

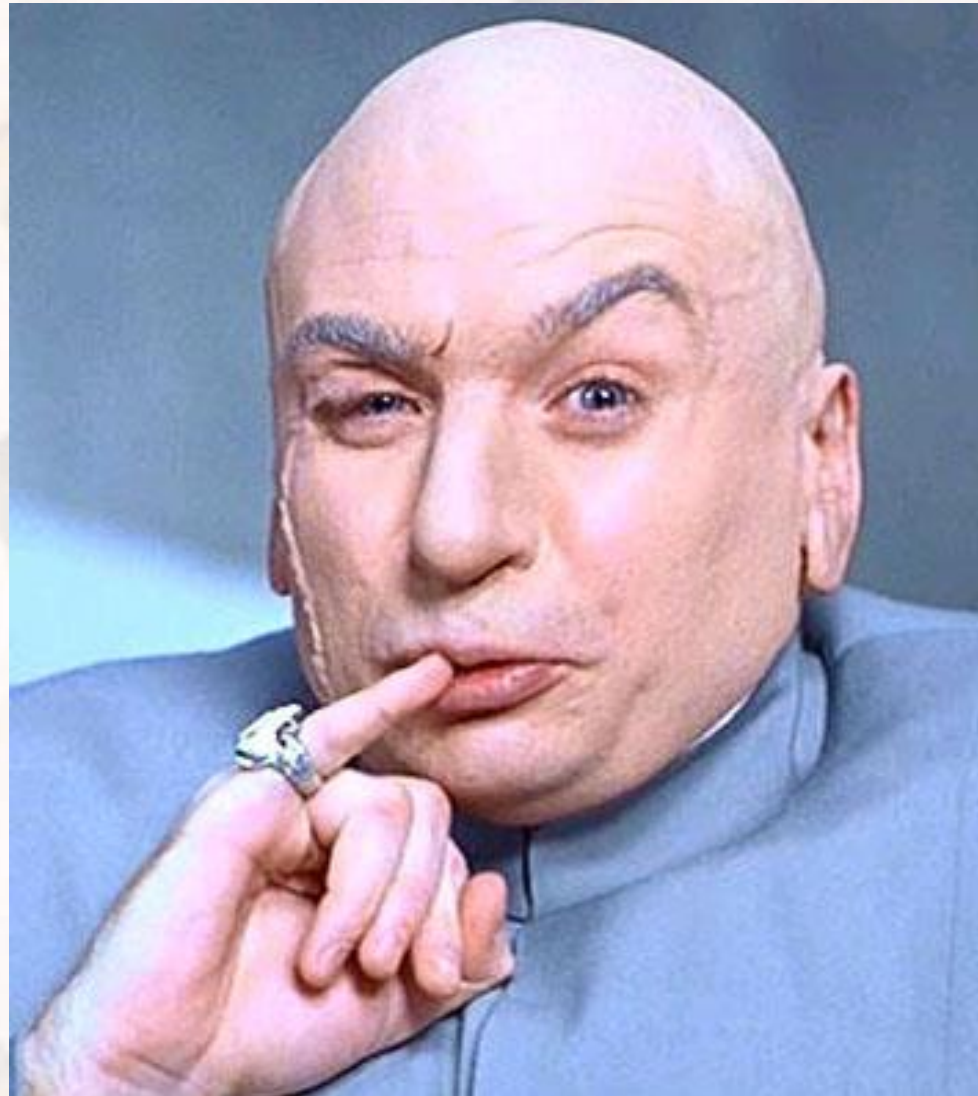


Peanut Weed Control Update - 2015

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Department of Crop & Soil Sciences



It Ain't Always Herbicides





A Herbicide Problem??

