

Performance of Insecticides Co-Applied In-Furrow with Superabsorbent Polymer Compared to Industry Standards

54th APRES Annual Meeting



Losses >\$35M annually



TSW Integrated Management

- Planting date
- Cultivar resistance
- Row pattern, plant population
- Tillage
- **In-furrow insecticide**

Vectored by thrips,
Frankliniella spp.



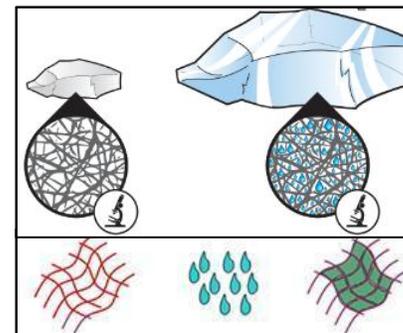
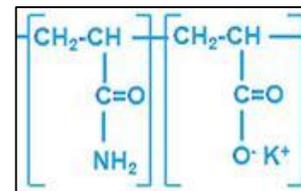


Objective:

Evaluate in-furrow insecticides for management efficacy, profitability



Tramfloc, Inc.



200-400% absorption SNF Floeger



Methods

- 40 experiments
- 2009 – 2021
- Blackville, Florence, and Fairfax, SC; Tifton, GA

- Admire Pro: 9 to 10 fl oz/A (or ≈rate generics)
- AgLogic: 5 lb/A (or Temik)
- Thimet: 4.7 to 5 lb/A
- Velum: 6.5 fl oz/A plus Admire Pro (18 fl oz Velum Total)
- Polymer: 2 lb/A (Aquasorb 3005KM, 0.3-1.0 mm, SNF Floeger)

