2006
Solution Days
The New Soybean – A Changing System

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2006soldays-change001

Feed Your Crop Not the Weeds

Weed Management

2006soldays-change002

Feed Your Crop – Not the Weeds Weed Management

Part of a Total Management System

- Quality Seed Matched to Agronomic Needs
- Plant Uniform Population, Depth, Spacing, Timing
- Seed Treatment to Establish Maximized Stands
- Control Weeds to Prevent Nutrient, Moisture Losses
- Insect and Disease Management-Soil and Foliar
- Water Preservation - Irrigation/Water

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York, NE 2006

Weed Competition

Weeds Compete For:

- **Water – Soil Moisture**
- **Nutrients**
- **Space**

In Nebraska – Water Is Our Most Limited Production Input

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Nutrient & Water Use of Weeds

Plant	N*	P*	Water*
Corn	10.1 lbs 1X	2.2 lbs 1X	349 gal = 1X Soybeans 646 gal
Lambsquarters	1.6 X	1.5 X	1.9 X
Common Ragweed	1.4 X	1.3 X	1.7 X
Redroot Pigweed	1.1 X	1.3 X	.85 X
Mustards	2.1 X	2.7 X	6.9 X

*Pounds of nutrients or gallons of water required to produce equal amounts of dry matter
Source: University of Nebraska; Weed Ecology Second Edition, Implications for Management
Ratio is fixed to Corn as 1X

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Yield Loss from Weed Competition

Weed Height at Glyphosate Application*	Average Corn Yield Loss vs. Weed-Free Control*	Bu/A Lost (180 Bu/A Goal)**	Dollars/A Revenue Lost (Corn @ $2.10/Bu)**
2"	7%	12.6	$26.46
4"	6%	10.8	$22.68
6"	7%	12.6	$26.46
9"	9%	16.2	$34.02
12"	21%	37.8	$79.38

Weed control = 1 application of glyphosate at weed height

*Data summarized by S. Gower and M. Loux, The Ohio State University
**Bu/A and $/A calculated by Syngenta based on research findings. 35 University Locations

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Weed Removal Greater than Crop

How Many Velvetleaf ?

153 Velvetleaf per sq yd 740,520 per acre

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Weed Removal Greater than Crop

Plant Dry Matter

Plant (@5")	Pop	lbs/Ac	Ratio
Corn	32,000	75.9#	
Soybeans	150,000	659#	1X
Grass (3")	1.96 mil	2710#	4.1X
Kochia	740,520	2556#	3.9X
Waterhemp	740,520	3640#	5.5X
Velvetleaf	740,520	2710#	4.1X

Avg Soybean/Weed Ratio: 1:5

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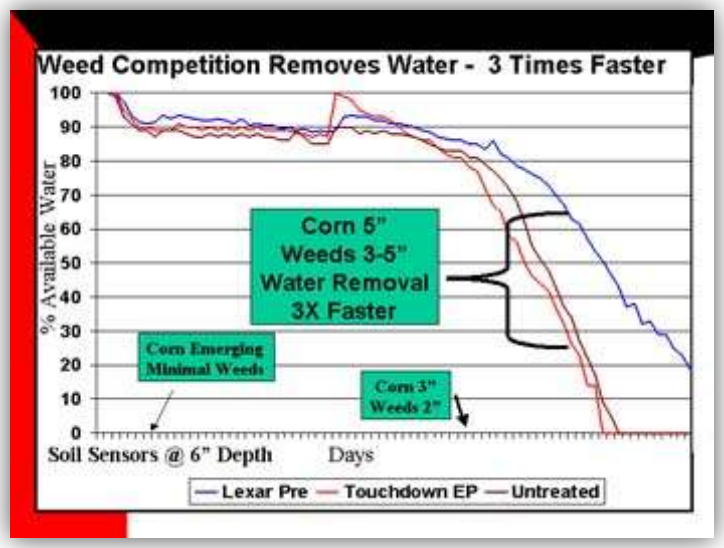

