

Bayer Peanut Meeting Savannah, 2017

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Add data on Provost??

Peanut Root Knot Nematode



Nematode Management Options

Grow favorite, high-yield peanut (GA-06G)
and use nematicides to reduce losses

OR

Grow a nematode-resistant cultivar
(Tifguard, GA-14N or TifNV-HighO/L)

Which option gives the best economic return?

Nematode resistance is awesome in
“Nuclear” sites – most commercial
fields have lower pressure



Nematicide Options

Pre-plant Fumigant

1. Telone (\$80 / A)

At Plant Treatment

1. Velum Total, 18 fl oz (\$34 / A)
2. AgLogic 15G, 7 lb/A (\$45 / A)

Pegging

1. AgLogic 15G, 10 lb/A (\$65 / A)
2. Propulse 13.7 fl oz (\$45 / A)

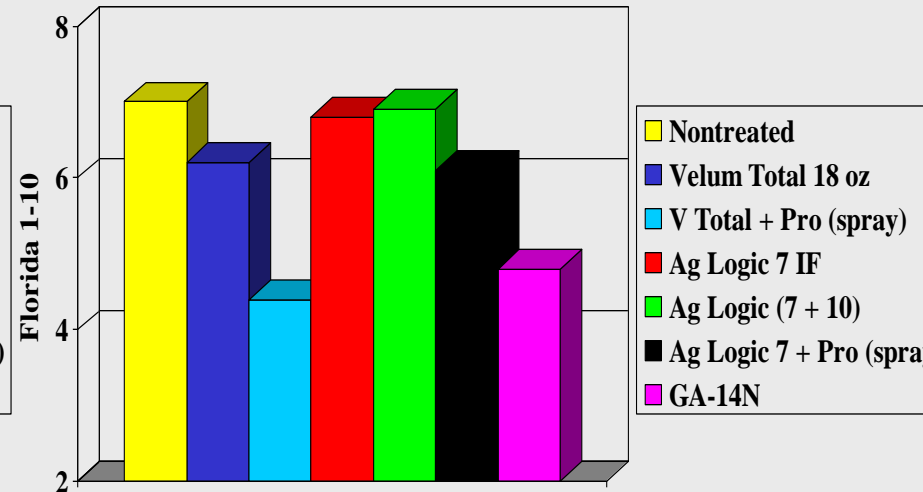
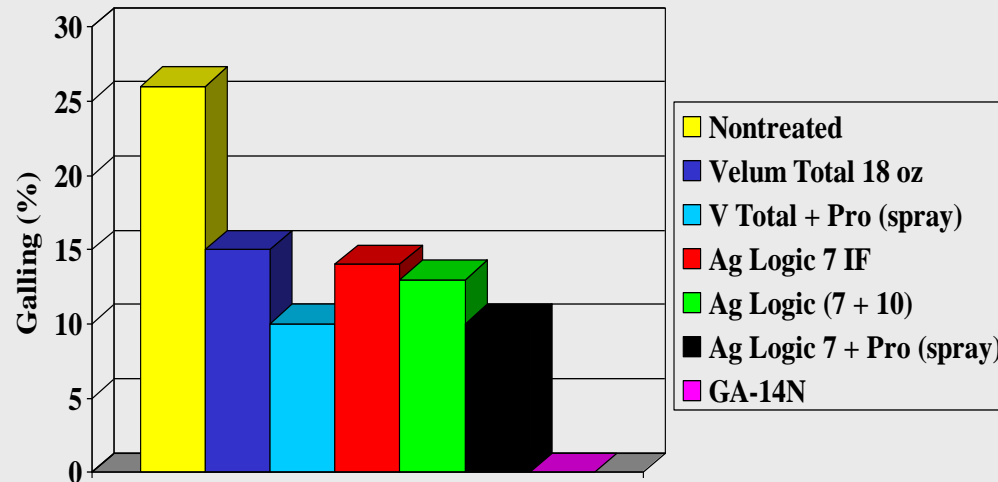
(Timing, wash off, disease control, etc.)

Bayer Nematode Management Test 3, 2017

(Ratings at Harvest)

Root/Pod Galling (LSD = 6.3)

Leaf spot (LSD = 0.8)

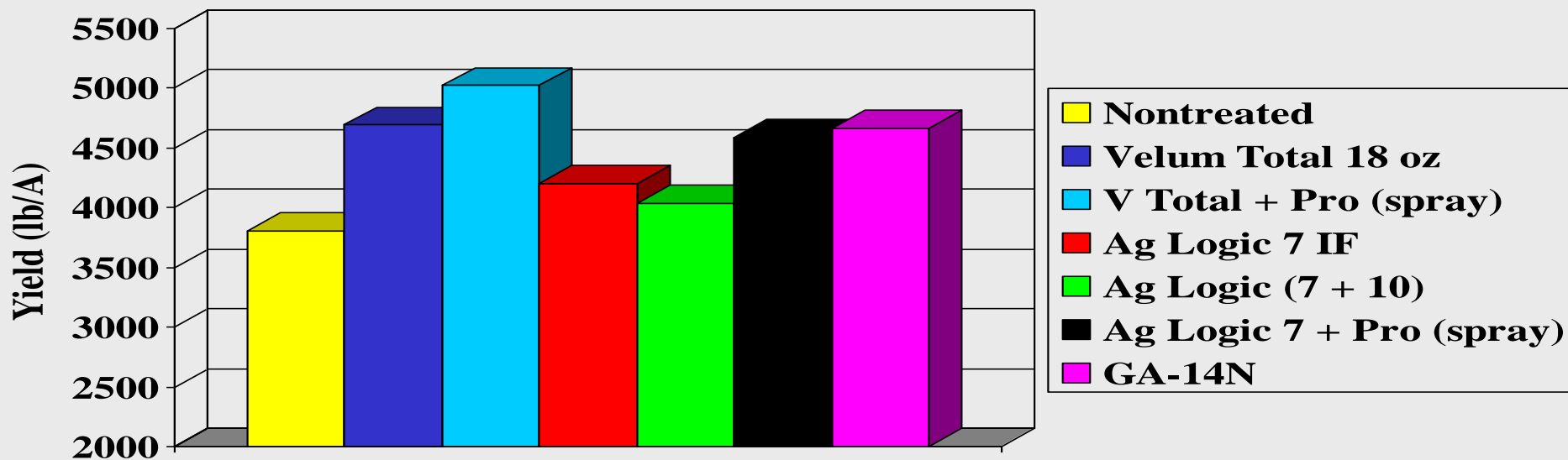


Pro = Propulse (13.7 oz) sprayed & watered in at 50 DAP.

