

# POST-HARVEST WEED MANAGEMENT

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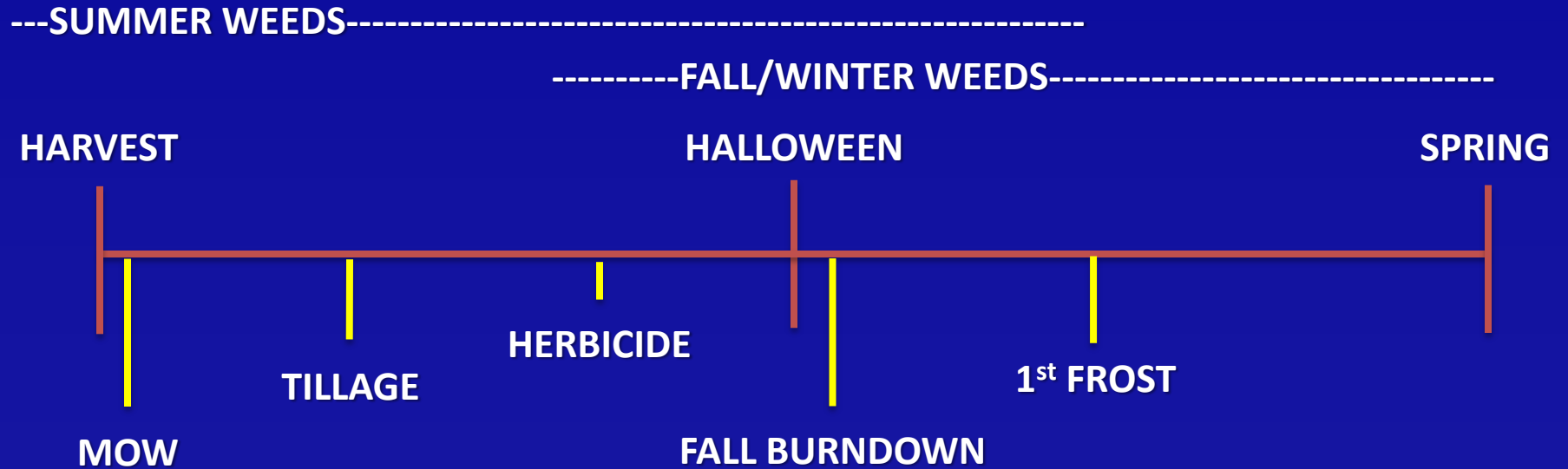
# No crop, No worries?

- Long time between harvest and planting of a crop
  - Corn
    - Planted February thru April **4-6 months w/o crop**
    - Harvested July thru September
  - Cotton
    - Planted April thru June **4-5 months w/o crop**
    - Harvested September thru November
  - Soybean
    - Planted March thru June **3-5 months w/o crop**
    - Harvested August thru November

# 3-6 months without a crop?

- **Glyphosate-resistant Palmer amaranth can continue to grow and produce seed until early-fall.**
  - Flowering (3-4 weeks)
  - Seed production (2-3 weeks)
- **Winter weed management**
  - Glyphosate-resistant Italian ryegrass
  - henbit
- **Burndown in the spring**
  - Not always effective
- **Why worry?**
  - Increasing resistant weed seed in soil seedbank
  - Winter vegetation harbors insects, utilizes soil nutrients for growth, and other issues.