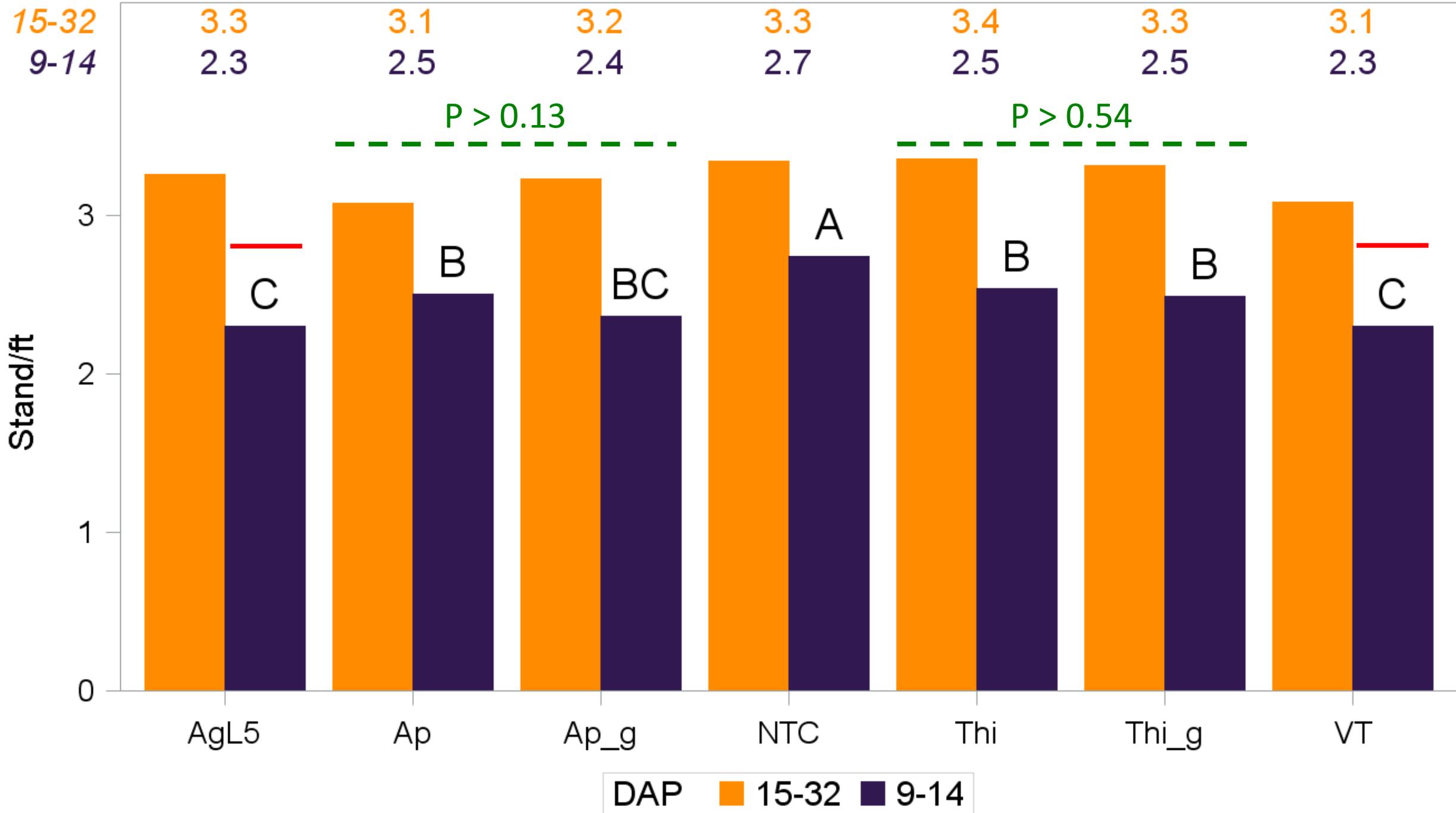
TSW Susceptibility Grouping

- Relative, rather than historical
- **Susceptible**
 - TR 511, Phillips, FR 157
- **Moderately susceptible**
 - Ga 06G, Ga 09B, Ga 16HO, FR 331, CHAMPS, NCV11
- **Resistant**
 - Bailey, Sullivan, Sugg, TR 297, Ga 12Y, TifNV-High O/L

