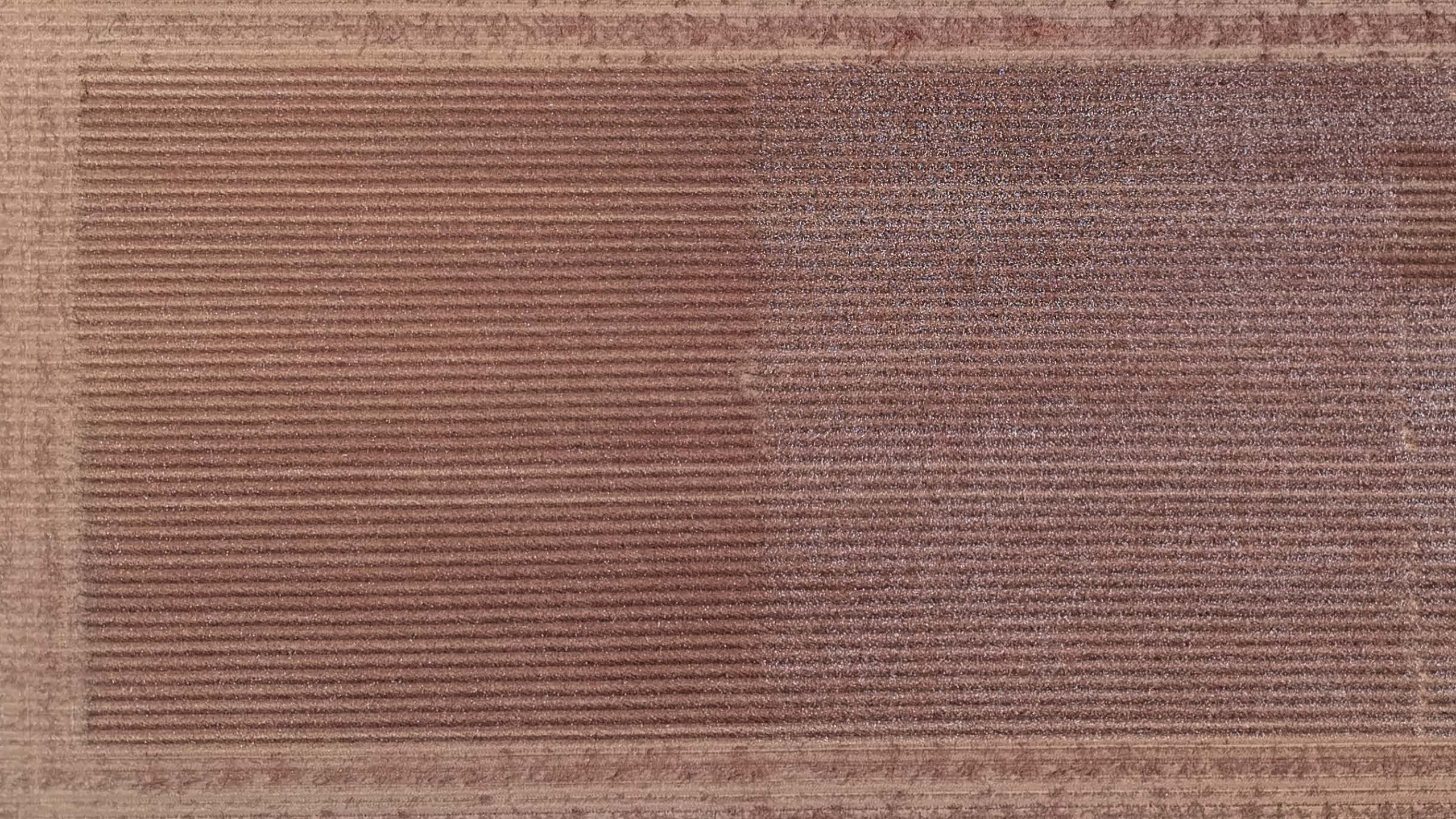


Plant Bug Management in Pre-blooming ThryvOn Cotton

Ben Thrash







Current Recommendations for TPB Pre-bloom

- Current threshold 8-12 TPB Adults per 100 sweeps
- 5-15% square loss tends to improve yields

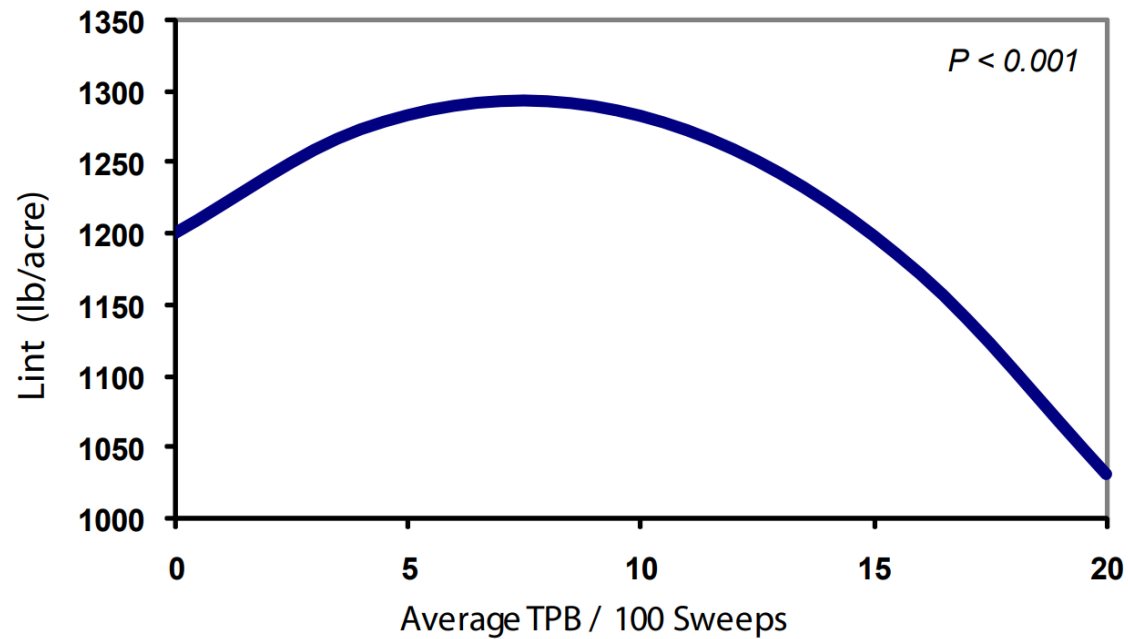


Figure 7. Regression analysis of yield response vs. average prebloom plant bug density across all 33 test locations.

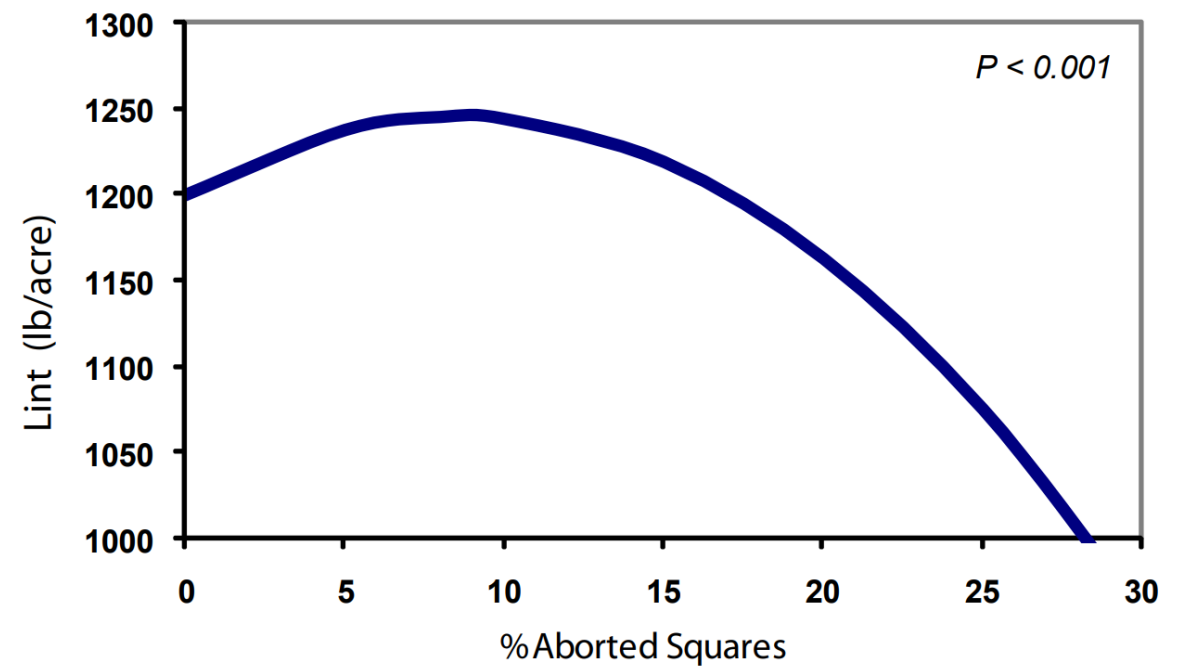
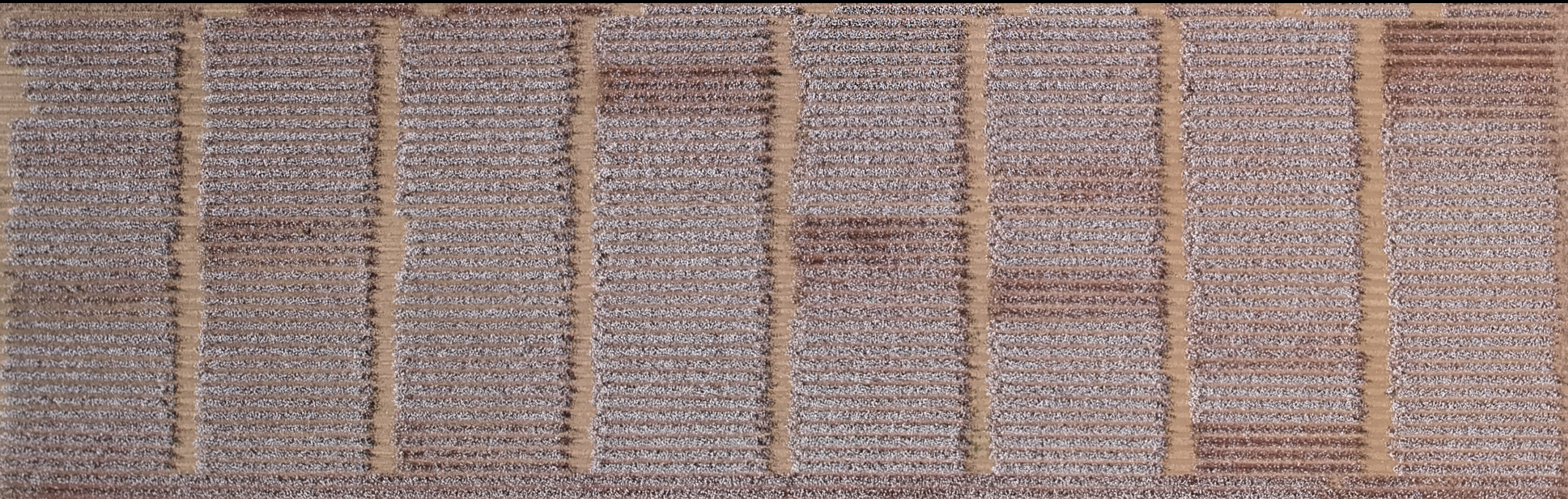


