

# Result from On-Farm Soybean Aphid Trials

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# 2002 Dodge County Plot

- Replicated 4 times - field size equipment
- Planted May 22
- Next to another soybean field planted 10 to 14 days earlier
- Scouted weekly - 10 whole plants
- Whole plant aphid counts using 1 thru 6 system
- Warrior was the insecticide at 2.9 oz/A

# 2002 Dodge County

- Rating system used

1	0-50 aphids per plant
2	51-100 aphids per plant
3	101-200 aphids per plant
4**	201-500 aphids per plant
5	501-1000 aphids per plant
6	1001+ aphids per plant

\*\* Recommended treatment level = 200

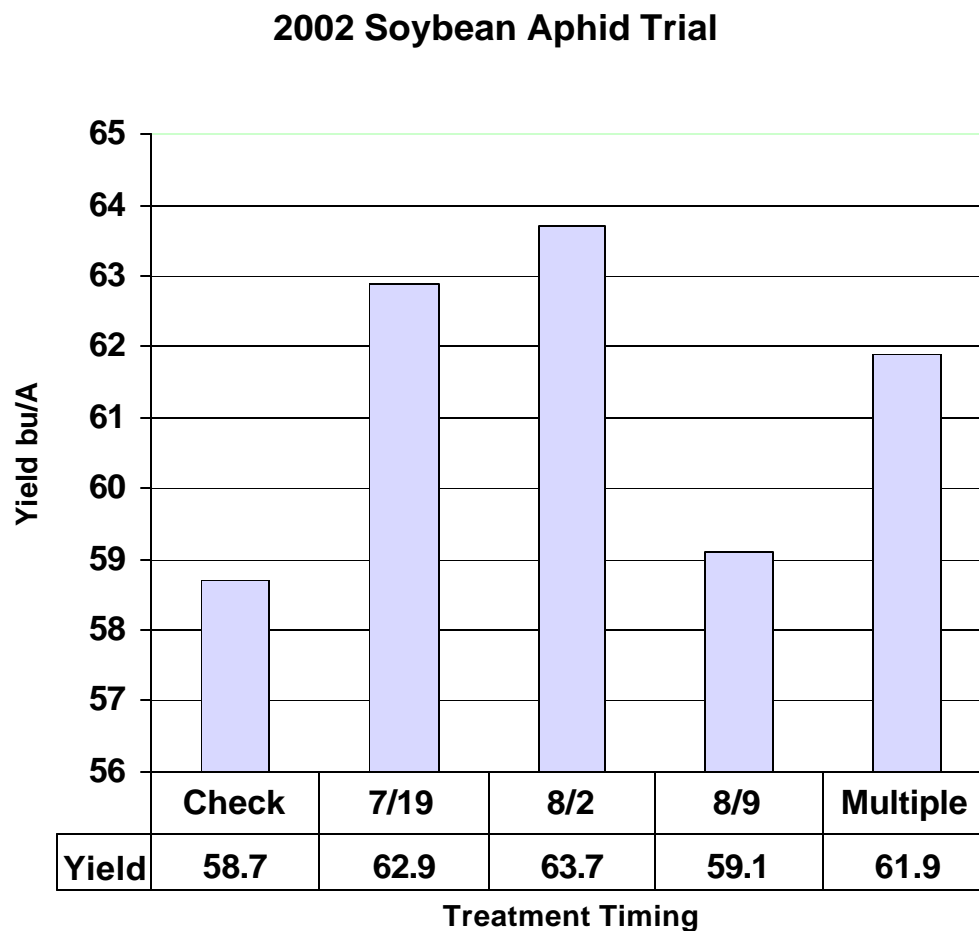
# 2002 Dodge County

- | Date | Check plot | # per plant |
|------|------------|-------------|
| 7/18 | 1          | 0-50        |
| 7/25 | 1.1        | 51-100      |
| 8/2  | 5.4        | 500-1000    |
| 8/10 | 5.8        | 500-1000    |
| 8/16 | 5          | 501-1000    |
| 8/23 | 3.9        | 101-200     |
| 8/30 | 2.2        | 51-100      |
| 9/5  | 1          | 0-50        |

Any spray treatment knocked them down and treatment threshold was not reached again

# 2002 Dodge County -Results

Treatment	Yield	Rating
Check	58.7	C
7/19	62.9	AB
8/2	63.7	A
8/9	59.1	BC
Multiple	61.9	ABC



# Dane County

- Trial established in Sun Prairie area
- Plots sprayed with backpack sprayer using Warrior at 3.2 oz/A in 20 GPA water
- Plots 20X30 ft harvested with producer's combine



