

# Are Two-Pass Herbicide Programs Viable?

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# What is a 2-pass program?





# Are 2-pass programs viable?

Why is the question being asked?

Are they needed?

Problem weeds

Risk management

Herbicide resistance

# Most problematic weeds in Wisconsin?

(according to ag-professionals in 2005)

Species	Soybean	Species	Corn
C. lambsquarters	63%	Giant ragweed	19%
Giant ragweed	9%	Crabgrass spp.	15%
Ragweed spp.	4%	C. lambsquarters	14%
Dandelion	4%	Foxtail spp.	9%
Waterhemp	4%	Velvetleaf	7%

# Are these 1-pass weeds?



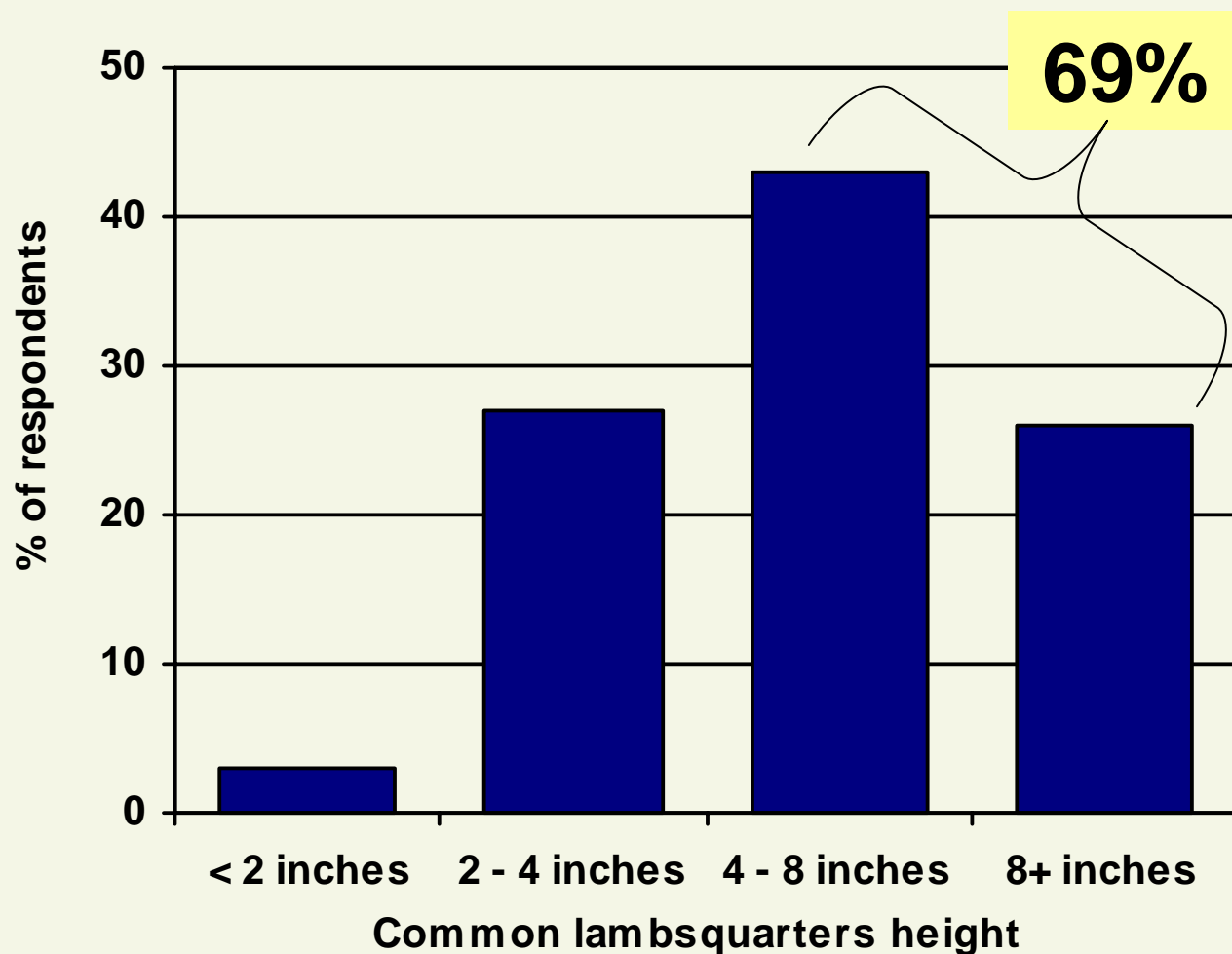
Giant ragweed



Waterhemp

# Height of common lambsquarters when sprayed in soybean

(according to ag-professionals in 2006)



Why?

Is this a problem?

Are there options?



## WeedSOFT<sup>®</sup> Yield Loss Calculator for Wisconsin

Crop:  Crop Stage:

Expected Weed Free Yield (Bu/Acre):  Expected Selling Price (\$/Bu):

Weed:  Enter Weed Density:  Weed Stage:   
(per 100 sq. ft.)

Weeds Selected for Calculation

Selected Weed	Density	Growth Stage
Lambsquarters, Common	400	4 - 8 inches





## WeedSOFT<sup>®</sup> Yield Loss Calculator

**Crop:** Soybeans

**Crop Stage:** V2

**RowSpacing:** 7.5 inches

**Estimated Yield with NO Weed Pressure:** 50 Bu/A

**Selling Price:** \$6.00

Selected Weed	Density	Growth Stage
Lambsquarters, Common	400	2 - 4 inches

Yield Loss through V2	0.5 Bu.	\$3.00 Lost
Yield Loss if delayed through V3	1.7 Bu.	\$10.20 Lost
Total Season Yield Loss without control	34.4 Bu.	\$206.40 Lost