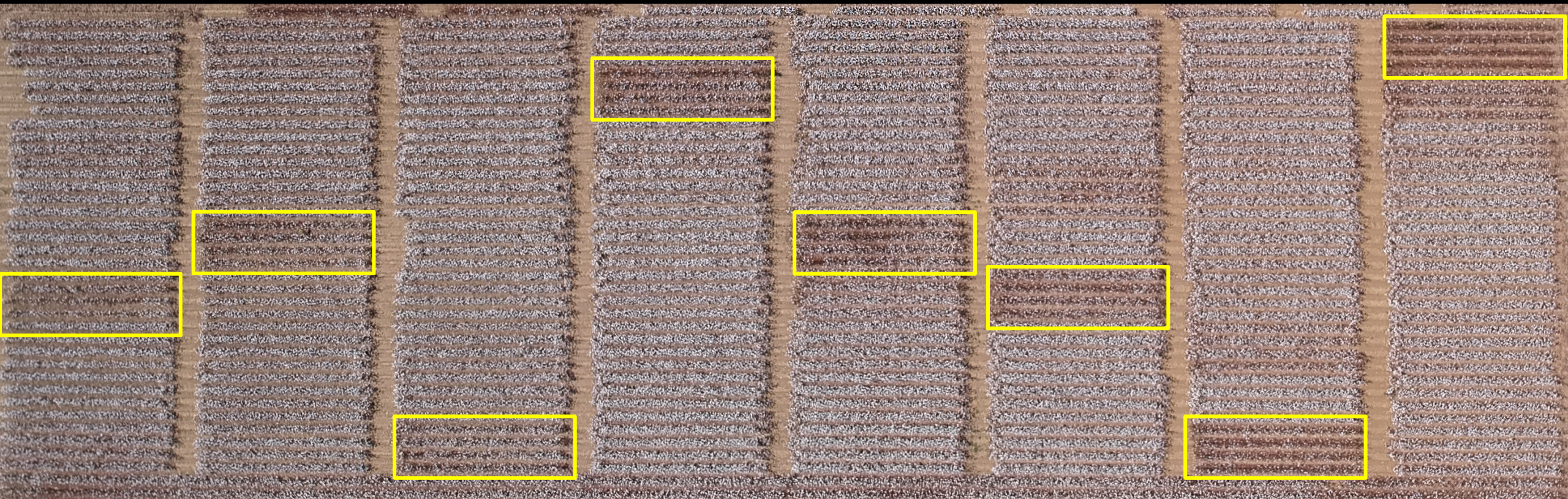
Figure 8. Regression analysis of yield response vs. average prebloom square loss across all 33 test locations.



