

Strategies for Managing Tarnished Plant Bug in Thryvon Cotton

UofA DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System



Cotton
Incorporated

Bollgard³
Thryv^{ON}TM
With **XTENDFLEX**
TECHNOLOGY

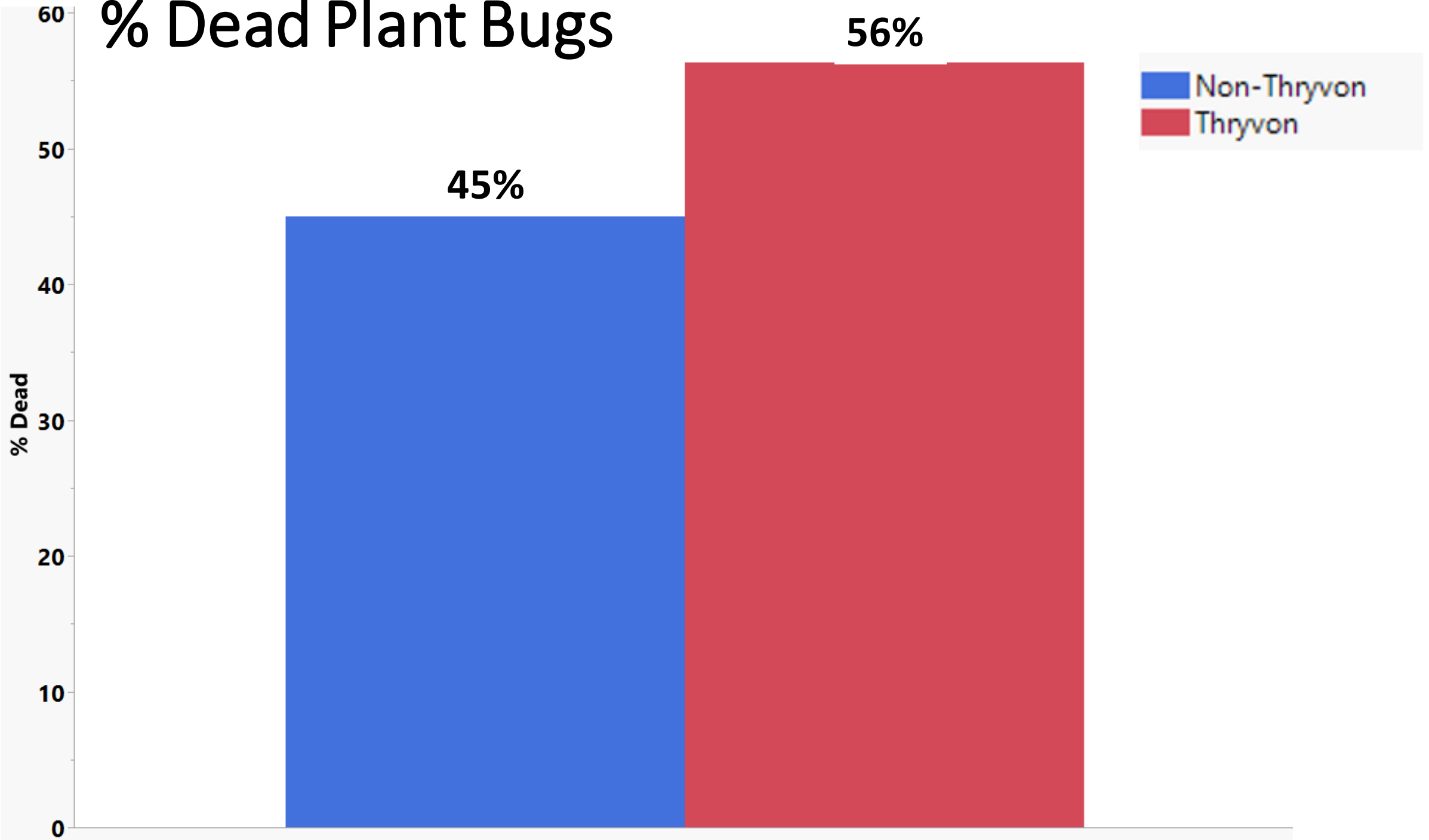


An aerial photograph of a vast agricultural field, likely a cornfield, showing neat rows of crops. A semi-transparent grey rectangular box is centered over the middle of the field, containing the text "How is Thryvon controlling plant bugs?". The field is surrounded by other agricultural areas, including a brown field on the left and a green field on the right. There are some utility poles and a small structure visible in the background.

How is Thryvon controlling plant bugs?