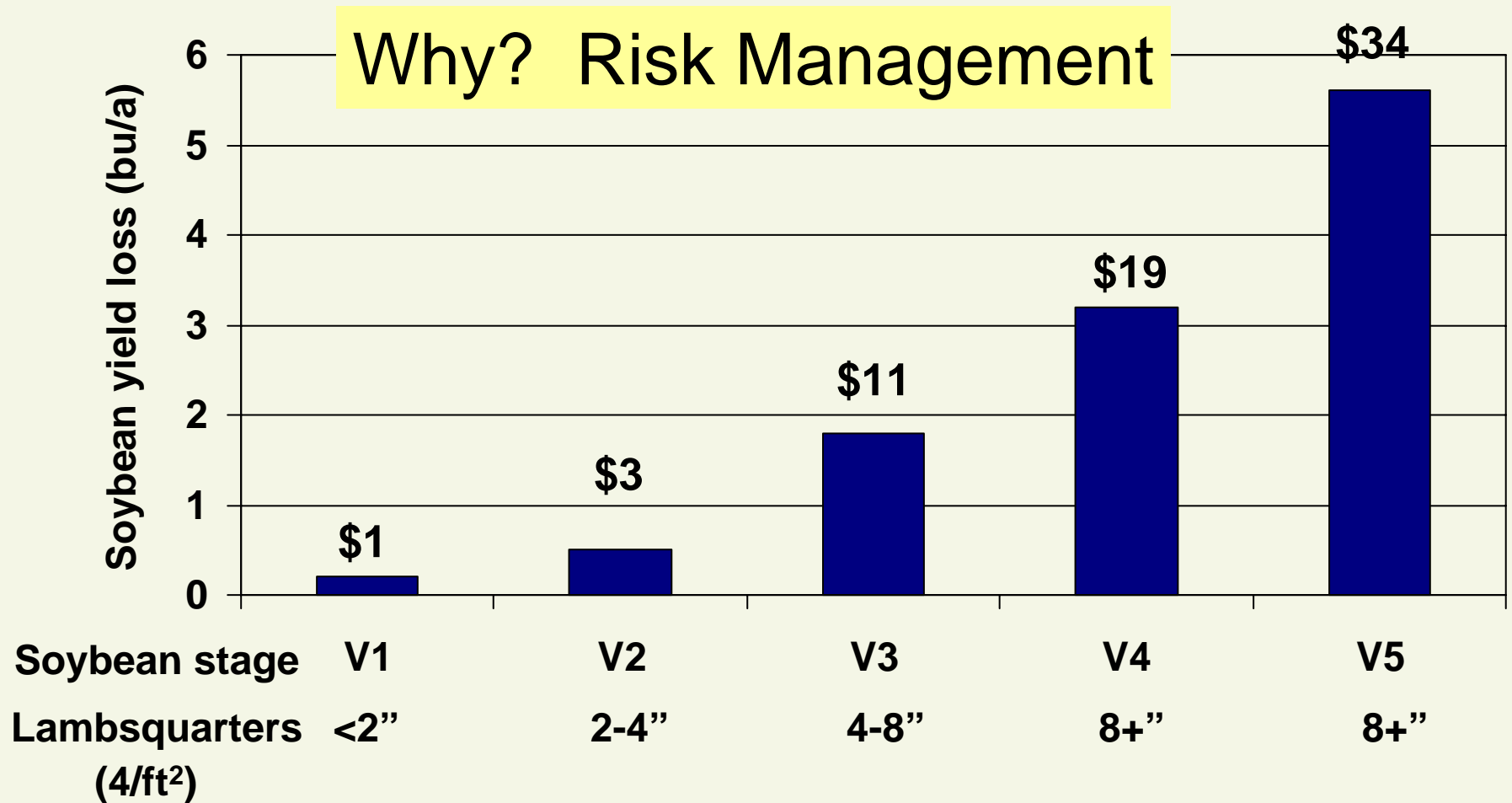
delayed weed control will vary with weed species, weed density, crop and weed growth stages, and growing conditions.

Re-enter data

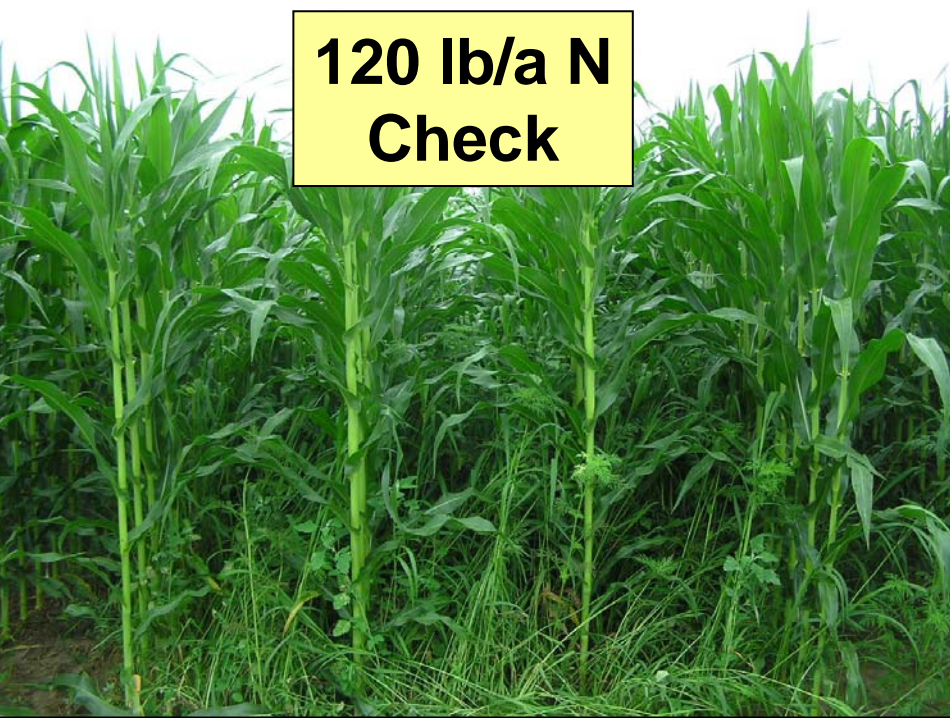
Use this button if you wish to go back and modify your data.  
Do Not use the browser 'Back' button or entered data may be lost.




# Is there a cost with late applications?






A photograph of a cornfield where the plants are surrounded by dense, tall weeds that are approximately 4 inches high. The corn plants are green and appear to be in the early stages of growth.


**120 lb/a N  
Check**

A photograph of a cornfield where the plants are growing in a clear field with no visible weeds. The corn plants are green and appear to be in the early stages of growth.