Ag Logic applied in furrow (7 lb/A) and/or banded (10 lb/A) at 60 DAP.

Bayer Nematode Management Test 3, 2017

(Yield, LSD=988)



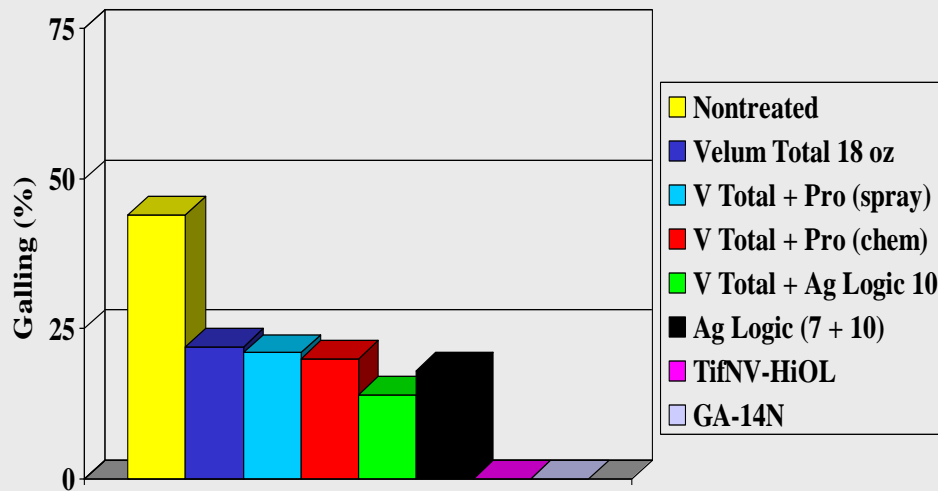
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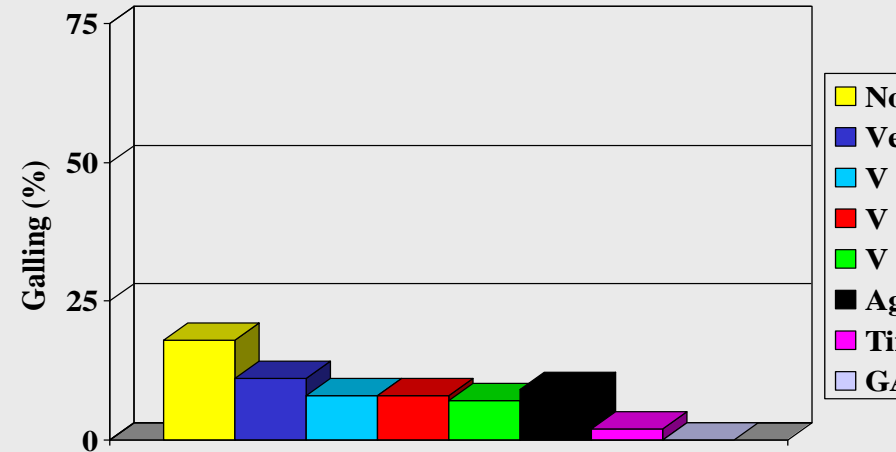
Nematode Management Tests, 2017

(Root Galling at harvest)

Test I (LSD = 13)



Test II (LSD = 5)

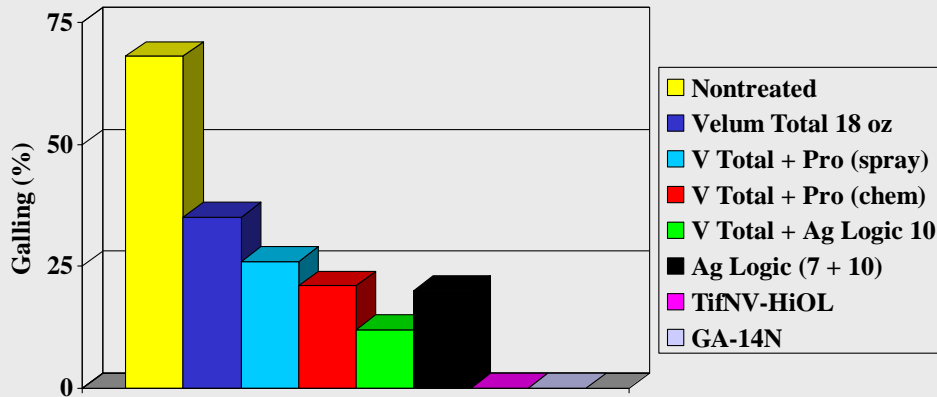


Pro = Propulse (13.7 oz) chemigated or sprayed & watered in at 60 DAP.
 Ag Logic applied in furrow (7 lb/A) and/or banded (10 lb/A) at 60 DAP.

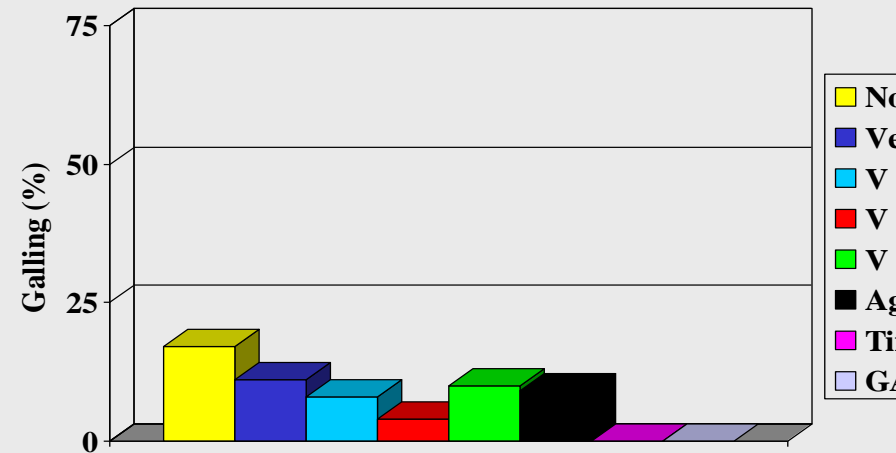
Nematode Management Tests, 2017

(Pod Galling at harvest)

Test I (LSD = 18)



Test II (LSD = 3)

