



# 2021 Layby Herbicide Control Options

Post-emergence control options for glyphosate resistant waterhemp are very limited and are becoming less effective. Therefore, a layby application approach with chloroacetamide herbicides such as Outlook, Warrant, or Dual Magnum is necessary to continue to provide a barrier against waterhemp emergence. Which option you choose should be based upon timing, likelihood of rainfall and finally if you used a PRE or PPI soil applied herbicide at planting. All layby herbicides need to be applied after the first 2 true leaves have emerged and the stand has been established. As with any pest control strategy, timing of application is more important than what herbicide you choose to use. If you do not use a PRE/PPI herbicide we recommend applying a layby herbicide as soon as the beet stand is established to increase rainfall chances for herbicide activation and prevent waterhemp emergence. Please consult your Agriculturalist for further information and Always Follow Label Directions.

**Layby Herbicide:** Soil applied herbicide that is applied after the crop stand has been established (after 2 true leaf stage in sugarbeet). All layby applications need rainfall to activate the herbicide.

Herbicide	Rate	Crop Injury Risk	Notes
<b>Outlook</b>	<p><b>Single</b> - 18oz application</p> <p><b>Split</b> application 12 oz fb 12oz</p>	<p>Higher for single app</p> <p>Low for Split</p>	<ul style="list-style-type: none"> <li>• Good waterhemp control</li> <li>• Good lambsquarters control</li> <li>• No kochia control</li> <li>• Cannot replant to sugarbeet</li> <li>• Shortest residual control length of any layby</li> <li>• Injury greater on small beets and course soil types</li> <li>• Very little moisture needed for activation <math>\approx \frac{1}{4}</math>"</li> <li>• 60 day PHI 2-8 leaf</li> </ul>
<b>Dual Magnum or generic S-metolachlor</b>	<p><b>Single</b> – 1.3pt/A course texture soil or up to 1.6pt/A fine texture soil</p> <p><b>Split</b> application 1pt/A fb 1pt/A</p>	<p>Higher for single app</p> <p>Low for Split</p>	<ul style="list-style-type: none"> <li>• Good waterhemp control</li> <li>• Fair lambsquarters control</li> <li>• Poor kochia control</li> <li>• Can replant to sugarbeet</li> <li>• Moderate residual activity length</li> <li>• Only use S-metolachlor formulations</li> <li>• Needs <math>\frac{1}{2}</math>" rainfall to activate</li> <li>• 60 day PHI</li> </ul>
<b>Warrant</b>	<p><b>Single</b> 1.5-2 quarts/A</p> <p><b>Split</b> 2.5pint-3pint fb 2.5pint - 3pint/A</p>	<p>Higher for single app</p> <p>Low for Split</p>	<ul style="list-style-type: none"> <li>• Good waterhemp control</li> <li>• Fair lambsquarter control</li> <li>• Poor Kochia control</li> <li>• Cannot replant to sugarbeet</li> <li>• Longest residual of any of the layby options</li> <li>• Needs minimum of <math>\frac{3}{4}</math>" of rainfall to activate</li> <li>• 70 day PHI</li> </ul>

## Additional Notes for all Layby Herbicides

- Must be applied to soil with good coverage to work properly
- Should be applied with 15 gallons of water and medium to course nozzles if sprayed alone
- Use at least 10 gallons of water if tank mixing layby with only glyphosate and AMS
- Use at least 12 gallons of water if tank mixing layby with glyphosate, AMS, and another broadleaf herbicide like Stinger, Betamix, ethofumesate, Upbeet, or an HSMOC surfactant
- PRE or PPI ethofumesate application alone is not a season long Waterhemp control strategy. Use split application rates of layby herbicides where you applied ethofumesate, preemergence to prevent injury.
- Application with temperatures over 85F are more likely to cause injury