2017 Herbicide Program Evaluation/Fall Herbicide Strategies

Preharvest and combine scouting are excellent opportunities to evaluate herbicide performance. Weed escapes in corn and soybean fields provide valuable information when determining adjustments for 2018 weed management strategies. As I drive across IL and IN, marestail, waterhemp, Palmer amaranth and giant ragweed escapes are abundant. Certain species such as marestail require special attention following harvest in no-till situations. Since marestail germinates over a long period of time, fall applications are the first step in effectively managing this species in a zero-tolerance strategy.

Resistance management requires the use of multiple mechanisms including mechanical, cultural and chemical techniques. Fall herbicide applications represent an opportunity to diversify weed management strategies by employing alternative modes of action in an integrated approach. Each year, we are burdened with attempting to control large marestail plants close to planting time with limited options and sometimes less than optimal environmental conditions for herbicide performance. Fall burndown plus residual will administer more manageable weed height and density when spring applications occur.

For spring burndown applications, this will provide more flexibility in tank mixing broad-spectrum herbicides that deliver residual activity on key broadleaf weeds including giant ragweed, Palmer amaranth and waterhemp with less plant-back restrictions. It will also facilitate an opportunity to manage weeds that may intercept herbicide patterns intended for driver weeds such as marestail next spring. Cressleaf groundsel comes to mind when I think of herbicide interception. Lack of marestail coverage was evident in several fields last spring in many cases due to inadvertent herbicide interception by winter annuals such as cressleaf groundsel. Implementing a fall herbicide program targeting winter annual weeds will facilitate an easy finish and peace of mind when planting time rolls around.
Fall Herbicides for Control of Weeds in No-Till RR Soybean
Univ. of IL. Urbana – 2013/2014 Fall Application: 11/15/13, Ratings: 4/28/14

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>% Control</th>
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<tbody>
<tr>
<td>Roundup® PowerMAX 22 oz. + 2,4-D LV4 16 oz.</td>
<td>95</td>
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<tr>
<td>Roundup® PowerMAX 22 oz. + 2,4-D LV4 16 oz. + Authority® XL 4 oz.</td>
<td>99</td>
</tr>
<tr>
<td>Roundup® PowerMAX 22 oz. + 2,4-D LV4 16 oz. + Authority MTZ DF 12 oz.</td>
<td>99</td>
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Fall Herbicide Programs
Purdue University– 2015/2016 Fall Application: 11/14/15, Ratings: 4/29/16

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>% Control</th>
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<tbody>
<tr>
<td>Roundup® PowerMAX 22 oz. + 2,4-D LV4 16 oz. + Authority® MTZ 11 oz.</td>
<td>90</td>
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Step 1 - Fall | Burndown Tank-Mix Partner | Step 2 - Early Spring | Burndown Tank-Mix Partner
---|---|---|---
Authority MTZ DF herbicide 10-12 oz. **Plant field corn or soybeans in spring.**
A. Dicamba 0.5 lb. ae
B. 2,4-D 16 oz.
C. Glyphosate 0.77-1 lb. ae/A (include for foliar grass and chickweed activity)

Authority Elite herbicide 26 - 30 oz.
A. Dicamba 0.5 lb. ae (Roundup® Ready 2 Yield Xtend)
B. 2,4-D 16 oz. (7-day plant back)
C. Glyphosate 0.77-1 lb. ae/A (include for foliar grass and chickweed activity)
D. Liberty® 280 herbicide 29 - 32 oz. (0-day plant back)

Authority XL herbicide 3.2-4 oz.
A. Dicamba 0.5 lb. ae
B. 2,4-D 16 oz.
C. Glyphosate 0.77-1 lb. ae/A (include for foliar grass and chickweed activity)

