

Wheat Weed Control

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Items to Cover:

- Carryover
- Managing Volunteer Roundup Ready Corn
- Control Weeds in the Fall
- Spring Applied Programs

Carryover

- **Direx**
 - Consider conducting a bioassay
- **Atrazine**
 - should not be a concern this year

“New” Wheat Problem in 2007

- **Volunteer Roundup Ready or Roundup Ready/Herculex Corn**
- **Was large enough in some fields to slow wheat establishment**
- **What will control it???**

Gramoxone Inteon 48 ozs/A



Coverage is Critical!



Volunteer Glyphosate Tolerant Field Corn In Wheat

Ignite[®]
preplant

Finesse[®] ½ oz/acre
+
Roundup Original MAX[™]
preplant

Managing Volunteer RR Corn Stands Prior to Wheat Planting

- Gramoxone Inteon 40 to 48 oz/A
 - 15 GPA
- Finesse
 - Provides good control of corn < 12"
 - DC soybeans must be STS!!!
- Herbicides that did not work
 - Harmony, Ignite and lower rates of Gramoxone Inteon

Control Weeds Early



Late to Control Poa



Control Ryegrass Early



Weeds Controlled in the Fall:

- Ryegrass

- Finesse, Osprey, Axial, Prowl H²O

- Poa (Bluegrass)

- Sencor, Finesse, Osprey

- Junk Winter Annuals

- Sencor, Osprey, Finesse, Dicamba, 2,4-D

Common tank mix partners in fall applications:

- **Dicamba**

- 2 to 4oz/A apply up to jointing

- **2,4-D**

- Apply 8 oz/A between tiller and jointing

- **Sencor**

- 4 oz/A between 2 leaf and 4 tiller

Pluses for Sencor

- ✓ **Cheap!**

- **Runs about \$0.90/oz**
- **3 to 4 oz/A**

- ✓ **Good program to manage:**

- **Junk broadleaves**
- **The most consistent Poa program**

Which Varieties are Sencor Tolerant ???

- ✓ **Manufacturers no longer screen varieties for Sencor tolerance**
- ✓ **We (TN and AR) have been screening county wheat plots the past two years**
 - **Spray 10' swath with 4 and another with 12 ozs of Sencor**
 - **Bob Scott in Arkansas has used 4 and 16 ozs of Sencor**

Which Varieties are Sencor Tolerant ???

- ✓ In two years of testing in AR and TN
 - Only minor injury with the 4 oz rate in the variety tests in the counties!
 - 8 varieties have shown significant injury at the high rates 12 to 16 ozs of Sencor
 - Moderately susceptible (Sand)

Coker 9511, 9663, Armor 3330, DK 7830, Vigoro 9710 and 3 experimental

Osprey

- **Application rate**
 - 4.75 ozs/A
- **Spray Additives**
 - NIS 0.5%/100 gallons + 28 or 32%N at 1 -2 qts/A
 - MSO 1.5 pts/A (expensive and unavailable)
- **Application Timing**
 - Ryegrass (1-leaf to 2-tiller stage)
 - Wheat (emergence to jointing)

Osprey

- Provides >80% control of Hoelon resistant ryegrass





Osprey + NIS and 32%

Osprey

Ospre

y

- ✓ Application volume
 - 10-15 GPA
- ✓ Tank Mixtures
 - Harmony Extra – Yes
 - Sencor and 2,4-D - **NO**



Osprey + NIS and 32%

Osprey + NIS and 32%
and 4 ozs of Sencor

Osprey Ryegrass Control Considerations

- **Timing is critical**
 - Fall ryegrass competition the most yield damaging
 - Application timing – Mid-November to mid-December (ryegrass 1-2 tiller)
- **Spring applications**
 - Can control of ryegrass with less than 2 tillers
 - Do not apply Osprey within 2 weeks +/- N application

Axial XL

- Pinoxaden (ACC'ase inhibitor) like Hoelon
- Rate 16.4 oz/A
- Apply from 2lf to pre-boot wheat
- Is Hoelon-resistant ryegrass resistant to Axial?
- In our work we have gotten good control of Hoelon-resistant ryegrass with Axial
 - Some sites could vary

Axial Ryegrass Control Considerations

- **Timing is critical**
 - Fall ryegrass competition the most yield damaging.
 - Application timing - Late October to early November
- **120 day recrop back to soybean**
 - Mid March

Considerations:

- **Pluses for Osprey vs Axial**
 - Provides control of many winter annuals
 - Applications made to small Poa will provide control
 - No resistance issues in TN yet
- **Pluses for Axial vs Osprey**
 - Timing of Axial application around N applications is not an issue

PowerFlex

- **New Herbicide for 2008**
- **Application rate**
 - 3.5 ozs/A
- **Spray Additives**
 - NIS 0.25% to 0.5%
 - Application Timing
 - Ryegrass (1-leaf to 2-tiller stage)
 - Wheat (3 leaf to jointing)

PowerFlex 3.5 oz/A



PowerFlex and Osprey

- These two herbicides are very similar in both ryegrass control and overall winter annual weed control
 - PowerFlex currently has a 9 month recrop interval back to soybean (Osprey 90 days)

Prowl H₂O

- **Prowl H₂O**
 - Provides more consistent control of grassy weeds
 - Is a good resistance management strategy
- **Rate is 1.5 to 2 pts/A**
 - We have had very good results with Prowl tank-mixed with either Axial or Osprey

Italian Ryegrass Control in Wheat (2/22/07)



Prowl H₂O + Osprey 1-2 If



Osprey 1-2 If

Prowl H₂O helps provide more Consistent Control + Resistance Management

Wheat Planted: 10/4/06

Long-Term Ryegrass Control Considerations

- Resistance management
 - Ryegrass resistance to ALS inhibitors has been documented in Arkansas, Mississippi, North Carolina and Texas
 - Use multiple modes of action
 - Burndown with Gramoxone Inteon or glyphosate
 - Apply different modes of action on your wheat
 - Osprey
 - Axial
 - Prowl H₂O

A photograph of a large agricultural field filled with green crops, likely corn, with some weeds visible. The field stretches to a distant treeline under a clear sky. The text is overlaid on the image.

Two More Problematic Weeds

Cornflower

Glyphosate Resistant Horseweed

Cornflower



Cornflower

- Bachelor's Button
- *Centaurea cyanus*
- Sunflower family (Aster)
- Can grow to be 3' tall



A photograph of a field with tall green grass and numerous small purple flowers. In the foreground, a red wooden marker is visible in the ground. The background shows a line of trees under a clear sky.

1 pt of Buctril in the Fall

Horseweed and Cornflower

✓ Horseweed

- 3 ozs/A Clarity
- 4 oz Sencor to tolerant varieties
- Harmony Extra 0.5- 0.6 ozs/A -
Suppression

✓ Cornflower

- 1 pt Buctril in fall
- 4 oz Sencor to tolerant varieties

Glyphosate Resistant Horseweed



Glyphosate Resistant Horseweed



Glyphosate – Resistant Horseweed



Control of Glyphosate Resistant Horseweed after Wheat Harvest

✓ Burndown

- 40 ozs/A Gramoxone + 4 ozs Sencor
- 29 ozs/A Ignite

✓ Post – partial control

- 0.3 ozs/A FirstRate
- 0.45 ozs/A FirstRate

Control of Glyphosate Resistant Horseweed in DC Soybeans

✓ FirstRate

- 0.3 ozs/A typically will not provide good control
- 0.45 ozs/A provides better control
- 0.6 ozs/A may be needed under heavy pressure and dry conditions

Questions?

