May 5, 2017

**Wet weather considerations for weed control.**

- Pre corn or soybean herbicides applied earlier may need an overlapping pre application or early post application to shore up the residual control after heavy recent rains.
- Fields that did not receive a burndown or pre application before the rains, have weeds that are large and will be difficult to control.

**Authority** Brand herbicides are the perfect residual base for 
*Roundup® Ready®* soybean trait, *Liberty Link®* soybean train, 
*Roundup Ready 2 Xtend®* soybean trait or conventional soybeans, especially in challenging wet weather conditions.

Let’s look at some research from 2015 when nearly 30” of rainfall occurred in May and June. Wet weather had already delayed burndown applications and the field below had knee high marestail and other weeds when several Authority Brand herbicides were compared in tank mixes with Roundup® herbicide and 2,4-D. Authority Brand herbicides premixes contain partner chemistry that assists in the burndown of tough weeds and eventual control was excellent in spite of weed size. Lush growing conditions certainly helped then and may help this spring as well.

Henbit was already turning yellow, but marestail was nearly knee high on the day of application. -Platte Co MO May 12, 2015

Results on next page→
Authority® Brand herbicides vs. Blanket® herbicide in burndown tank mix  Platte Co MO 2015  7 DAT

All Authority Brand herbicide premixes showing more Activity on tough weeds than Blanket herbicide (straight sulfentrazone).

Premix partner chemistry in Authority Brands helps take down bigger marestail in a burndown tank mix* (Each treatment has ~0.19 lbs active sulfentrazone)

*All treatments included 28 oz loaded glyphosate and 16 oz 2,4-D ester

30 days after treatment and several more inches of rain
In June, after 20 inches of rainfall, the value of an overlapping pre application of Anthem® herbicide (plus additional burndown) was clear.

6 oz. of Anthem® herbicide + glyphosate/2,4-D applied perpendicular across the pre treatments (looking south instead of east) 2.5 weeks after the post application.

Photos June 30, 18 DAT, 48 DA Pre
Rainfall: 6-8” since post, 16-21” since pre, soybeans finally planted

Authority® Brand herbicide pre
Anthem® herbicide overlap
July 17: 37 DAT post, 65 DAT Pre likely ~30” rain by this point
Anthem herbicide 6 oz. applied as an overlapping pre + glyphosate across the Authority herbicide treatments 37 DAT

big weeds are check strips between the pre treatments

Foreground: Authority Elite herb. 32 oz ~ May 10th
fb Anthem herb. 6 oz ~June 15
Commercially applied
2017 Soybean Recommendations

When weather allows, stay with your pre herbicide program which is critical to effective weed control and resistance management, especially if excess rainfall continues. If you have an early pre on, plan to follow with an overlapping application of Anthem® MAXX herbicide preemerge or post thru 3T. Tank mix with Roundup® herbicide, Liberty® herbicide or other post herbicide for emerged weeds as appropriate to timing and with required transgenic variety selection.

Anthem MAXX herbicide following Authority Brand herbicides

Early Authority® Brand herbicide applications with heavy rain & no soybeans planted may need additional residual: Apply Anthem MAXX herbicide overlap pre or post to 3rd T.

- 2.5-3 oz./A Anthem MAXX herbicide + Roundup® herbicide 1-1.5 lb a.i./A + AMS 8-17 lb/100 gal*
- 2.5-3 oz./A Anthem MAXX herbicide + Liberty® herb. 29 oz./A With AMS or COC if desired**

*Round up herb. post emergence only on Roundup Ready® soybeans.
**Liberty herbicide post emergence only on LibertyLink® soybeans

Authority Brand herbicides + new dicamba formulations near planting

If no herbicide yet applied, get burndown and residual control in one application without worry of plant back restrictions on Roundup Ready 2 Xtend® soybeans

- Apply 5-6 oz. of either Authority® XL herbicide, Authority® Maxx herbicide or Authority® First DF herbicide or 14-18 oz. Authority® MTZ DF herbicide for residual control of weeds yet to emerge and burndown assistance
- Tank mix any of the above Authority Brand herbicides with Xtendimax™ herbicide 22 oz. + a Roundup® Brand herbicide at 1 lb ai glyphosate equivalent for full burndown of emerged weeds
- Or Apply 5-6 oz. Authority XL herbicide mixed with Engenia™ herbicide 12.8 oz. + glyphosate 1 lb. ai.

Read and follow all federal and supplemental label directions and abide by special application precautions for use of Xtendimax or Engenia herbicides on soybeans. Additional state rules may apply.

Additional Authority Brand or Anthem Brand herbicides may receive tank mix approval, visit www.engeniatankmix.com or www.xtendimaxapplicationrequirements.com/Pages/tankmix.aspx for latest information.