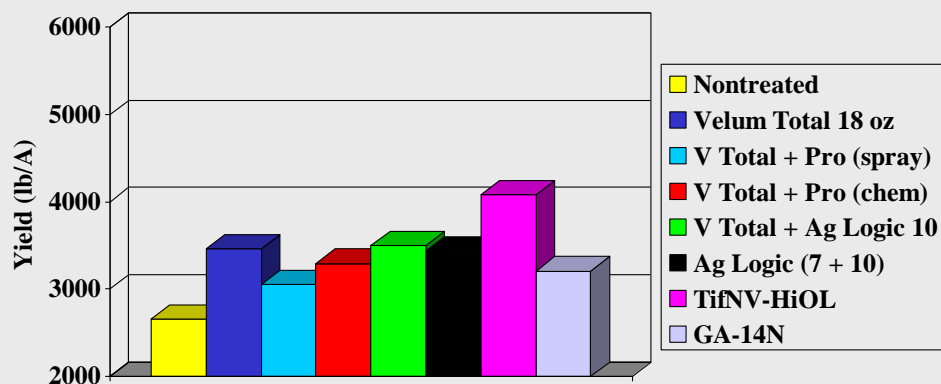


Pro = Propulse (13.7 oz) chemigated or sprayed & watered in at 60 DAP.
 Ag Logic applied in furrow (7 lb/A) and/or banded (10 lb/A) at 60 DAP.

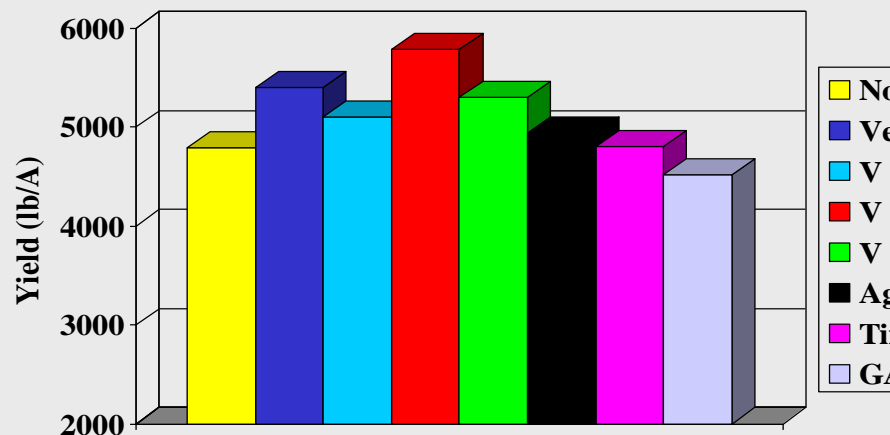
Nematode Management Tests, 2017

(Pod Yield)

Test I (LSD = 742)



Test II (LSD = 740)



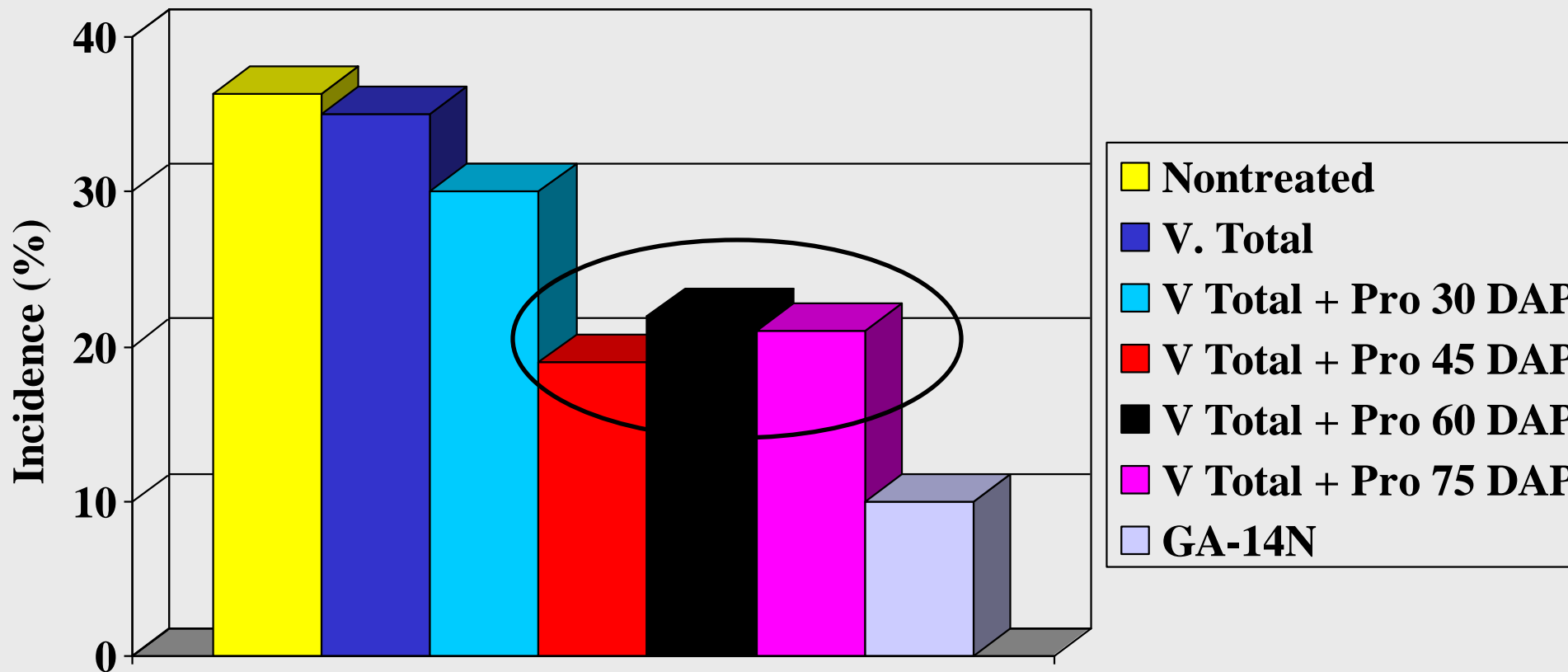
Pro = Propulse (13.7 oz) chemigated or sprayed & watered in at 60 DAP.
 Ag Logic applied in furrow (7 lb/A) and/or banded (10 lb/A) at 60 DAP.
 NOTE – All plots coversprayed for white mold and leaf spot

Key Questions for Propulse

- **Timing of “pegging” application to optimize disease and nematode benefits**
- How soon is wash of needed for foliar sprays?