Authority Elite herbicide 26 - 30 oz.
A. Dicamba 0.5 lb. ae (Roundup® Ready 2 Yield Xtend)
B. 2,4-D 16 oz. (7-day plant back)
C. Glyphosate 0.77-1 lb. ae/A (include for foliar grass and chickweed activity)
D. Liberty® 280 herbicide 29 - 32 oz. (0-day plant back)

Crusher® herbicide 1 oz. **Plant field corn or soybeans in spring.**
A. Dicamba 0.5 lb. ae
B. 2,4-D 16 oz.
C. Glyphosate 0.77-1 lb. ae/A (include for foliar grass and chickweed activity)

Authority Elite herbicide 26 - 30 oz.
A. Dicamba 0.5 lb. ae (Roundup® Ready 2 Yield Xtend)
B. 2,4-D 16 oz. (7-day plant back)
C. Glyphosate 0.77-1 lb. ae/A (include for foliar grass and chickweed activity)
D. Liberty® 280 herbicide 29 - 32 oz. (0-day plant back)

Do not exceed 0.375 lb. ai/A of sulfentrazone per soybean crop year. Refer to metribuzin label for rate selection x soil texture / organic matter. Refer to dicamba tank-mix websites for labeled tank mixtures in burndown applications.
**AIM® EC Herbicide – Harvest Aid**

Broadleaf weed escapes are evident in many fields. A harvest aid application may provide a few benefits:

1. Reduce growth and/or desiccate weeds to improve harvest.
2. Reduce weed seed production from late-developing weeds to reduce pressure next season.

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**Corn (Field, Seed, Pop), Soybeans and Sorghum**

Use a tank mix for weeds like velvetleaf, morning glories, bindweed, black nightshade, waterhemp, lambsquarter and others.

**Soybeans**

1.0-1.5 oz./A Aim EC herbicide + 1.5 lbs. glyphosate + 1 pt./A COC/MSO OR

1.0-1.5 oz./A Aim EC herbicide + 1 pt./A Gramoxone® herbicide + NIS 0.25%

- Aim EC herbicide + Gramoxone herbicide better for waterhemp and other glyphosate-resistant weeds.
- Aim EC herbicide + glyphosate; good for velvetleaf, morning glories and grasses
- Soybeans - when pods turn brown

**Corn & Sorghum**

1.0 oz./A Aim EC herbicide + 1-2 pt./A 2,4-D + 1.0 lb. ai/A glyphosate + 1 pt./A COC/MSO

- Roundup Ready® herbicide corn - start after hard dough
- Sorghum - Grain moisture is <30% to avoid crop damage
- Check Aim EC herbicide partner product for timing and PHI restrictions
- Aim EC herbicide pre-harvest interval on above crops - 3 days
- PHI for glyphosate and 2,4-D is 7 days

3-5 gal./A aerial application
15-20 gal./A ground application

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*Untreated Check*

*Aim EC herbicide 1 oz. + 2,4-D. Seven days after Appl. – Seed Corn. Velvetleaf 3-5 ft. tall*
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, Ethos XB Insecticide/Fungicide and Gladiator Insecticide/Miticide are Restricted Use Pesticides. NOTE FOR CALIFORNIA: Accurate Extra herbicide, Aim EC 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, Report Extra Herbicide, Solstice herbicide, Spartan 4F herbicide, Spartan Charge herbicide, Spartan Elite herbicide, Zeus Prime XC herbicide, Zeus XC herbicide, Capture 3RIVE 3D insecticide, Ethos XB Insecticide/Fungicide, Hero Insecticide, Mustang Maxx Insecticide, Topguard Terra Fungicide, Topguard Fungicide Specialty Crops fungicide, Display cotton harvest aid are not registered for sale or use in California. 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, Fortix, Fracture, Fyfanon, Gladiator, Hero, Koverall, LFR, Marvel, Mustang, Nimble, Obey, Pounce, Report, Rhyme, Rovral, Shark, Solida, Solstice, Spartan, Stallion, Topguard, Topguard Terra 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. 10-29-15

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