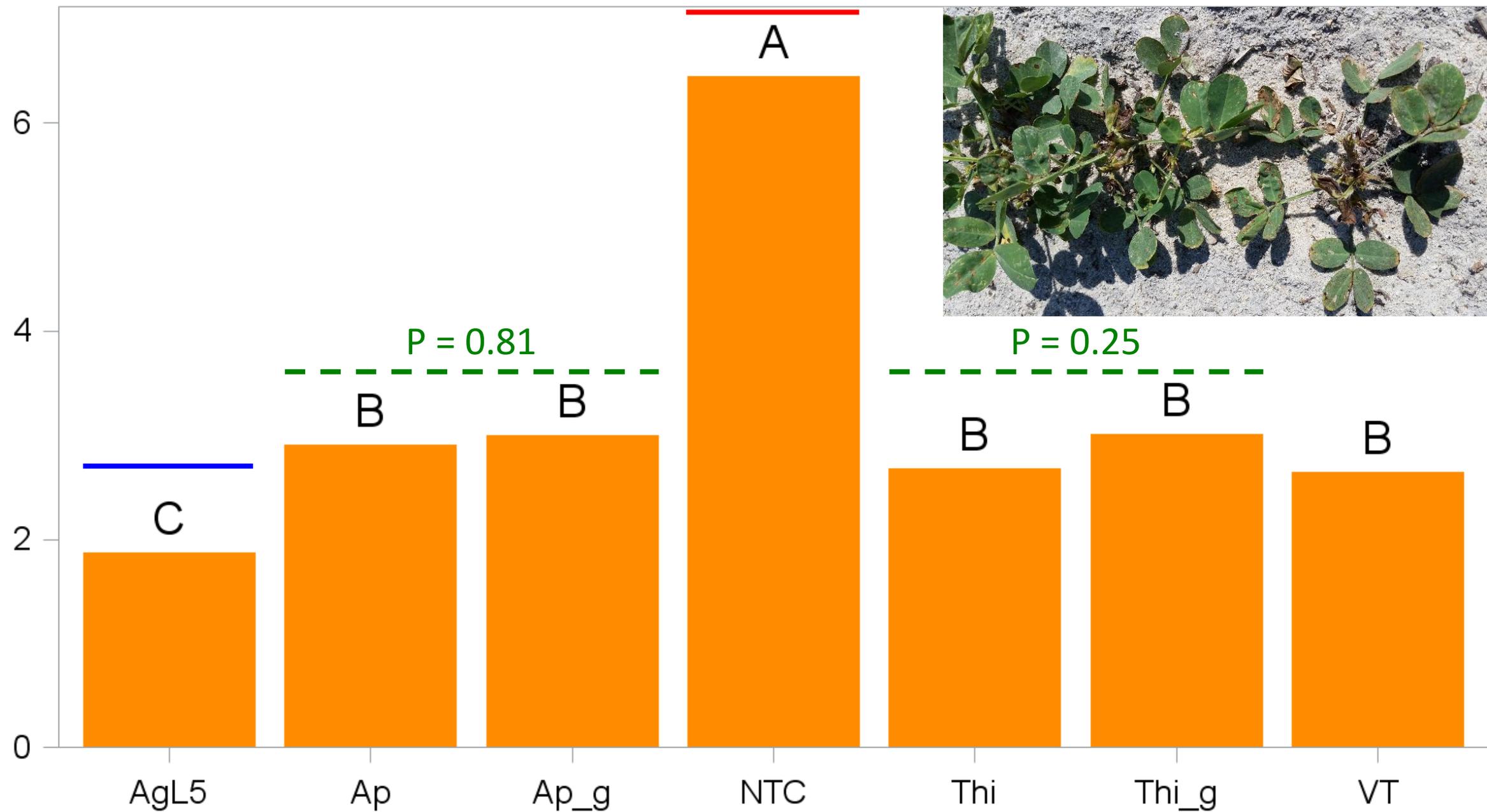
Table 1. Treatment representation among numbers of experiments conducted from 2009 to 2021.