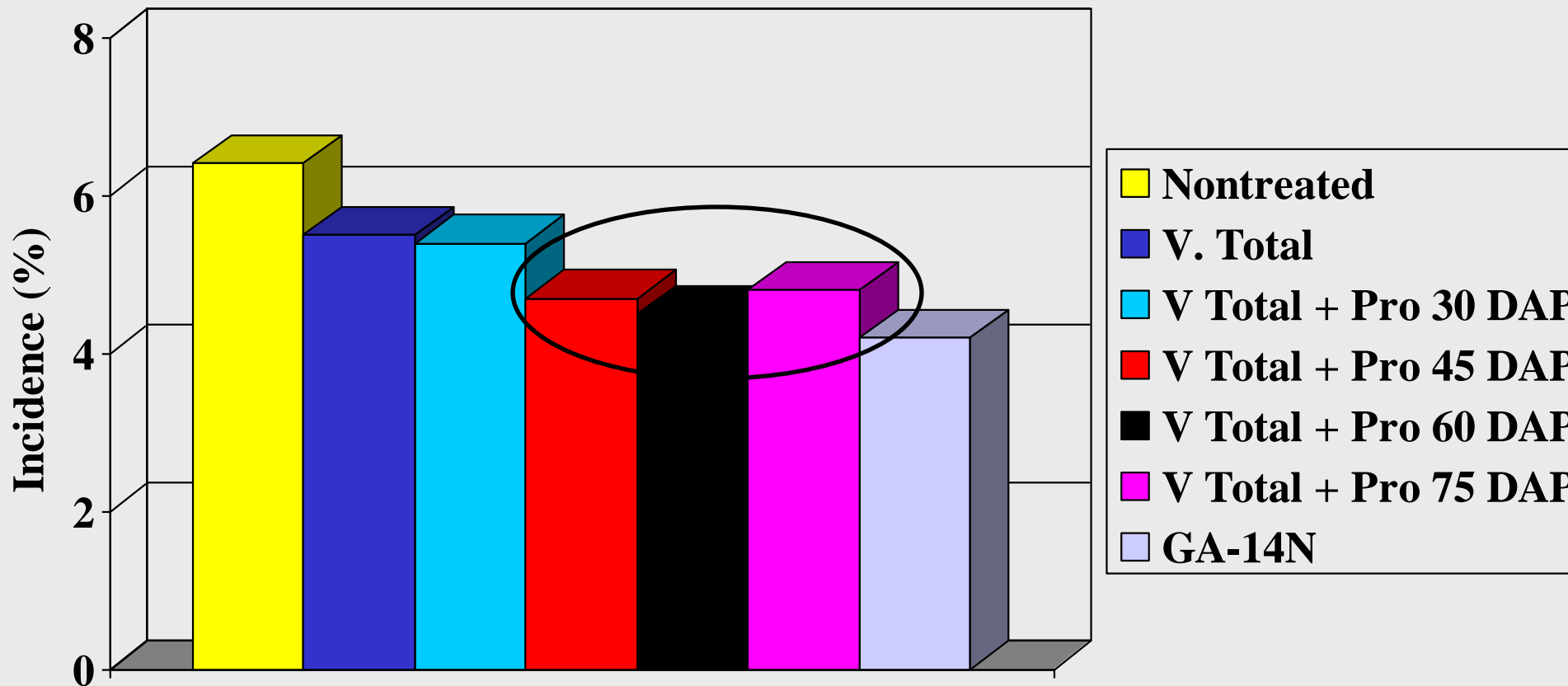
Timing Propulse Applications, 2017 (White Mold at Digging)

(LSD = 9.9)



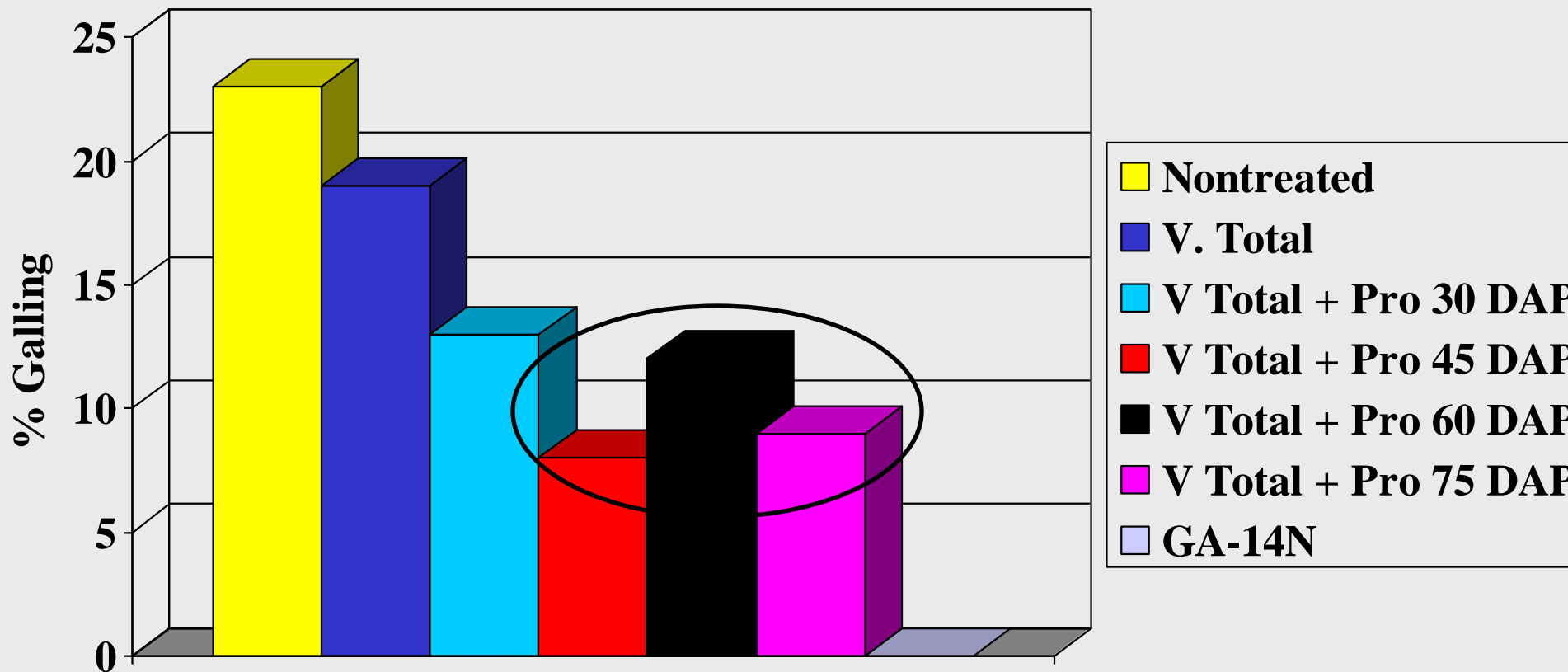
Timing Propulse Applications, 2017 (Leaf Spot at Digging)