# Timeline



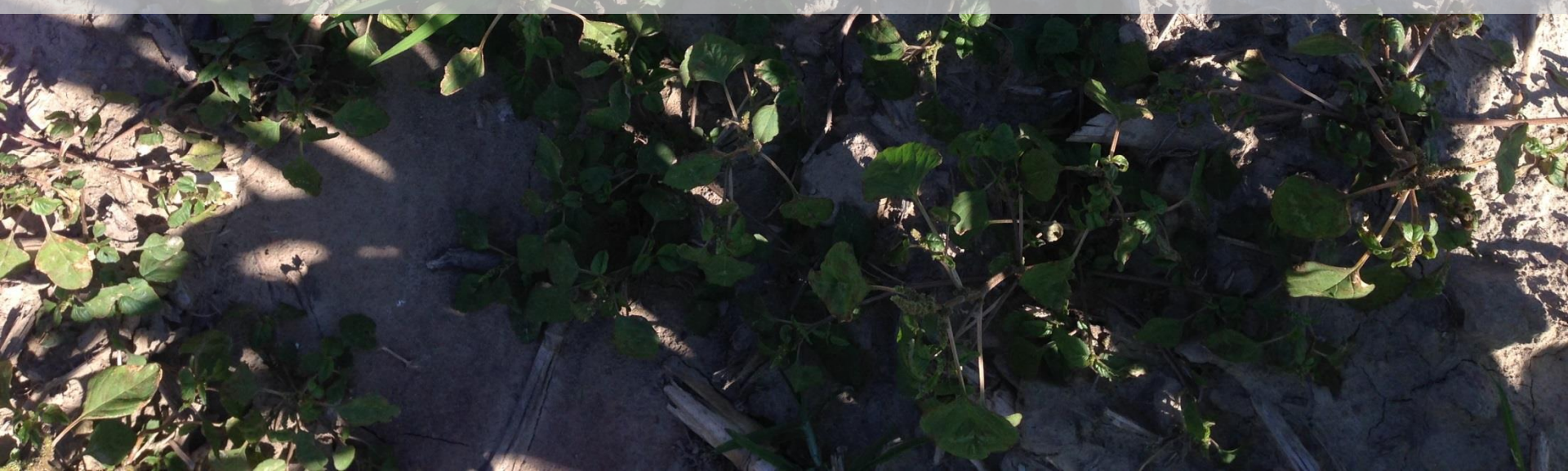
# Post-Harvest Weed Management



**Photo taken 10/26/13**



# Post-Harvest Weed Management



# Post-Harvest Weed Management



**Corn Harvested 8/31/2013**  
**Photo taken 9/11/2013**

# Post-Harvest Weed Management

- 0-5 months – harvest to first frost
- GR Palmer amaranth, various grass weeds, volunteer corn
- **Methods**
  - Mowing
  - Tillage
  - Herbicides
    - Gramoxone + Valor, Dual Magnum, Zidua, Goal, Direx, Valor XLT, Canopy EX, Sharpen
    - Consult labels for specific crop to be planted the following year
- Sequence depends upon producers ability
- Mow soon after harvest, tillage 3-4 weeks later, apply herbicide treatment 3-4 weeks later