**120 lb/a N  
May 22 - Pre**

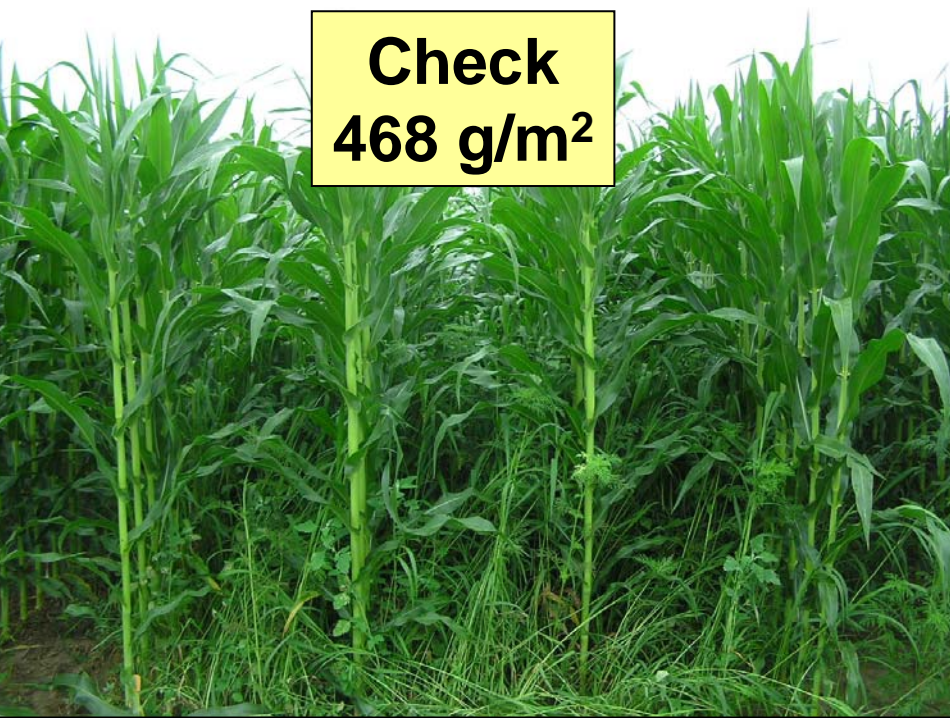
A photograph of a cornfield where the plants are surrounded by dense, tall weeds that are approximately 4 inches high. The corn plants are green and appear to be in the early stages of growth.

**120 lb/a N  
June 13 – 4" weeds**

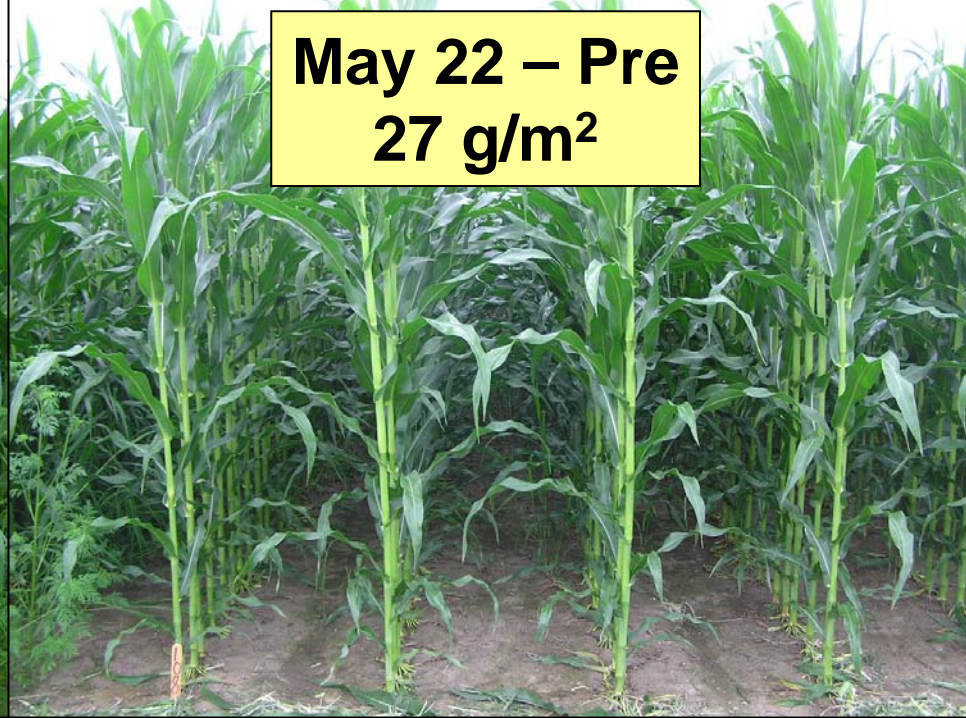
A photograph of a cornfield where the plants are surrounded by dense, tall weeds that are approximately 12 inches high. The corn plants are green and appear to be in the early stages of growth.