(LSD = 0.6)



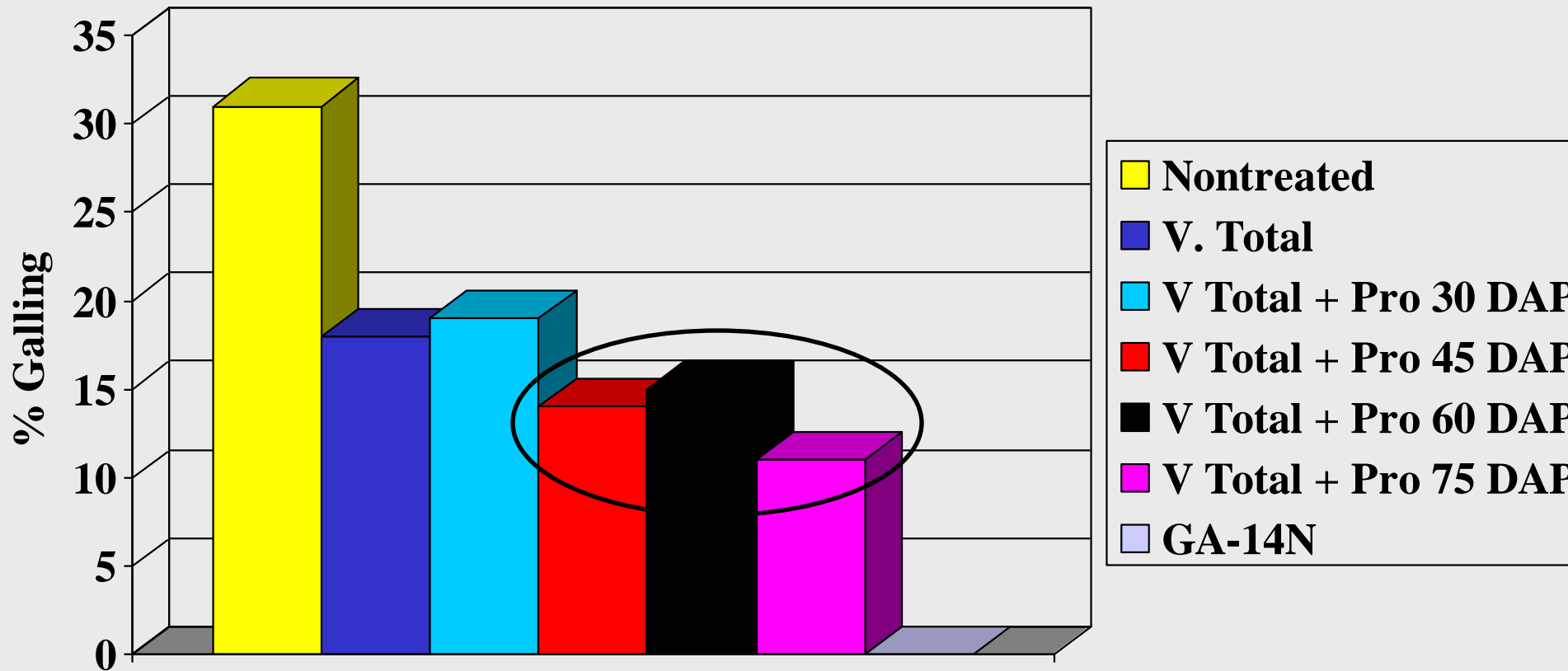
Timing Propulse Applications, 2017 (Pod Galling at Digging)

(LSD = 6.5)



Timing Propulse Applications, 2017 (Root Galling at Digging)

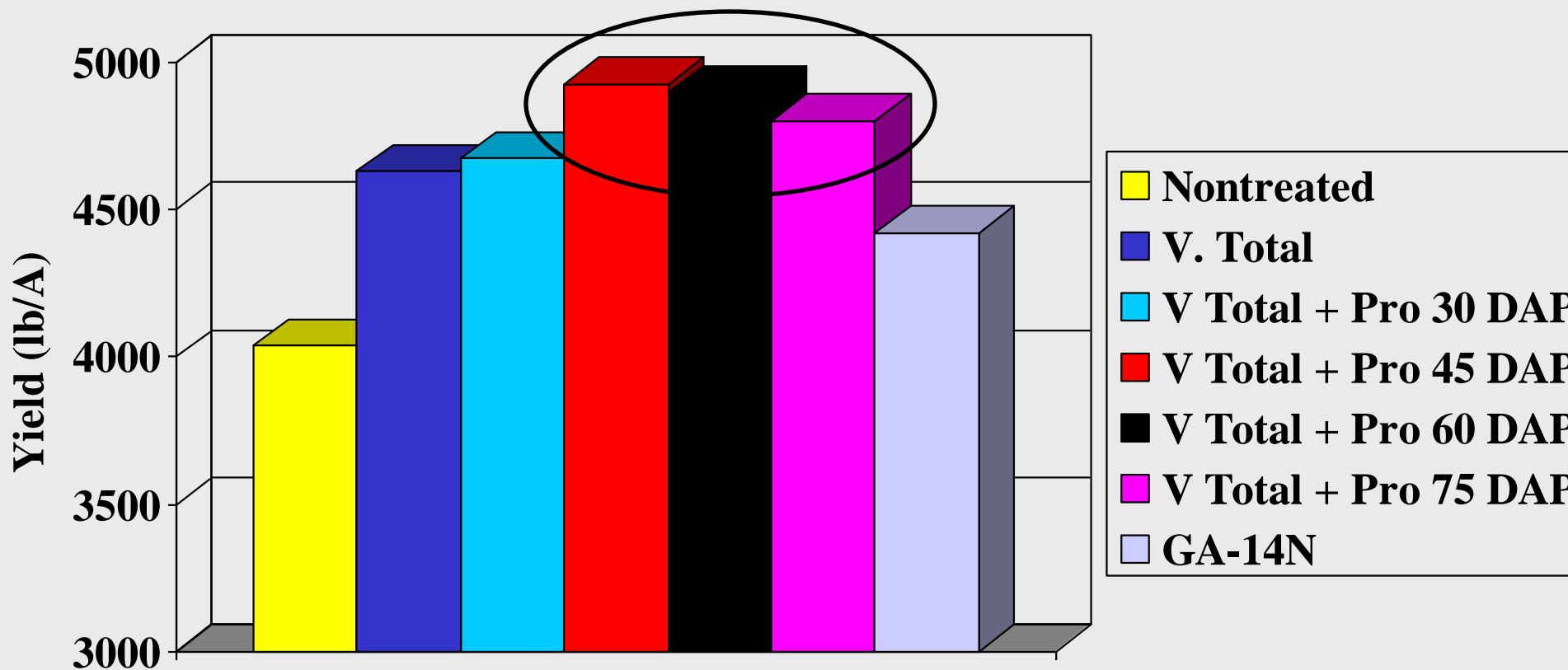
(LSD = 6.5)