TPB Adults 4-10x threshold



Untreated Non-ThryvOn



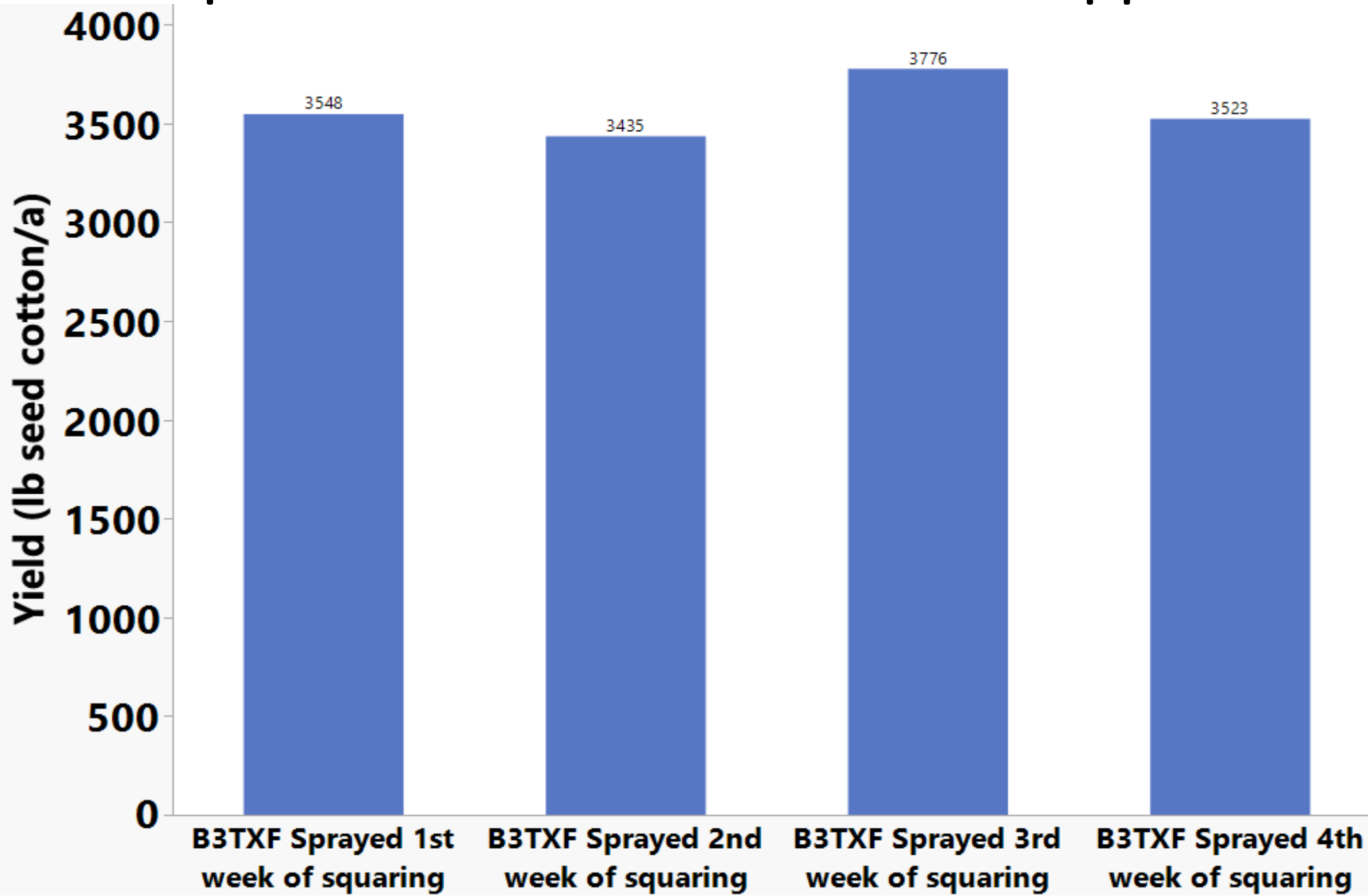
Non-ThryvOn with 3 post bloom apps



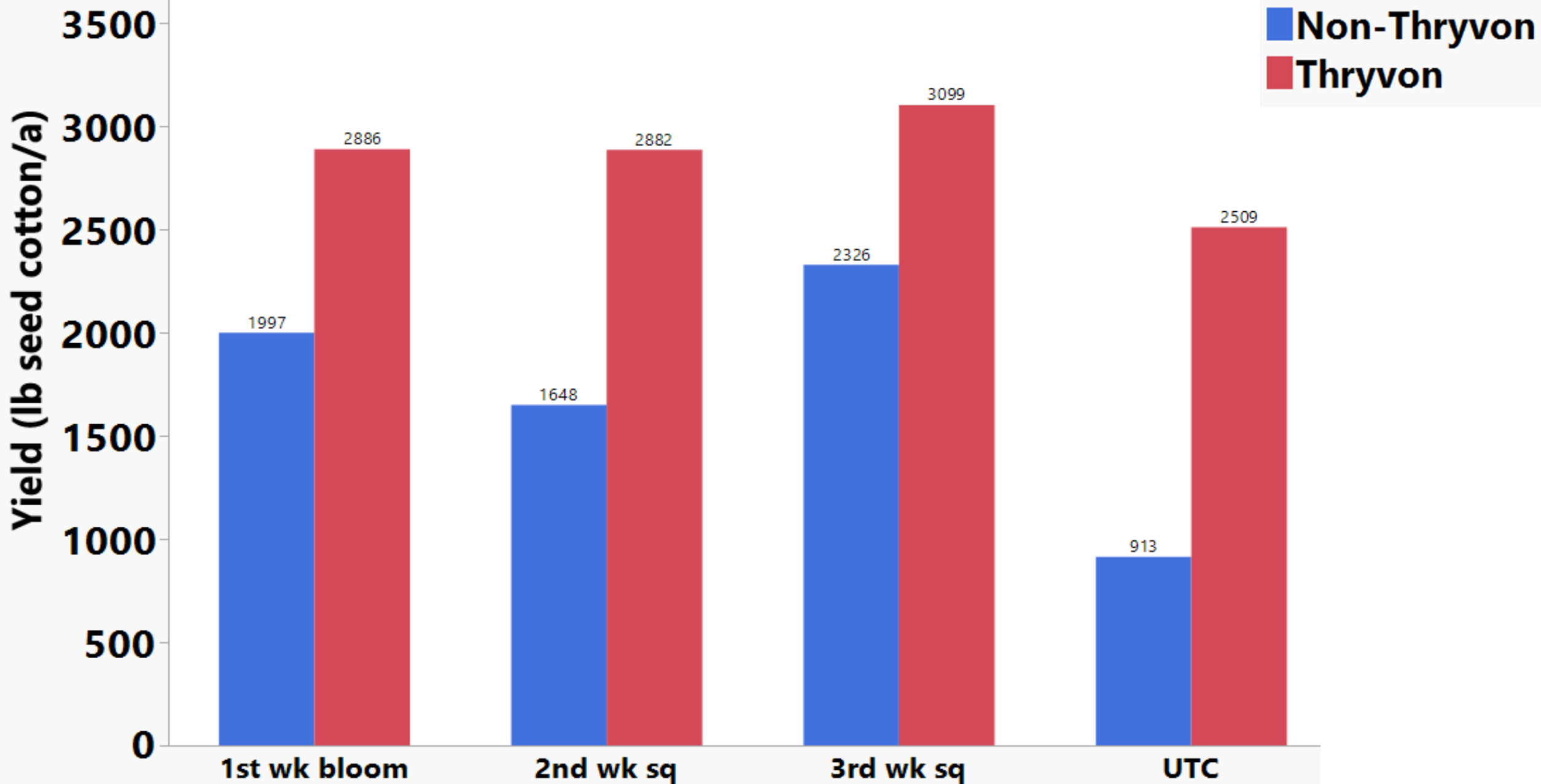
Untreated ThryvOn

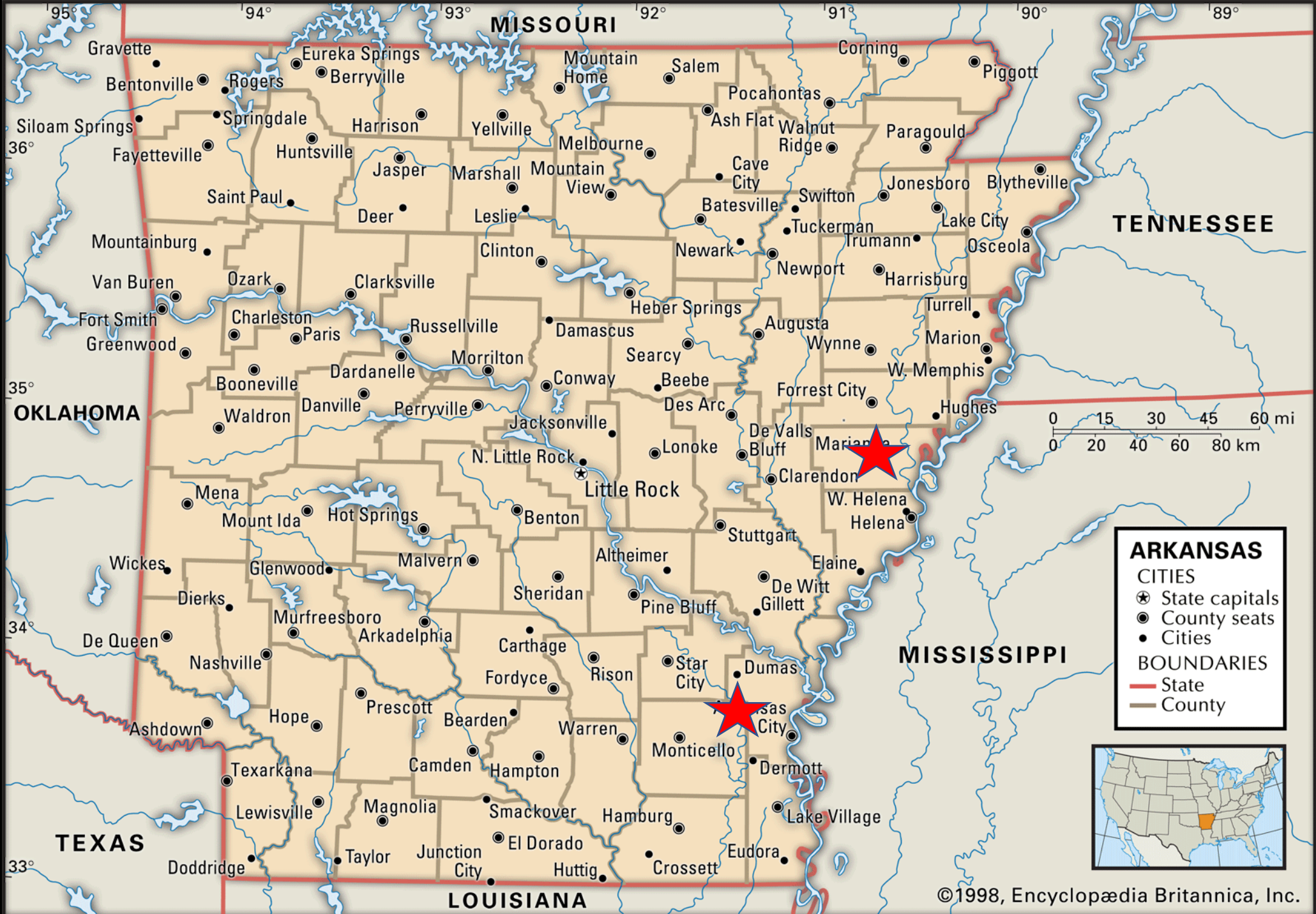