**120 lb/a N  
June 21 - 12" weeds**

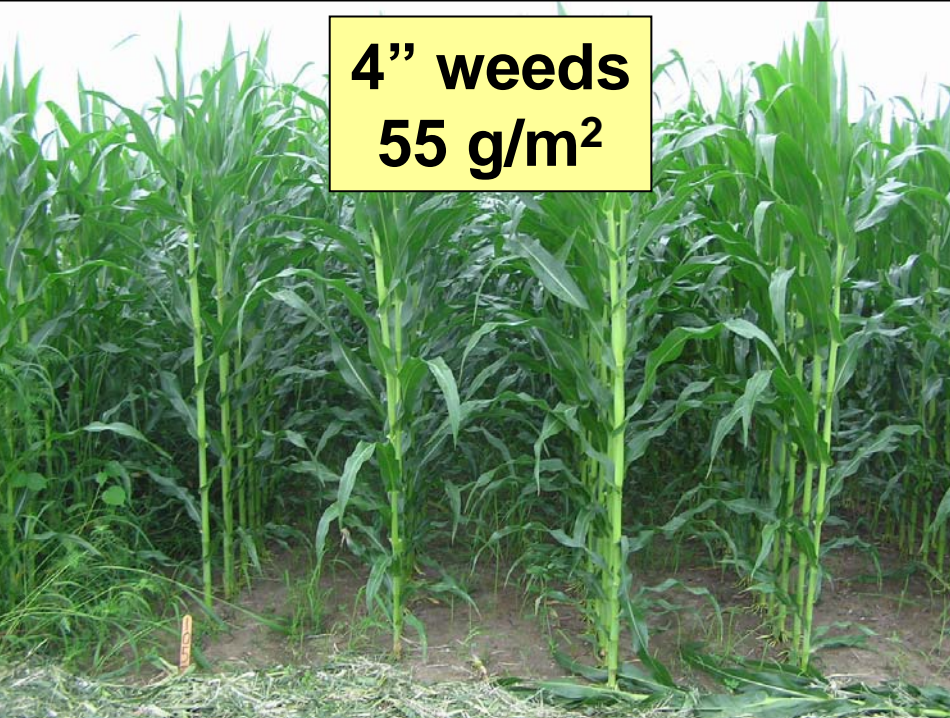


A photograph of a cornfield where the plants are heavily obscured by a thick, dense growth of green weeds. The weeds appear to be tall and leafy, filling the spaces between the corn stalks.

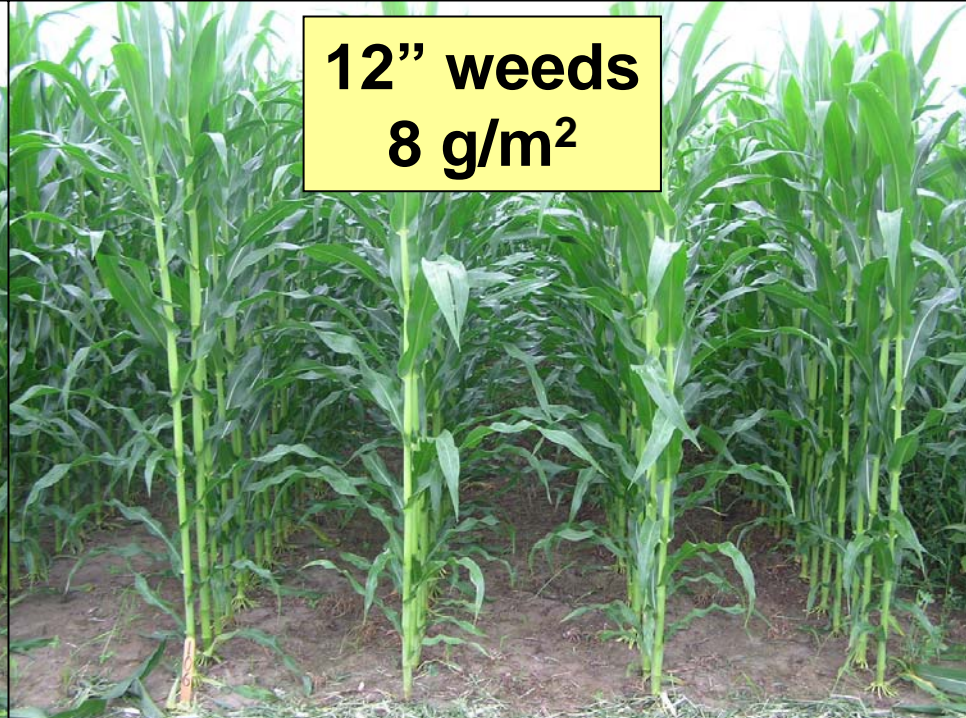
**Check**  
**468 g/m<sup>2</sup>**

A photograph of a cornfield with corn plants that are clearly visible and well-spaced. There are very few weeds present, and the ground between the plants appears mostly bare soil.

**May 22 – Pre**  
**27 g/m<sup>2</sup>**

A photograph of a cornfield with corn plants that are visible but have some low-growing weeds at their base. The weeds are not very tall, reaching about 4 inches.

**4" weeds**  
**55 g/m<sup>2</sup>**

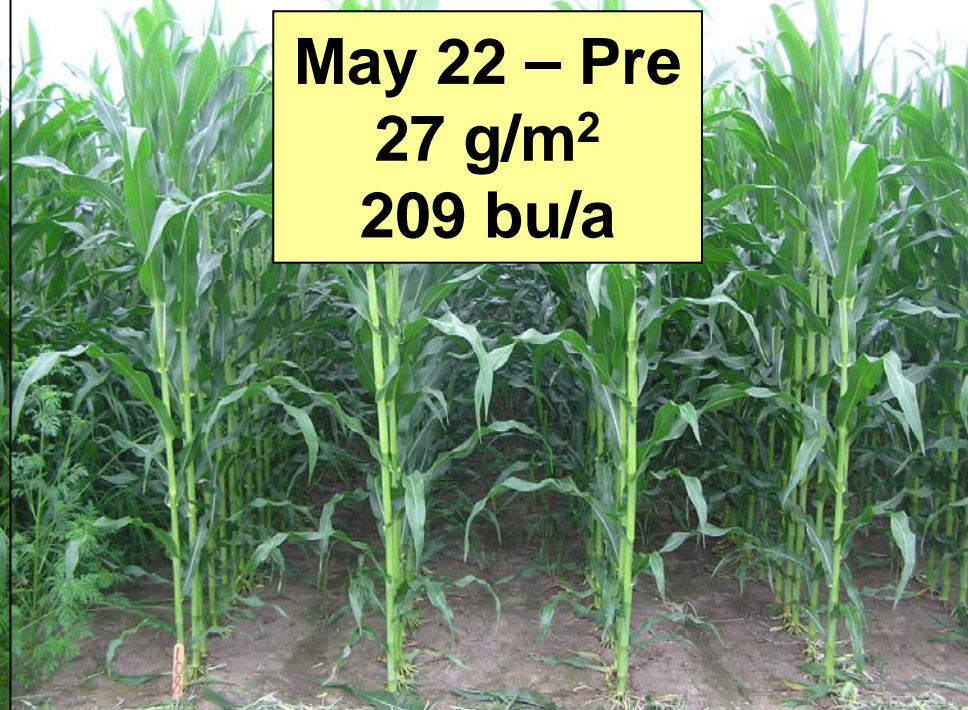
A photograph of a cornfield with corn plants that are visible and have some weeds at their base. The weeds are taller than in the previous panel, reaching about 12 inches.