Timing Propulse Applications, 2017

(Yield)

(LSD = 630)

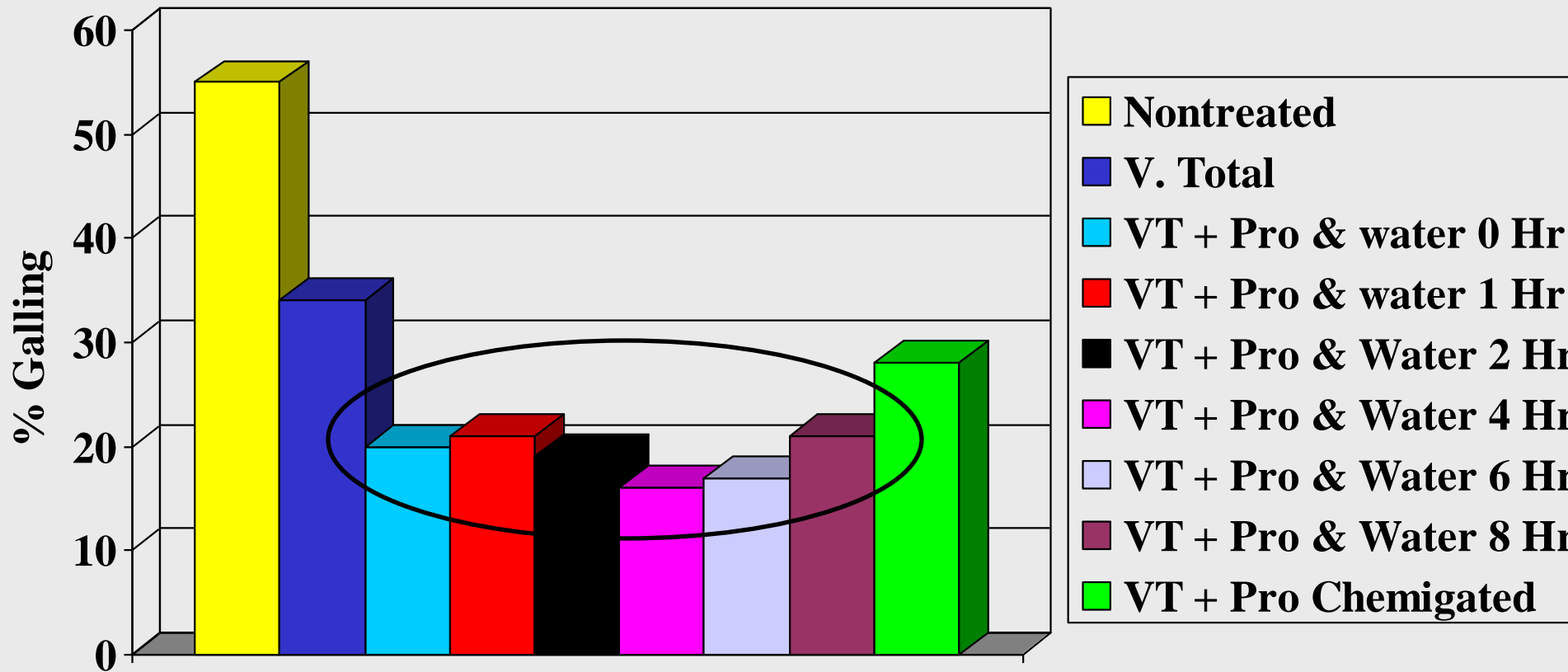


Key Questions for Propulse

- Timing of “pegging” application to optimize disease and nematode benefits
- **How soon is wash off needed for foliar sprays to obtain control of nematodes and white mold?**

Irrigation Timing for Propulse, 2017 (Pod Galling at Digging)

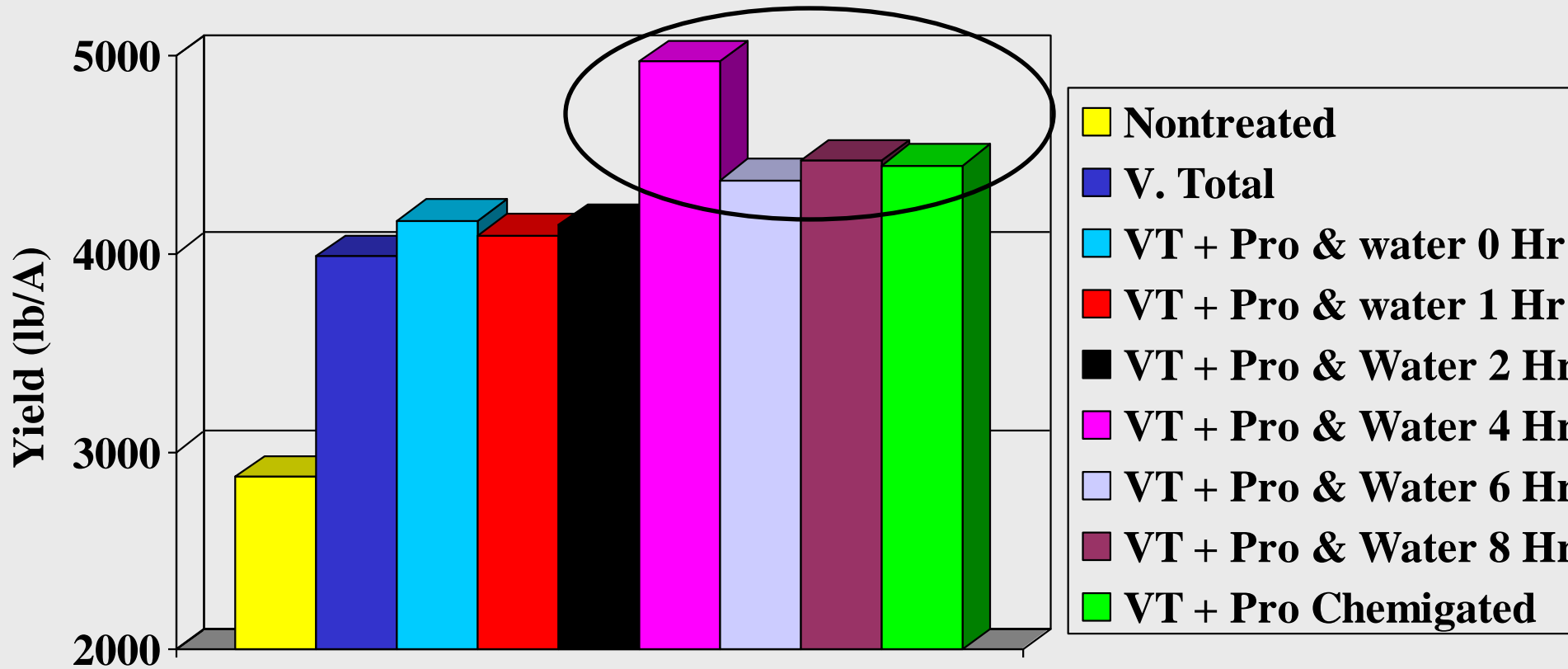
(LSD = 11.4)