Impact of Pre-Bloom Insecticide apps on Yield



Impact of Pre-Bloom Insecticide apps on Yield

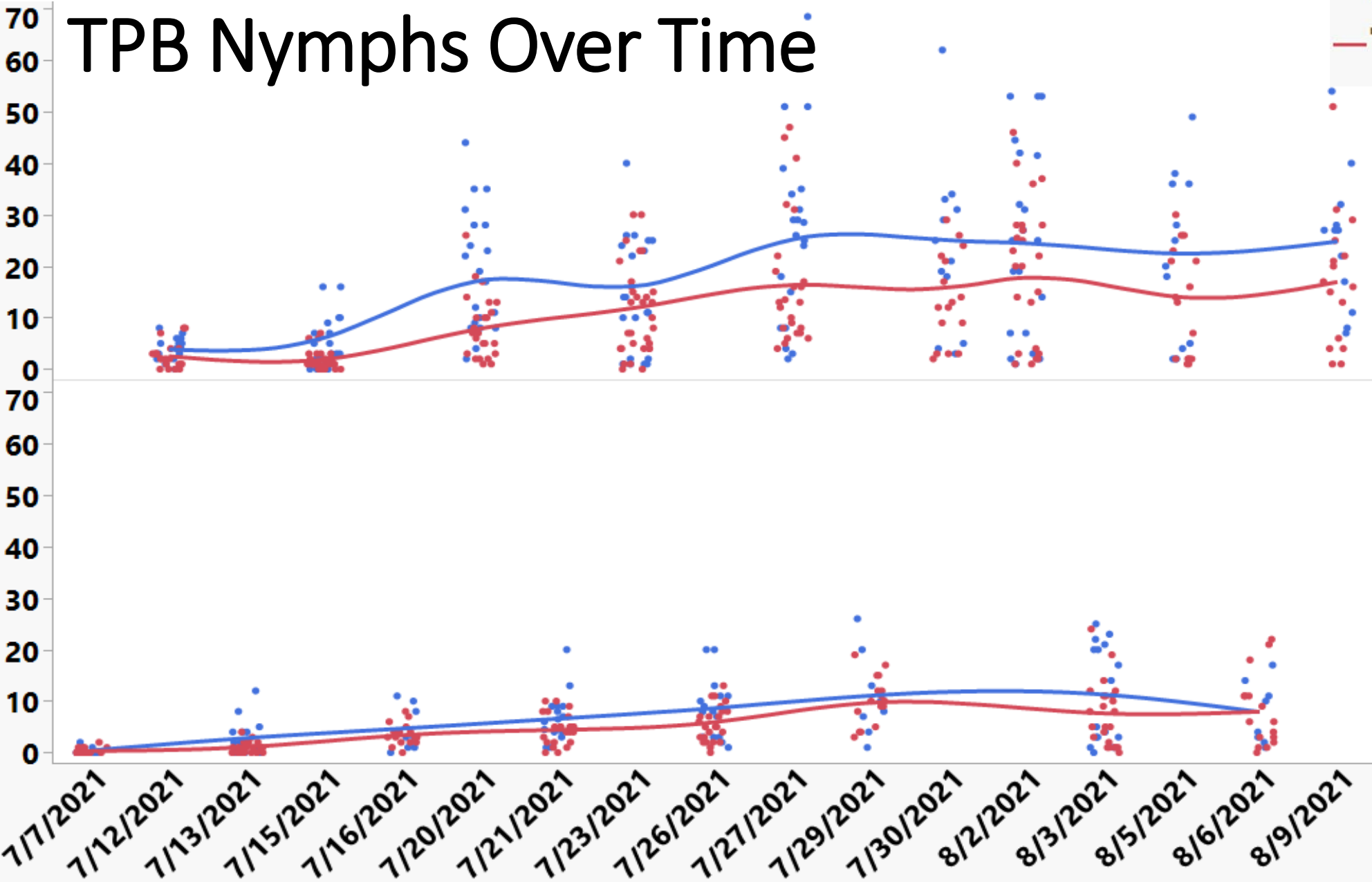




TPB Nymphs Over Time

— Non-Thryvon
— Thryvon

Nymphs/10 row ft



Marianna

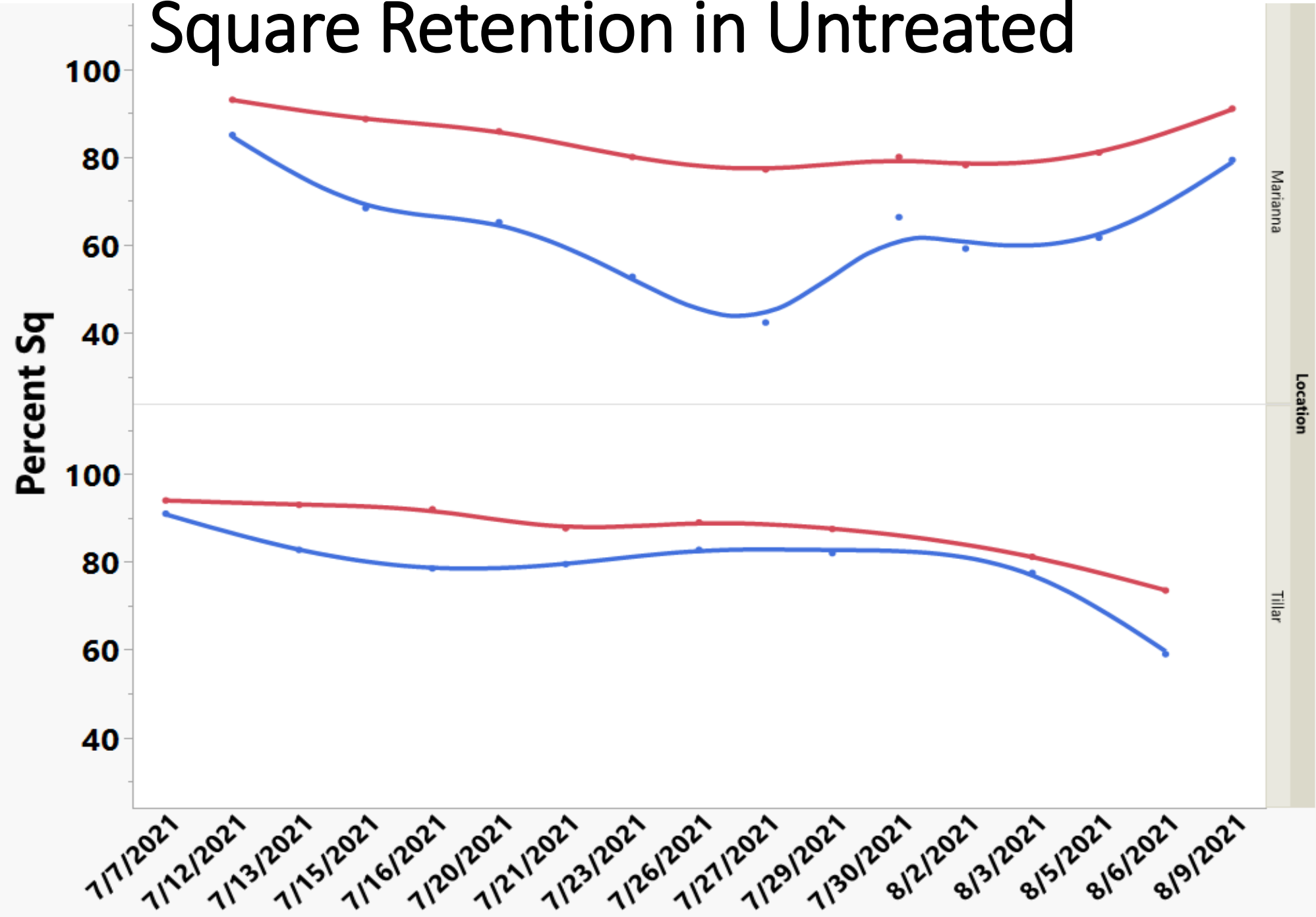
