MINN-DAK FARMERS COOPERATIVE

BEET TOPics

ISSUE 15 - May 2013
Mike Metzger - Editor

Effective Weed Control for 2013…

MAKE SURE TO HIT THE MAX

The maximum amount of glyphosate that can be used from sugarbeet emergence to the 8-leaf stage in the Roundup Ready Sugarbeet System is currently limited to 1.96 lb ae/A with the maximum amount for a single application in the same growth stage limited to 1.125 lb ae/A. With glyphosate resistant Waterhemp, Common Ragweed and Kochia already identified within the Minn-Dak Growing area, **KNOW THESE LIMITS AND MAKE SURE TO USE THEM**.

For example, if your 1st application was 0.835 ae/A, then make sure your 2nd application is 1.125 ae/A (0.835 + 1.125 = 1.96). Similarly, if your 1st application was 0.98 ae/A, then make sure your 2nd is also 0.98 ae/A (0.98 + 0.98 = 1.96).

Whatever combination you decide to utilize for 2013 - Max it Out!!!

The very first report of a weed being documented as glyphosate resistant in the US came in 1998 when a species of Rigid Ryegrass was found to be thriving in the flat lands California. Fifteen years later, there are now 21 different weed species in the world that are resistant to glyphosate (10 grass species and 11 broad leafs) and of these 21 species, four of them now call the Minn-Dak growing area "home."

Field of Soybeans with Glyphosate Resistant Kochia - Richland County, 2012

In order to prevent this resistance from spreading, it is imperative that you not only use good management practices in your rotational crops (pre-plant herbicides, rotation of chemistries, etc.), but within your sugarbeet crop as well. With this in mind, the single most important in-crop factor aiding in resistance management and achieving optimum weed control is the proper use of glyphosate. Here are several things to consider when applying glyphosate:

- Add AMS to glyphosate at 8.5 to 17 lbs/100 gal – AMS enhances glyphosate adsorption and translocation and helps deactivate antagonistic hard water salts.
- Add NIS to glyphosate (label permitting) – this will help improve control on hard-to-wet species such as common lambsquarter.
- Enjoy the Banker's Hours!!! - Weed control is best between 9 AM and 5 PM.
- Use the lowest water volume (gpa) allowed by the label – Low water volumes produce bigger spray droplets which results in better herbicide adsorption.
- Use the correct rates – reducing application rates only encourages the development of resistant weeds. Small savings up front will cost you BIG TIME in the long run…
- Apply glyphosate when the humidity is high – Since glyphosate is highly water soluble, its activity increases during humid conditions when the additional air moisture hydrates the plant cuticles.
- Apply glyphosate to small actively growing plants – the 1st application should be applied when weeds are cotyledons and certainly before the weeds reach 2" in height.

2013 Betamix Program

Growers who are interested in enhancing their weed resistance management program may do so by including Betamix in their 2013 sugarbeet herbicide portfolio – either as a stand-alone application or as a tank-mix partner with glyphosate. Minn-Dak is currently **offering each grower up to 20 gallons of Betamix free of charge**. In order to sign up for the 2013 Betamix Program, simply contact your Agriculturist and he will deliver the product to your farm and discuss which application method/usage rates would be the option for your operation. Each Agriculturist will also do a follow-up inspection to determine the application's efficacy in order to share this information with fellow sugar companies, allied industry and other interested growers.