Irrigation Timing for Propulse, 2017

(Yield)

(LSD = 1127)



Conclusions

- In furrow treatments reduced root galling
- Propulse is more effective on pod galling than roots. It also reduces leaf spot and white mold, and wash off anytime in first 8 hours was similar to chemigation
- Mid season (≥ 45 DAP) timing of Propulse will optimize benefits for diseases and nematodes (versus 30 DAP)
- GA-06G w/ nematicides can yield similar to resistant lines, but what about net return?

On Farm Trial (Decatur Co., 2017)

Returned to the scene of the crime!

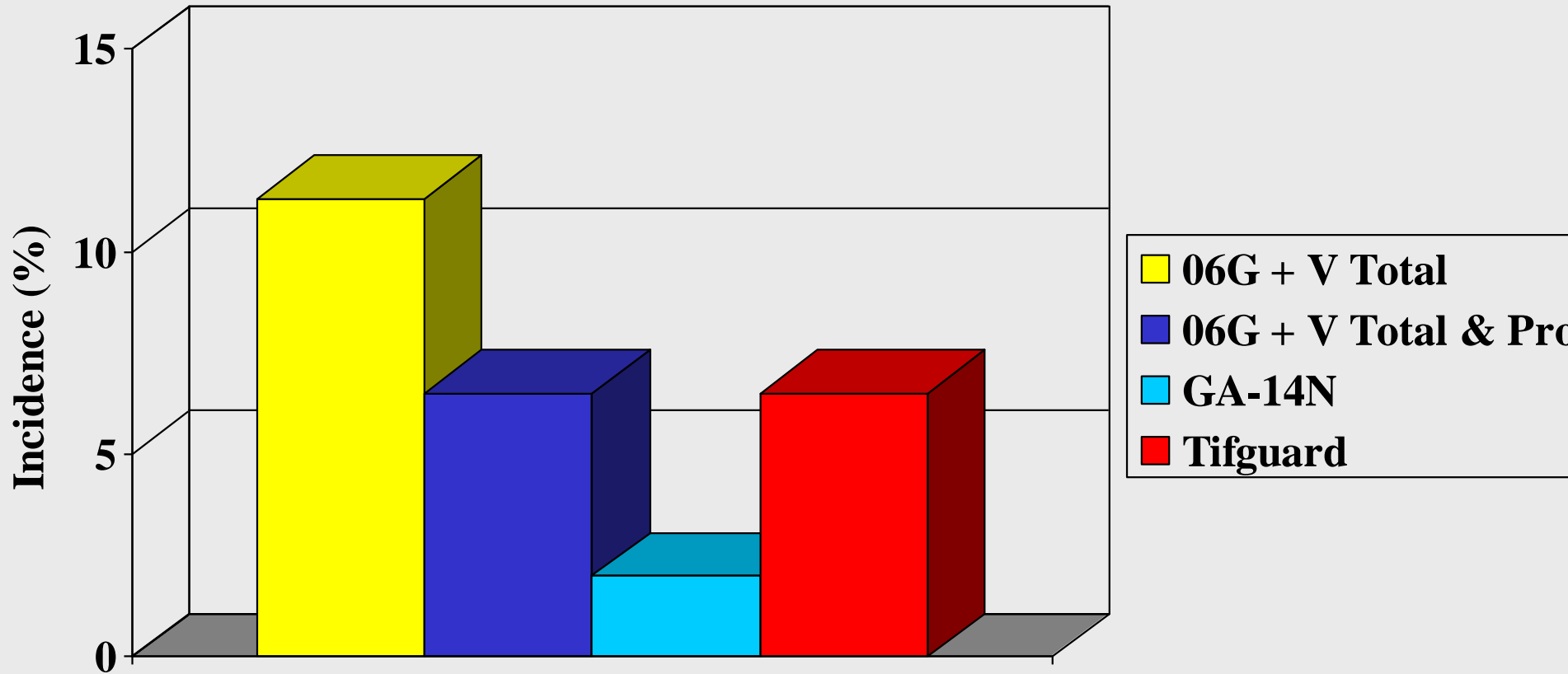


GA-06G w/ V. Total, 2016, but low nematode pressure in 2017 (600 ft plots X 3 beds wide)