Location

Tillar

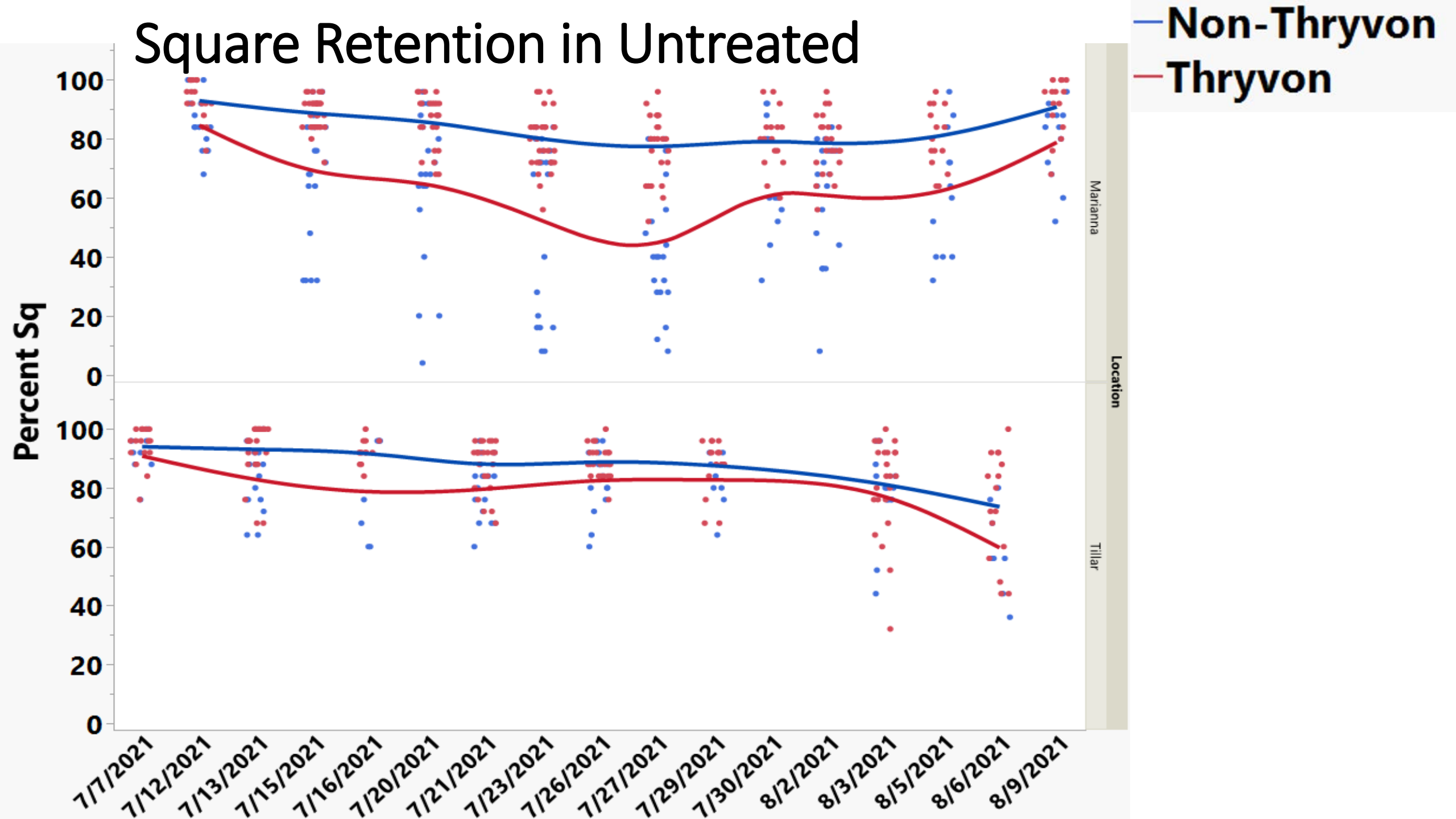
Date

Square Retention in Untreated

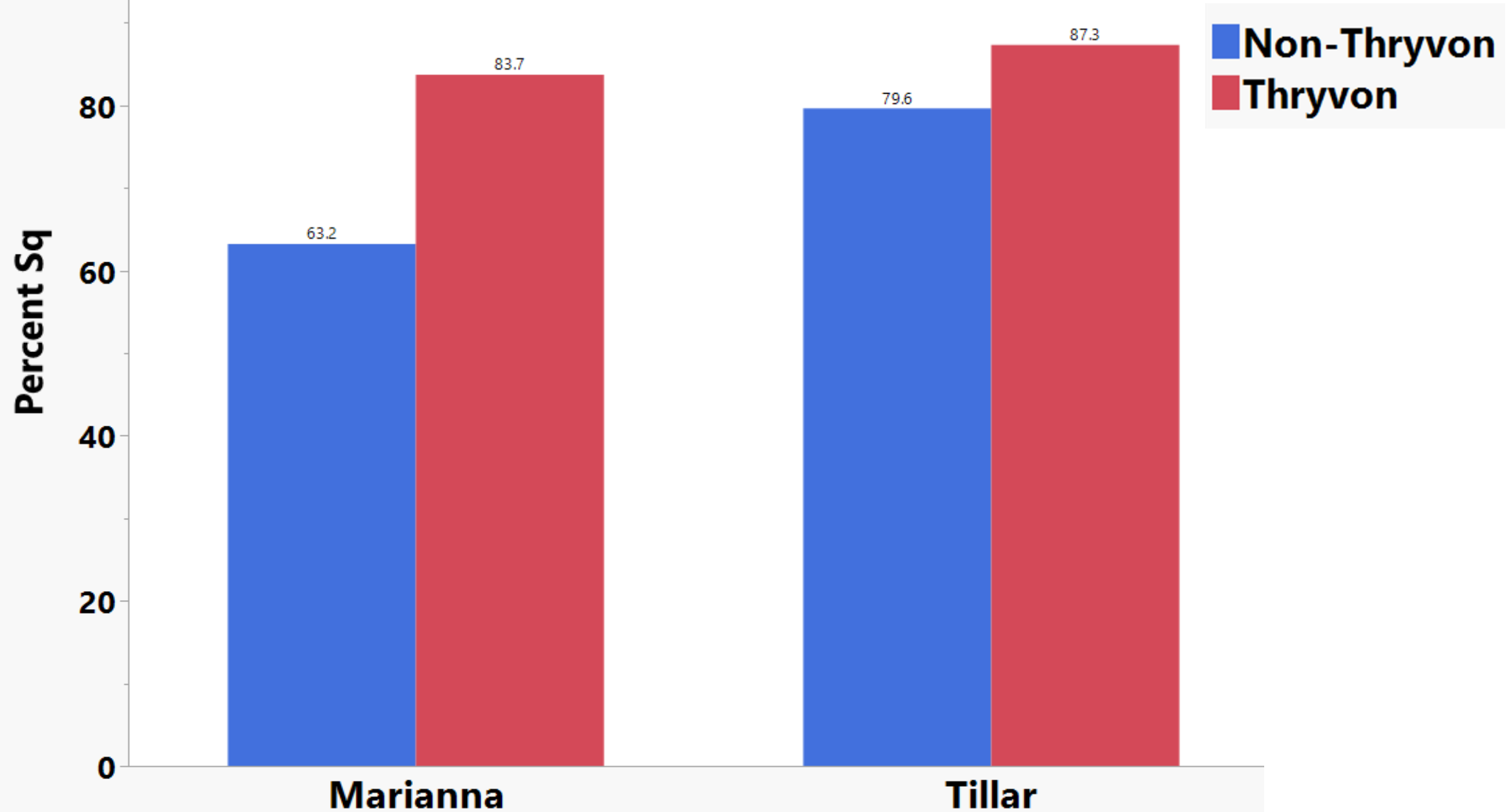
— Non-Thryvon
— Thryvon



Square Retention in Untreated

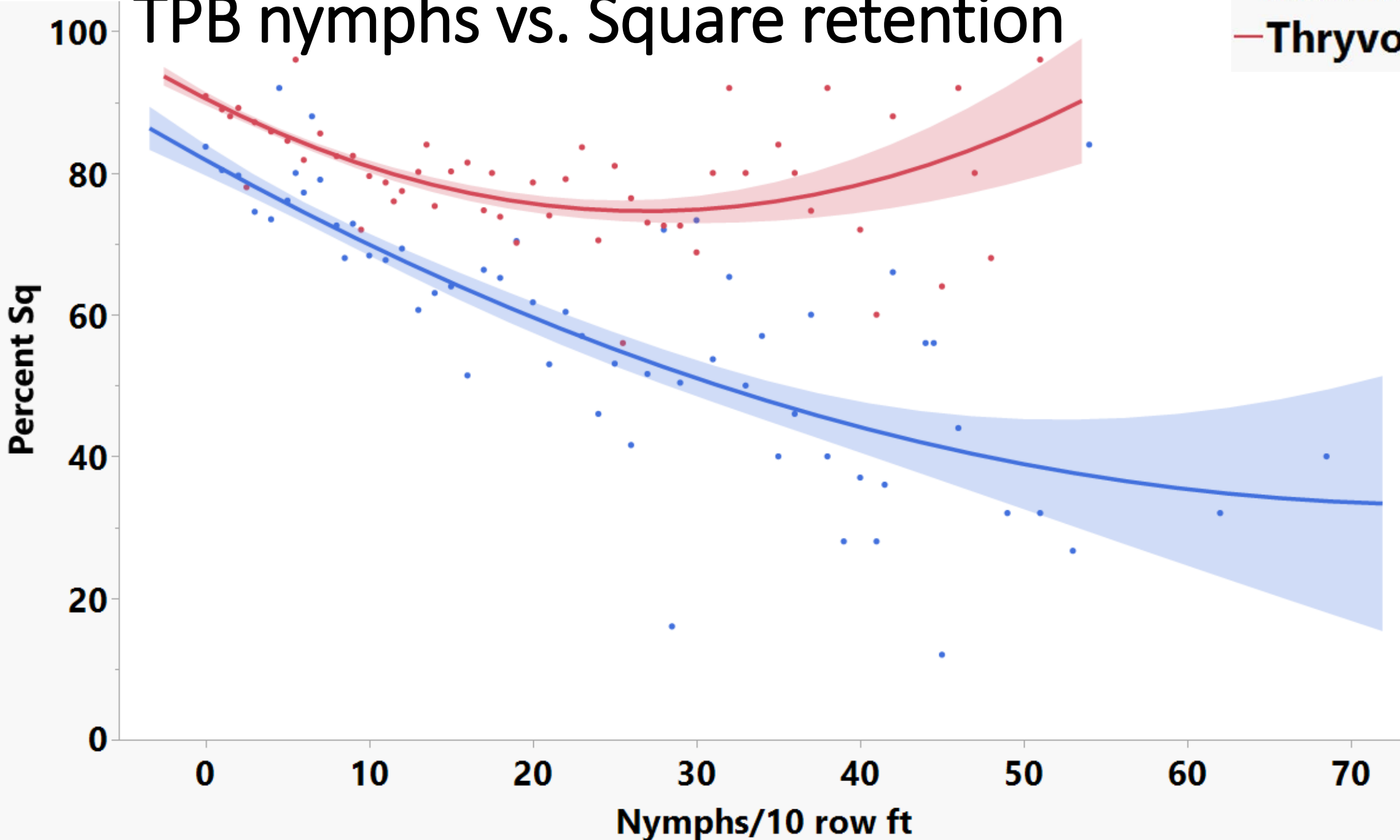