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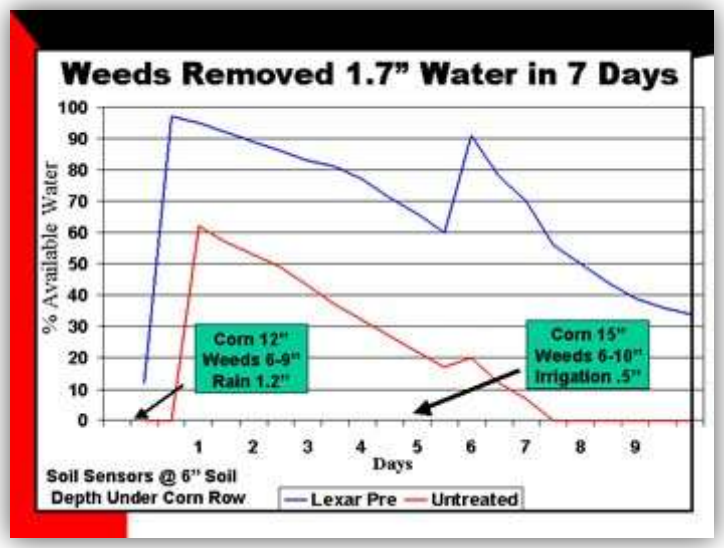

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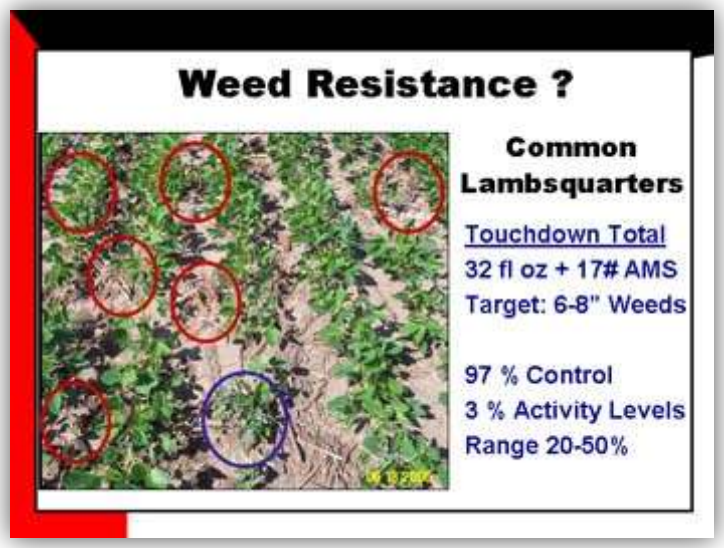

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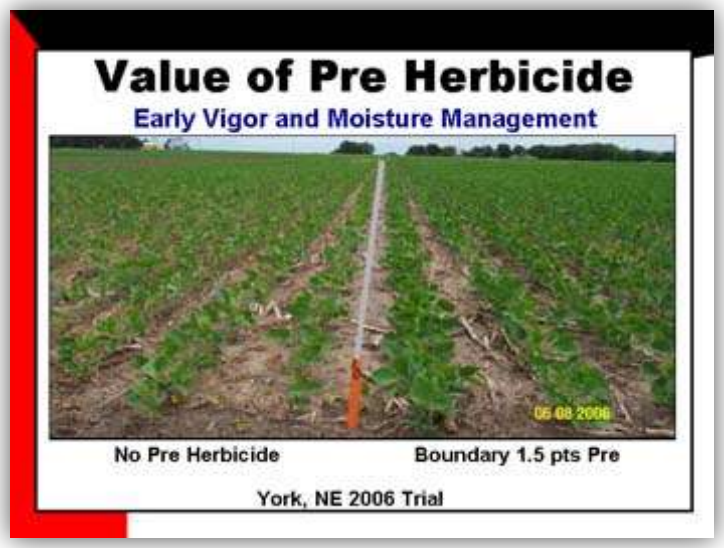