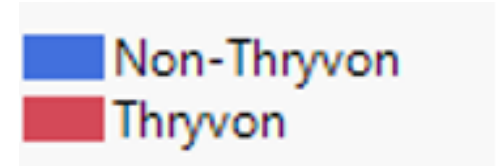


% Dead Plant Bugs



% Squares Missing

% Damage



15

10

5

0

0

1

3

Infested

6.4%

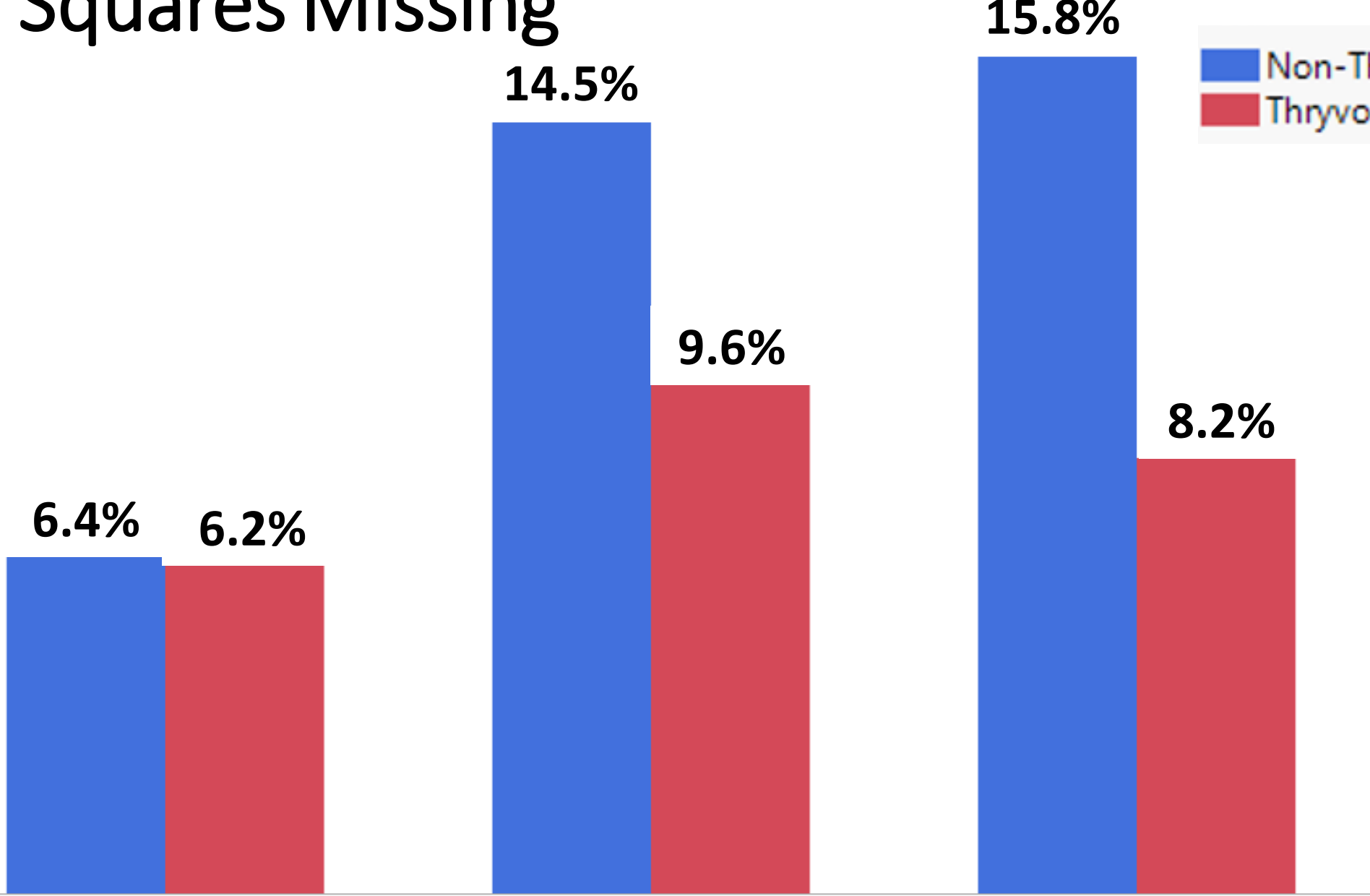
6.2%

14.5%

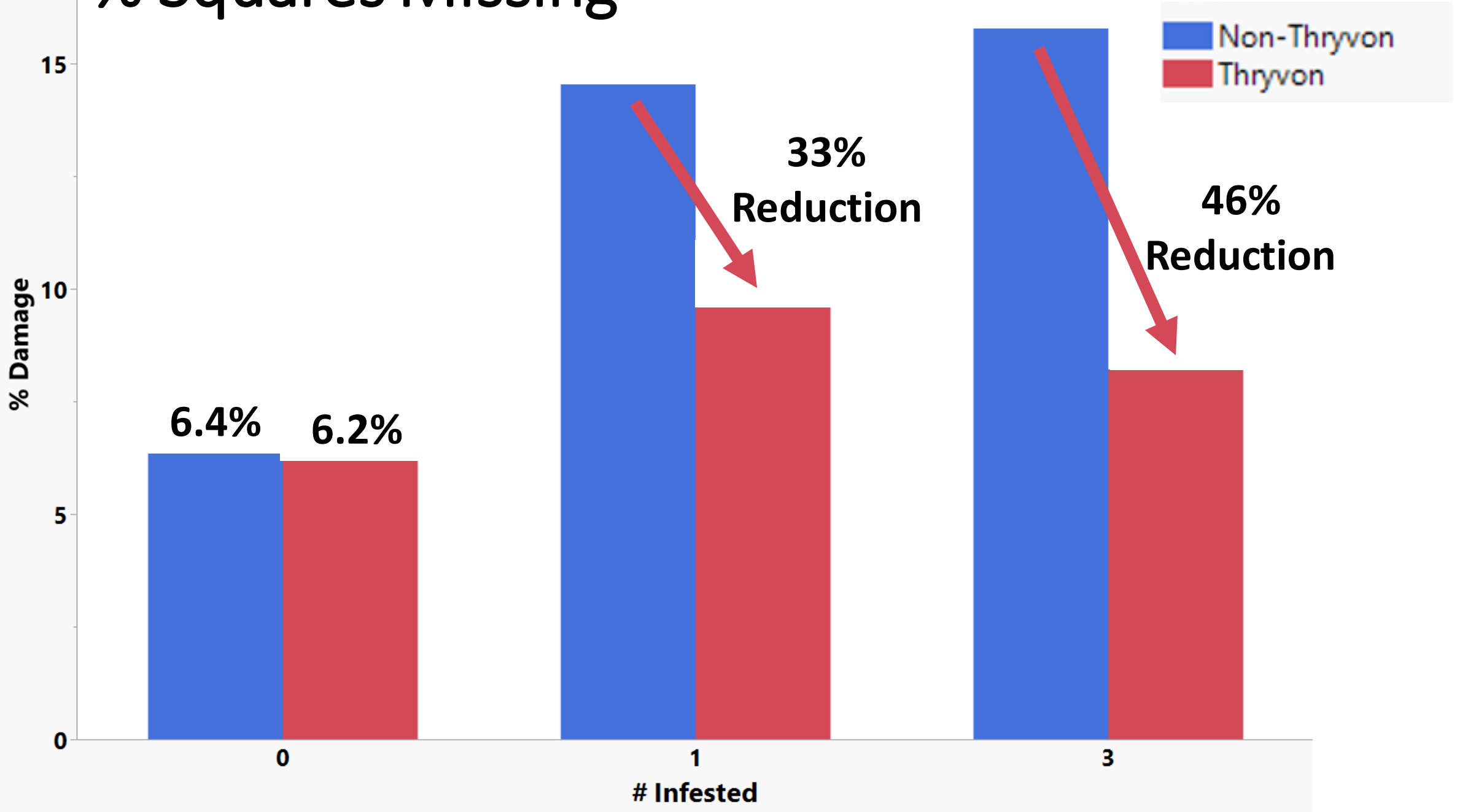
9.6%

15.8%

8.2%



% Squares Missing



Threshold Study

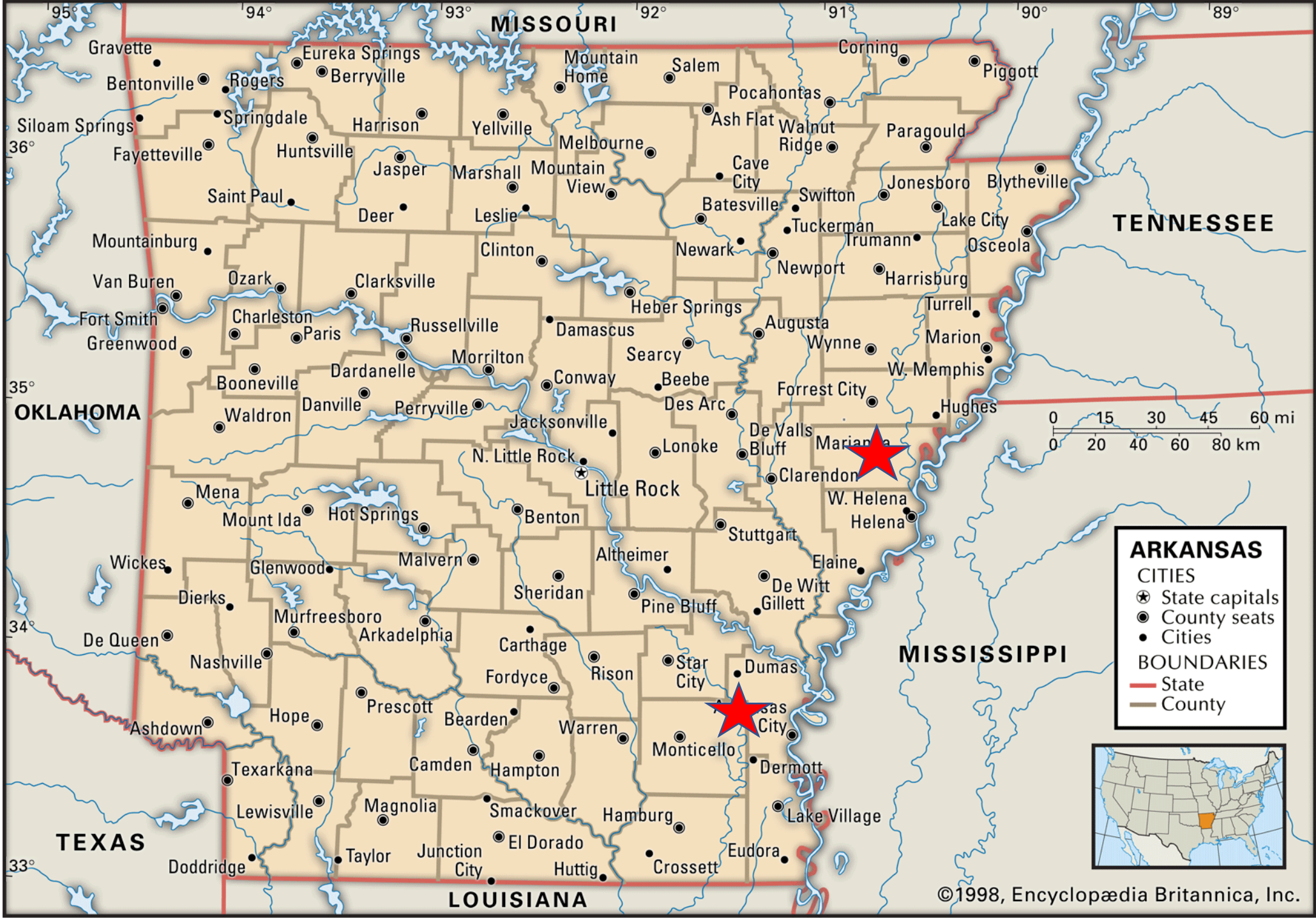
- Untreated
- 1x threshold
- 2x threshold
- 3x threshold
- 3 large nymphs
- 6 large nymphs