Season Total Square Retention

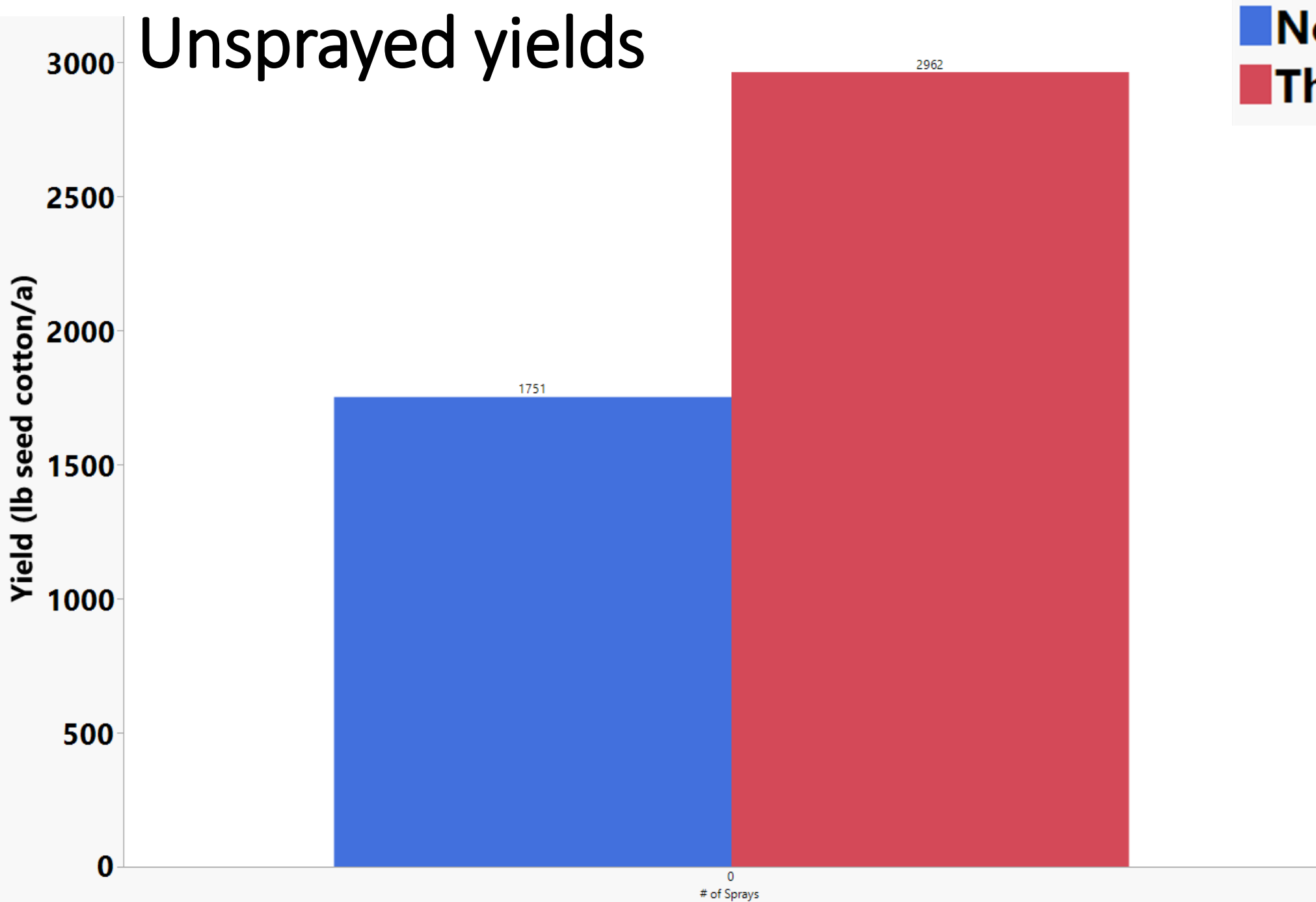


TPB nymphs vs. Square retention

- Non-Thryvon
- Thryvon

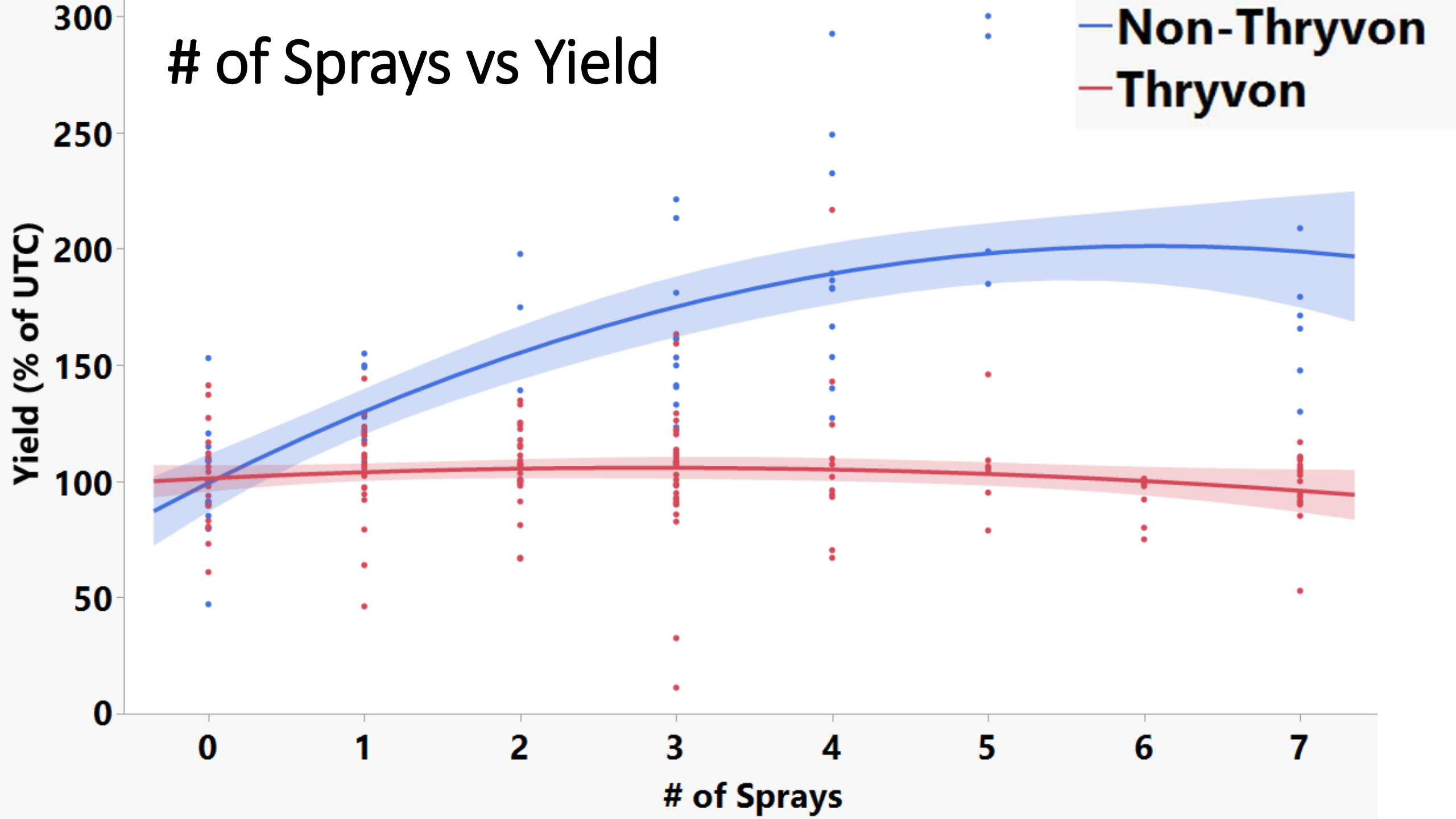


Unsprayed yields



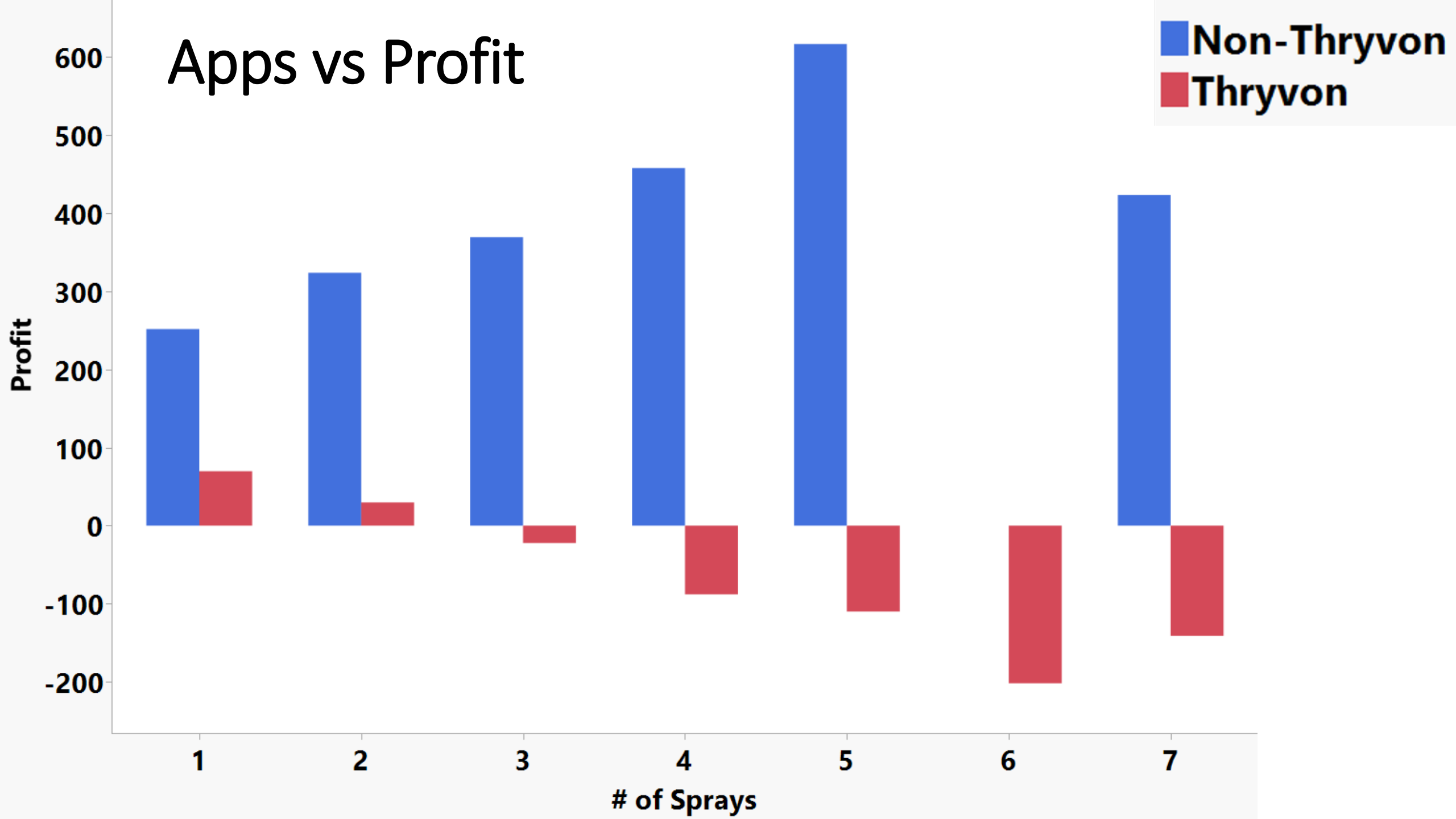
of Sprays vs Yield

