

Wheat 2019/2020



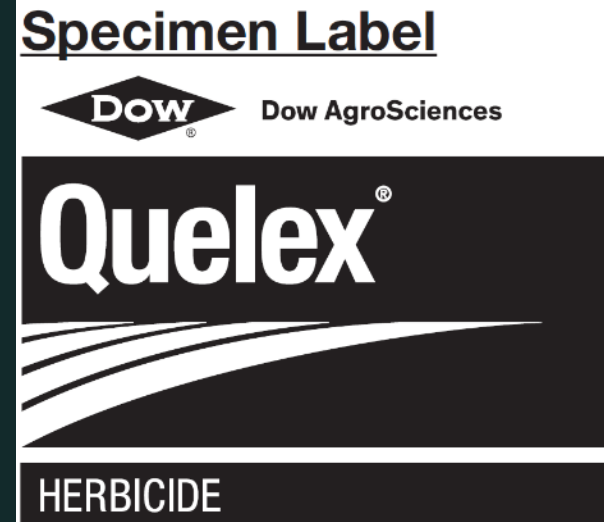
Treated



Untreated

Wheat Weed Control

1. New topics: Quelex
2. Broadleaf weed control review
3. Ryegrass weed control review



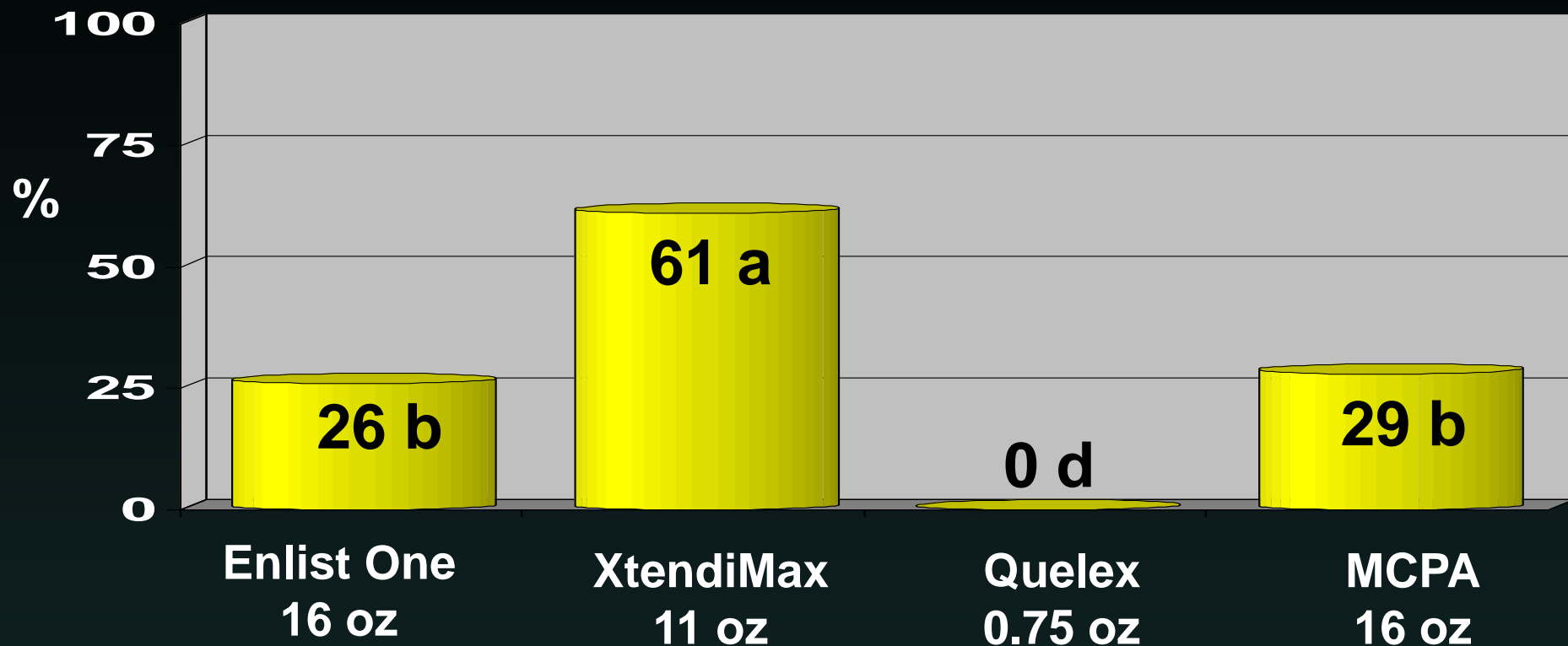
Quelex[®]