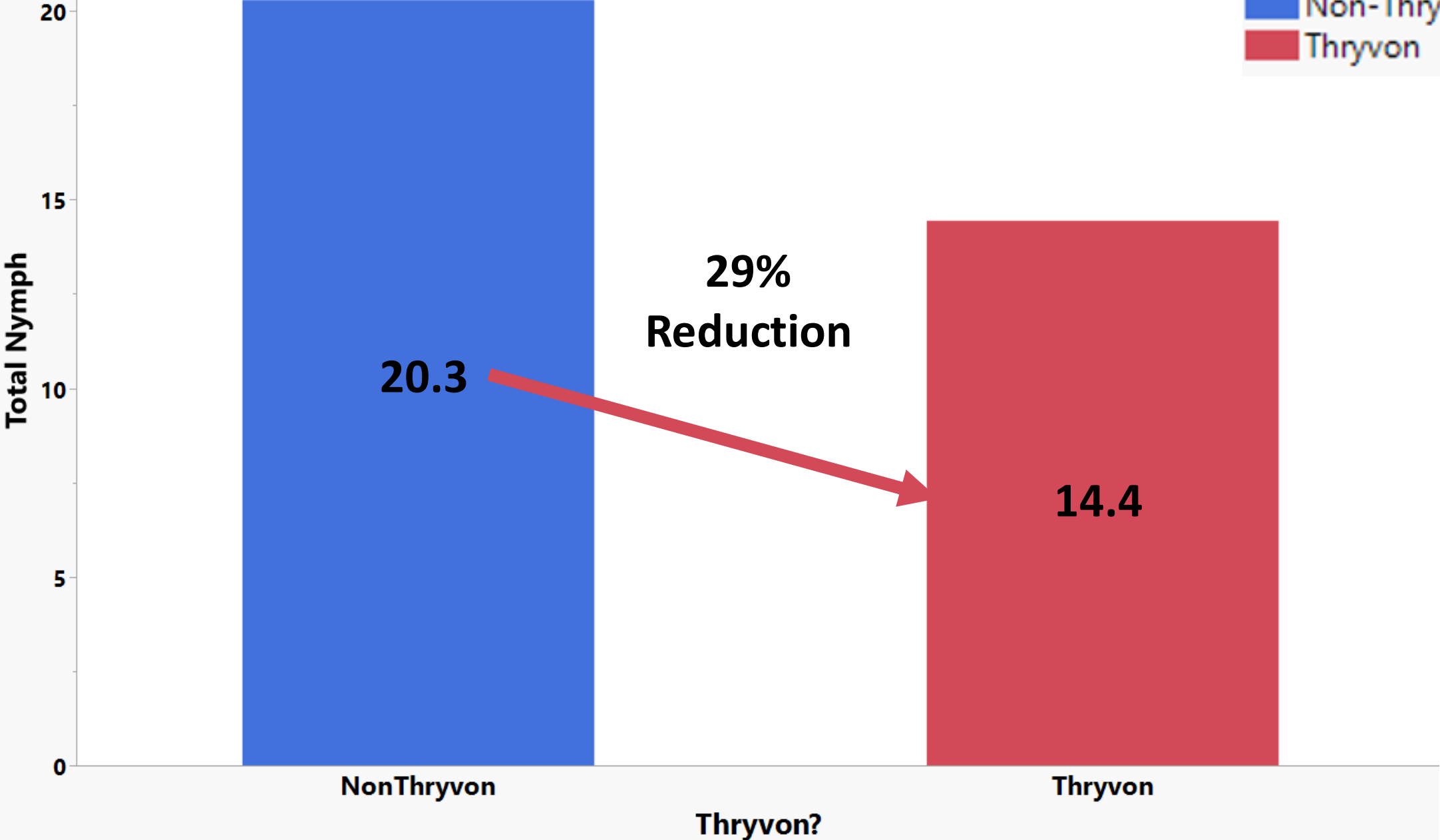
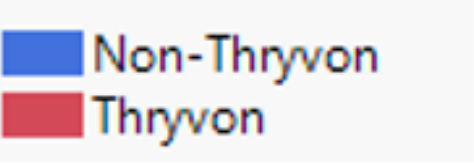
Threshold Study

- Untreated
- 1x threshold
- 2x threshold
- 3x threshold
- ~~3 large nymphs~~
- ~~6 large nymphs~~
- 80% square retention
- 85% square retention