— Non-Thryvon
— Thryvon

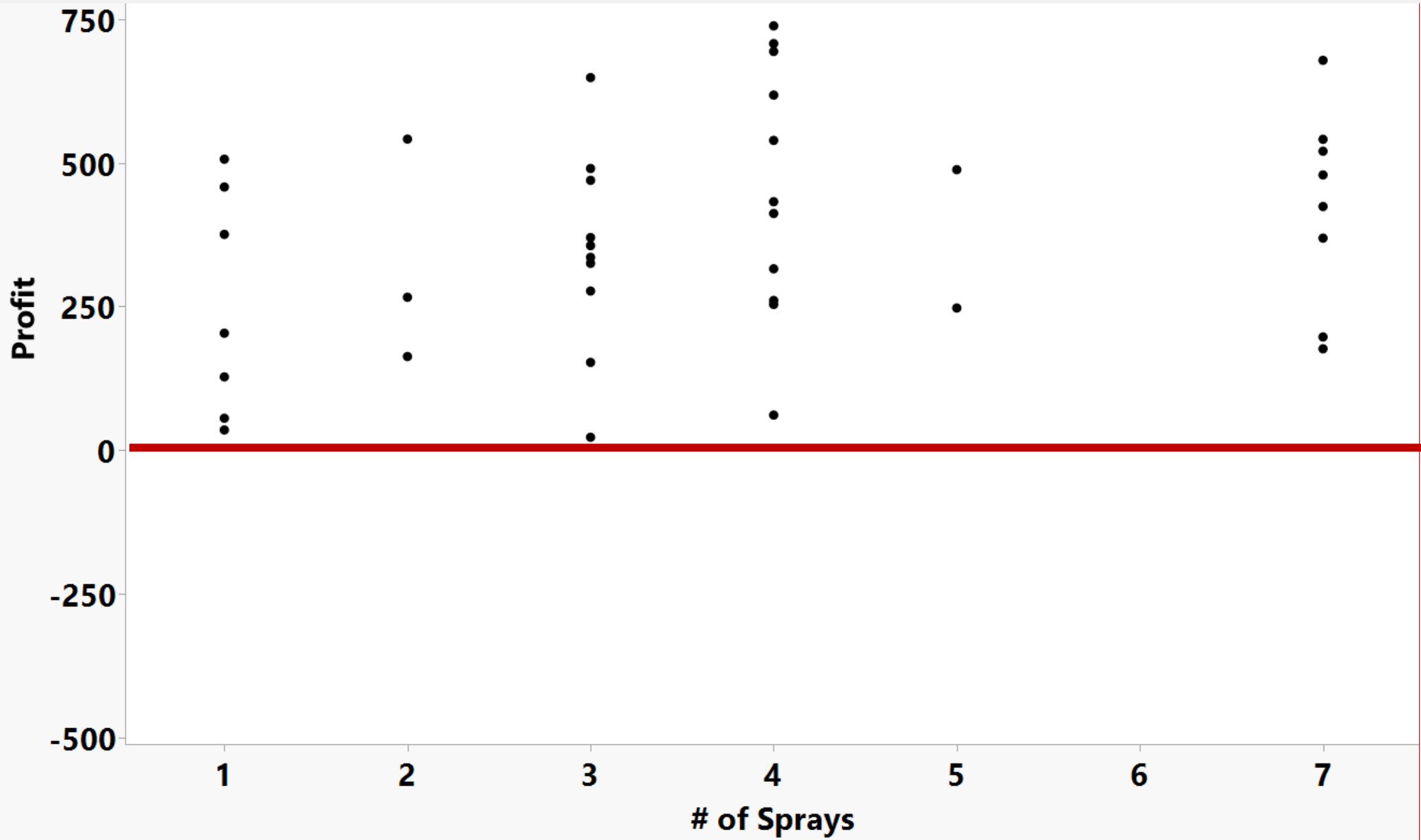


Apps vs Profit

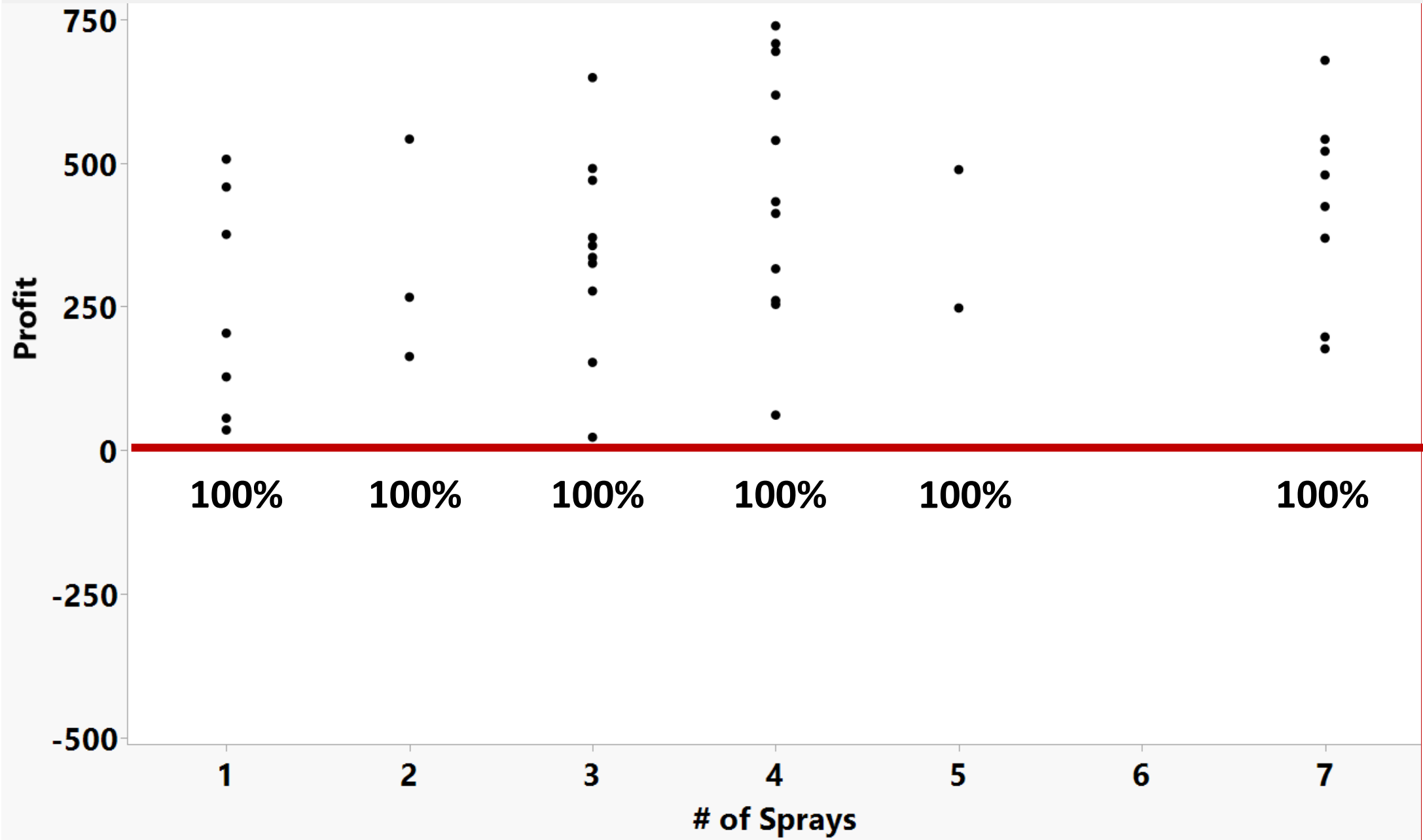
Non-Thryvon
Thryvon



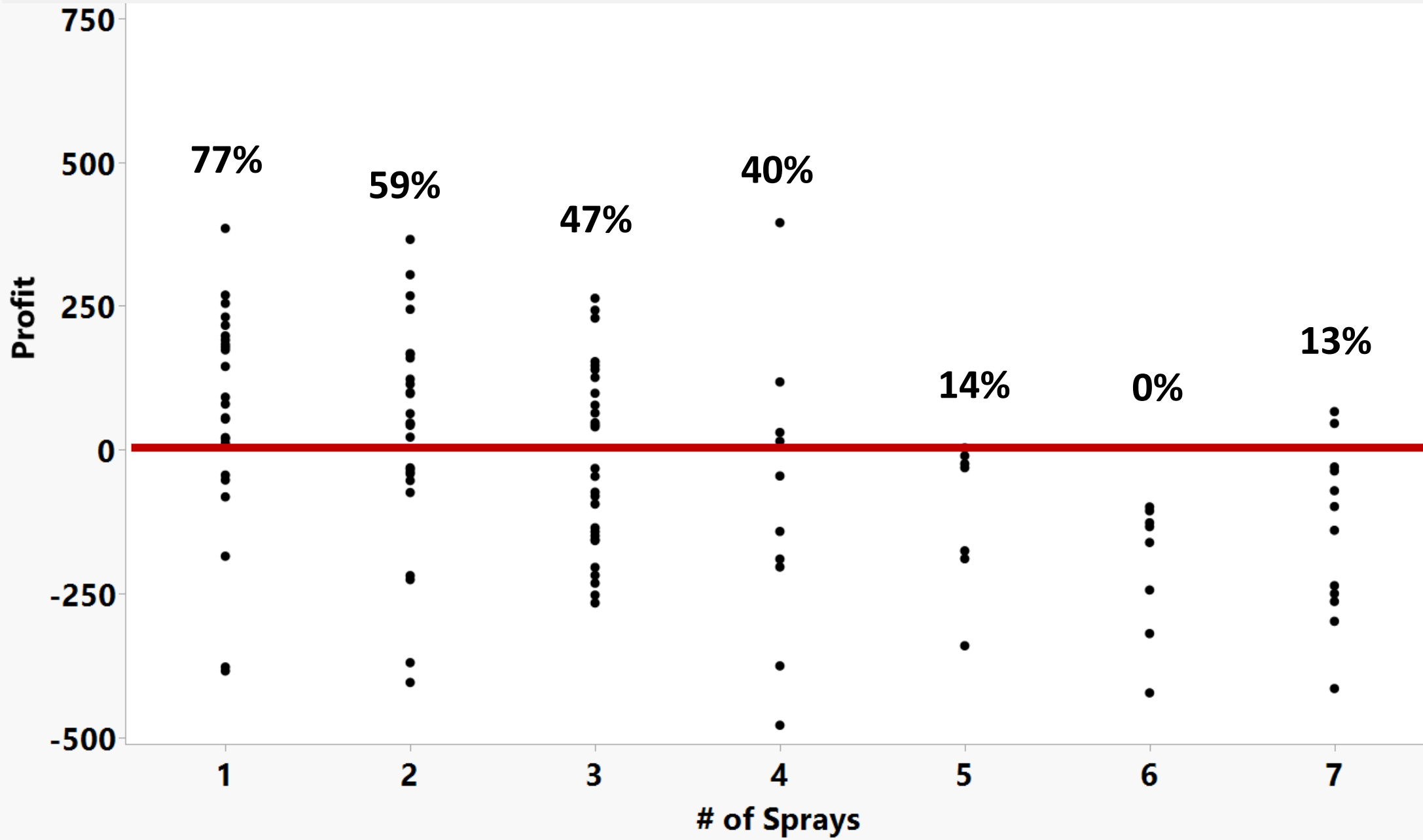
Plots that Profited from Spraying Non-ThryvOn



