



# Don't Let Weed Competition Rob Your Yield...

It's no secret that waterhemp escapes rob your sugarbeet crop of yield and quality - but to what extent? Research has shown that a single, healthy pigweed escape every three foot of row reduced sugarbeet yield by 30% and revenue per acre by over \$90. Furthermore, a single pigweed escape every 10 foot of row competing with the beet crop all season has shown to reduce revenue by nearly \$20 per acre. With these numbers in mind, it doesn't take long for an investment in a layby herbicide to provide big returns.

Regardless of what lay-by herbicide you use, make sure to add 4 oz/A of Nortron (ethofumesate) in with the tank mix...



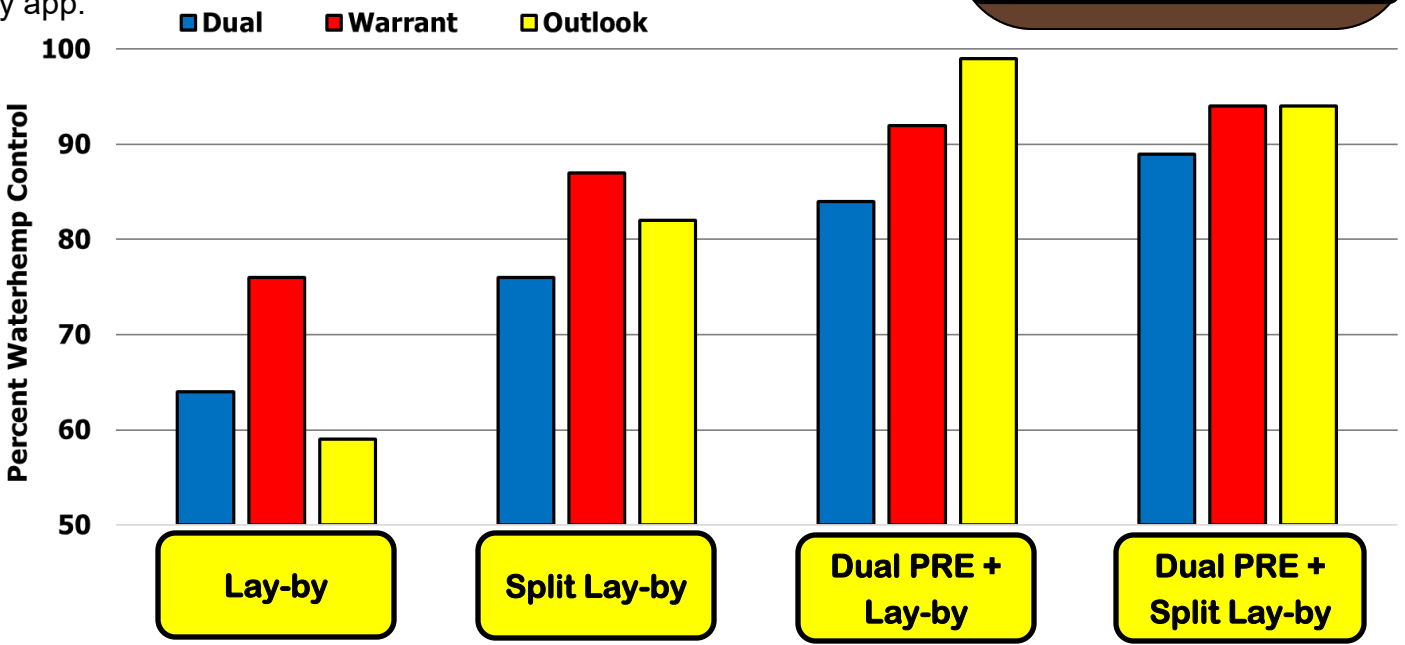
**PowerMax + Outlook**



**PMax + Nortron + Outlook**

## Single Layby or Split Application?

Research by Dr. Tom Peters (NDSU/U of MN) has shown that regardless of product, lay-by herbicides were more effective at controlling waterhemp when applied as a split lay-by application as opposed to a single lay-by application. Looking at the chart below, his data also indicates that a single application of a lay-by herbicide provided significantly better waterhemp control if it was used following a pre-emerge application. It is of note to mention that the most consistent performance of each of the three products evaluated was achieved when a pre-emerge application was followed by a split lay-by app.



## Consider the Following When Utilizing Layby Herbicides...

### Dual Magnum

- Apply at a rate of 1.0 pint/acre on coarse textured soils, 1.33 pints per acre on medium soils and up to 1.67 pints per acre on fine texture soils
- Split applications should not exceed 2.6 pt/A
- Sugarbeets should have 2 true leaves to minimize crop injury
- Temperature (extreme hot or cold) is more important than moisture from an injury standpoint
- Will wash off cover crop and corn stalks
- Layby Dual Magnum will require about 0.5" of rain for activation
- Rainfall needed within 10-14 days of application to achieve good weed control
- Not all formulations are labeled for use on sugarbeet – check the label

### Outlook

- Apply after sugarbeets have first true leaves have fully expanded
- Use 18 - 21 oz. per acre in a single application
- Use 12 oz/A followed by 12 oz/A in a split application (preferred app method)
- Injury to young beets is more prevalent on medium- to coarse-textured soils
- Outlook is very water-soluble – it needs less rainfall than Dual or Warrant to be activated (~ 0.25")
- Rotary hoeing or other incorporation improves performance
- Will wash off cover crop and corn stalks
- Do not apply until the stand is established
- Do not replant into Outlook-treated fields

### Warrant

- Apply at a rate of 1.5-2 qt/acre across all soil types in a single application
- Rates for split applications should target 2.5-3 pt/A followed by 2.5-3 pt/A.
- Does NOT wash off cover crop or corn stalks without significant rainfall
- Microencapsulation allows it to 'lay on the surface' longer than other labeled chloroacidemides
- Has longest PHI of the recommended layby products (70 days)
- Application target should be from 2-8-leaf sugarbeets
- Do not apply until the stand is established
- Do not replant into Warrant-treated fields

### Treflan

- Apply at a rate of 1.5 pt/A of a 4 lb/gallon formulation (0.75 lb/acre a.i.)
- Apply when sugarbeets reach the 6-8-leaf stage and well-rooted to withstand incorporation
- MUST be incorporated into the soil to avoid herbicide loss – rotary hoes work the best
- Exposed roots should be covered with soil BEFORE application – HOWEVER - this increases the likelihood of Rhizoctonia in fields where the pathogen is endemic
- Avoid allowing treated soil to come into contact with root crowns
- Treflan applied to the exposed crowns of plants may cause excessive girdling with a period of wet weather after application