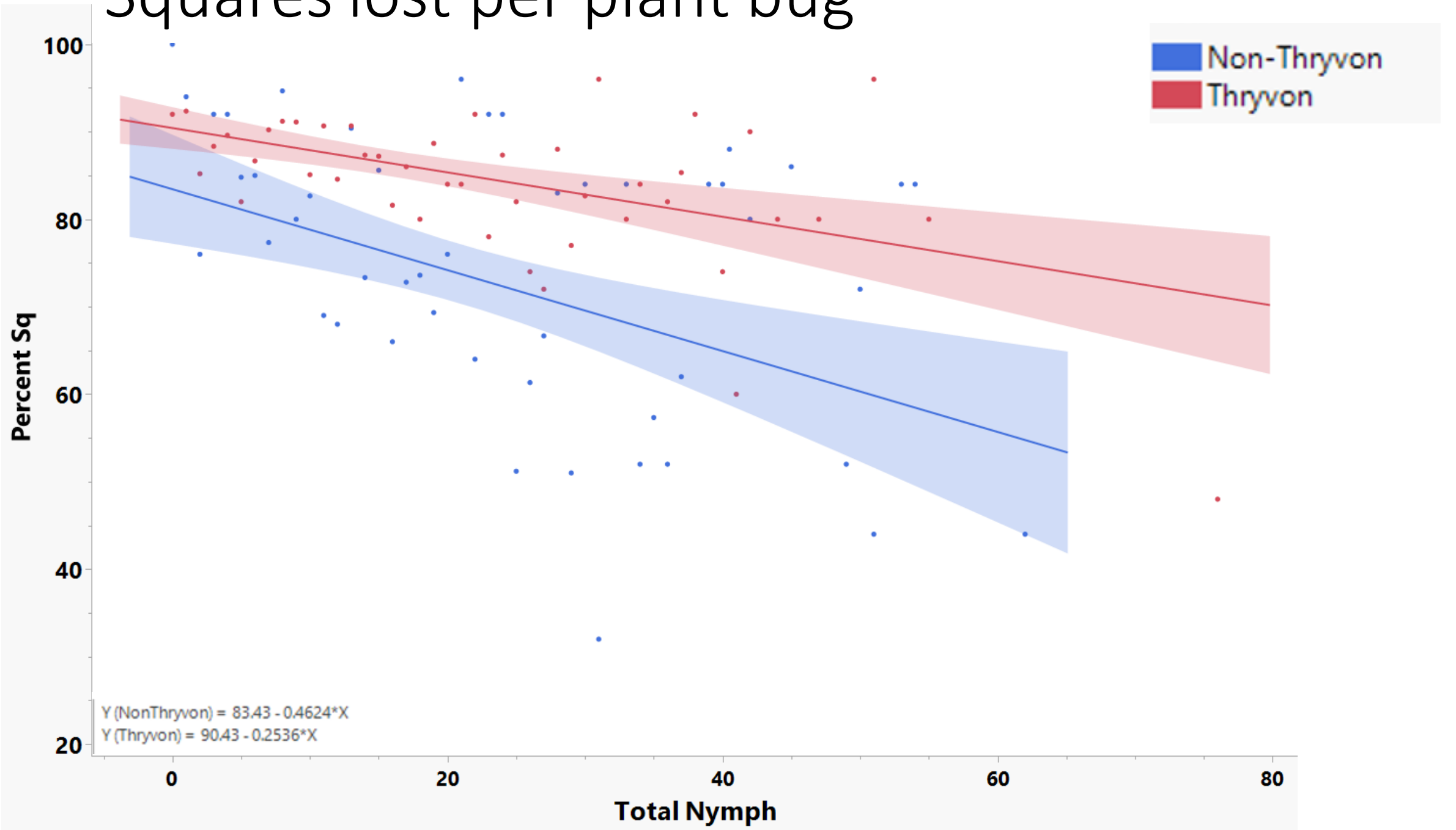




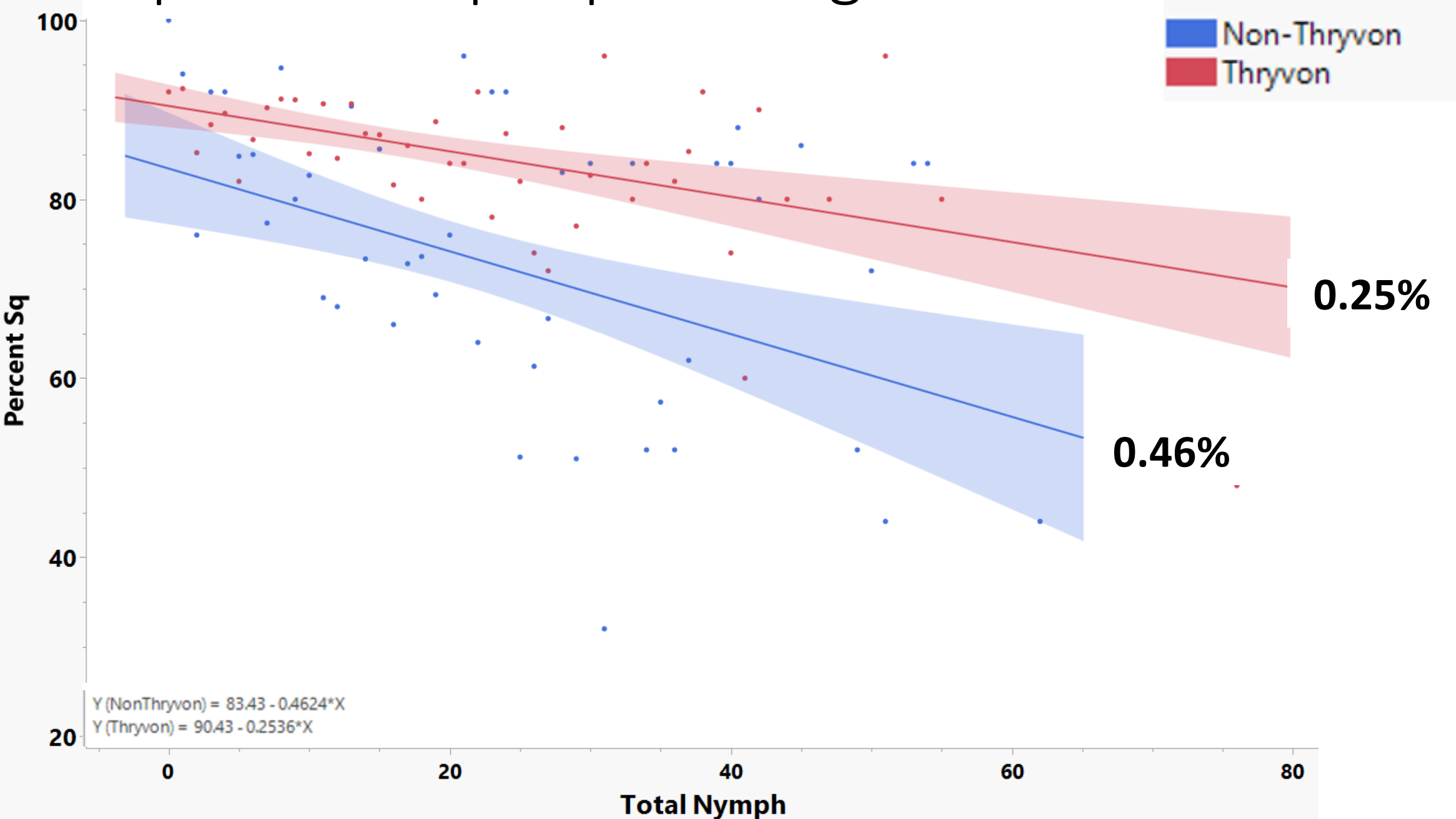
Average Plant Bug Nymphs



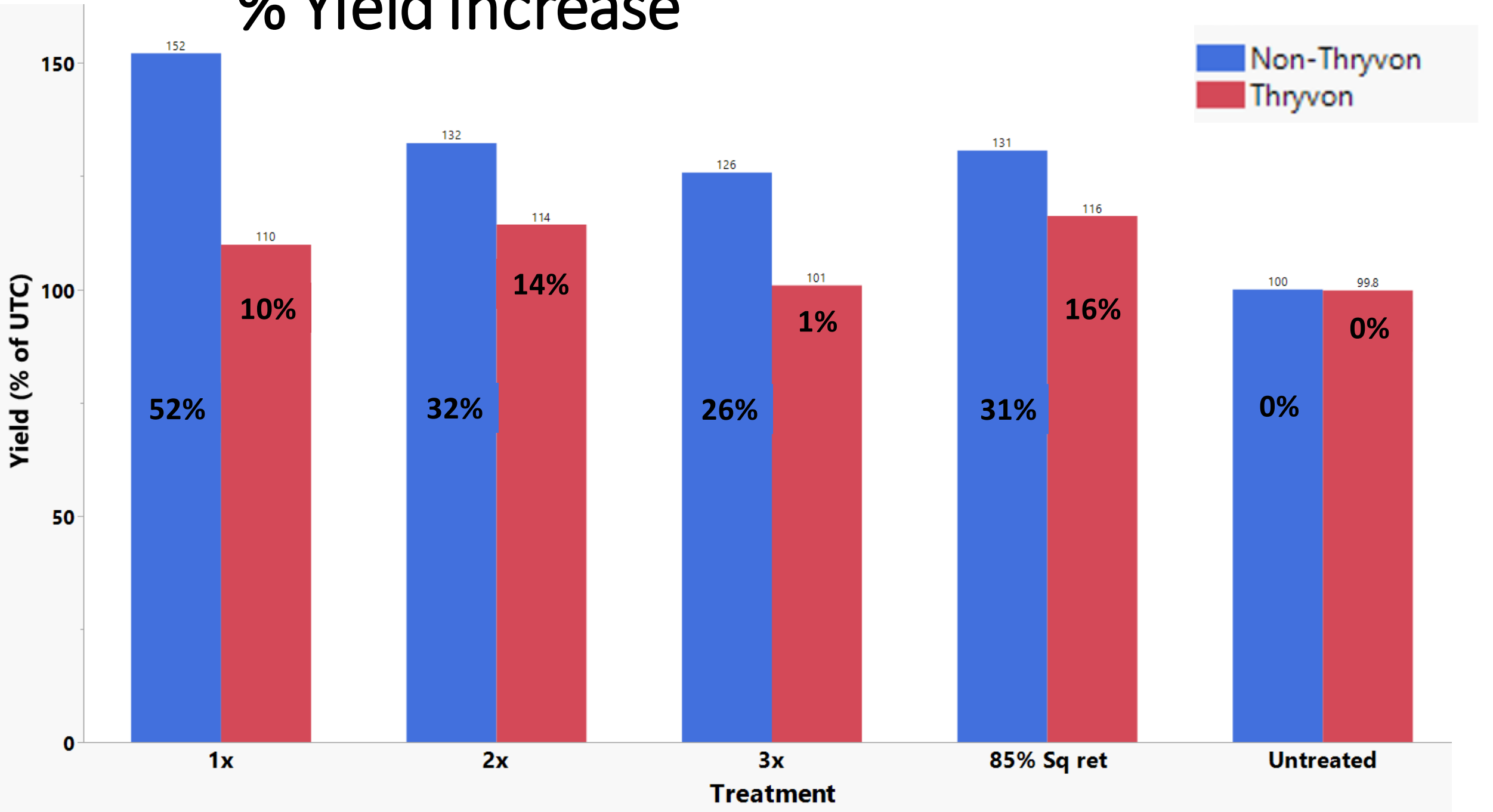
Squares lost per plant bug