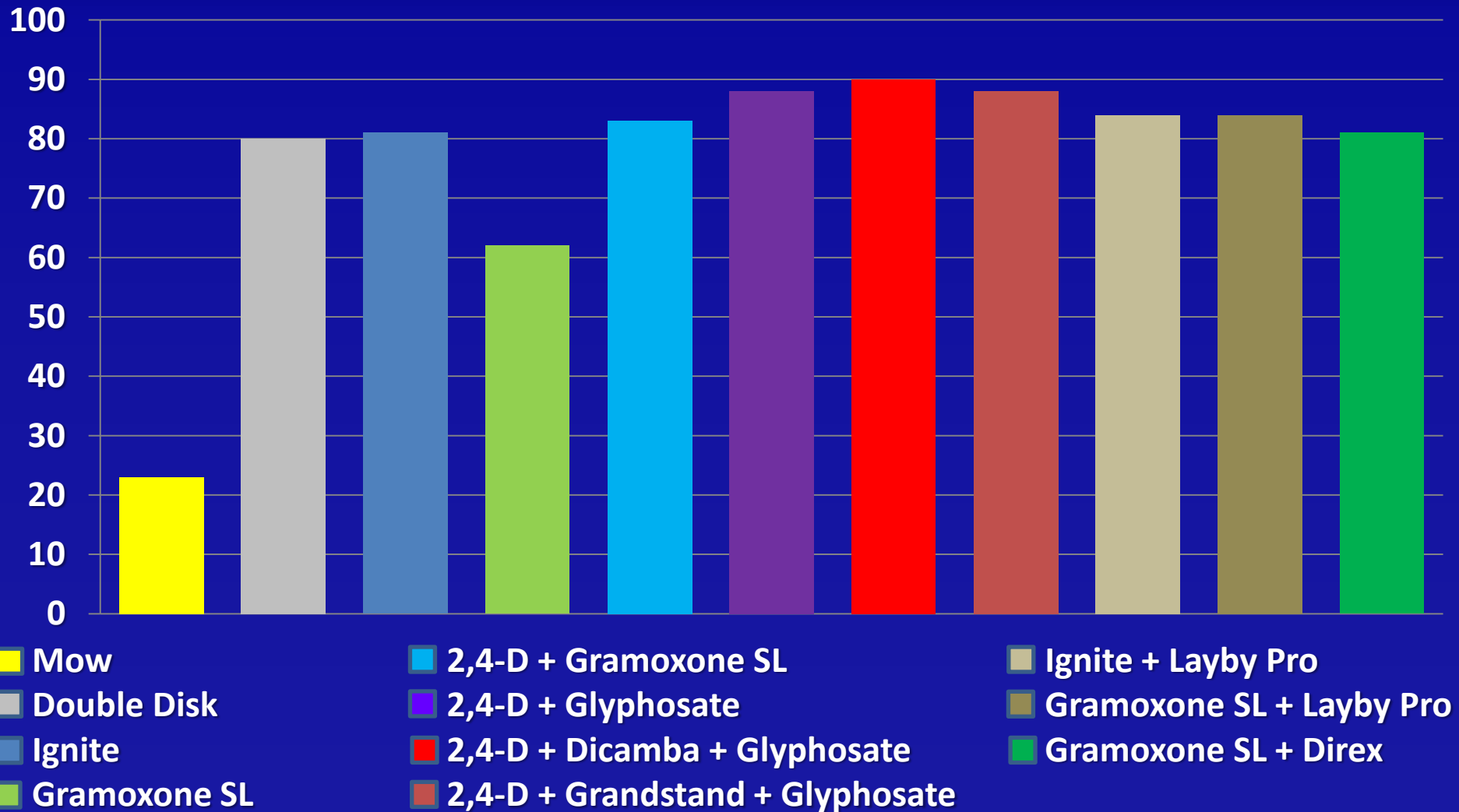
09/13/2012



# Post-harvest GR Palmer Amaranth Control in Tennessee

- Gramoxone provided 83% control (.75 lb ai/a)
- When tank mixed with Dual II Magnum, Zidua, Sharpen, or Valor regrowth and new emergence was controlled
- The addition of the residual provide 10 – 15% more control than Gramoxone alone
- Some wheat injury was observed where residuals where applied but injury did not translate into yield reduction

