INSIDE THIS ISSUE

Early-Season Winter Wheat Weed Control

Combining FMC’s Herbicide Portfolio for Wheat Weed Control and Yield Optimization

The acquisition of several cereal herbicide brands in Nov. 2017 presented FMC with some interesting new opportunities for cereal weed control that are complementary with Anthem® Flex herbicide. Trials were immediately initiated in the 2017-18 wheat crop to explore the benefits of combining Anthem Flex herbicide with Finesse® herbicide for early-season weed control and the results will be shared in this edition of HatchTrak.

BENEFITS OF ANTHEM FLEX HERBICIDE AND FINESSE HERBICIDE COMBINATIONS

1. Application flexibility
   a. Finesse herbicide may be applied preplant with burndown, preemergence (PRE) or postemergence (POST) prior to boot growth stage.
   b. Anthem Flex herbicide may be applied PRE, delayed PRE, or POST up to the fourth tiller growth stage.

2. Multiple modes of action. Use of both herbicides incorporates Group 2, 14 and 15 modes of action into your wheat production system.

3. Complementary weed control
   a. Finesse herbicide broadens spectrum of winter annual weed control when paired with Anthem Flex herbicide.
   b. PRE activity of Anthem Flex herbicide aids Finesse herbicide to manage or suppress ALS-resistant weeds.
   c. Control or suppression of tough winter grasses such as Italian or annual ryegrass, annual bluegrass and brome species.
   d. Burndown of volunteer corn to aid planting and wheat establishment.

Mid-Season Wheat Growth and Weed Control

No herbicide check
2.7 fl. oz./A Anthem Flex herbicide (PRE)
2.7 fl. oz./A Anthem Flex herbicide (D-PRE)

1Anthem Flex herbicide has 24c labels for preemergence use to manage resistant Italian ryegrass in VA, NC and AR.

FMC’s New Cereal Herbicide Product Lineup for the NE

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Chris Leon
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### Summary of Wheat Trials

**Anthem® Flex Herbicide and Finesse® Herbicide Combinations and Timings**

**Soil Texture Triangle**

- Do not apply zone.
- OR <1% OM.
- ESAREC is here

**Crop Response to PRE & DPRE Herbicide Applications – 14 da PRE Application**

- **2.7 fl. oz./A Anthem® Flex herbicide (PRE)**
- **2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse® herbicide (PRE)**
- **2.7 fl. oz./A Anthem Flex herbicide (DPRE)**
- **2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide (DPRE)**
- **2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide (EPOST)**
- **2.7 fl. oz./A Anthem Flex herbicide (EPOST)**
- **2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide (PRE)**

**Ratings 83 days after (da) PRE; 79 da D-PRE; 57 da EPOST; 30 da LPOST**

- **Location:** Virginia Tech ESAREC; Painter, VA, 2017-18

**Mid-Season Annual Broadleaf Weed Control**

- **2.7 fl. oz./A Anthem® Flex herbicide (PRE)**
- **2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse® herbicide (PRE)**
- **2.7 fl. oz./A Anthem Flex herbicide (DPRE)**
- **2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide (DPRE)**
- **2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide (EPOST)**
- **2.7 fl. oz./A Anthem Flex herbicide + 2 oz./A metribuzin (EPOST)**
- **2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide + 2 oz./A metribuzin (EPOST)**
- **2.7 fl. oz./A Anthem Flex herbicide + 16.4 fl. oz./A Axial® XL herbicide (EPOST)**
- **2.7 fl. oz./A Anthem Flex herbicide (DPRE) + 16.4 fl. oz./A Axial XL herbicide (LPOST)**

**Ratings:**
- 83 days after (da) PRE; 79 da D-PRE; 57 da EPOST; 30 da LPOST

**Location:** Virginia Tech ESAREC; Painter, VA, 2017-18

- **Common chickweed**
- **Henbit**
- **Hairy vetch**

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**As seen above,** the soil texture and OM content of the Virginia Tech ASAREC at Painter, VA, is just outside the do not apply soil texture classification for Anthem Flex herbicide.

**Injury observed in 2017 immediately after emergence was the result of 2.5” rainfall received approximately 48-72 hours after planting. This injury was temporary and did not result in a yield reduction.**

**The initial stand reduction turned out to be delayed emergence as wheat continued to emerge in subsequent ratings.**

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*The addition of Finesse herbicide, metribuzin or Axial XL herbicide to Anthem Flex herbicide significantly improved overall control of ALS-susceptible chickweed, henbit and hairy vetch at this location.*

1. Anthem Flex herbicide has 24c labels for preemergence use to manage resistant Italian ryegrass in VA, NC and AR.
Summary of Wheat Trials
Anthem® Flex Herbicide and Finess® Herbicide Combinations and Timings

Late-Season Annual Broadleaf Weed Control

- The same general trends from the earlier rating dates are also observed for Johnny-jump-up and mayweed chamomile when rated late season. Anthem Flex herbicide benefited by tank mixing Finess herbicide, metribuzin or Axial XL herbicide for all application timings.
- Hairy vetch control continued to improve when compared to the mid-season rating date.