HERBICIDE

Research in Progress

- **Preplant application**
- **“prior to or shortly after planting”**
- **2-lf to flag leaf**
- **0.75 oz/A + Crop Oil**

Wheat Injury From PRE Herbicides. 2019 (significant rainfall after planting)



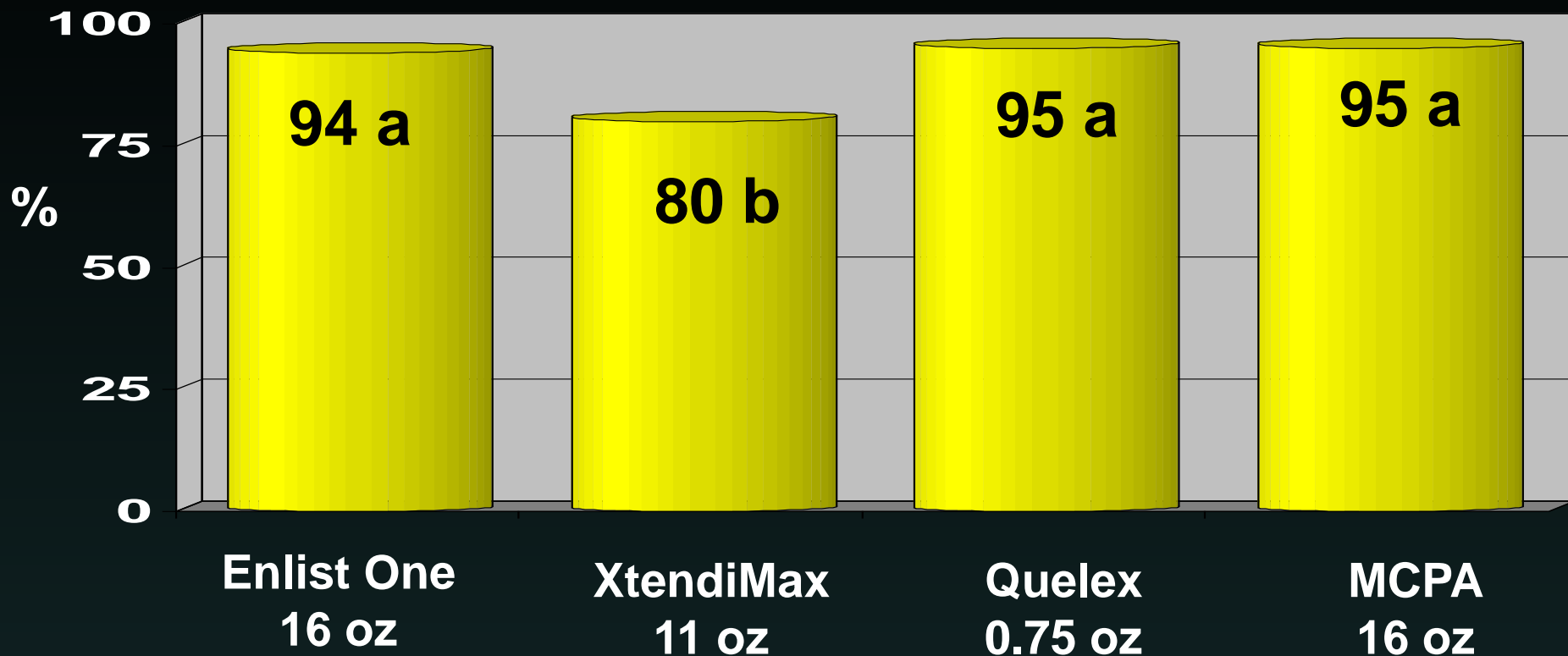


Weed Control



- **Label: chickweed, geranium, henbit, horseweed, radish, vetch**
- **Research: chickweed, gernanium, henbit, **small radish****

2" Radish Response to POST herbicides.