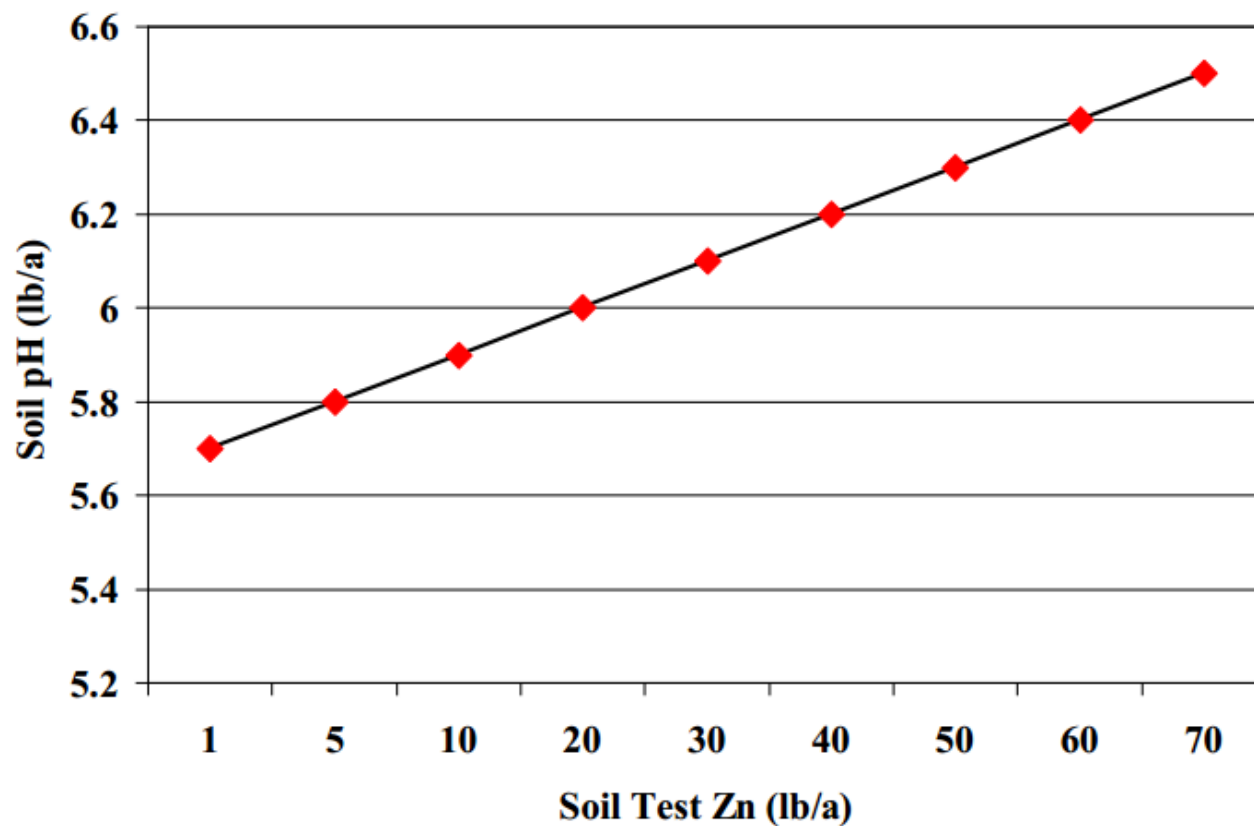




pH = 4.9
Zn = 46 lb/A

Figure 2. Relationship between pH and zinc availability. Maintain soil pH levels above the line to help avoid zinc toxicity.

Source: Davis-Carter, J. et al. 1991 Peanut Research Extension report



J-Rooting Peanuts – No Herbicides Applied GA-06G, Planted May 5, 2014, Pictures May 20





Starting Clean



- If you are getting ready to plant and get to the field and have pigweed > 6" tall
- Park the planter and sprayer
- **Go get your mower, disk, and/or bottom plow!!!!!!!**



Did you really start clean????
A disk may not be good enough!