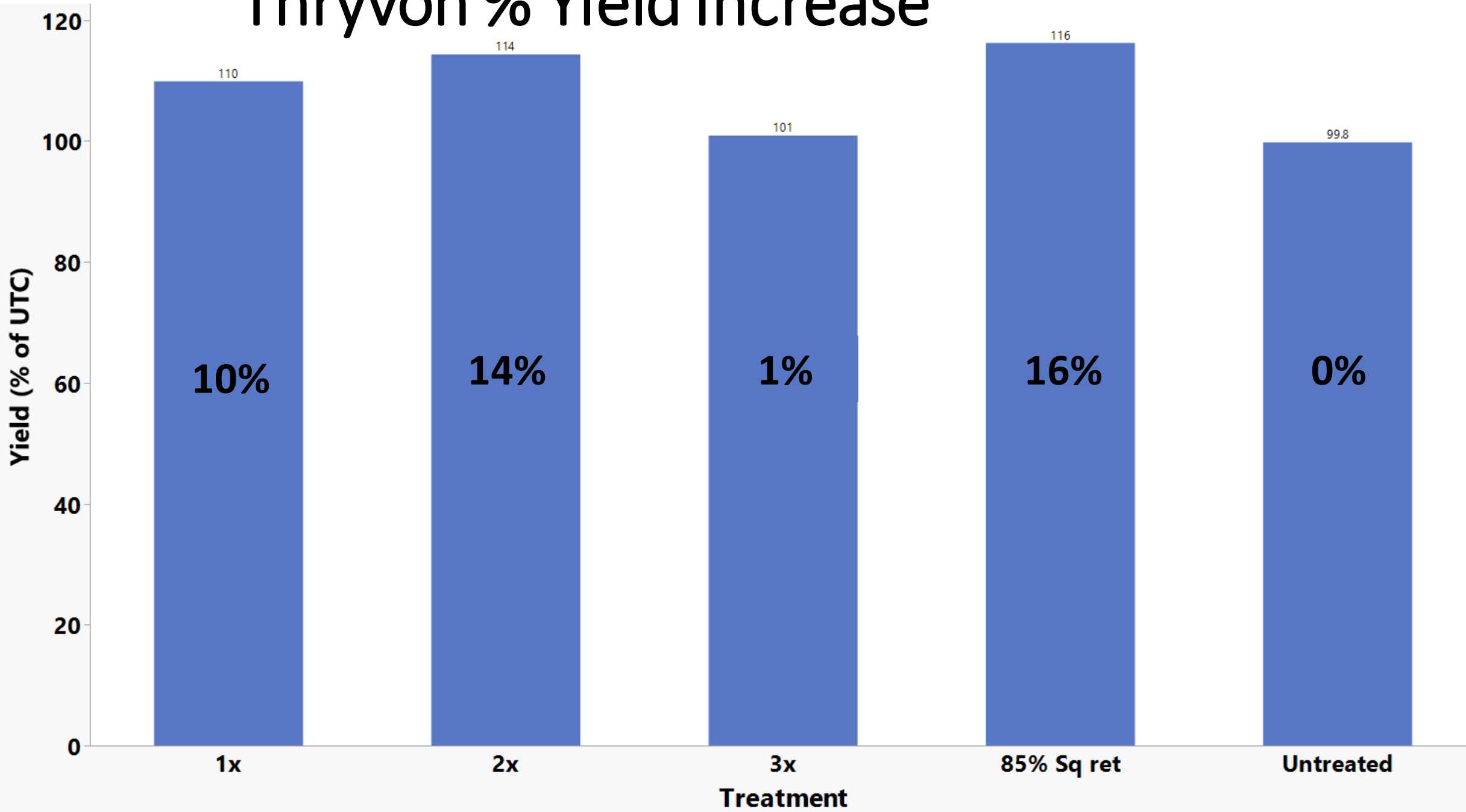
Squares lost per plant bug



% Yield Increase



Thryvon % Yield Increase

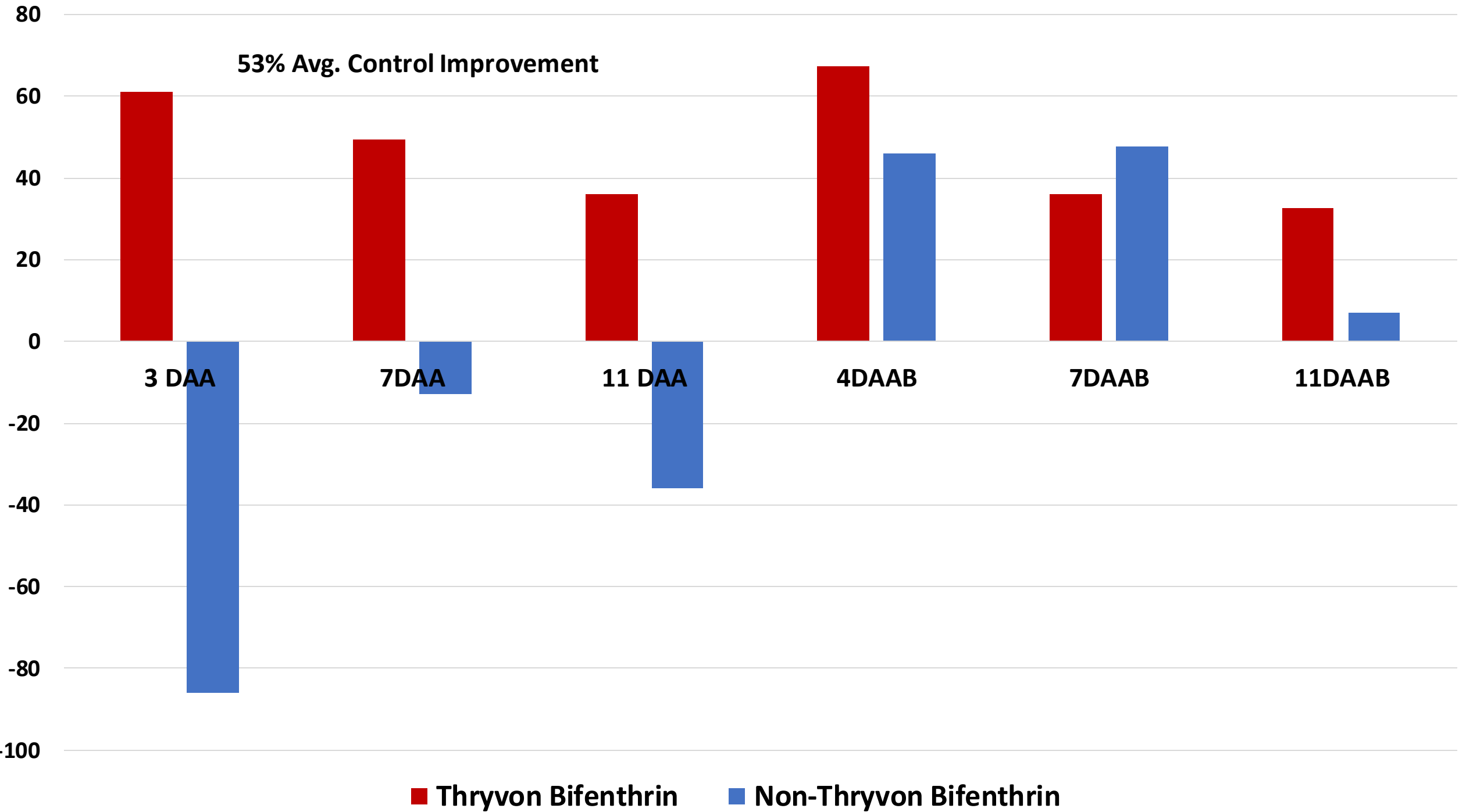


What insecticide should I use?