Enlist One – 1 qt/A



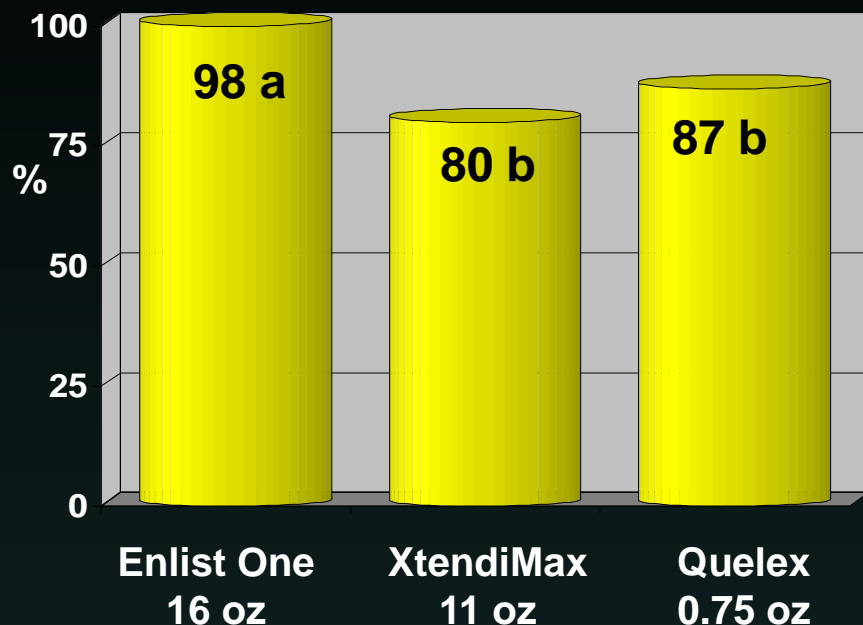
XtendiMax – 22 oz/A



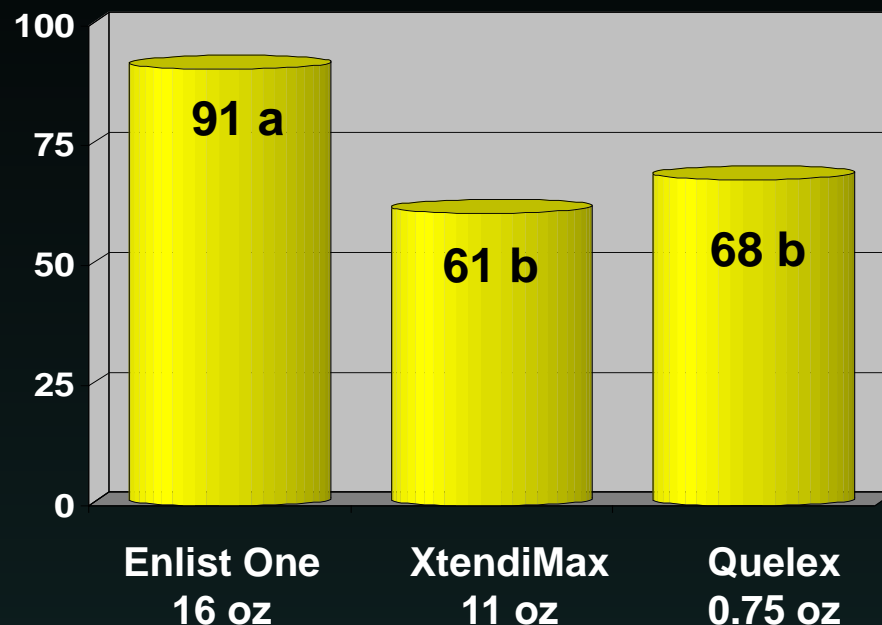
Quelex – 1 qt/A

Radish Response to POST herbicides.

