Herbicide Update

The cool wet forecast (see map below for Des Moines, IA) has many people wondering when they will get back into the fields. Also, with the large equipment many farmers have, some are wondering how we will get all the herbicide applications done when they get back into the field. I just want to reiterate that the plans laid out this winter were the best plans, and we should not be changing them, this Summer you will regret not applying a residual herbicide. On the next page you will see a slide showing herbicide resistance and how the majority of weeds are resistant to post-emergence herbicides. The options for effective weed control of waterhemp and Palmer pigweed in soybeans is limited when using just post-emergence herbicides and with resistance to glyphosate and some to post-emergence PPO chemistries you cannot afford to forget your soybean pre-emergence herbicides! In fact, there are more options for post-emergence herbicides in corn; soybean pre-emergence herbicides are a necessity.

### Weather Forecast

<table>
<thead>
<tr>
<th>DAY</th>
<th>DESCRIPTION</th>
<th>HIGH / LOW</th>
<th>PRECIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>TODAY</td>
<td>Cloudy</td>
<td>53/36°</td>
<td>20%</td>
</tr>
<tr>
<td>THU</td>
<td>Partly Cloudy</td>
<td>60/41°</td>
<td>0%</td>
</tr>
<tr>
<td>FRI</td>
<td>Showers</td>
<td>53/42°</td>
<td>50%</td>
</tr>
<tr>
<td>SAT</td>
<td>Showers</td>
<td>51/41°</td>
<td>70%</td>
</tr>
<tr>
<td>SUN</td>
<td>Rain</td>
<td>47/37°</td>
<td>100%</td>
</tr>
<tr>
<td>MON</td>
<td>AM Rain/Snow Showers/Wind</td>
<td>56/41°</td>
<td>50%</td>
</tr>
<tr>
<td>TUE</td>
<td>Mostly Sunny</td>
<td>67/45°</td>
<td>20%</td>
</tr>
<tr>
<td>WED</td>
<td>Few Showers</td>
<td>64/44°</td>
<td>30%</td>
</tr>
<tr>
<td>THU</td>
<td>Partly Cloudy</td>
<td>67/43°</td>
<td>10%</td>
</tr>
<tr>
<td>FRI</td>
<td>Sunny</td>
<td>66/46°</td>
<td>10%</td>
</tr>
<tr>
<td>SAT</td>
<td>Partly Cloudy</td>
<td>72/50°</td>
<td>20%</td>
</tr>
<tr>
<td>SUN</td>
<td>Partly Cloudy</td>
<td>74/53°</td>
<td>10%</td>
</tr>
<tr>
<td>MON</td>
<td>Partly Cloudy</td>
<td>75/55°</td>
<td>20%</td>
</tr>
<tr>
<td>TUE</td>
<td>Partly Cloudy</td>
<td>73/53°</td>
<td>20%</td>
</tr>
<tr>
<td>WED</td>
<td>Partly Cloudy</td>
<td>71/51°</td>
<td>20%</td>
</tr>
</tbody>
</table>

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Vast Majority of Herbicide Resistance is to Foliar Herbicides

Aim® EC Herbicide and Cadet® Herbicide Burndown – Corn / Soybean Decisions

The recent rains and upcoming forecast have delayed burndown applications for winter annuals and cover crops. Now that we are on top of planting, growers may not want to use 2,4-D due to plant-back restrictions. Aim EC herbicide and Cadet herbicide provide very effective tank-mix options that allows for the immediate planting for corn or soybeans.

Some things to keep in mind as we get into early May applications for burndown before or after planting:

- Winter annuals are heading and seeding out and have stopped most vegetative growth. It will take higher rates of Aim EC herbicide, Cadet herbicide and other herbicides to fully desiccate these weeds that are full size and in very heavy patches. Good coverage is a must in these heavy weed fields. Increasing gallonage to 15-20 GPA will help spray coverage.