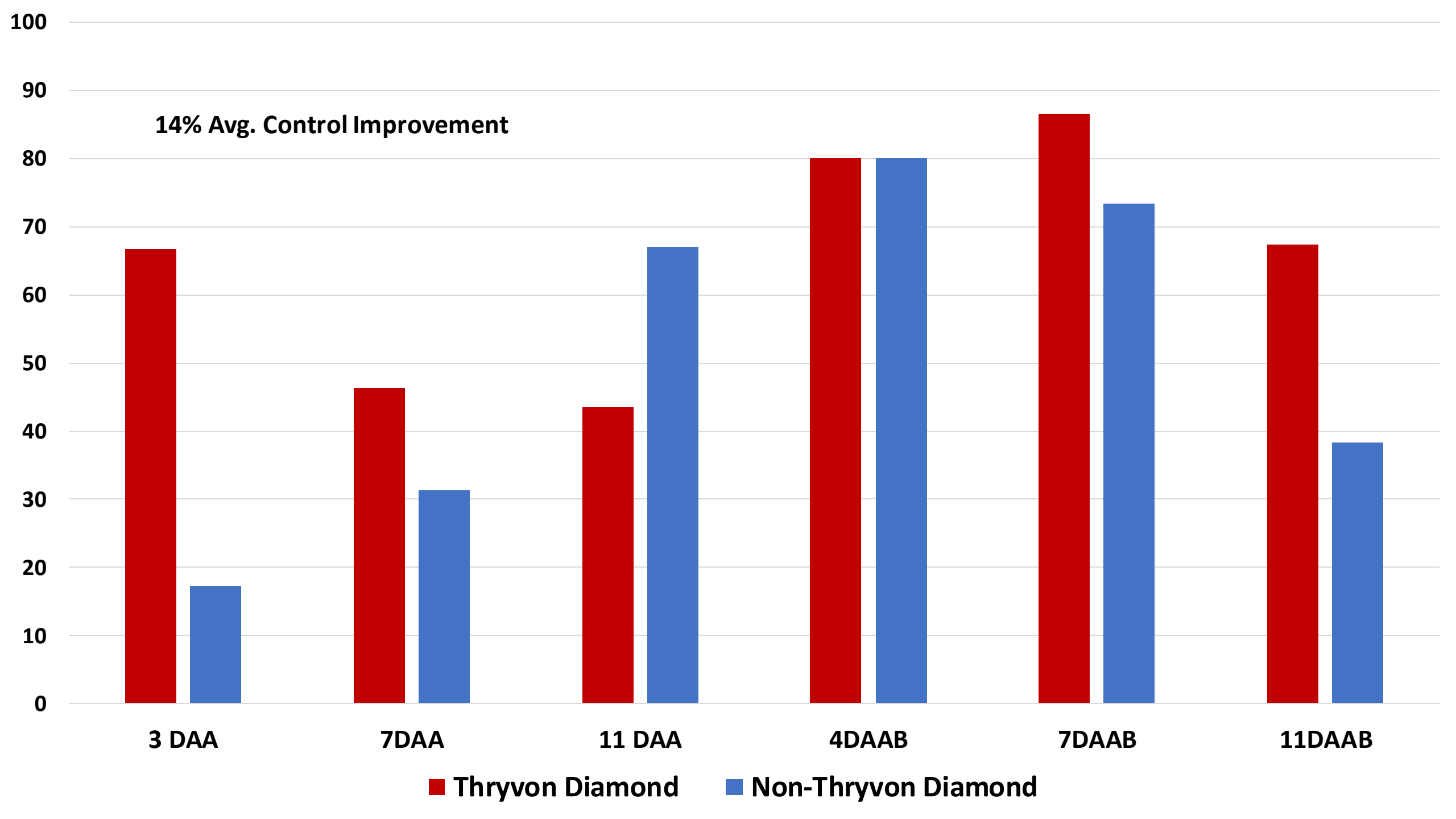




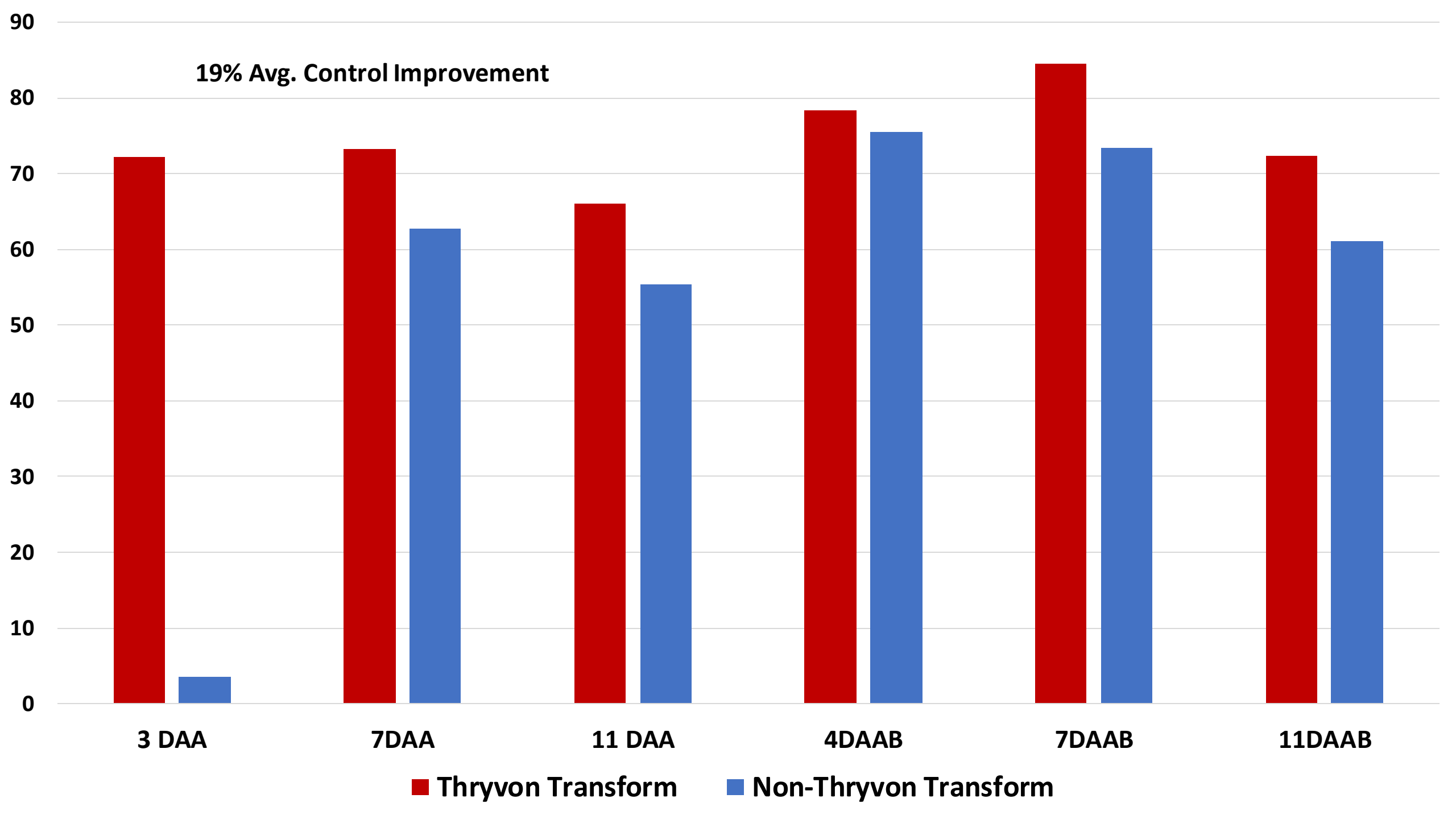
53% Avg. Control Improvement

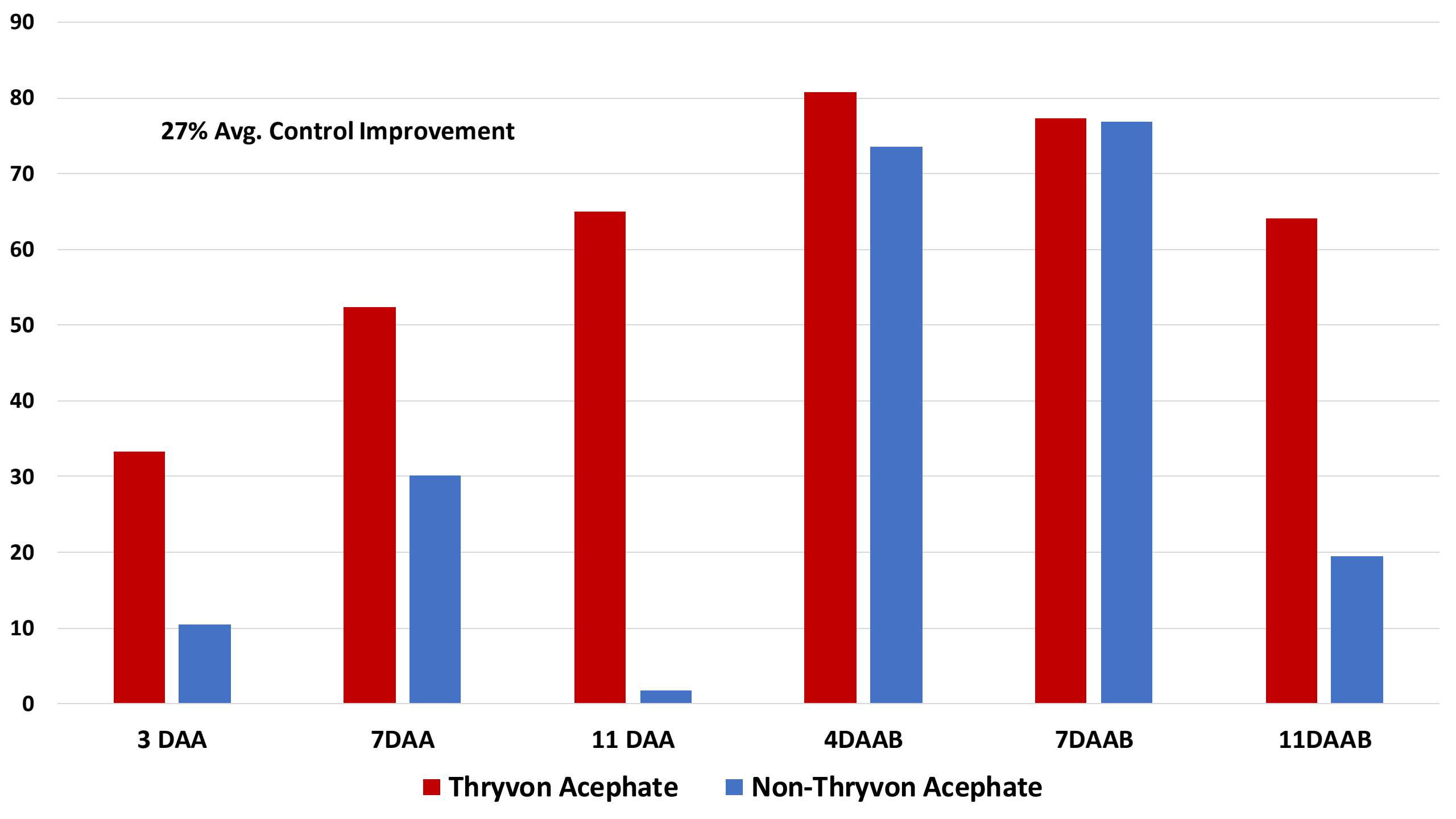


■ Thryvon Bifenthrin ■ Non-Thryvon Bifenthrin

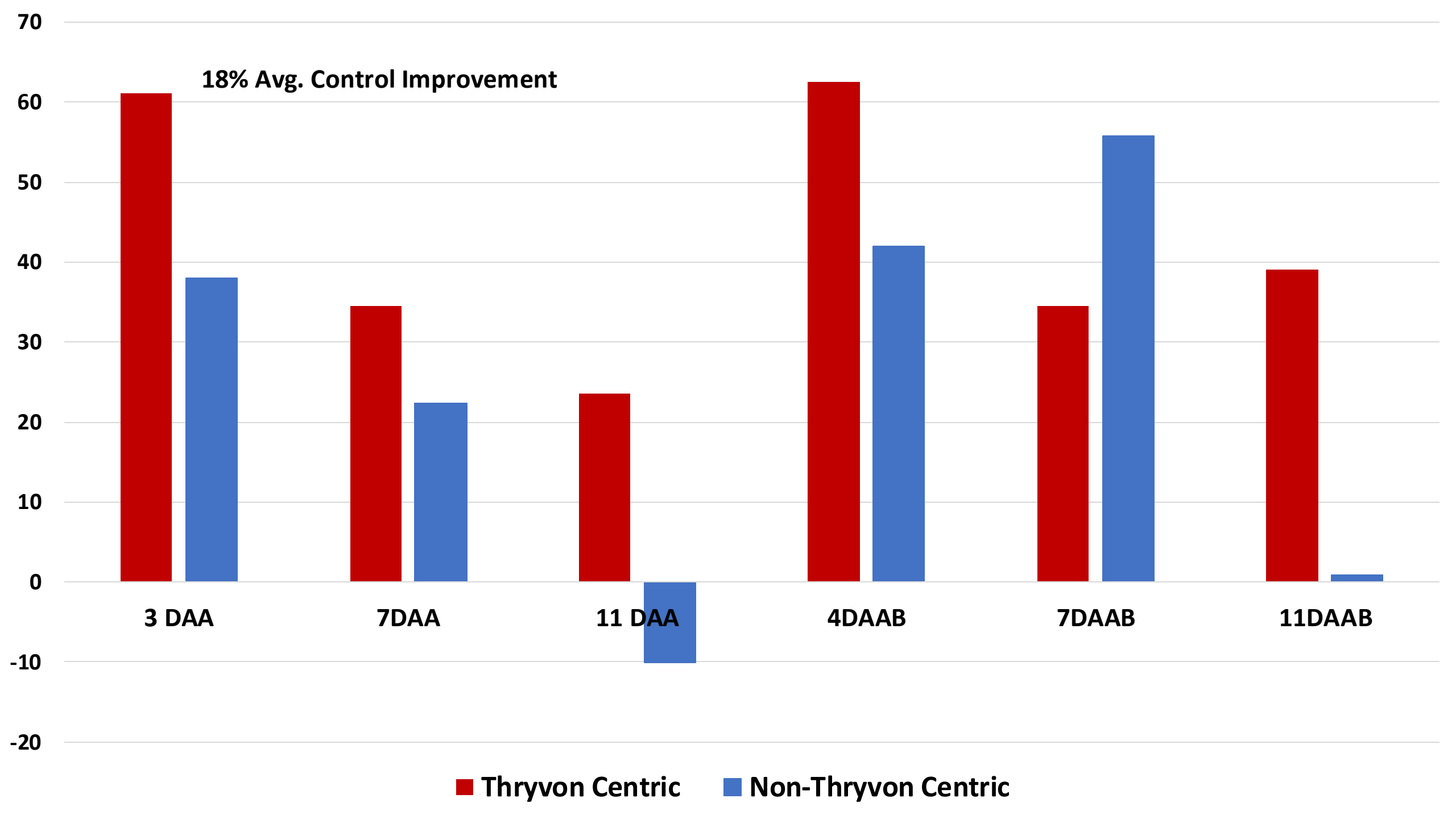


19% Avg. Control Improvement



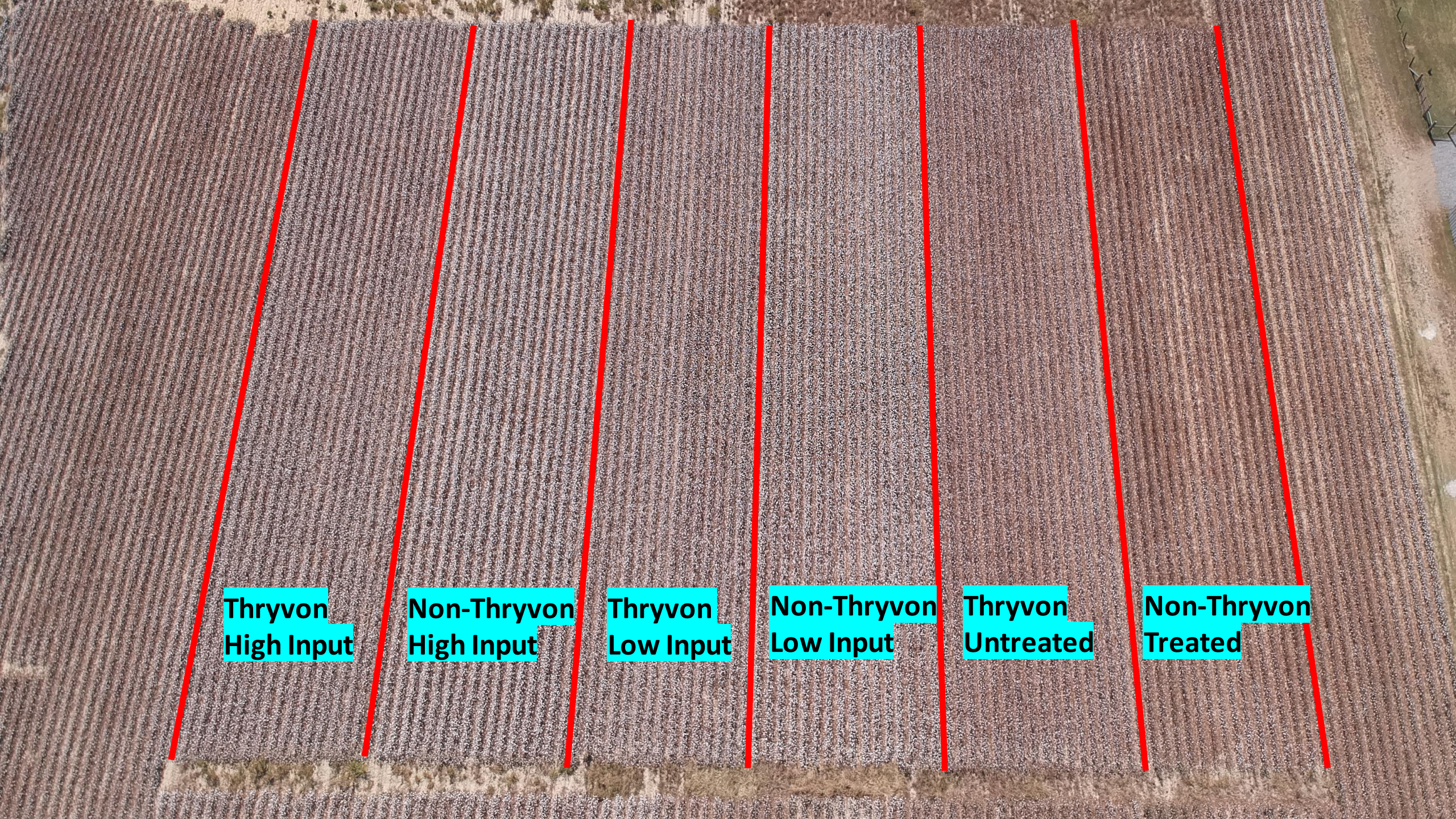


18% Avg. Control Improvement



An aerial photograph of a vast agricultural field, likely a cotton plantation, showing a dense grid of rows. The field is divided into several rectangular sections by narrow paths or roads. The central part of the image is overlaid with a semi-transparent grey rectangle containing the text "Where should I place my Thryvon cotton?".

Where should I place my Thryvon cotton?



**Thryvon
High Input**

**Non-Thryvon
High Input**

**Thryvon
Low Input**

**Non-Thryvon
Low Input**