Radish 4-8"



Radish 18-24"



***MCPA = 2,4-D in control**

Clean at Planting

1. Tillage (*before emerge*)
2. Roundup (*before emerge*)
3. Gramoxone (*before emerge*)
4. Harmony Extra (*before emerge or in crop*)
5. Quelex (*before emerge or in crop*)
6. Select 30 d plant back
7. 2,4-D: 24 d plant back
8. Valor: 30 d plant back

RYEGRASS:
Roundup fb Gramoxone

Controlling Broadleaf Weeds - Radish

Most effective program

1. Harmony Extra fb MCPA or 2,4-D

1. Harmony Extra ± MCPA or 2,4-D

2. 2,4-D alone

3. Harmony + Quelex

4. Harmony Extra alone



Least effective program

MCPA vs 2,4-D

CROP RESPONSE:

MCPA: 2 tiller to full tiller wheat (safer)

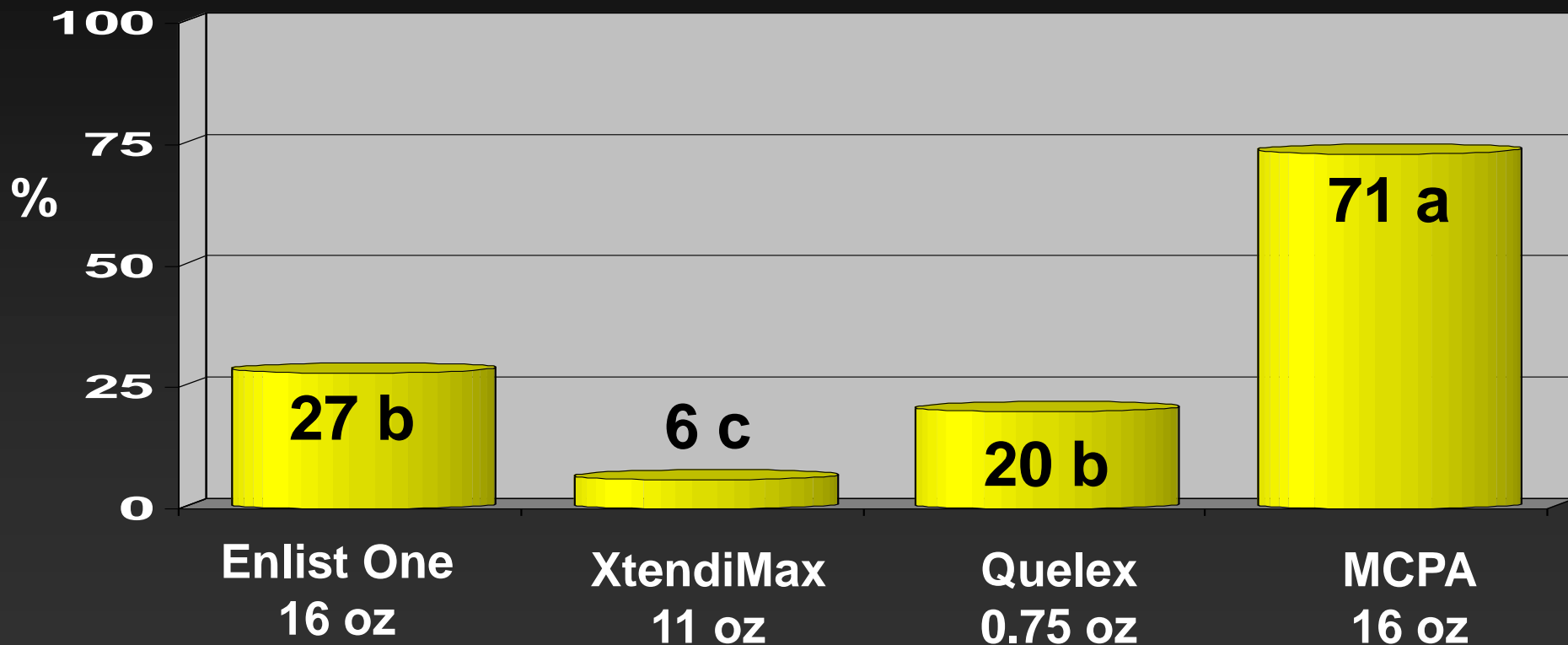
2,4-D: full tiller wheat

WEED RESPONSE:

Similar on small weeds; 2,4-D often better on larger weeds. No difference when mix w Harmony.

MCPA provides best residual radish control.

