

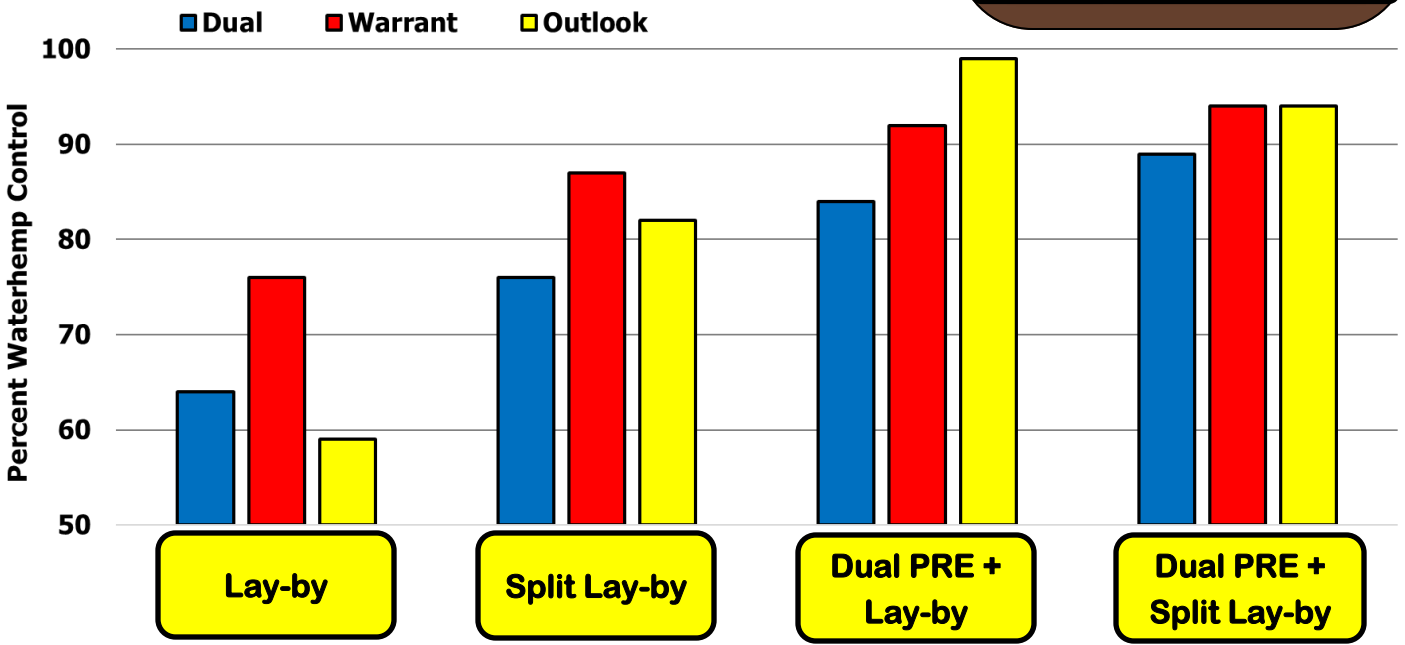


Effective Use of Layby Herbicides...

One of the best management strategies that you can have for waterhemp control this season is the integration of soil residual herbicides into your weed control program. The graph below represents data from a 2016 research trial conducted by Dr. Tom Peters (NDSU) at the Moorhead, MN, Waterhemp Nursery. The blue bars represent Dual (s-metolachlor), the red bars Warrant (acetochlor) and the yellow bars Outlook (dimethenamid). Note that 'Dual-PRE' was a pre-emerge application of s-metolachlor at 0.5 pt/A and that the percent waterhemp control is expressed as a visual average of the July 22nd and August 24th weed evaluations. The following conclusions can be drawn from this data:

- **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.**
- **A single application of a lay-by herbicide provided significantly better control if it was used following a pre-emerge application.**
- **The most consistent performance of each product was achieved when pre-emerge application was followed by a split lay-by application.**

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



Keep Your Cover Crop in Check!!!

While cover crops can be beneficial in protecting sugarbeet seedlings, they can also be a significant hindrance to older plants if not controlled at the correct time. When left unchecked, the cover crop will start to compete with the beets for nutrients, water and sunlight - Wheat alone will take up 30-50 lb. of nitrogen per acre within 28 days after emergence. Dr. Allan Cattanach (ACSC-retired) has documented that when cover crop control is delayed, beet growth will be 2-4 leaves behind potential growth. Yield loss experienced in these fields was between **2 - 4 tons per acre** (see picture below). This past season, Minn-Dak and NDSU collaborated on a research trial near Foxhome, MN, showing the negative effects of late cover crop control. Using wheat as a cover crop, we were able to show a significant advantage in RSA (730 lbs.) by controlling the cover crop at 4" tall vs. waiting until 8" tall and **1,450 lbs. of sugar per acre** by holding off until the cover crop was 10-12" tall (see table below). With these yield differences in mind, start controlling a 0.50-1 bushel cover crop seeding rate, regardless if it is wheat, barley or oats, when it reaches 4-6" tall. Generally speaking, an application of glyphosate will knock down the cover crop faster than the conventional grass herbicides we have used in the past. Keep in mind that a good stand of cover crop will still provide protection from the wind for up to 2 weeks 'postmortem.'



Wheat Height at Time of Glyphosate Application	Recoverable Sugar per Acre
2"	4,640 lbs.
4"	5,050 lbs.
6"	4,640 lbs.
8"	4,320 lbs.
10-12"	3,600 lbs.

'Retiring' the Planter for Another Season...

Proper operation of a well-maintained planter is essential to your crop's stand establishment and is the first step towards maximizing your per acre return. Today's sophisticated planters need to be thought of as 'precision tools' - and they certainly need to be treated as such. Growers must give careful attention to the details of planter storage and maintenance if they expect it to operate properly next spring. The simple tasks listed below should help to eliminate warped plates, damaged seed doors (hinges and seals), ruined gaskets and the like. Consider the following tips/tricks:

- Clean planter with a pressure washer or high pressure air. It is especially important to wash off all starter fertilizer to prevent corrosion.
- Flush all liquid handling systems.
- Remove all seed plates, number them by row unit and store on a wood dowel hung horizontally.
- Remove the seed plate doors – DO NOT stack them on top of each other, use original boxes/rubber tubs for storage.
- Release the tension on all press wheel springs.
- Check for missing insecticide spoons or banders.
- Make a list of need repairs and/or parts while it is still 'fresh' in your mind.
- Mouse-proof the seed tubes with fabric softener sheets in the seed hoppers.
- Keep track of how many acres are seeded on a set of seed plates (write the date of purchase in owners manual or on the plates themselves).
- Grease/protect all electrical harnesses and connections.