**12" weeds**  
**8 g/m<sup>2</sup>**

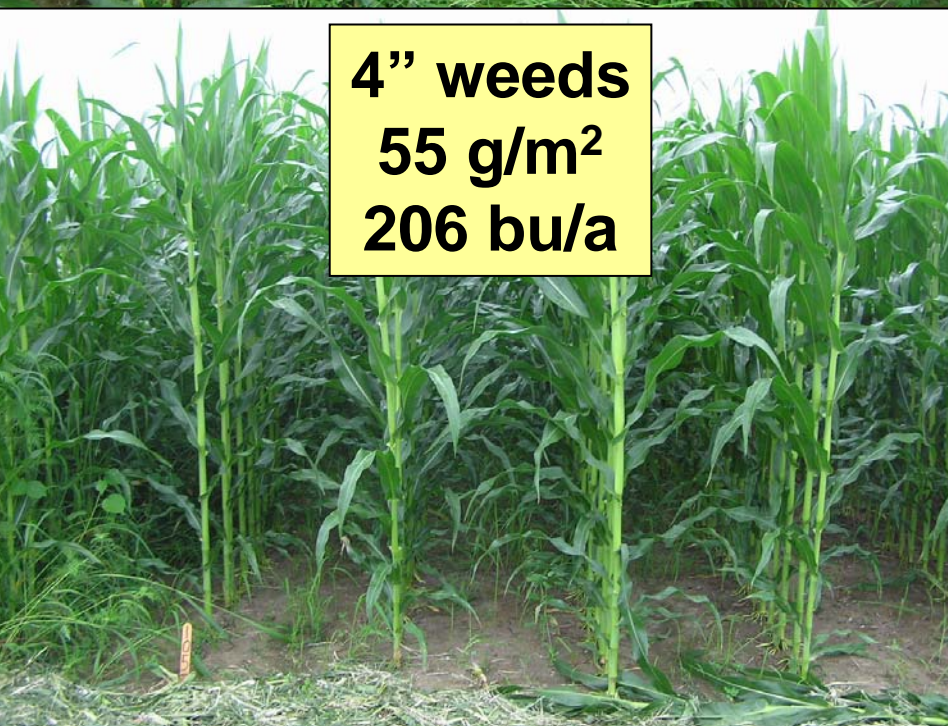




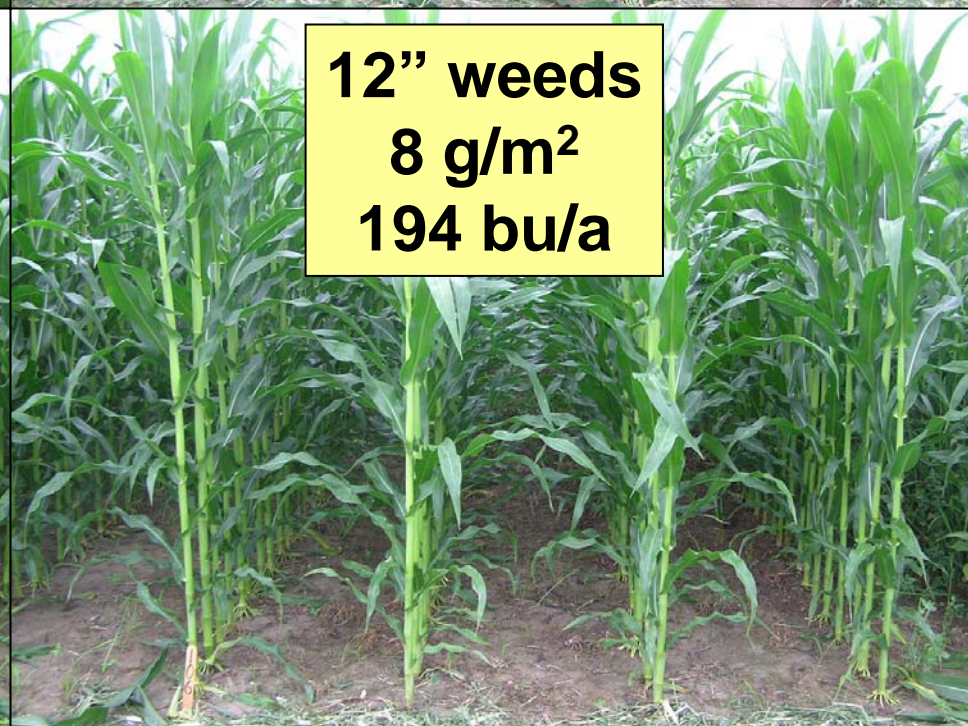
**Check**  
**468 g/m<sup>2</sup>**  
**133 bu/a**