# Prickly Sida Control Following Post-harvest Treatments



# – Post-Harvest Weed Management

- **MAIN POINT**

- **Don't allow weeds, especially GR Palmer amaranth, to produce seed!**

09/13/2012



# Fall/Winter Weed Management

*GR Italian ryegrass*



# GR Italian Ryegrass Management

*No fall treatment*

March 20, 2012



**No POST**



**Select Max 12 OZ/A; Jan.**



**Gramoxone SL 4 PT/A; Feb.**



**Select Max fb Gramoxone Inteon**

# GR Italian Ryegrass Management

*Double disk in fall; November*

March 20, 2012



**No POST**



**Select Max 12 OZ/A; Jan.**



**Gramoxone SL 4 PT/A; Feb.**



**Select Max fb Gramoxone SL**

# GR Italian Ryegrass Management

*Dual Magnum @ 1.33 pt/A; November*

March 20, 2012



**No POST**



**Select Max 12 OZ/A; Jan.**



**Gramoxone SL 4 PT/A; Feb.**



**Select Max fb Gramoxone SL**



# Herbicide Programs for Managing Glyphosate-Resistant Italian Ryegrass in Mississippi

*Jason A. Bond and Thomas W. Eubank*

## Herbicide Programs to Manage Resistant Italian Ryegrass.<sup>1</sup>

Crop	Fall <sup>2</sup>	Winter <sup>4,5</sup>	Spring <sup>6</sup>
Corn	Dual Magnum <sup>3</sup> at 1.33 pt/A or double disk	Select Max at 12–16 oz/A or equivalent rate of 2 lb clethodim formulation	Paraquat <sup>7</sup> at 0.75–1 lb/A of active ingredient or two applications of paraquat spaced 10–14 days apart
Cotton	Dual Magnum <sup>3</sup> at 1.33 pt/A or trifluralin at 3 pt/A or double disk	Select Max at 12–16 oz/A or equivalent rate of 2 lb clethodim formulation	Paraquat <sup>7</sup> at 0.75–1 lb/A of active ingredient or two applications of paraquat spaced 10–14 days apart
Soybean	Dual Magnum <sup>3</sup> at 1.33 pt/A or Boundary at 2 pt/A or trifluralin at 3 pt/A or double disk	Select Max at 12–16 oz/A or equivalent rate of 2 lb clethodim formulation	Paraquat <sup>7</sup> at 0.75–1 lb/A of active ingredient or two applications of paraquat spaced 10–14 days apart
Rice	Command at 2 pt/A or double disk	Select Max at 12–16 oz/A or equivalent rate of 2 lb clethodim formulation	Paraquat <sup>7</sup> at 0.75–1 lb/A of active ingredient or two applications of paraquat spaced 10–14 days apart

# Fall Marestalk Management

- Mid Oct. To Nov. are optimum timings
- Leadoff, Canopy EX, Envive, Valor XLT, Valor etc.
- These provide some POST activity but not to the level of dicamba (8-12 oz/A)
- Follow-up with dicamba in spring for control of escapes



