

Agricultural Beet



Weed Control 2017

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Glyphosate:

- Identify weeds and make application to weeds < 2 inches tall.
- Use highest labeled rate.
- Do not tank mix with fungicides.
- Continuous applications will not work. Either tank-mix or rotate herbicide modes of action.



Glyphosate Resistance:

- Manage glyphosate resistant weeds with residual herbicides.
- Post-emerge weed control is more effective when combined with a pre-emerge application.
- Consider using a pre-emerge application of Nortron, Ro-Neet, or Dual Magnum to help control tough weeds like waterhemp.
- Control glyphosate resistant common ragweed or giant ragweed with Stinger.
- Layby applications of Dual, Warrant, or Outlook will provide residual weed control during the season.
- A tank-mix of Betamix, Upbeet, and Nortron can be used on small (<1inch) waterhemp. This is less effective if used as a rescue treatment than as a proactive herbicide program. For additional information regarding the use of Betamix see the quick sheet at <http://www.smbc.com/pdf/2017BetamixQuicksheet.pdf>.

Cultural Control:

- Cultivation can effectively control small weeds and may help reduce herbicide resistance development.
- Hand weeding to remove escapes is important for reducing the number of resistant weed seeds in the field.
- One waterhemp plant can produce >500,000 seeds. Imagine if even 10% of those seeds are glyphosate resistant.



Common Questions and Answers

Q: Will Dual Magnum stunt my beets?

A: The current recommendation is to apply 0.5 to 0.75 pints/acre pre-emerge. If the soil is cold it is possible that Dual Magnum could cause temporary stunting of beet plants in course soils with low organic matter. Consider applying 0.5 pints/acre in areas with low organic matter and hill tops.

Q: What spray tips should I use with beet herbicides and fungicides?

A: Glyphosate - Air Induction
Fungicides - Hollow Cone or Flat Fan
Conventional sugarbeet herbicides (BetaMix) - Flat Fan

Q: What rate of ethofumesate can be applied to a cover crop?

A: Rates of 1.5 to 2 pts/A can be safely applied to a cover crop. Picture frame applications with full label rates will stunt or kill cover crop where sprayed, but will provide excellent weed control on field borders.

Q: Is a pre-emergence herbicide needed for waterhemp control when planting near the multi-peril Insurance date of April 11th?

A: If planting in the first half of April it is possible to control waterhemp with a split lay-by application (early post-emergence / post-emergence) applied at 2 leaf sugarbeet followed by 4-6 leaf sugarbeet or a single lay-by at or after the 2 leaf stage. During the second half of April it would be prudent to use a Pre-emerge followed by a lay-by or split lay-by. Individuals must evaluate the risk involved with not using a Pre-emerge, especially if the field is known to have glyphosate resistant waterhemp. Using a Pre-emerge is recommended in fields with a history of heavy waterhemp infestation regardless of planting date.

Q: Should ethofumesate be used with glyphosate for waterhemp control in 2017?

A: Glyphosate tank-mixed with 4 to 6 fl oz/A of ethofumesate will provide better control than glyphosate alone. Glyphosate is not a stand-alone herbicide for waterhemp control in sugarbeet. Ethofumesate is limited to a maximum of 12oz/acre post-emerge in a season.

Q: Are there any differences to consider when applying Outlook vs Warrant?

A: Applying a full rate (21oz) of Outlook may result in some beet stunting depending on the environmental/field situation. Research would suggest using 18oz of Outlook in a single application or a 12oz followed by a 12oz in a split lay-by. Warrant is regarded as being less prone to causing crop injury compared to Outlook. Warrant is microencapsulated, which requires more water to activate, but will be slower to degrade or be lost compared to Outlook. Outlook is more water soluble and would be activated with less precipitation.

Information Credit:

Mark Bloomquist-Director of Research
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Khan, M. 2017 Sugar Beet Production Guide.
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