**May 22 – Pre**  
**27 g/m<sup>2</sup>**  
**209 bu/a**



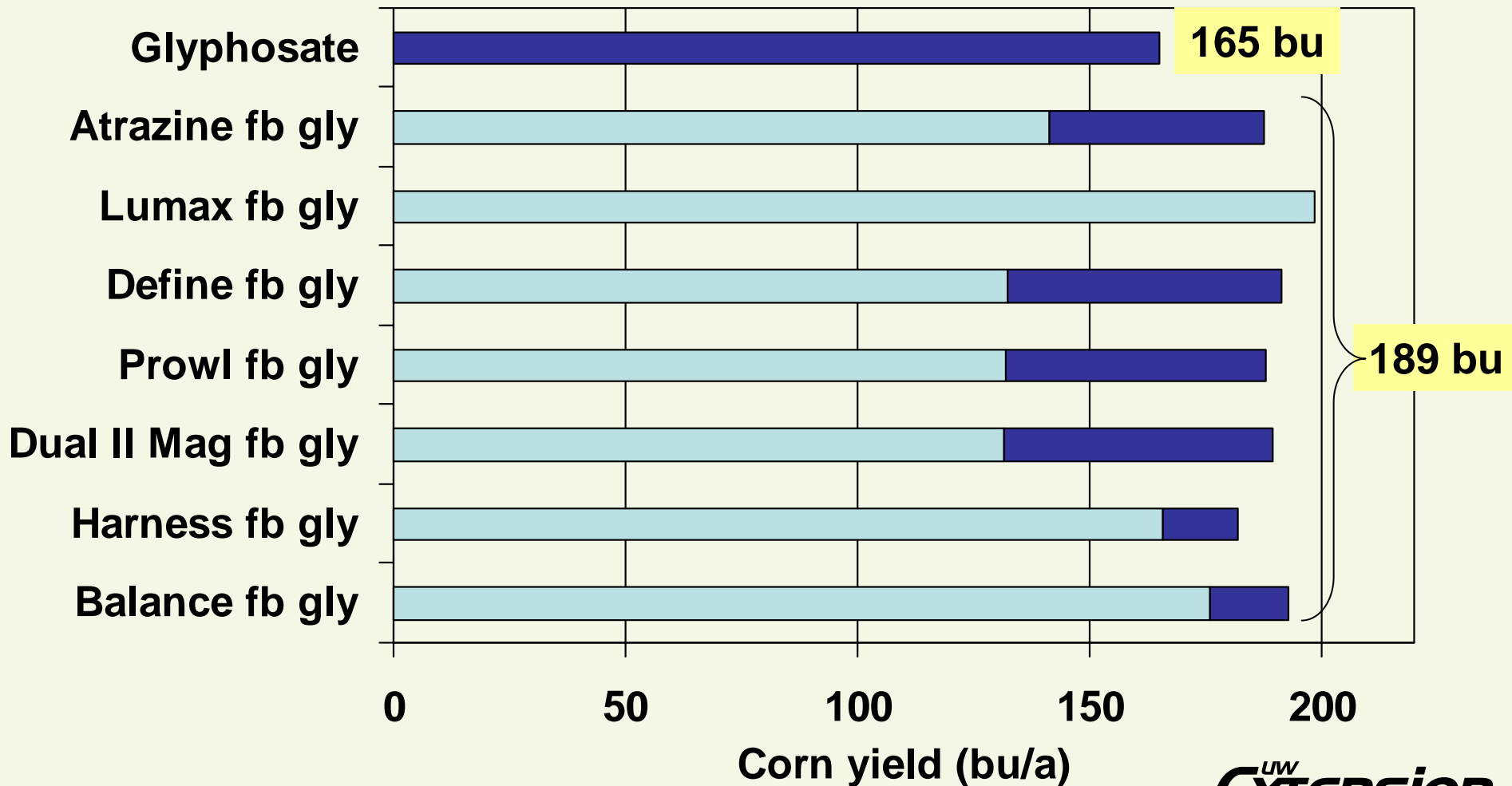
**4" weeds**  
**55 g/m<sup>2</sup>**  
**206 bu/a**



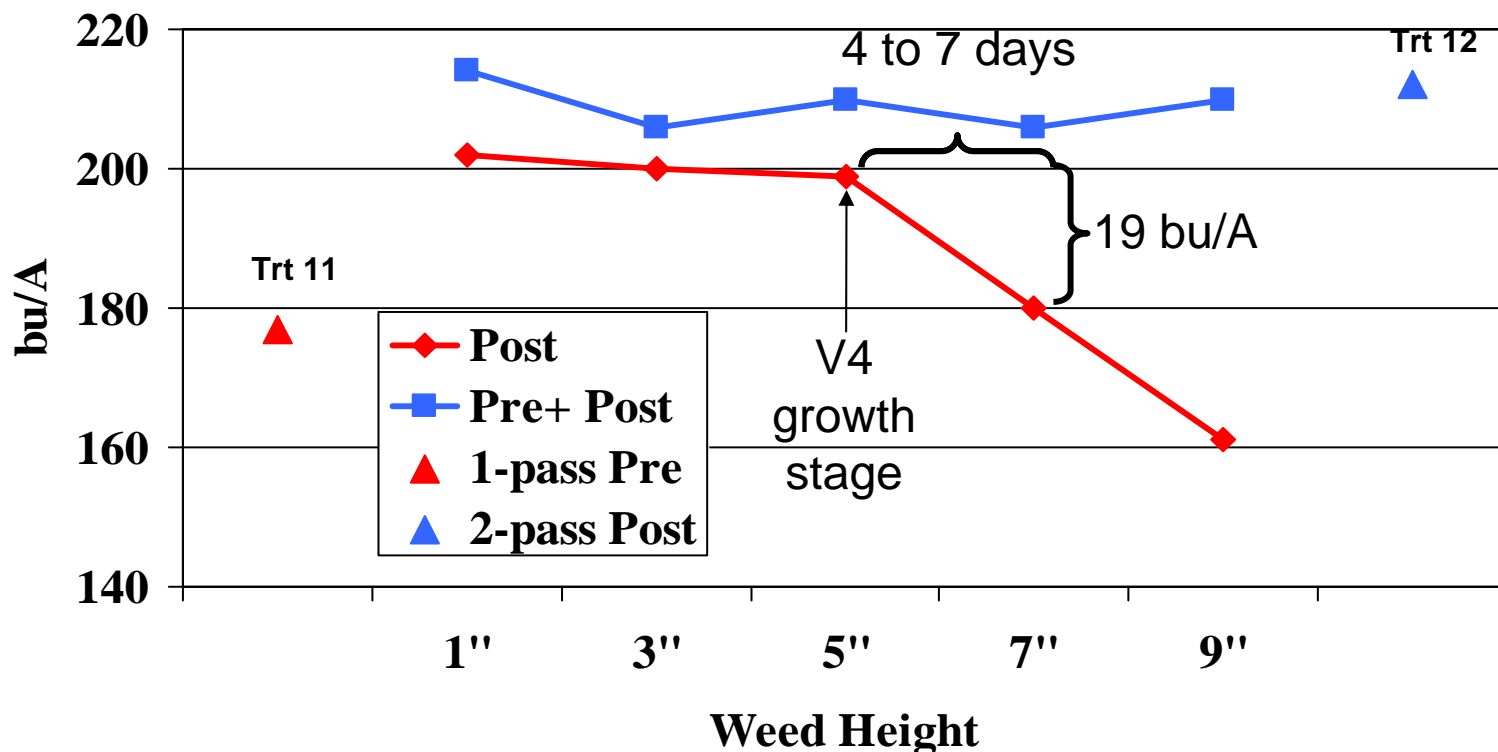
**12" weeds**  
**8 g/m<sup>2</sup>**  
**194 bu/a**