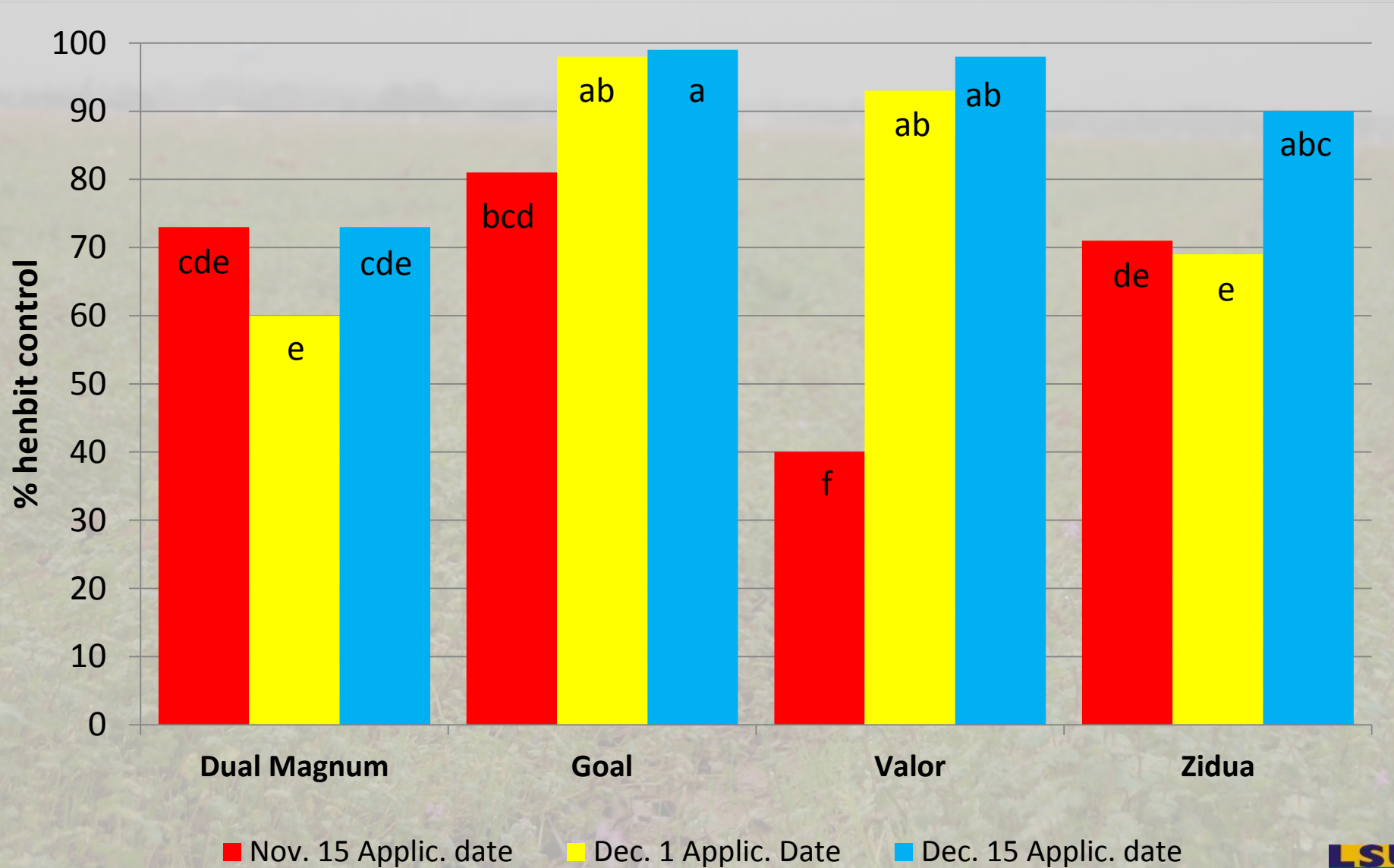
# Fall/Winter Weed Management

## *Henbit*



# Fall/Winter Weed Management

## *Henbit*



# Henbit Management

*Applied December 15<sup>th</sup>*

March 18<sup>th</sup>

**Goal @ 1 pt/A**



**Valor @ 2 oz/A**



**Manage fall emerged henbit, multiple options  
for control of spring emergence**

# Spring Weed Management

---SUMMER WEEDS---

-----FALL/WINTER WEEDS-----

HARVEST

HALLOWEEN

SPRING

MOW

TILLAGE

HERBICIDE