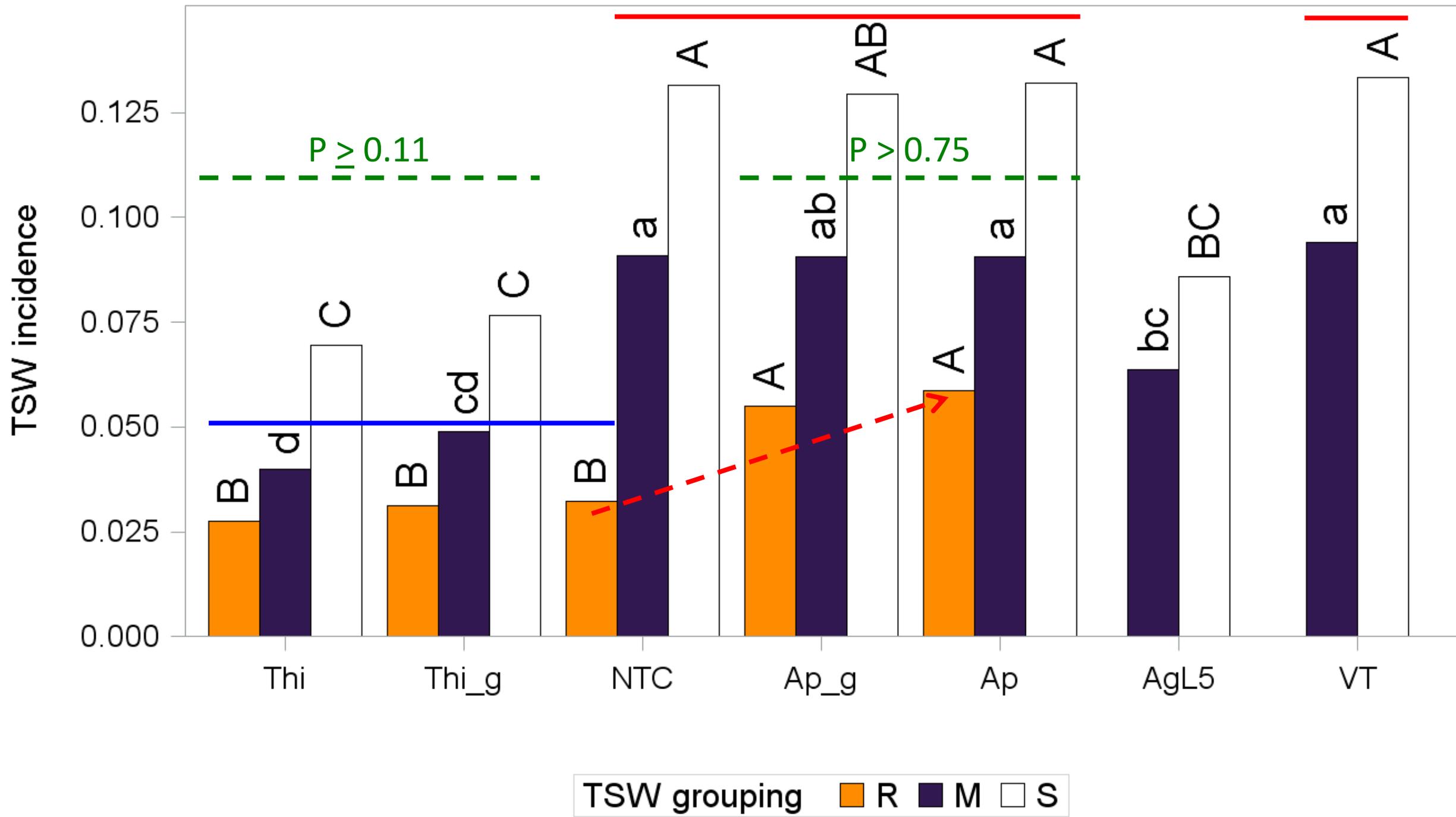
Treatment	Experiments				Years			
	S ^a	M	R	Total	S	M	R	Total
Aldicarb	4	11	-	15	3	8	-	9
Imidacloprid	16	19	6	26	4	7	2	7
Imidacloprid plus fluopyram	7	13	-	17	4	7	-	7
Imidacloprid plus polymer	11	6	6	11	2	2	2	2
Nontreated	14	28	7	36	5	12	5	13
Phorate	18	31	11	39	5	12	5	13
Phorate plus polymer	11	13	6	18	2	5	2	5