# 1/2 rates of pre herbicides in corn



# Glyphosate Timing and Corn Yield Across Locations, 2004 – Excluding Rochester



**Post** – Roundup WeatherMax (22 oz/A)

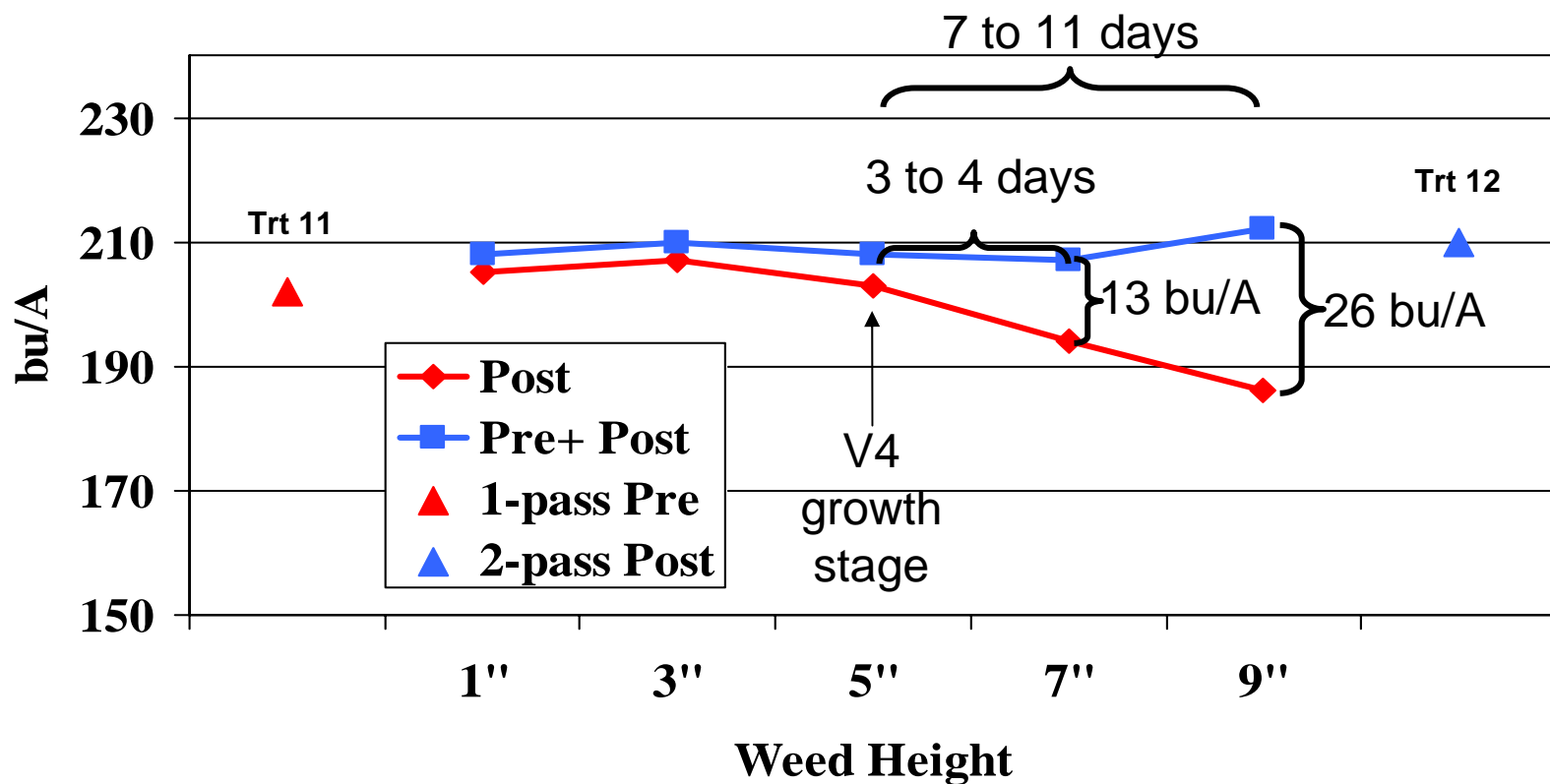
**Pre + Post** - Harness (1.25 pt./A) / Roundup WeatherMax (22 oz/A) + AMS

**Trt 11** – Harness PRE

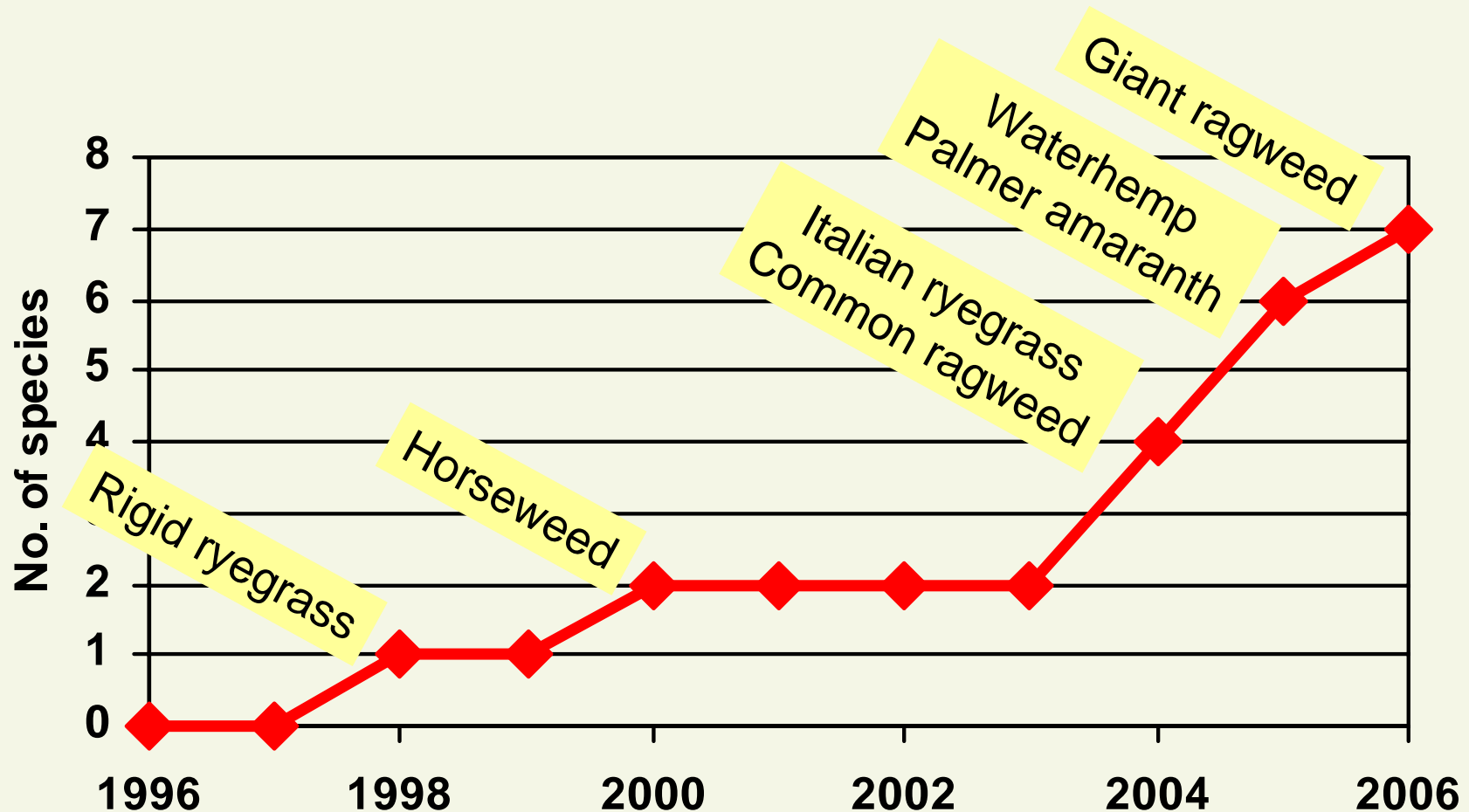
**Trt 12** – Roundup WeatherMax + AMS / Roundup WeatherMax + AMS at 3"/ 2-4" regrowth