FALL BURNDOWN

1<sup>st</sup> FROST

**14 DAT**

**28 DAT**

**Applied  
February 18th**

**Glyphosate +  
2,4-D @ 1 pt/A**

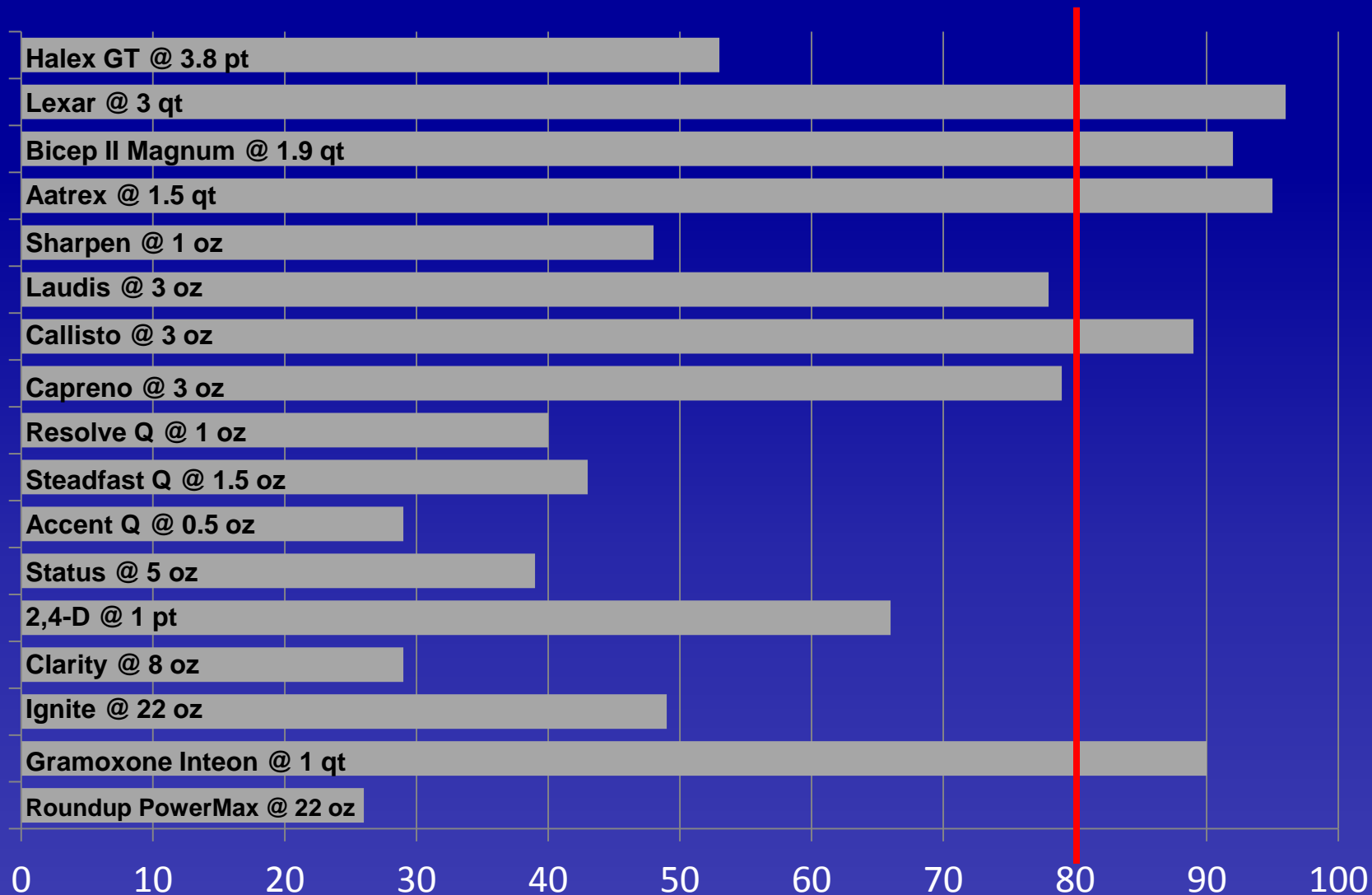
**Glyphosate +  
2,4-D + Valor @ 2 oz/A**

**Glyphosate +  
2,4-D + Goal @ 1 pt/A**

- **Many reports of glyphosate + 2,4-D in spring not providing acceptable control.**
- **Glyphosate @ 1 lb/A + 2,4-D @ 0.5 lb/A**
  - **Provided 50-60% henbit control 21 DAT**
- **Possible overwintering site for spider mites**