- Multiple modes of action help kill these weeds several ways and prevent herbicide resistance issues in the future.
Are You Needing Faster And Better Activity In Your Burndown Programs? Then Add Aim® EC Herbicide Or Cadet® Herbicide Into Your Burndown Program. Also Authority® XL Herbicide and Authority® First DF Herbicide add Additional Burndown Activity on Many Broadleaf Species including Marestail

- Zero day plant back with Aim EC herbicide and Cadet herbicide for all labeled crops
- Enhanced activity on difficult broadleaf weeds
- Tank-mix flexibility – glyphosate, 2,4-D, Gramoxone® SL herbicide, corn atrazine pre-mixes, soybean foundation herbicides
- Increased speed of control even in cooler weather
- Adds another mode of action in burndown programs for resistance management

Benefits of a FAST Burndown:
- Soil is drier and warmer
- Weeds no longer interfere with mechanical operations
- Roots are less restricted during very important early establishment
- Reduced seedling disease due to quicker emergence and increased vigor
- Clean fields have less insect challenges

12 Hours after application
Aim® EC herbicide @ 0.5 oz/a + glyphosate @ 32 oz./A
14 days after treatment
Aim® EC herbicide @ 0.5 oz/a + glyphosate @ 32 oz./A

7 days after treatment
Cadet® herbicide @ 0.5 oz/a + glyphosate @ 32 oz./A
**Higher Use Rates: 0.75-1.0 oz./Aim EC Herbicide**
- Heavy Russian thistle, Kochia, Henbit and/or Lambsquarter populations
- Weeds are reaching reproductive growth stage and/or under drought stress
- Using reduced rates of 2,4-D to shorten planting interval
- Weeds are larger than 6-8 inches tall (length) or past rosette stage

**General Information**
- Recommended to always use Aim EC herbicide in a tank-mix combo for burndown applications
- Glyphosate may be needed to control emerged grasses with 2,4-D treatments
- Aim EC herbicide: no planting restrictions for most crops / Observe all plant-back restrictions when tank-mixing
- Aim EC herbicide: on certain crops, only make applications as a burndown up to 24 hrs after planting (see label)

**Adjuvant Guidelines**
- COC at 1 gal./100 gal. (1/2 gal. on high loads) of spray solution whenever possible as labeled (or equivalent)
- NIS may be added to glyphosate treatments if required, otherwise half rate of an oil would be good
- AMS / UAN may be added as needed by the tank-mix partner
- For fertilizer solutions as the carrier, use of an adjuvant can improve control
- Suggested adjuvant with fertilizer carrier would be 50% of the normal rate of an adjuvant either per 100 gals or per acre
- Mixing order: Compatibility Agent (if needed); WP, DF & WDG; AMS; L & F; EC; ME; surfactants & oils last

**Application Guidelines**
- Coverage is essential for good control; 10 GPA label minimum
- 15-20 GPA recommended minimum, especially when weed populations are high, or weed size is large (over 6”)
- With fertilizer solutions and coarse nozzles, only apply with high gallonage and upper range of nozzle pressure
- XR TeeJet rated as excellent for contact herbicides, DG TeeJet (pre-orifice design) rated as good for contact herbicides
- Turbo TeeJet and Air Induction nozzles good for contact herbicides at pressures above 40 psi
- Do not use FloodJet nozzles or tips larger than 8008 that create a coarse spray unless as noted above

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**Burndown Value**
- Active in Cold Weather
- Increased Spectrum
- Increased Speed of Control
- More Complete Desiccation
- Resistance Management
- Multi-crop Labeling
- Economical Cost

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888-59-FMC-AG  FMCCROP.COM

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, Temtry LFR Insecticide/Fungicide, Triple Crown Insecticide, Ethos XB Insecticide/Fungicide and Gladiator Insecticide 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, Premzept SC fungicide, Report Extra Herbicide, Solstice herbicide, Spartan 4F herbicide, Spartan Charge herbicide, Spartan Elite herbicide, Temtry 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, Athenia, Authority, Brigade, Brigadier, Cadet, Capture, Chisum, Command, Crusher, Declare, Display, Edition, Ethos, Preemptor, Fracture, Fynanor, Gladiator, Hero, Koverall, LFR, Marvel, Mustang, Nimble, Obey, Pounce, Report, Rhyme, Rozval, Shark, Solida, Solstice, Spartan, Stallion, Temtriy, 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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HT-CCB-C&S-BAN 04-26-2017