Glyphosate Formulations Labeled for RR Sugarbeet in 2013

3.0 Pounds of Acid Equivalent per Gallon / 4.0 Pounds of Active Ingredient per Gallon

- Abundit Extra
- Alecto 41 HL
- Alecto 41 S
- Alecto 41 UL
- Axss Glyphosate Plus*
- Buccaneer
- Buccaneer Plus
- Bullzeye**
- Clean Field 41% Plus
- Consus Gly. 41% Plus
- Cornerstone
- Cornerstone Plus
- Credit 41
- Credit 41 Extra
- CropSmart 41 Plus
- Crop-Sure Gly. Plus
- Eraser A/P
- Four Power Plus
- Glycana Plus 41
- Glyfine Plus
- Glyfos X-TRA
- Glypho 41
- Glyphogan
- Glyphogan Plus
- Glyphosate Plus
- Glysort
- Glysort Plus
- Gly-4 Plus
- Gly Star Gold
- Gly Star Original
- Gly Star Plus
- Helosate Plus Adv
- Honcho Plus
- Imitator Plus
- Mad Dog
- Mad Dog Plus
- Makaze
- Makaze Yield Pro
- Mirage
- Mirage Plus
- Quali-Pro Gly. Plus
- Rascal
- Rascal Plus
- Rascal Plus EX*
- SharMax Gly. 41% SL*
- Showdown
- Strikeout Extra
- Strikeout Loaded
- Tomahawk 4
- Z-Gly. 41% Max

1.125 lb ae/A = 48 fl oz of product/A; 0.98 lb ae/A = 41 fl oz/A; 0.773 lb ae/A = 32.9 fl oz/A

3.7 Pounds of Acid Equivalent per Gallon / 5.0 Pounds of Active Ingredient per Gallon

- Buccaneer 5
- Extra Credit 5

1.125 lb ae/A = 38 fl oz of product/A; 0.98 lb ae/A = 33 fl oz/A; 0.773 lb ae/A = 26.7 fl oz/A

4.0 Pounds of Acid Equivalent per Gallon / 5.4 Pounds of Active Ingredient per Gallon

- Cornerstone 5 Plus
- Glyfine 5 Plus
- Duramax
- RapidFire
- Durango DMA
- Tomahawk 5
- Gly Star 5 Extra

1.125 lb ae/A = 36 fl oz of product/A; 0.98 lb ae/A = 31 fl oz/A; 0.773 lb ae/A = 24.7 fl oz/A

4.17 Pounds of Acid Equivalent per Gallon / 5.1 Pounds of Active Ingredient per Gallon

- Touchdown CT2
- Touchdown Total
- Traxion

1.125 lb ae/A = 35 fl oz of product/A; 0.98 lb ae/A = 30 fl oz/A; 0.773lb ae/A = 23.7 fl oz/A

4.5 Pounds of Acid Equivalent per Gallon / 5.5 Pounds of Active Ingredient per Gallon

- Credit Extreme
- Roundup OriginalMAX
- Roundup PowerMAX
- Roundup WeatherMAX

1.125 lb ae/A = 32 fl oz of product/A; 0.98 lb ae/A = 28 fl oz/A; 0.773 lb ae/A = 22 fl oz/A

5.0 Pounds of Acid Equivalent per Gallon / 6.1 Pounds of Active Ingredient per Gallon

- Touchdown HiTech

1.125 lb ae/A = 30 fl oz of product/A; 0.98 lb ae/A = 25 fl oz/A; 0.773 lb ae/A = 20 fl oz/A

64.9% ae (71.4% ai) SG Formulation

- Roundup UltraDry

1.125 lb ae/A = 1.73 lbs of product/A

68.9% ae (75% ai) SG Formulation

- Helosate 75 SG

1.125 lb ae/A = 1.63 lbs of product/A

80.65% ae (88.8% ai) WDG Formulation

- Clean Field 88.8 WDG

1.125 lb ae/A = 1.39 lb of product/A; 0.98 lb ae/A = 1.21 lb/A; 0.773 lb ae/A = 0.95 lb/A

Full Adjuvant Load = Add NIS (0.25% v/v) unless prohibited by label
Partial Adjuvant Load = Add NIS (0.25-0.5 %v/v) unless prohibited by label
* = Use in ND Only ** = Use in MN Only

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

All of the Glyphosate Information Listed Above was Compiled by Dr. Jeff Stachler