# Henbit control w/ corn herb. 14 DAT



**Nontreated**



**Callisto**



**atrazine**



**Bicep II Magnum**



**Lexar**

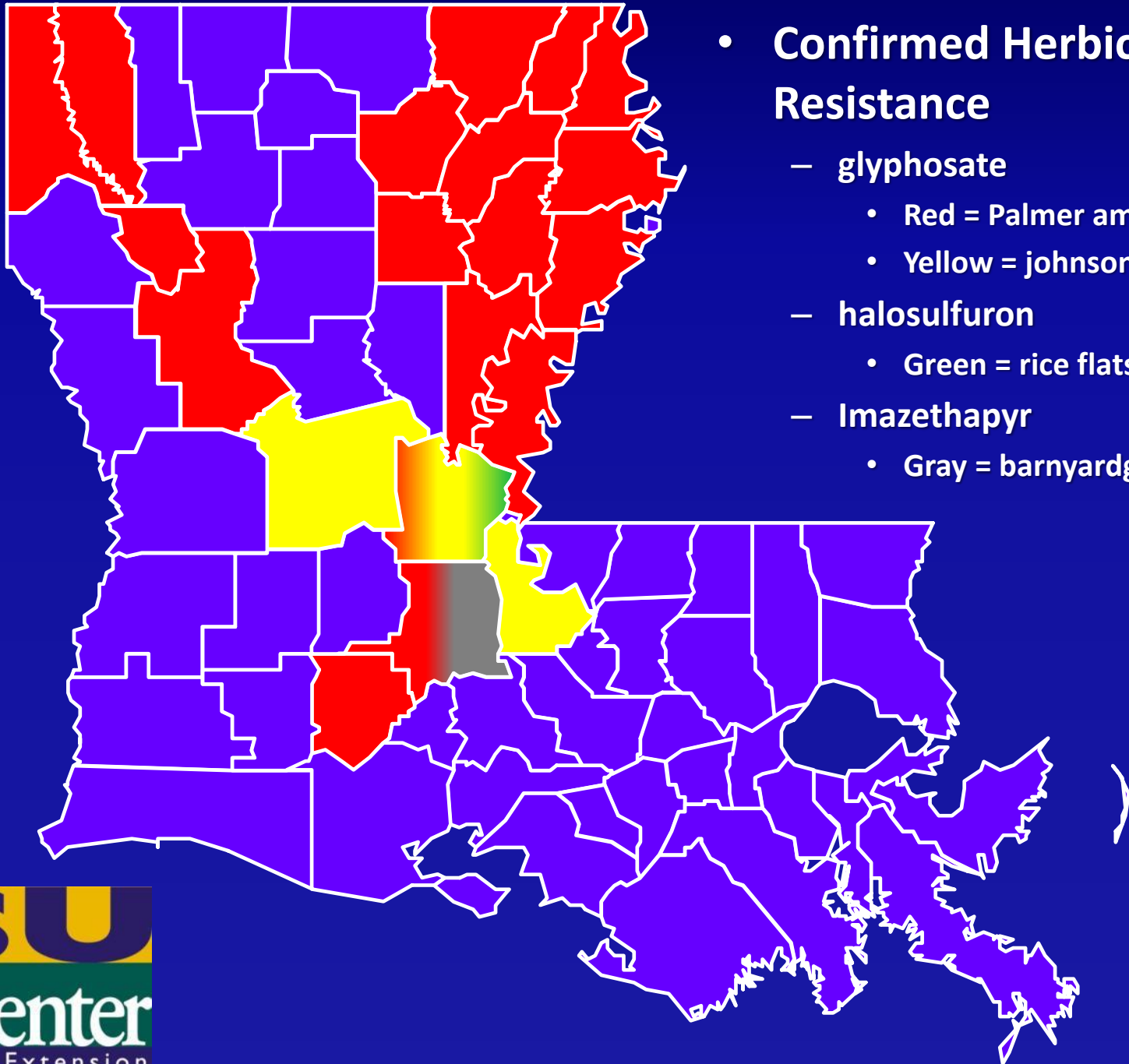


**Gramoxone Inteon**



# Weed management the absence of a crop

- Post-harvest
  - GR Palmer amaranth
  - Volunteer corn
  - Various other grass and broadleaf weeds
- Fall/Winter and Spring burndown
  - GR Italian ryegrass
  - Henbit
  - Numerous other winter annuals
- Weeds don't stop. Take opportunity to help your summer crop!



- **Confirmed Herbicide Resistance**
  - glyphosate
    - Red = Palmer amaranth
    - Yellow = johnsongrass
  - halosulfuron
    - Green = rice flatsedge
  - Imazethapyr
    - Gray = barnyardgrass

Questions?