Plots that Profited from Spraying Non-ThryvOn

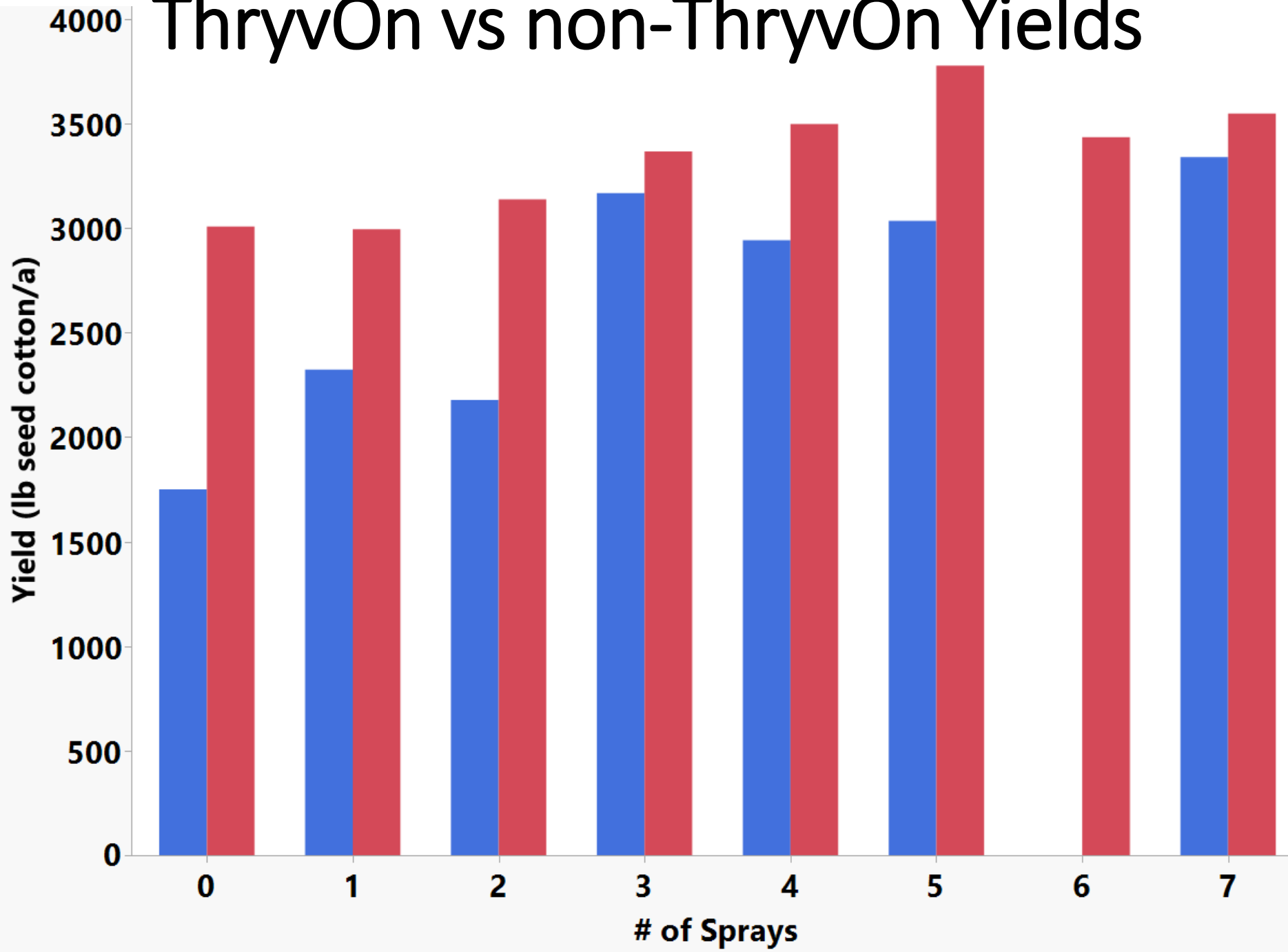


Plots that Profited from Spraying ThryvOn



ThryvOn vs non-ThryvOn Yields

■ Non-Thryvon
■ Thryvon

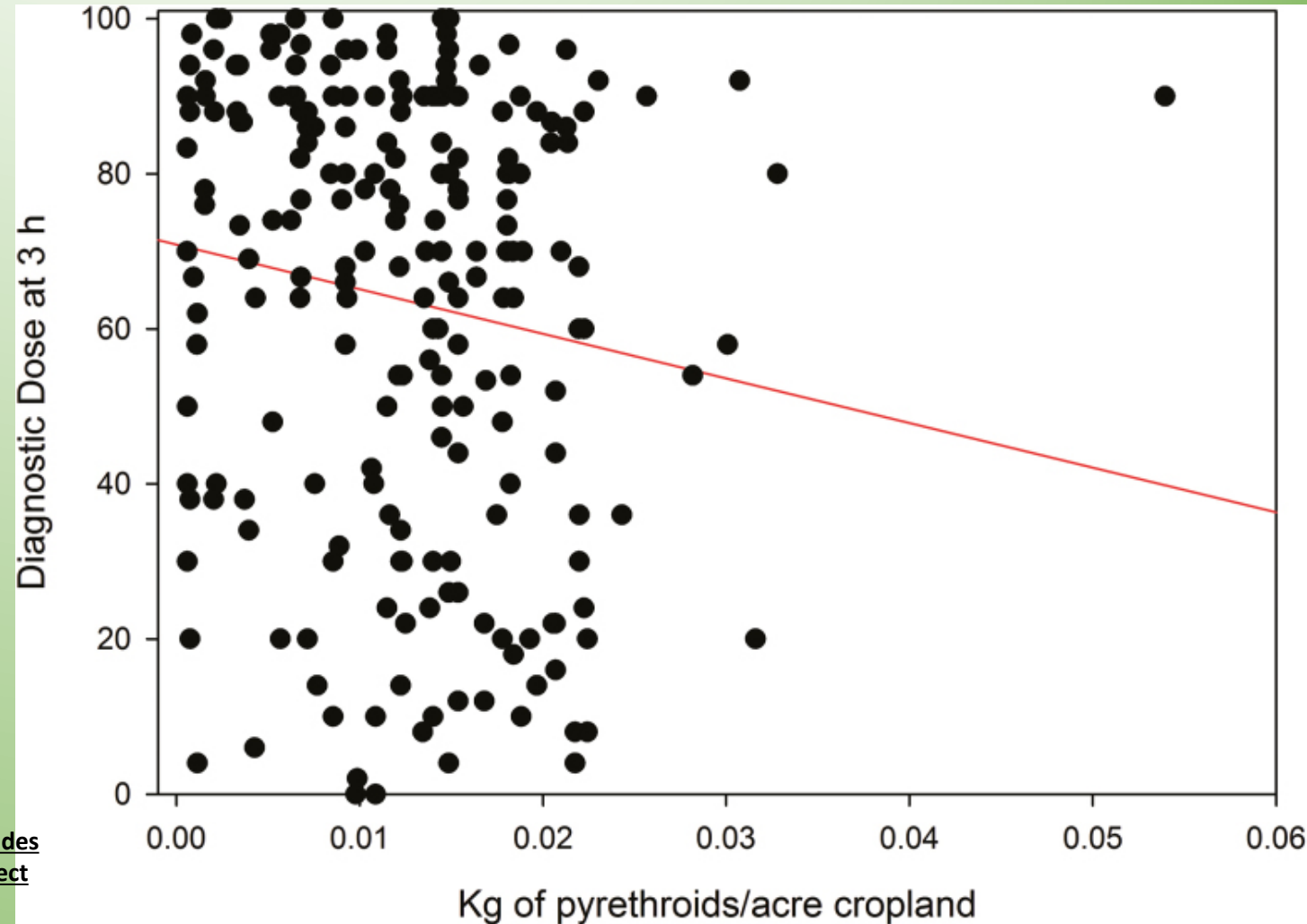


Conclusion

- **Thryvon cotton has improved square retention over non-Thryvon cotton**
- **Thryvon cotton has fewer overall plant bugs than non-Thryvon**
- **Thryvon cotton does not appear to have the “yield drag” associated with some other technologies**

Effect of Lygus Trait on Resistance?

- Lygus trait very good on thrips and will reduce plant bug applications
- Parys found as pyrethroid use declined so did resistance
- A overall decrease in use may improve efficacy for our current insecticides



Patterns of Tarnished Plant Bug (Hemiptera: Miridae) Resistance to Pyrethroid Insecticides in the Lower Mississippi Delta for 2008-2015: Linkage to Pyrethroid Use and Cotton Insect Management

Parys KA, Luttrell RG, Snodgrass GL, Portilla MR

Will ThryvOn change our pest complex?

- **Elimination of thrips apps and reduction in TPB apps could reduce flaring of spider mites**
- **Reducing insecticide apps could allow beneficial insect numbers to build reducing other insect numbers**

Or...

- **Insecticide applications for TPB keep stink bugs #'s down, could end up making a stink bug application necessary**

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