Authority Brand herbicide & Anthem MAXX Herbicides approved for aerial application

with the damp conditions, consider applying by air

Authority Elite herbicide, Authority XL herbicide, Authority Maxx herbicide, Authority MTZ DF herbicide or Authority Assist herbicide preemergence up to 3 days after planting in soybeans (do not apply if soybeans are cracking)

or

Anthem MAXX herbicide preemergence through early post in corn or soybeans

Use 5 gallons of finished spray per acre for uniform coverage tank mix with popular burndown herbicides also approved for aerial application and not otherwise prohibited read and follow label directions
### Anthem MAXX Herbicide – Tank-mix PRE Programs

- **Anthem MAXX herbicide 4 oz. + Balance Flexx herbicide 3 oz.:** added kochia, velvetleaf, lambsquarters, smartweed, other large seeded annuals & additional mode of action. (add Roundup *herbicide* + 2,4D or dicamba for full burndown of emerged weeds)

- **Anthem MAXX herbicide 4 oz. + atrazine 1 lb + Hornet herbicide 3 oz.:** adds ragweed, velvetleaf, sunflower plus marestail burndown. (add Roundup + 2,4-D or dicamba for full burndown of emerged weeds)

#### Anthem MAXX Herbicide Early Post Emergence with premier residual

- **Option 1:** Anthem MAXX herbicide 2.5-4 oz. + glyphosate + AMS : Combines residual of pyroxasulfone + fluthiacet methyl (Cadet® herbicide) for added post activity on broadleaf weeds when paired with glyphosate on Roundup Ready® corn. Add ½-1 lb atrazine for an additional mode of action and broader control.

- **Option 2:** For low cost control of tough, resistant weed populations, use Solstice herbicide at 2.5 oz. + Anthem MAXX herbicide 2 oz., + atrazine ½-1 lb +COC 0.5 gal/100 + AMS. Solstice herbicide (Cadet® herbicide + mesotrione) provides strong post control on resistant broadleaf weeds. Anthem MAXX herbicide brings additional residual control for grasses and broadleaves.

### Add in a quality FMC insecticide for control of cutworms, stalk borers, armyworms or other pests:
- **Mustang® Maxx insecticide 2-4 oz.**
- **Hero® insecticide 3-5 oz.**
- **Declare® insecticide 1-1.5 oz./acre**

Always read and follow label directions. NOTE REGARDING RESTRICTED USE PESTICIDES: Anthem ATZ herbicide; Athena insecticide, Brigade 2EC Insecticide/Miticide, Brigade WSB Insecticide/Miticide, Brigadier Insecticide Capture 3RIVE 3D insecticide, Capture LFR Insecticide, Declare insecticide, Hero Insecticide, Mustang Insecticide, Mustang Maxx Insecticide, Pounce 25WP Insecticide, Stallion Brand Insecticide, Temitry LFR Insecticide/Fungicide, Triple Crown Insecticide, Ethos XB Insecticide/Fungicide and Gladiator Insecticide/Miticide are Restricted Use Pesticides. NOTE FOR CALIFORNIA: Accurate Extra herbicide, Aim herbicide, Aim EC herbicide, Aim EW herbicide, Anthem herbicide, Anthem ATZ herbicide, Anthem Flex herbicide, Anthem MAXX herbicide, Authority Assist herbicide, Authority Elite herbicide, Authority First DF herbicide, Authority MAXX herbicide, Authority MTZ DF herbicide, Authority XL herbicide, Cadet herbicide, Chisum Herbicide, Command 3ME microencapsulated herbicide, Crusher Herbicide, Edition Broadspec herbicide, Edition Tankmix Herbicide, Marvel herbicide, Nimble Herbicide, Nuance Herbicide, Preempror SC fungicide, Report Extra Herbicide, Solstice herbicide, Spartan 4F herbicide, Spartan Charge herbicide, Spartan Elite herbicide, Temitry LFR Insecticide/Fungicide, Topguard EQ fungicide, Zeus Prime XC herbicide, Zeus XC herbicide, Capture 3RIVE 3D insecticide, Ethos XB Insecticide/Fungicide, Hero Insecticide, Mustang Maxx Insecticide, Display cotton harvest aid, Zoro Miticide and VGR Soil Amendment are not registered for sale or use in California. VGR Soil Amendment is not a pesticide. Beleaf and Carbine are trademarks of Ishihara Sangyo Kaisha, Ltd. Cercobin is a trademark of Nippon Soda Co., LTD. Sovran is a registered trademark of BASF. FMC, 3RIVE 3D, Accurate, Aim, Anthem, Athena, Authority, Brigade, Brigadier, Cadet, Capture, Chisum, Command, Crusher, Declare, Display, Edition, Ethos, Preempror, Frature, Fyfanon, Gladiator, Hero, Koverall, LFR, Marvel, Mustang, Nimble, Obey, Pounce, Report, Rhyme, Rovral, Shark, Solida, Solstice, Spartan, Stallion, Temitry, Topguard, Topguard Terra, VGR and Zeus are trademarks and HatchTrak and Investing in farming’s future are service marks of FMC Corporation or an affiliate. ©2016 FMC Corporation. All rights reserved. 11/16

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