions need to be favorable for plant growth. Cold temperatures before, during, or after application may limit control.

- Allow 7 to 30 days after application before planting soybeans. Note, certain 2,4-D ester products such as Weedone 650, E-99, and

Salvo, or Rage D-Tech (a premix of 2,4-D ester plus carfentrazone) require less than 30 days when the rate of 2,4-D is greater than 0.5 lb ae/A. (Consult labels for details)

- Do Not Use this option if drift to nearby sensitive plants is a risk.

- Apply to marestalk 4 inches tall for optimum results. Plants that exceed 6 inches tall may not be controlled.

- The addition of AMS as an additive may limit the antagonism of 2,4-D to glyphosate's control of certain grasses.

- Approx cost of chemicals: \$5 to \$10/A

OPTION 2: Sharpen (saflufenacil) at 1 oz/A or Verdict (saflufenacil + dimethenamid) at 5 oz/A. Include MSO at 1 gal/100 gals + either AMS 8.5 to 17 lb/100 gals or UAN at 1.25 to 2.5 gals/100 gals.

- An MSO based adjuvant is a required additive for marestalk control and must contain at least 60% methylated seed oil. Do not use less than 1 pt of MSO/A with low-volume (<12.5 gals/A) applications. Do not substitute nonionic surfactant for MSO. It is recommended that AMS also be included when mixing with glyphosate.

- Thorough spray coverage is important. A spray volume of 15 to 20 GPA is normally recommended, especially for such situations as dense stands of weeds, variable plant sizes, as well as plants that emerged in the fall and overwintered.

- Do Not use Sharpen or Verdict as a tankmix

partner or sequential application within 30 days of other PPO (Protoporphyrinogen Oxidase) inhibitor herbicides such as Spartan (sulfentrazone), Valor (flumioxazin), etc... due to the risk of crop injury. PPO herbicides labeled for post-emergence applications in soybean may be applied 14 days after soybean emergence.

- Include glyphosate in order to aid in the control of grasses and other broadleaf weeds. Tank mixes with contact herbicides such as Aim (carfentrazone) or paraquat may limit burndown activity of saflufenacil.

- Apply before marestalk exceeds 6 inches in height or diameter.

- Consult label for maximum cumulative rate of saflufenacil per cropping season. Allow a minimum of 30 days between sequential applica-

Figure 1. Marestalk escaped control with glyphosate



tions.

- Approximate cost of chemicals:

Sharpen \$9 /A

Verdict \$12/A

OPTION 3: Ignite 280 at 29 to 36 oz/A + AMS at 3 lb /A

- A silicone based antifoam agent may be added if needed.

- Ignite 280 (glufosinate) may be applied as a broadcast burndown treatment before planting any conventional or transgenic variety of soybean. If Ignite 280 is used in a burndown application, no postemergence applications may be applied in-season to the crop such as with LibertyLink soybean.

- Thorough spray coverage is important. Apply in a minimum of 15 gallons of water/A. A spray volume of 20 or more gallons of water/A may be needed for a dense canopy of weeds.

- Weather conditions need to be favorable for plant growth. Warm temperatures, high humidity, and bright sunlight enhance the performance of Ignite 280. Weed control may be reduced when weeds under stress due to cool temperatures, drought, or extended periods of cloudiness.

- Apply Ignite 280 to marestalk plants less than 6 inches in height. Consult label for sequential applications. Ignite 280 may not provide complete burndown control of grasses and certain broadleaf weeds.

- Approximate cost of chemicals: \$12 to \$14/A

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