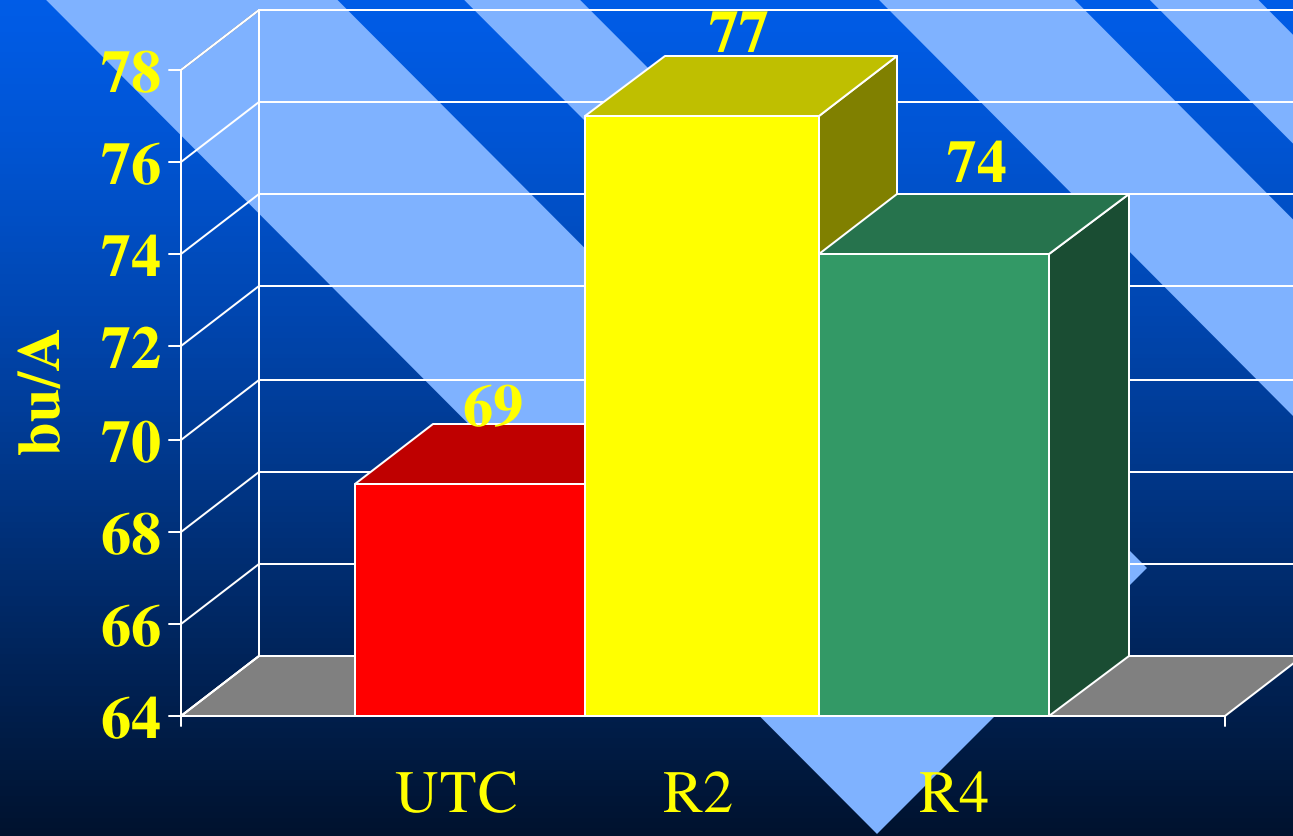
# Dane County

- Aphid numbers remained lower than expected season long
- First treatment – less than 5 aphids/plant
- Second treatment – 65 aphids per plant
- Other insects
  - Bean leaf beetle, leafhopper
  - Present in extremely low numbers

# Dane County

- After treatment no plots had any rebound
- Very low predator numbers all year
- Site was very dry mid June – August
- No yield response was expected
- BUT.....

# Dane County Yields



# Similarities to Previous Years

- Aphids were again seen in WI
- Aphid control resulted in increased yields
- Control timing R2-R4 soybean, late July  
early August

# Differences Found

- Between studies
  - Ideal control timing
  - Economic threshold for control
  - Sooty mold presence
- Between years
  - Location of aphids on plant
  - Predator populations
  - Length of aphid presence



# Observations and Conclusions

- Dodge Co.
  - Plot ends next to the earlier planted field had highest numbers
  - Numbers stayed high longer (almost leaf color)
  - Edge between the two varieties and planting dates was attractive to the aphids
  - Sooty Mold cause plant discoloration could it be the cause of yield loss?

# Observations and Conclusions

- Dane Co.
  - Low numbers resulted in yield loss
- Both locations
  - Aphids don't do well in hot and dry
  - Predator numbers stayed low
  - Populations never rebounded after treatment

# Actions

- Aphid appears to be here to stay
  - May not always need treatment
- Scouting
  - Mid July
- Thresholds

# The Future

- Was Dane Co. results a one time occurrence?
- Additional on farm trials with farmers to expand the knowledge base
- Interactions with other pest insects