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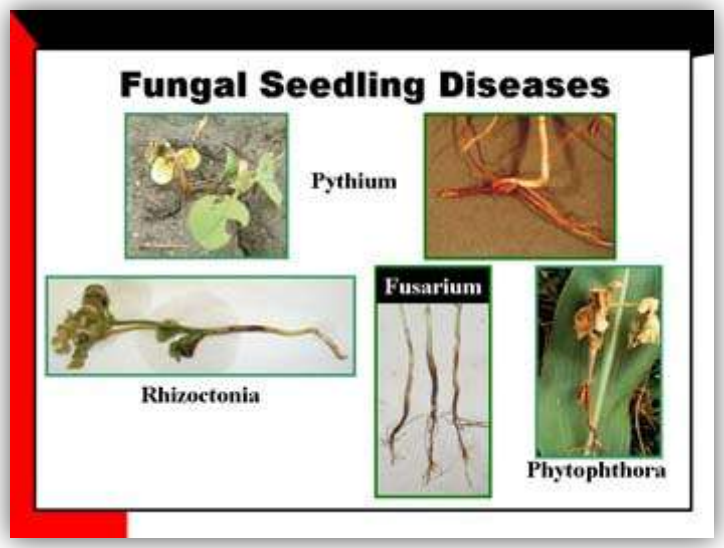

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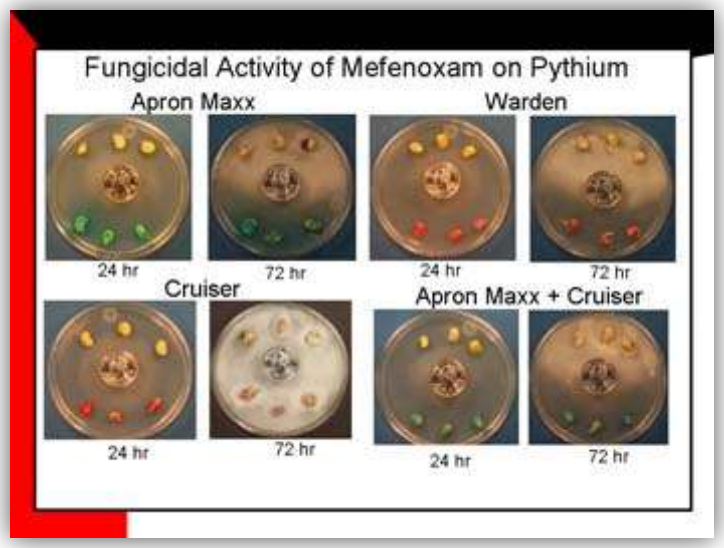

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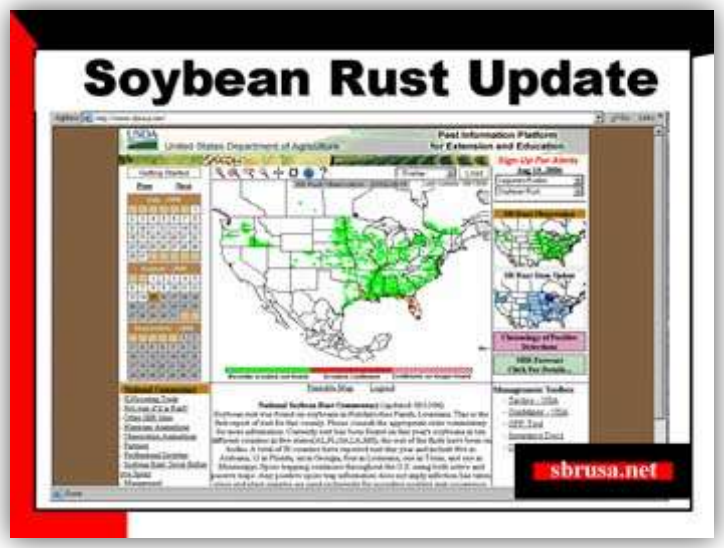

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