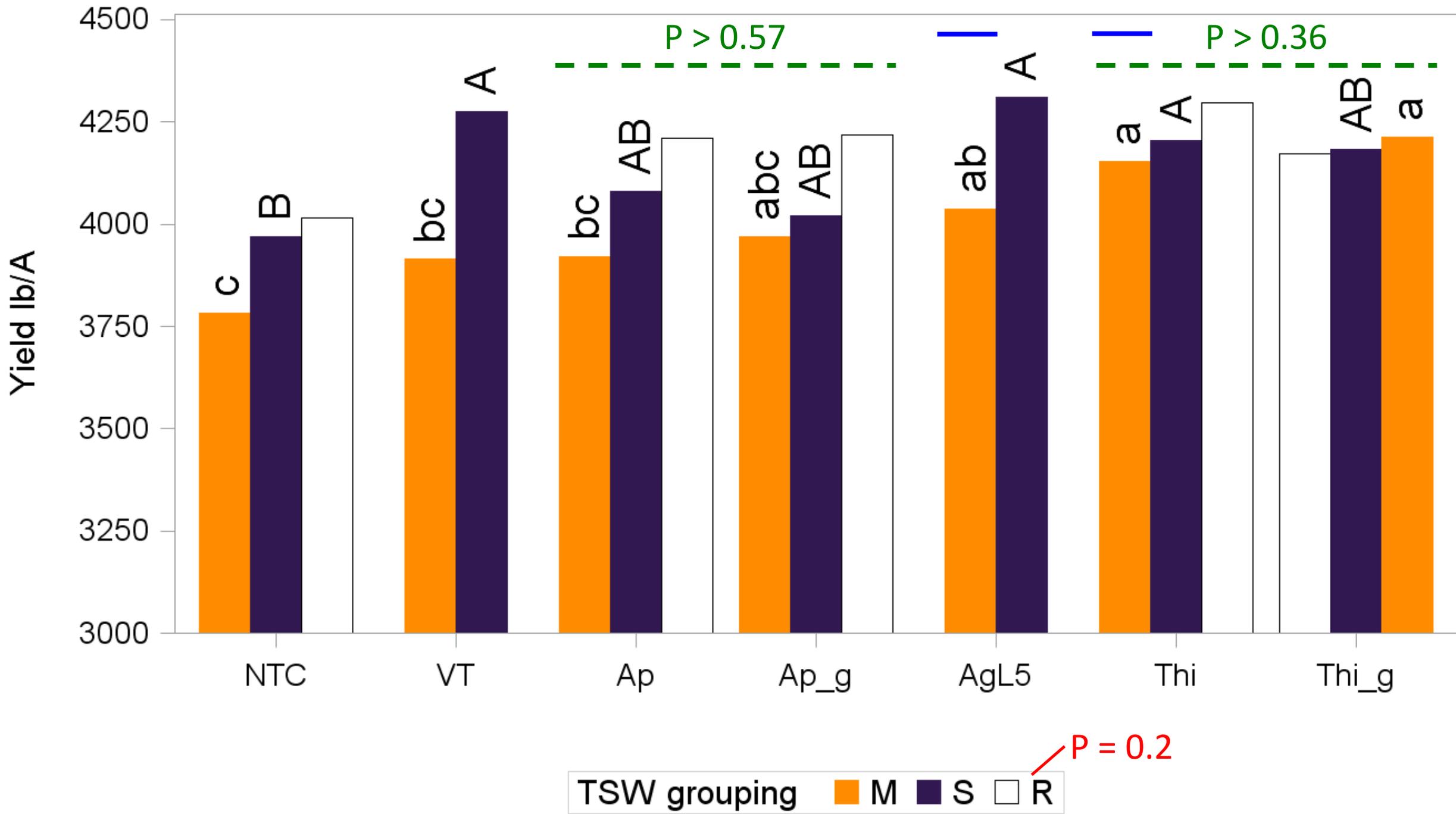
^aRelative TSW susceptibility classifications: susceptible (S), moderately susceptible (M), and resistant (R).



Thrips injury (0 to 10)