# Glyphosate Timing and Corn Yield Across Locations 2005

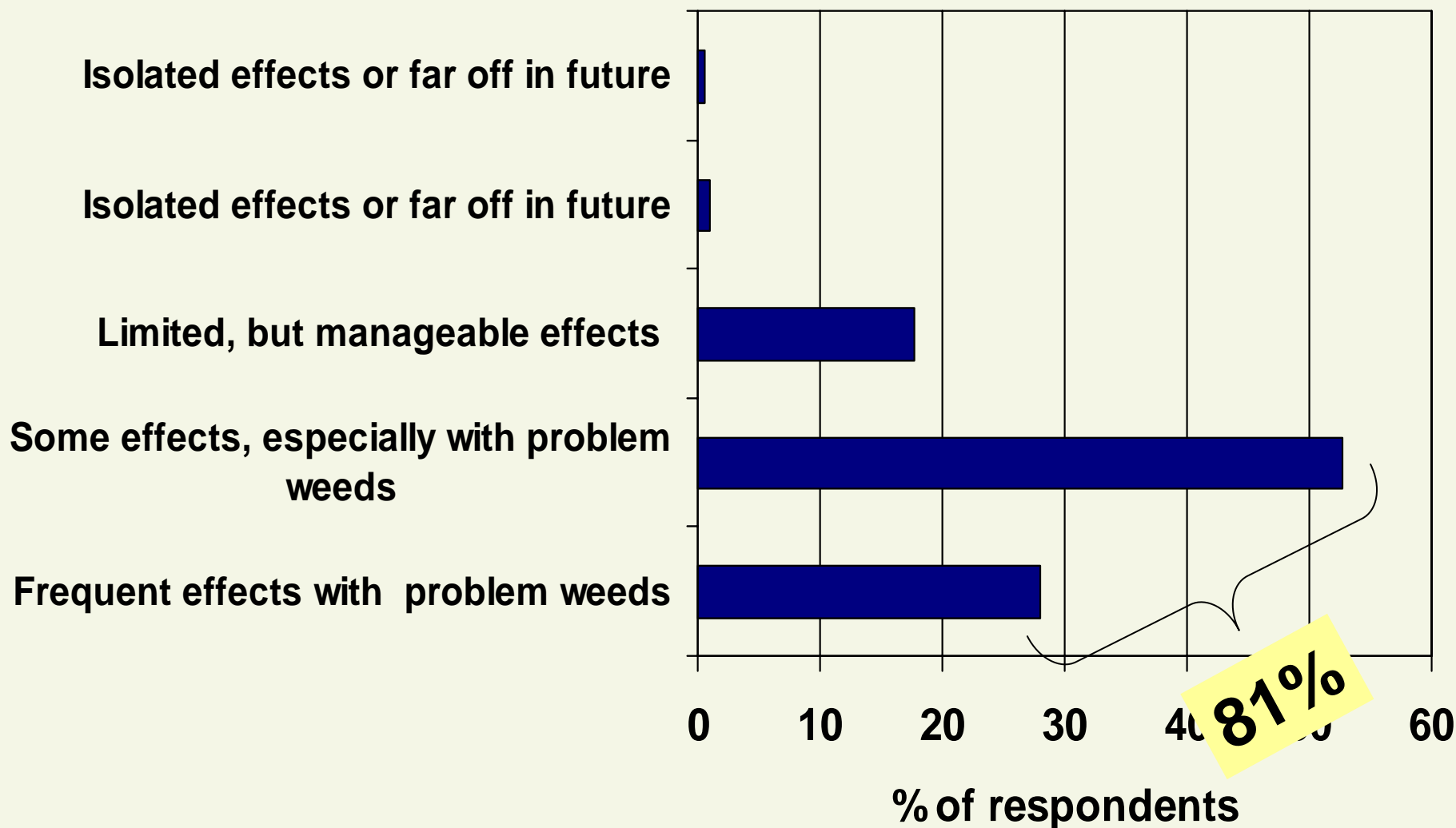


# Glyphosate Resistant Weeds in the US



# Are You Concerned?

(Will glyphosate-resistant weeds affect weed management in Wisconsin?)





# Are 2-pass programs viable?

What is the cost?

- depends on the system - \$10 to ?

What's the benefit?

- depends on the field
  - < problem weeds
  - < risk management (timing)
  - < part of resistance management



