



ISSUE 22 - March 2015  
Mike Metzger - Editor

## Pre-Emerge Herbicides for 2015...

It is no secret that excellent weed control helps promote a high-yielding crop. This simple fact alone is the main reason that sugarbeet growers hold the record for the fastest adaptation and implementation of the use of glyphosate-tolerant technology – greater than 95% utilization of Roundup-Ready sugarbeets in a mere two-years - but, as the cliché goes, “all good things soon come to an end.”

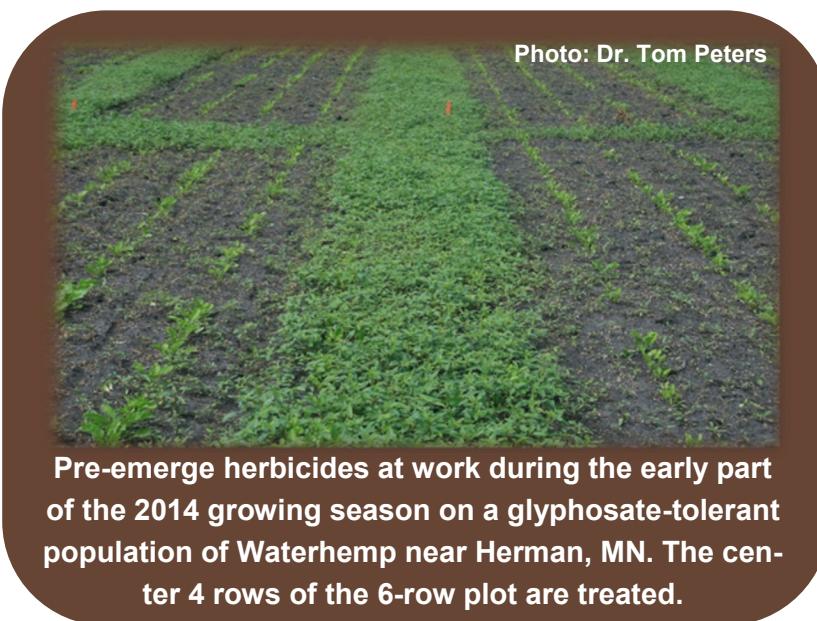


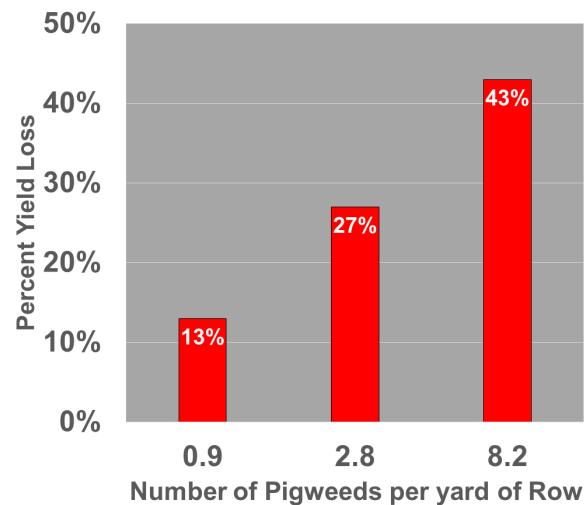
Photo: Dr. Tom Peters

Pre-emerge herbicides at work during the early part of the 2014 growing season on a glyphosate-tolerant population of Waterhemp near Herman, MN. The center 4 rows of the 6-row plot are treated.

Four species of glyphosate-resistant weeds now call the Minn-Dak growing area their home; common ragweed, giant ragweed, kochia and the most prevalent, waterhemp. In fact, 62% of the respondents to the 2014 U of M / NDSU Sugarbeet Production Survey categorized waterhemp as their worst weed problem in Richland County. **That same number was 77% in Traverse County this past season.** With waterhemp on the advance, growers need to rethink their approach to weed control and the use of a soil-applied pre-emerge herbicide needs to be considered for your 2015 weed control program.

### Yield Loss From Pigweed Species - How Bad Can It Be?

The chart to the right shows just how dramatic losses to pigweed species (like waterhemp) can be. This study was conducted by Dr. Alan Dexter and graphs the percent yield loss against the weed density of pigweed. Take note that just shy of a single pigweed present per yard of planted sugarbeet row can cause a 13% yield loss. This loss more than doubles when there are close to 3 pigweeds present in the same measured area. Considering last year's yield and beet payment, **this is nearly a \$250 per acre hit** to your bottom line. With yield losses like this, it doesn't take very long for pre-emerge herbicides to pay big dividends.



In 2014, pre-emerge herbicides provided nearly season-long control. The following photos were taken at the NDSU Waterhemp Trial (conducted by Dr. Tom Peters) near Herman, MN towards the end of August. This is the difference that could be seen 48 days after the last application of glyphosate.



### (3) Applications of PowerMax



Or



- Active Ingredient: s-metolachlor
- Rate: 0.5 to 1.67 pt/A
- Est. Cost: \$120/gallon
  - ⇒ Broadcast: \$7.50 to \$25 / A
  - ⇒ 11" Band: \$3.75 to \$12.50 / A

### PRE Dual (0.5 pt) + Nortron (3 pt) & (3) Applications of PowerMax

#### • Considerations Before Application:

- Rate dependent upon soil organic matter
- Safe for use on with most cover crops
- **Dual requires an Indemnification Label Required Before Use**
- Not all generic equivalents are labeled for pre-emerge use on sugarbeet



- Active Ingredient: ethofumesate
- Rate: 6.0 to 7.5 pt/A
- Est. Cost: \$64 gallon
  - ⇒ Broadcast: \$48 to \$60 / A
  - ⇒ 11" Band: \$24 to \$30 / A

#### • Considerations Before Application:

- Higher rates will severely stunt and/or completely eliminate cover crops
- Has a 12-month crop rotation restriction on most crops including wheat, barley, corn and soybean
- Band applications can help reduce possible carry-over issue the following year



+

- Rate: 2.0 to 3 pt/A Nortron + 0.5 to 0.75 pt/A Dual or Cinch
- Estimated Cost per Acre:
  - ⇒ Broadcast: \$23.50 to \$35.25 / A
  - ⇒ 11" Band: \$11.75 to \$17.50 / A

#### • Considerations Before Application:

- Cover crop safety is dependent upon soil type (more injury on lighter soils) and the rate Dual or Cinch (> 0.75 pt/A)
- **Dual requires an Indemnification Label Required Before Use**
- Not all generic equivalents are labeled for pre-emerge use on sugarbeet

The product label trumps this information at all times - Always read & follow label instructions

Special Thanks to Dr. Tom Peters (NDSU) for providing information and editorial review of this issue