Wild Radish Response to Residual Activity of Wheat Herbicides. 10 DAT



Ryegrass Control

1. A genetic stud– will develop resistance to ALL herbicides quickly.
2. Extremely competitive with grain production.



In-Crop Ryegrass Control

Wheat

Barley

Oat

Rye

Zidua



Fierce



Axiom

Hoelon



Hoelon

Osprey



Axial



Axial

PowerFlex



Products with the same
color error = same MOA

Ryegrass Control in Wheat

- Resistance management:

Axial and Hoelon have same mode of action. Treat a field only once every two years with either.

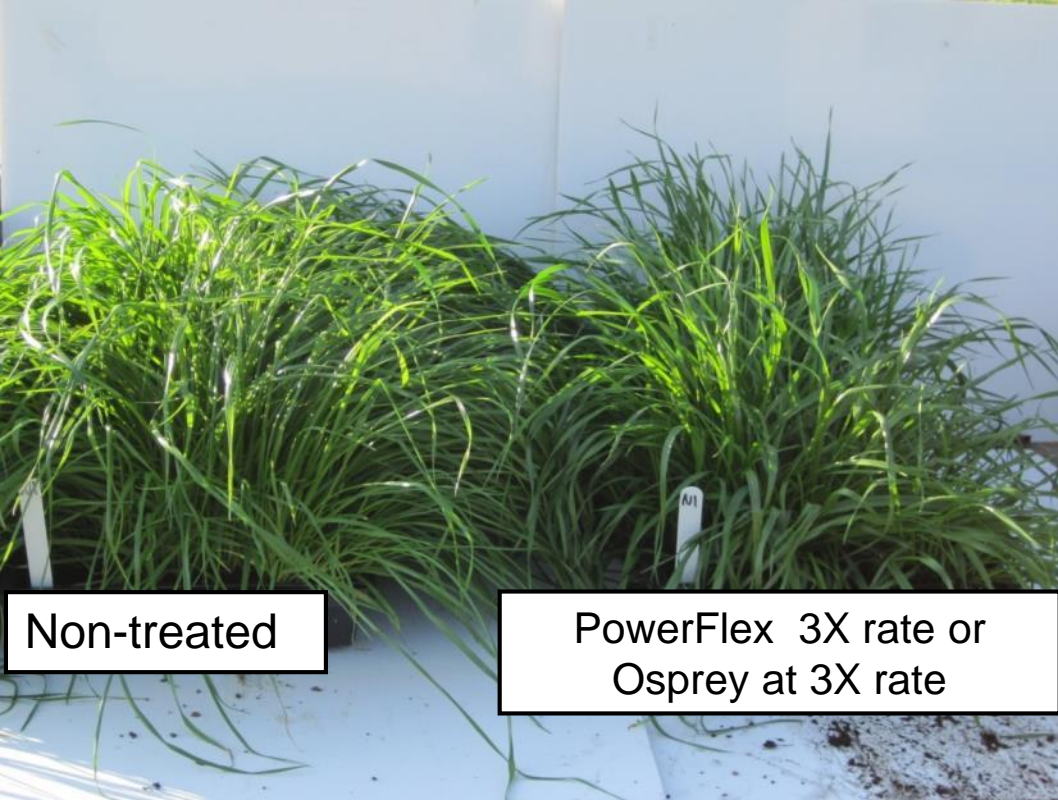
Osprey and PowerFlex have same mode of action. Treat a field only once every two years with either.

Zidua and Fierce contain same mode of action. Treat a field only once every two years with either.

Proper Timing of POST Materials

- Timeliness is critical !!!
- With normal planting date, generally best to apply around Christmas

