



## Layby Herbicides for 2018...

With the 2018 growing season off and running, Minn-Dak growers need to start thinking about the next few steps in their weed control program – one of which includes a layby herbicide(s) application. The Ag Staff has reported that stand establishment has been a challenge this season due to areas plagued by issues such as crusting, deep planting, cutworms, frost and dry seedbeds. While this type of herbicide application **is recommended on all fields where waterhemp is a concern**, growers who have fields with low plant populations or “gappy,” uneven stands should **consider the use of layby herbicides a must** to help make up for the reduced sugarbeet competition with weeds.

### So Which Products Are Labeled For Use?

Dual Magnum, Outlook, Warrant and Treflan have labels for layby application to sugarbeets, as do many different generic formulations of each. You can expect the same/similar performance out of the ‘generics’ as you can their ‘branded’ counterparts. However, it is of note to mention that not all of the generics have a label for use on sugarbeet – **make sure you check the label before applying the product.**



PowerMax + Outlook

PMax + Etho + Outlook

### Are There Differences Between The Metolachlor-Based Products?

It seems like everyone and their brother has their own generic formulation of Dual Magnum. All metolachlor products (whether it is Dual or a generic brand) contain a blend of isomers – ‘S’ and ‘R.’ S-isomers are more active on weeds and will give you a better bang for your buck; while the R-isomers are still active, they do not work as well as their counterpart. This ratio of isomers has a direct correlation to the rate of herbicide needed to achieve adequate weed control. ‘Branded’ products like Dual Magnum and EverpreX are formulated to contain 88% of the more active S-isomers and 12% of the less active R-isomers. Although a few of the generic formulations are formulated to have this same S- to R-isomer ratio, many contain a 50/50 ratio (especially those utilized in corn and soybeans). This lower concentration of the more active S-isomer will result in poorer weed control unless the application rate is adjusted accordingly.

### Single Layby or Split Layby?

Data generated by NDSU and U of MN over the last few seasons indicates that the best weed control, regardless of product, is achieved by applying a split lay-by application of a chloroacetamide herbicide applied to 2-leaf sugarbeets followed by an application at the 4-6-leaf stage. Ethofumesate should be added to all lay-by applications regardless of timing.

Regardless of what layby herbicide you use, make sure to add 4 oz/A of Ethofumesate in with the tank mix...

# Outlook vs. Warrant - Anything Specific I Need To Know?

Depending upon the environment, applying a full rate of Outlook (21 oz/A) has the potential to result in stunted sugarbeets – especially at the 2-leaf stage. As such, it is recommended that 18 oz/A of Outlook be utilized for a single application or a 12 oz/A followed by a 12 oz/A in a split layby. Being microencapsulated, Warrant is considered to be a little safer to the crop compared to Outlook. This unique formulation also slows down the degradation process, allowing the product to ‘lay on the soil surface’ a little longer than Outlook. That being said, the microencapsulation will require more water to activate the product. Outlook is much more water soluble and would be activated with less precipitation. Remember that sugarbeets cannot be replanted into fields that have had either Outlook or Warrant applied – they will not emerge through the chemical barrier.

## 2018 Layby Recommendations

### Outlook

- Apply after sugarbeets have first true leaves have fully expanded
- Use 18 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

### 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

### 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 chloroacetamides
- 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.)
- Not all formulations are labeled for use on sugarbeet – check the label
- Apply when sugarbeets reach the 6-8-leaf stage and well-rooted to withstand incorporation
- Does not control emerged weeds
- 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

**Always Read and Follow Label Instructions**

*Thanks to Dr. Tom Peters (NDSU & U of MN) for his review of this issue*