Peanut Weed Control Programs (2014) – I

Valor + Strongarm + Prowl fb Cadre, Cobra, or Blazer



NTC



Prowl H₂O @ 34 oz/A - PRE
Valor @ 3 oz/A - PRE
Strongarm @ 0.23 oz/A - PRE

Cadre @ 4 oz/A - POST (36 DAP)
Dual Magnum @ 16 oz/A - POST (36 DAP)



Prowl H₂O @ 34 oz/A - PRE
Valor @ 3 oz/A - PRE
Strongarm @ 0.23 oz/A - PRE

Cobra @ 12.5 oz/A - POST (36 DAP)
Dual Magnum @ 16 oz/A - POST (36 DAP)
2,4-DB @ 18 oz/A - POST (36 DAP)



Prowl H₂O @ 34 oz/A - PRE
Valor @ 3 oz/A - PRE
Strongarm @ 0.23 oz/A - PRE

Ultra Blazer @ 24 oz/A - POST (36 DAP)
Dual Magnum @ 16 oz/A - POST (36 DAP)
2,4-DB @ 18 oz/A - POST (36 DAP)

Peanut Weed Control Programs (2014) – II

Prowl fb Gramoxone fb Cadre, Cobra, or Blazer



NTC



Prowl H₂O @ 34 oz/A – PRE

Gramoxone @ 12 oz/A – EPOST (22 DAP)
Storm @ 16 oz/A – EPOST (22 DAP)
Dual Magnum @ 16 oz/A – EPOST (22 DAP)

Cadre @ 4 oz/A – POST (36 DAP)
Dual Magnum @ 16 oz/A – POST (36 DAP)



Prowl H₂O @ 34 oz/A - PRE

Gramoxone @ 12 oz/A – EPOST (22 DAP)
Storm @ 16 oz/A – EPOST (22 DAP)
Dual Magnum @ 16 oz/A – EPOST (22 DAP)

Cobra @ 12.5 oz/A – POST (36 DAP)
Dual Magnum @ 16 oz/A – POST (36 DAP)
2,4-DB @ 18 oz/A – POST (36 DAP)



Prowl H₂O @ 34 oz/A - PRE

Gramoxone @ 12 oz/A – EPOST (22 DAP)
Storm @ 16 oz/A – EPOST (22 DAP)
Dual Magnum @ 16 oz/A – EPOST (22 DAP)

Ultra Blazer @ 24 oz/A – POST (36 DAP)
Dual Magnum @ 16 oz/A – POST (36 DAP)
2,4-DB @ 18 oz/A – POST (36 DAP)

Peanut Weed Control Programs Without Valor - 2014



NTC



Prowl H₂O @ 32 oz/A (PRE)
Gramoxone @ 12 oz/A (17 DAP)
Storm @ 16 oz/A (17 DAP)
Dual Magnum @ 16 oz/A (17 DAP)
Cadre @ 4 oz/A (39 DAP)
Dual Magnum @ 16 oz/A (39 DAP)



Prowl H₂O @ 32 oz/A (PRE)
Gramoxone @ 12 oz/A (17 DAP)
Storm @ 16 oz/A (17 DAP)
Warrant @ 48 oz/A (17 DAP)
NIS @ 0.25% v/v (17 DAP)
Cadre @ 4 oz/A (39 DAP)
Warrant @ 48 oz/A (39 DAP)
NIS @ 0.25% v/v (39 DAP)



Warrant Label Change (Hopefully?)

- **Old Label**

- *Warrant may be applied postemergence to peanut at 1.25 to 2 quarts per acre after crop emergence and before flowering.*

- **Proposed New Label?**

- *Warrant may be applied postemergence to peanut at 1.25 to 2 quarts per acre after crop emergence up through the R1 growth stage (beginning bloom). R1 ends as 50% of the plants in an area have a visible peg (R2).*