Treatment Effects on Annual Ryegrass Control

- While the rainfall after planting produced some transient adverse crop response, the rainfall did an excellent job activating the PRE and D-PRE treatments which provided excellent Italian ryegrass control.
- Performance of the early POST Anthem Flex herbicide timing is dependent upon availability of effective tank-mix herbicide partners such as Axial herbicide, PowerFlex® herbicide and willingness to use metribuzin POST in wheat.

1. Anthem Flex herbicide has 24c labels for preemergence use to manage resistant Italian ryegrass in VA, NC and AR.
## Wheat Yields

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Wheat Yield (bu/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide (PRE)</td>
<td>57</td>
</tr>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide (PRE)</td>
<td>79</td>
</tr>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide (DPRE)</td>
<td>78</td>
</tr>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide (DPRE)</td>
<td>78</td>
</tr>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide (EPOST)</td>
<td>53</td>
</tr>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide (EPOST)</td>
<td>83</td>
</tr>
<tr>
<td>0.3 oz./A Finesse herbicide + 2 oz./A metribuzin (EPOST)</td>
<td>83</td>
</tr>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide + 2 oz./A metribuzin (EPOST)</td>
<td>79</td>
</tr>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide + 2 oz./A metribuzin (EPOST)</td>
<td>83</td>
</tr>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide + 16.4 fl. oz./A Axial XL herbicide (EPOST)</td>
<td>75</td>
</tr>
<tr>
<td>2.7 fl. oz./A Anthem Flex herbicide (DPRE) + 16.4 fl. oz./A Axial XL herbicide (LPOST)</td>
<td>73</td>
</tr>
<tr>
<td>No herbicide check</td>
<td>17</td>
</tr>
</tbody>
</table>

- All herbicide treatments significantly improved wheat yields versus the no herbicide check.
- Where Anthem Flex herbicide yielded 57 and 53 bu/A, it was due to reduced annual broadleaf weed control.
- Tank-mix combinations with Finesse herbicide and/or metribuzin provided the best level of weed control and highest yields.

### Summary

- FMC’s expanded cereal portfolio now provides opportunities early and late to keep growers’ wheat crops clean.
- Where 24c labels for resistant Italian ryegrass are available, Anthem Flex herbicide may be applied PRE or D-PRE. Planting into moisture is the best way to use Anthem Flex herbicide and generally provides the best safety to the wheat crop and highest efficacy for Italian ryegrass and overall weed control.
- Refer to the Anthem Flex herbicide label for all use precautions and restrictions to avoid adverse crop response.
- Finesse herbicide has greater flexibility and can be applied prior to planting to reduce interference from volunteer corn or it may be applied in tank mixture with Anthem Flex herbicide after planting and postemergence to provide the maximum in crop residual herbicide benefits.
- When using Anthem Flex herbicide postemergence for Italian ryegrass control, make sure it is tank mixed with an effective postemergence Italian ryegrass herbicide to control emerged Italian ryegrass plants.

### Photos From The Field – 201 da PRE

- No herbicide check
- 2.7 fl. oz./A Anthem Flex herbicide (PRE)
- 2.7 fl. oz./A Anthem Flex herbicide + 0.3 oz./A Finesse herbicide (PRE)
Always read and follow all label directions, restrictions and precautions for use. Some products may not be registered for use in all states. Please contact your FMC representative for information regarding current state registrations. As of November 1, 2017, the USEPA registrations for DuPont™ Finesse® herbicide, DuPont™ Harmony® Extra SG herbicide and DuPont™ Sentrallas® herbicide were sold by E.I. du Pont de Nemours and Company to FMC Corporation. FMC, Anthem, Finesse, Harmony, Sentrallas and Hatch Trak are trademarks or service marks of FMC Corporation or an affiliate. Do not use Finesse in Alamosa, Conejos, Costillo, Rio Grande and Saguache counties of Colorado. Do not use less than 2/10 oz. per acre of Finesse preplant, preemergence or postemergence. Axial is a registered trademark of a Syngenta Group Company. PowerFlex is a registered trademark of Dow AgroSciences LLC. ©2018 FMC Corporation. All rights reserved. 5/18