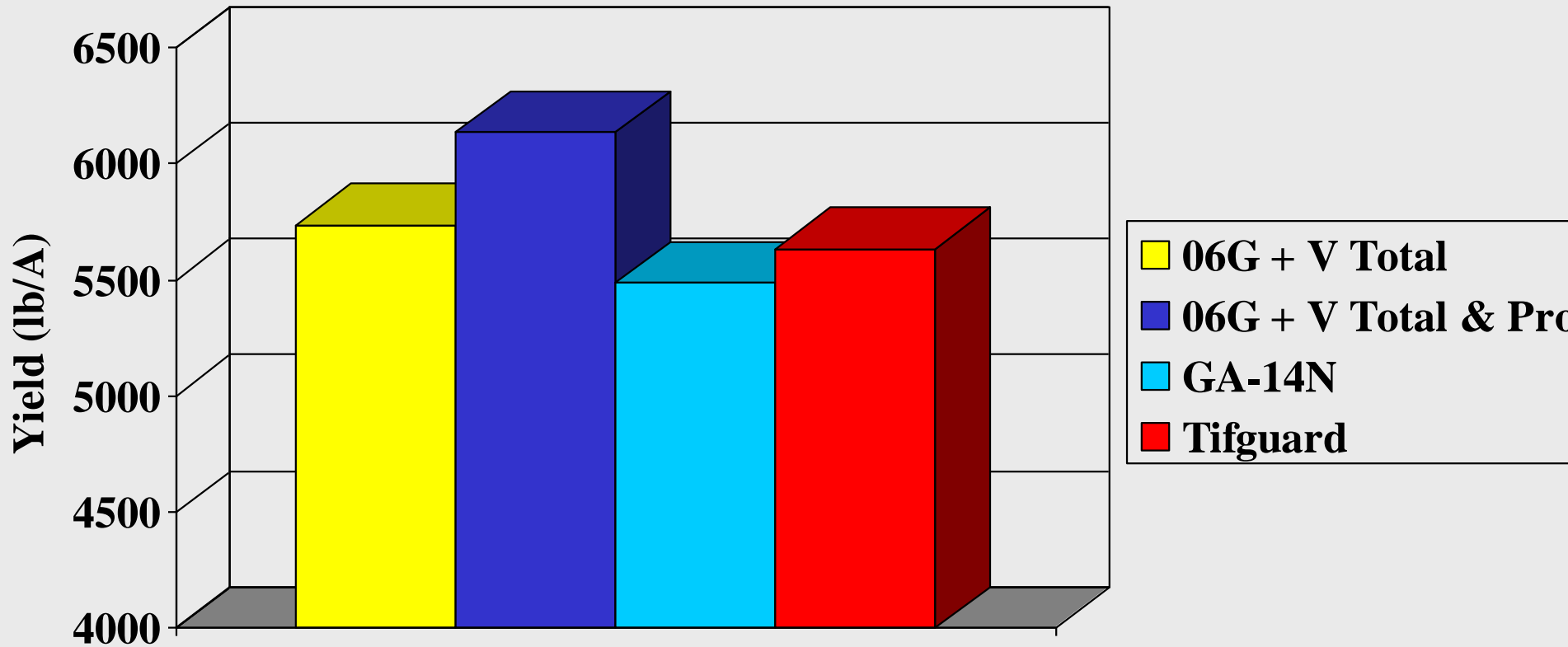


Decatur County On-Farm Trial, (White Mold at Digging)

(LSD = 2.3)



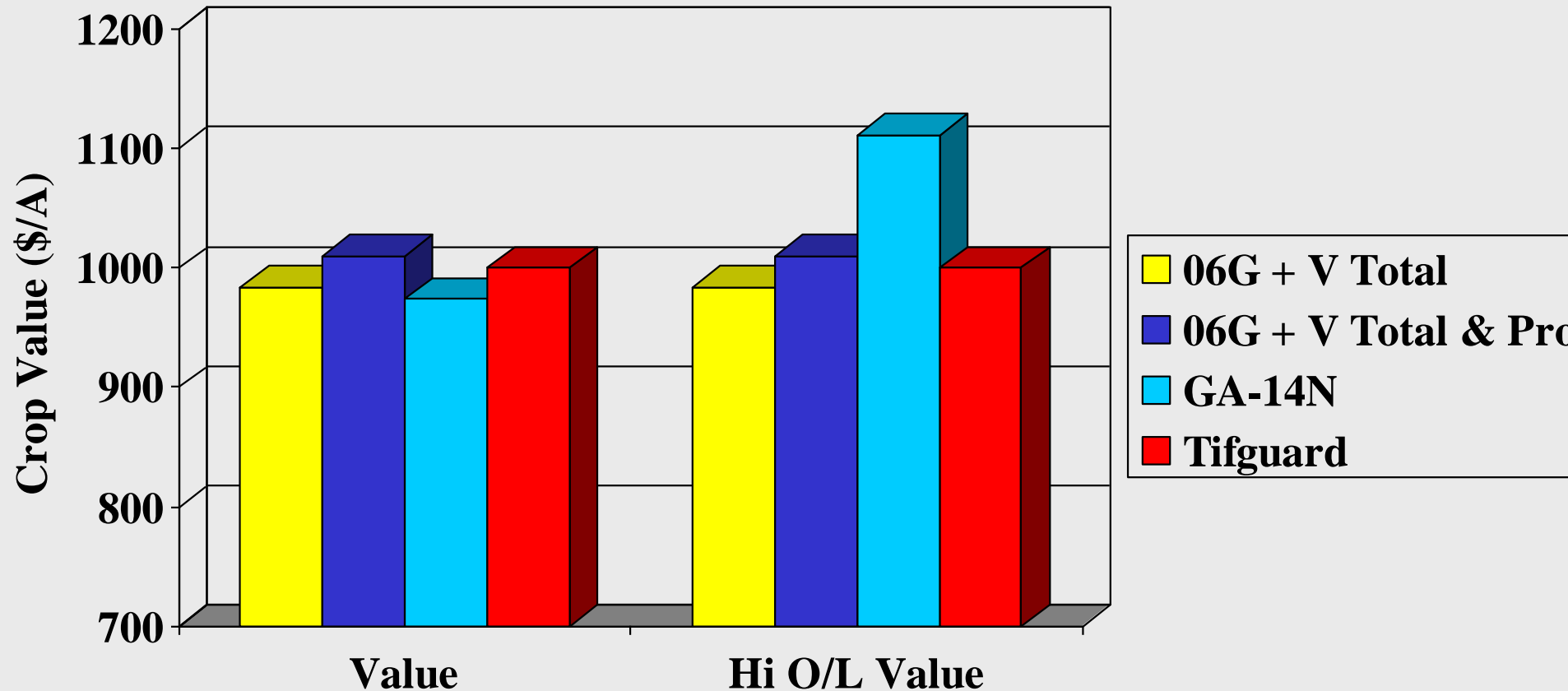
Decatur County On-Farm Trial, (Pod Yield) (LSD = 152)



Decatur County On-Farm Trial, 2017

(Crop Value Based on Yield and Grade*)

(LSD = n.s.)



* Value of crop minus cost of V. Total and Propulse