Treatments applied 6 DAC; Photo at 3 DAT
GA-02C



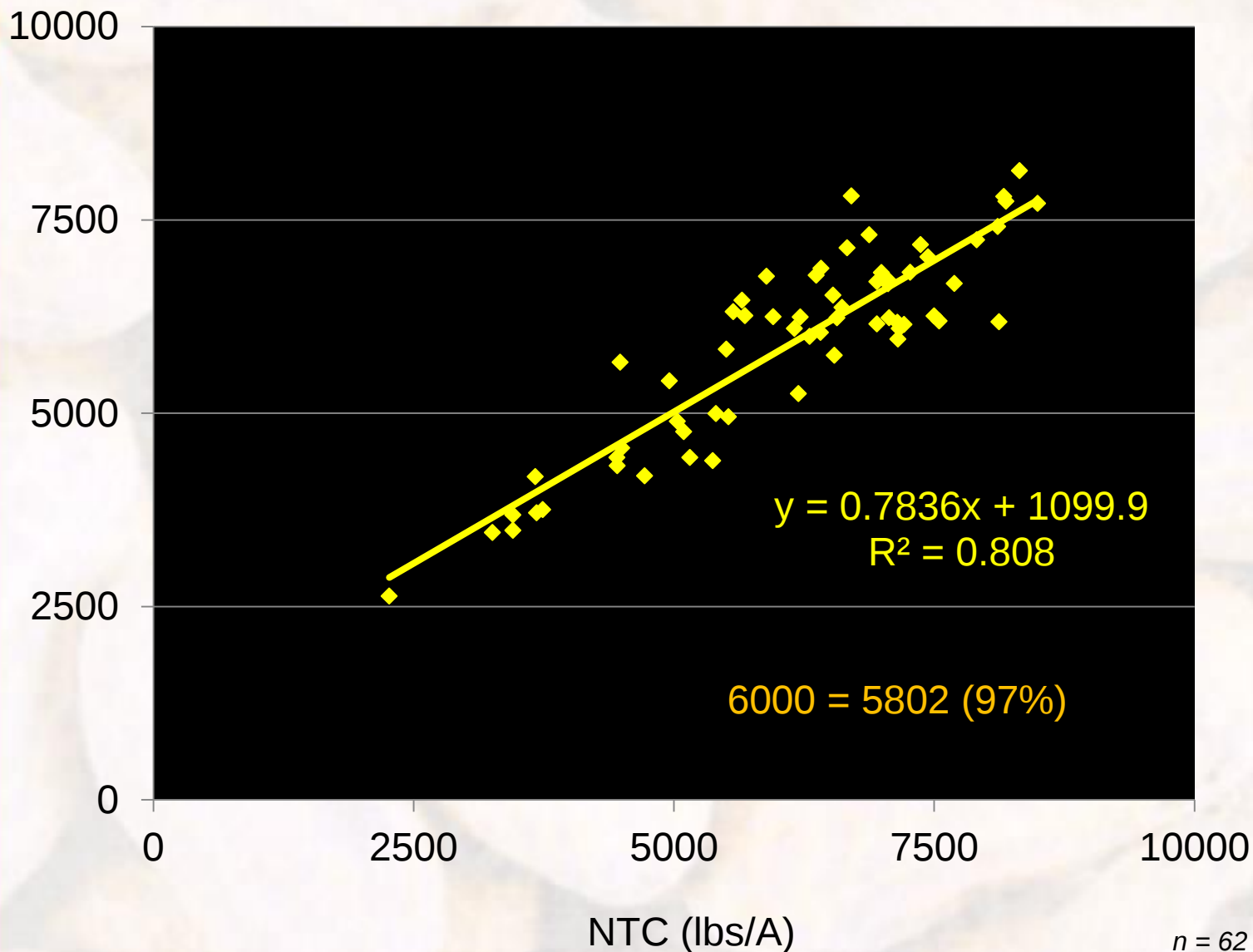
GI @ 8 oz/A +
NIS @ 0.25% v/v

GI @ 12 oz/A + Basagran @ 8 oz/A +
NIS @ 0.25% v/v



A Comparison of Irrigated Weed-Free Peanut Yields Between NTC and Gramoxone (12 oz/A) + Storm (16 oz/A) + Dual Magnum (16-21 oz/A) Treatments in Georgia, 2011-2014.