**Thryvon
Untreated**

**Non-Thryvon
Treated**

Tillar

	July 6 3rd wk sq	12-Jul	19-Jul	26-Jul	4-Aug	11-Aug	Total
Thryvon High Input	2.5 oz Centric + Diamond 6 oz	1.5 oz Transform			Bidrin 0.5 lb + Bifenthrin 6.4 oz		3
NonThryvon High Input	2.5 oz Centric + Diamond 6 oz	1.5 oz Transform	Bidrin 0.5 oz + Diamond 6 oz	Transform 2 oz		1 lb Acenthrin	5
Thryvon Low Input		Imidacloprid 2 oz + Bifenthrin 6.4 oz	Acephate 0.75 lb + Bifenthrin 6.4 oz				2
NonThryvon Low Input	Imidacloprid 2 oz	Imidacloprid 2 oz + Bifenthrin 6.4 oz	Acephate 0.75 lb + Bifenthrin 6.4 oz	Acephate 0.75 lb + Bifenthrin 6.4 oz			4
Thryvon Untreated							0
NonThryvon Untreated							0

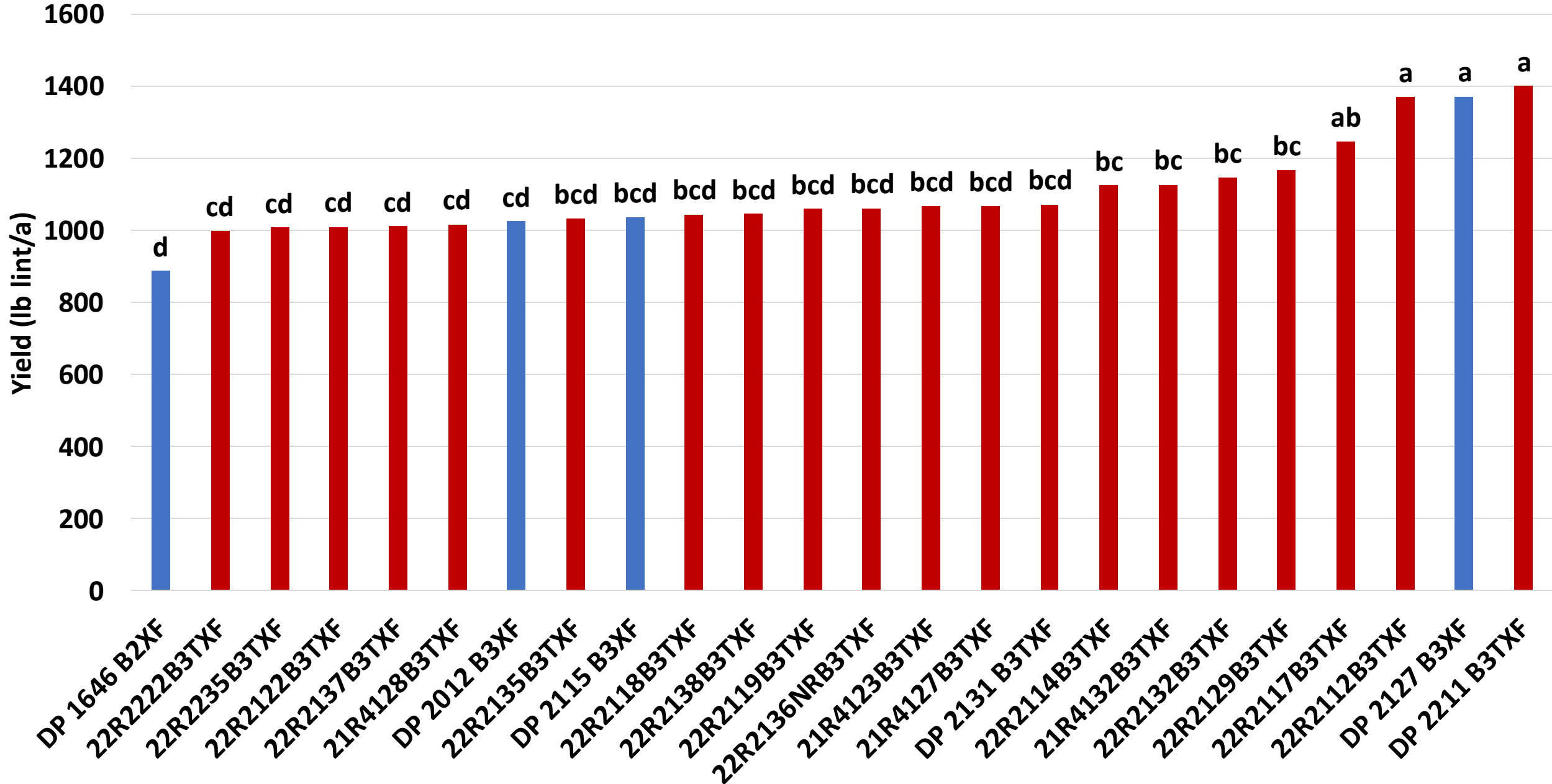
Marianna

	Total Apps	Yield
Thryvon High Input	2	1166
NonThryvon High Input	7	1335
Thryvon Low Input	2	1126
NonThryvon Low Input	6	1202
Thryvon Untreated	0	793
NonThryvon Untreated	0	371

Tillar

	Total	Yield
Thryvon High Input	3	1139
NonThryvon High Input	5	1055
Thryvon Low Input	2	1108
NonThryvon Low Input	4	1003
Thryvon Untreated	0	850
NonThryvon Untreated	0	490

Thryvon Variety Trial





Takeaways

- Roughly a 30% reduction nymphs seen
- Lose about half as many squares per plant bug as normal
- Insecticides overall performed better in Thryvon cotton
 - The best insecticides in conventional cotton are still the best in Thryvon
- Good technology, manage your expectations
 - You will likely still have to spray, but you don't have to be as timely
 - Continue with the normal threshold...for now
- Where to place limited acres?
 - The back 40
 - High pressure areas
- Pick variety first, technology second



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