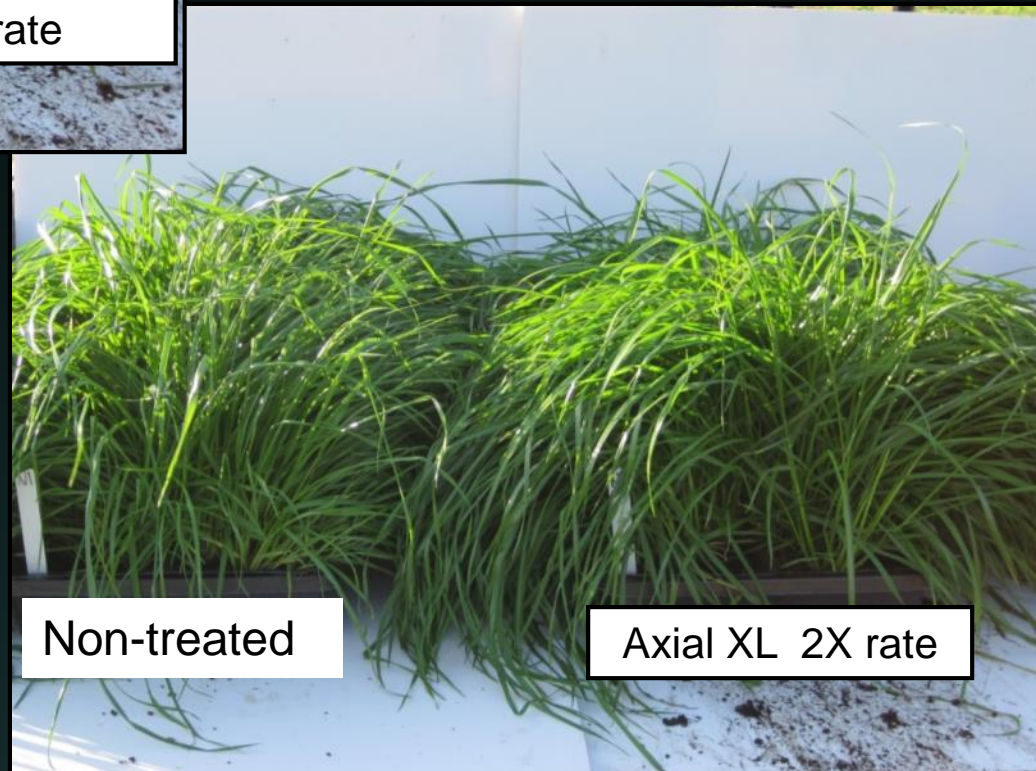
ALS resistance - MoA 2



Non-treated

PowerFlex 3X rate or
Osprey at 3X rate

ACCase resistance – MoA 1



Non-treated

Axial XL 2X rate



**Ryegrass planted 0.5
inch followed by deep
turning.**

**Ryegrass planted 0.5
inch without tillage.**

Ryegrass Resistant to ALL POST'S?

Use of residuals



(BASF)



(Valent - 24 c)

Zidua: Effective on Ryegrass

Delayed PRE:

- Wheat seed planted at least 0.75" deep
- 80% of seed germinated with 0.5" shoot
- 0.75 to 1 oz (sands); 1 to 1.25 oz (med texture)

Early POST (spike through 4-tiller):

- Seed planted at least 0.5" deep
- 1 to 2 oz/A
- Can mix with Axial after 2 leaf wheat

Fierce (Section 24 c GA Label)

- Good ryegrass, radish & other broadleaves!
- Must walk slowly with injury concerns.



Fierce (Section 24 c GA Label)

Application between spike and 2 If wheat:

- **Seed planted between 1 and 1.5 inch deep**
- **Apply at 1.5 oz/A**
- **Do not apply on sands!!!!**
- **Do not mix with anything but water!!!**
- **MUST BE ACTIVATED PRIOR TO WEEDS 1/2"**

Ryegrass and Radish

- **PowerFlex or Osprey + Harmony Extra**
- **Axial followed by MCPA + Harmony Extra**
- **Fierce**

Summary

- **Great options for broadleaves**
- **Using same herbicide MOA on a piece of ground guarantees ryegrass resistance in 3 yr**
- **Walk slowly with Fierce and zidua**



Clean at Planting

(wheat, barley, oats, rye, triticale)

1. Tillage (all crops)
2. Roundup (all crops)
3. Gramoxone (wheat, barley)
4. Select 30 d plant back (all crops)
5. 2,4-D: 24 d plant back (all crops)
6. Valor: 30 d plant back (wheat only)

Broadleaf Herbicides Labeled

1. Wheat: Harmony/MCPA/2,4-D/Quelex
2. Barley: Harmony/MCPA/2,4-D/Quelex
3. Oats: Harmony/MCPA/2,4-D
4. Triticale: Harmony/2,4-D/Quelex
5. Rye: 2,4-D/MCPA