G + S + DM
(lbs/A)

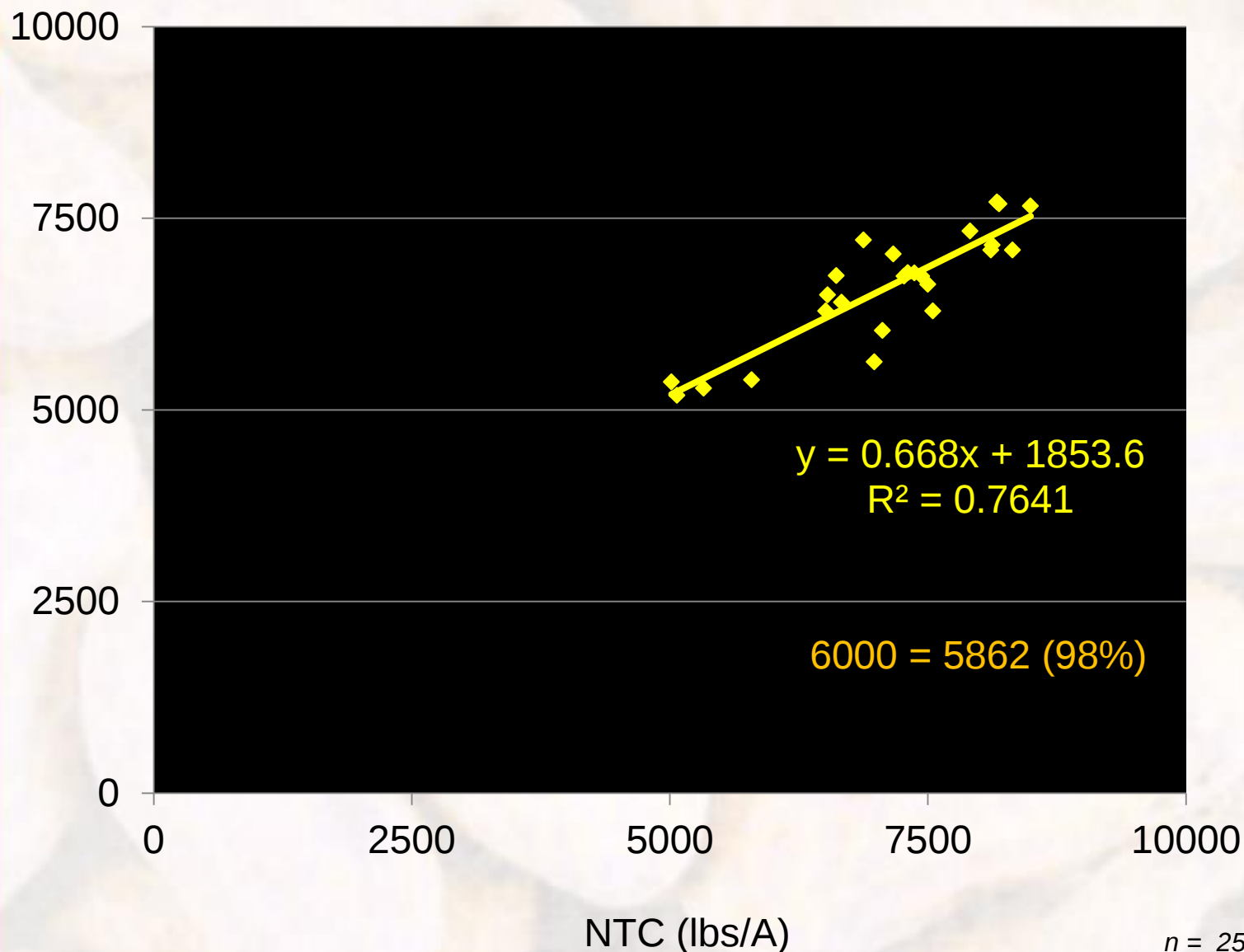


PEA01-11 (GA-06G)
PEA01-12 (GA-06G)
PE-20-11 (GA-06G)
PE-01-12 (GA-06G)
PE-17-12 (GA-06G)
PE-02-13 (GA-06G)
PE-02B-13 (GA-09B)
PE-12-13 (GA-06G)
PE-13-13 (GA-06G)
PE-06-14 (GA-06G)
PE-06-14 (GA-09B)
PE-08-14 (GA-12Y)



A Comparison of Irrigated Weed-Free Peanut Yields Between
NTC and Gramoxone (12 oz/A) + Storm (16 oz/A) + Dual
Magnum (16 oz/A) fb Cadre (4 oz/A) + Dual Magnum (16 oz/A)
Treatments in Georgia, 2012-2014.