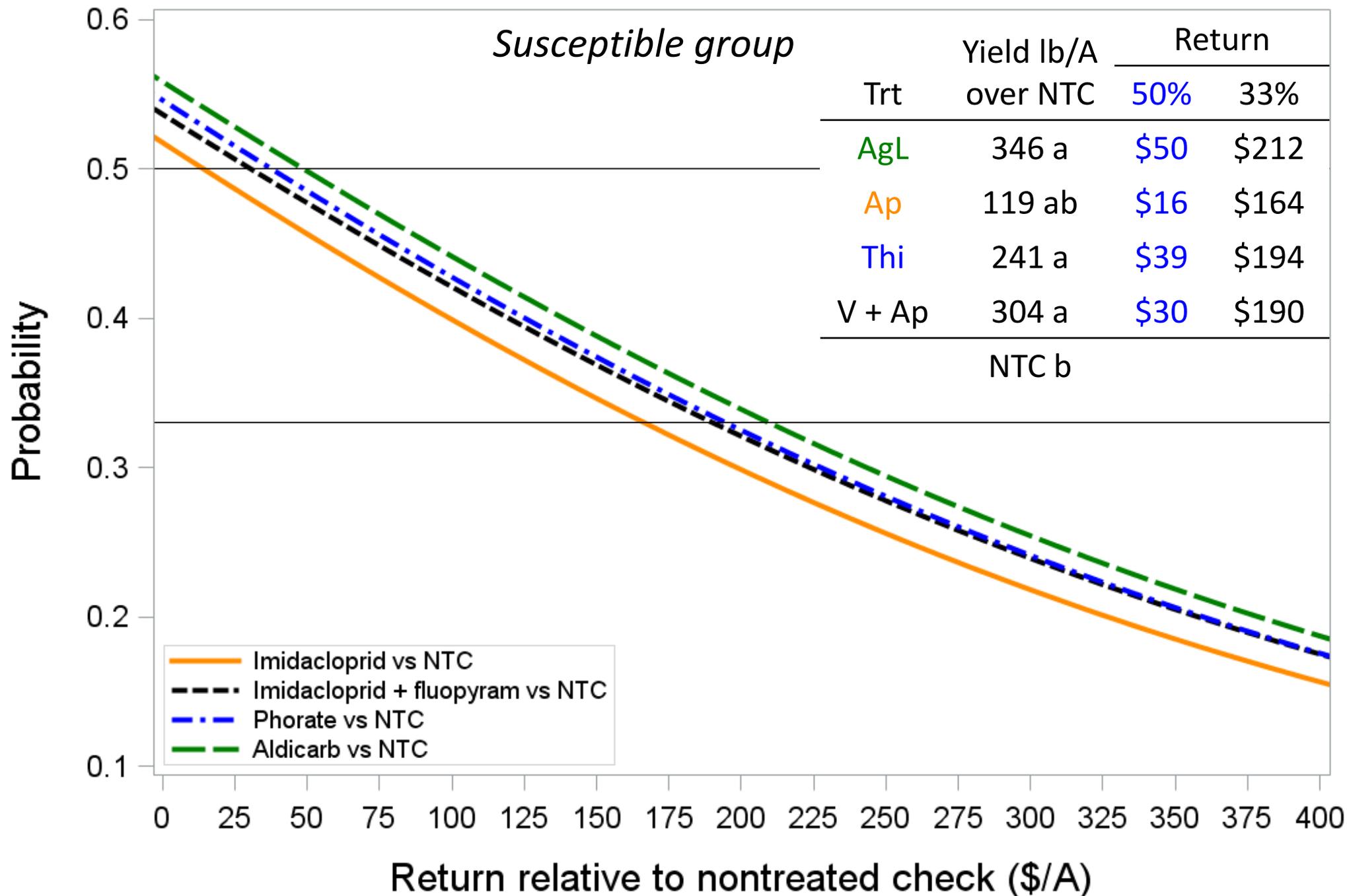


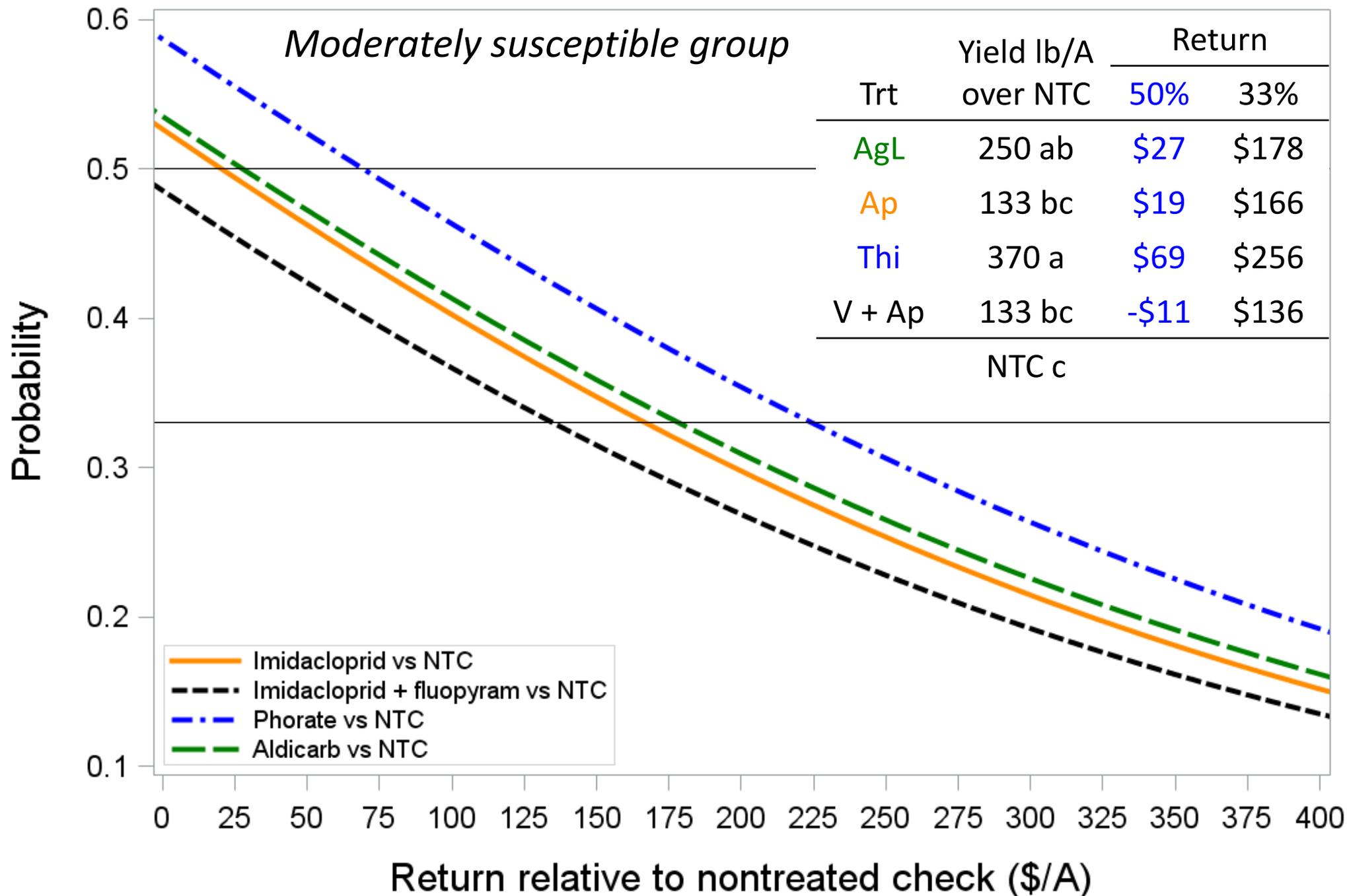
Profitability Assumptions

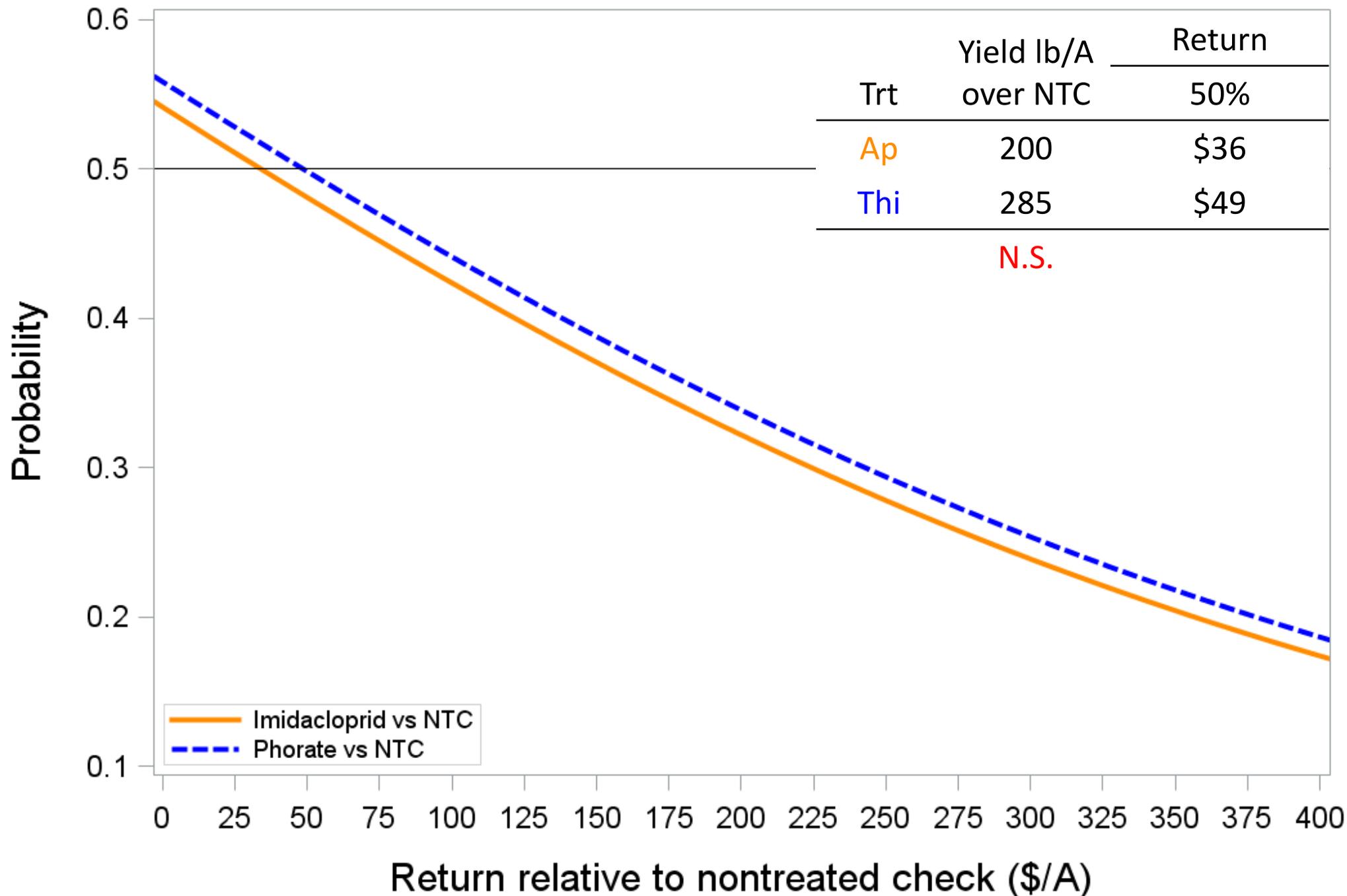
- \$475/ton contract

- Imidacloprid \$140/gal \$12.50
- Fluopyram \$588.80/gal \$29.90
- Phorate \$3.93/lb \$18.47
- Aldicarb \$6.50/lb \$32.50

- Polymer treatments excluded (N.S.) (est. \$2-3/lb)







Summary

- Polymer plus Ap or Thi N.S. among responses
- **Stand:**
 - ≤ 2 wk, some lag AgL, VT
 - > 2 wk, no differences
- **Thrips injury:**
 - All $<$ NTC; AgL greatest reduction

Summary

- **TSW:**
 - Thi greatest reduction
 - AgL intermediate
 - Imid. no benefit to R > NTC
- **Yield:**
 - Thi or AgL most consistent
 - R: N.S.
- **Profitability:**
 - S: AgL, Thi, VT
 - M: Thi, AgL

Considerations

- Insecticides important, still one piece of the IPM puzzle
- Total complement of pests
- Costs of varying rates, convenience

Thank You

James Thomas
Kyle Kinard
Trevor Zorn
James Haynes

Support