G + S + DM fb C + DM
(lbs/A)



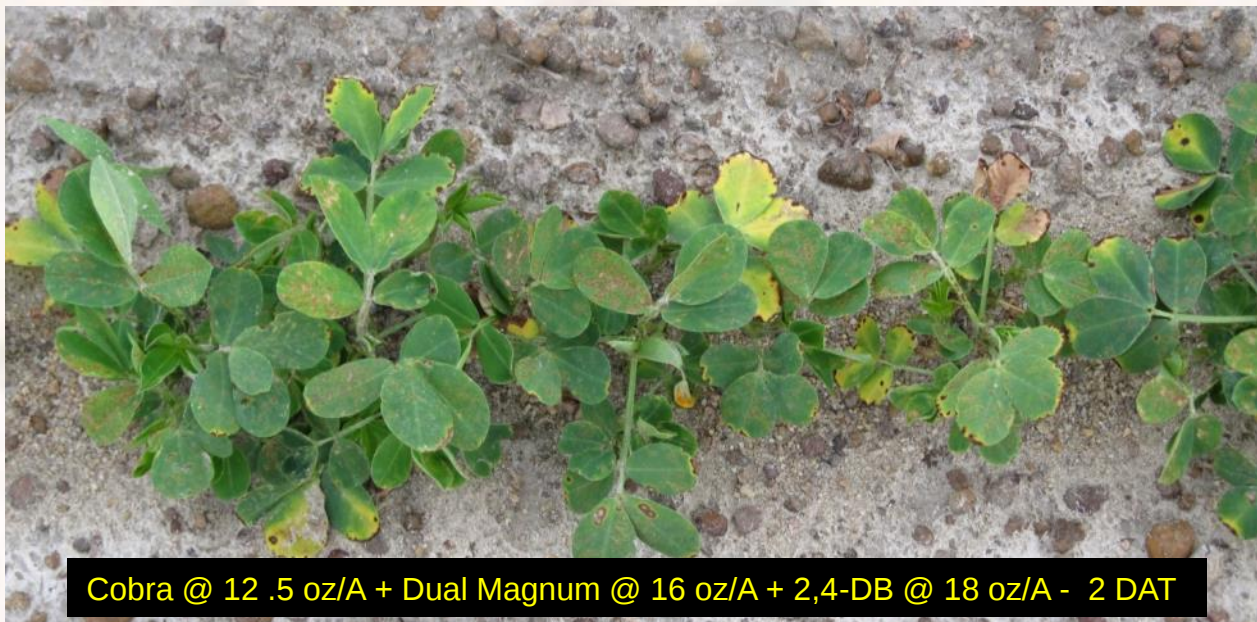
PE-06-12
PEA03-12
PE-12-13
PE-13-13
PE-06-14
PE-08-14



My Opinion

- We are at the point now that 2,4-DB needs to be included with all of our 30-45 DAP POST treatments.
- Why? Improved control of Palmer amaranth, sicklepod, and annual mg. Not really that expensive (~\$2.75/A for 18 oz/A of 1.75 lb gal)
 - *Cadre + Dual or Warrant* + 2,4-DB*
 - *Cobra or Ultra Blazer + Dual or Warrant* + 2,4-DB*
 - *When Warrant is used, add NIS @ 0.25% v/v.*
 - *No negative yield effect in 2014 field trials*

***Assuming
Warrant
label change**



Cobra @ 12.5 oz/A + Dual Magnum @ 16 oz/A + 2,4-DB @ 18 oz/A - 2 DAT



Cobra @ 12.5 oz/A + Warrant @ 48 oz/A + 2,4-DB @ 18 oz/A + NIS @ 0.25% v/v - 2 DAT



Cobra + 2,4-DB + Dual or Warrant - 2014



Cobra @ 12.5 oz/A
Dual Magnum @ 16 oz/A
2,4-DB @ 18 oz/A
3 DAT

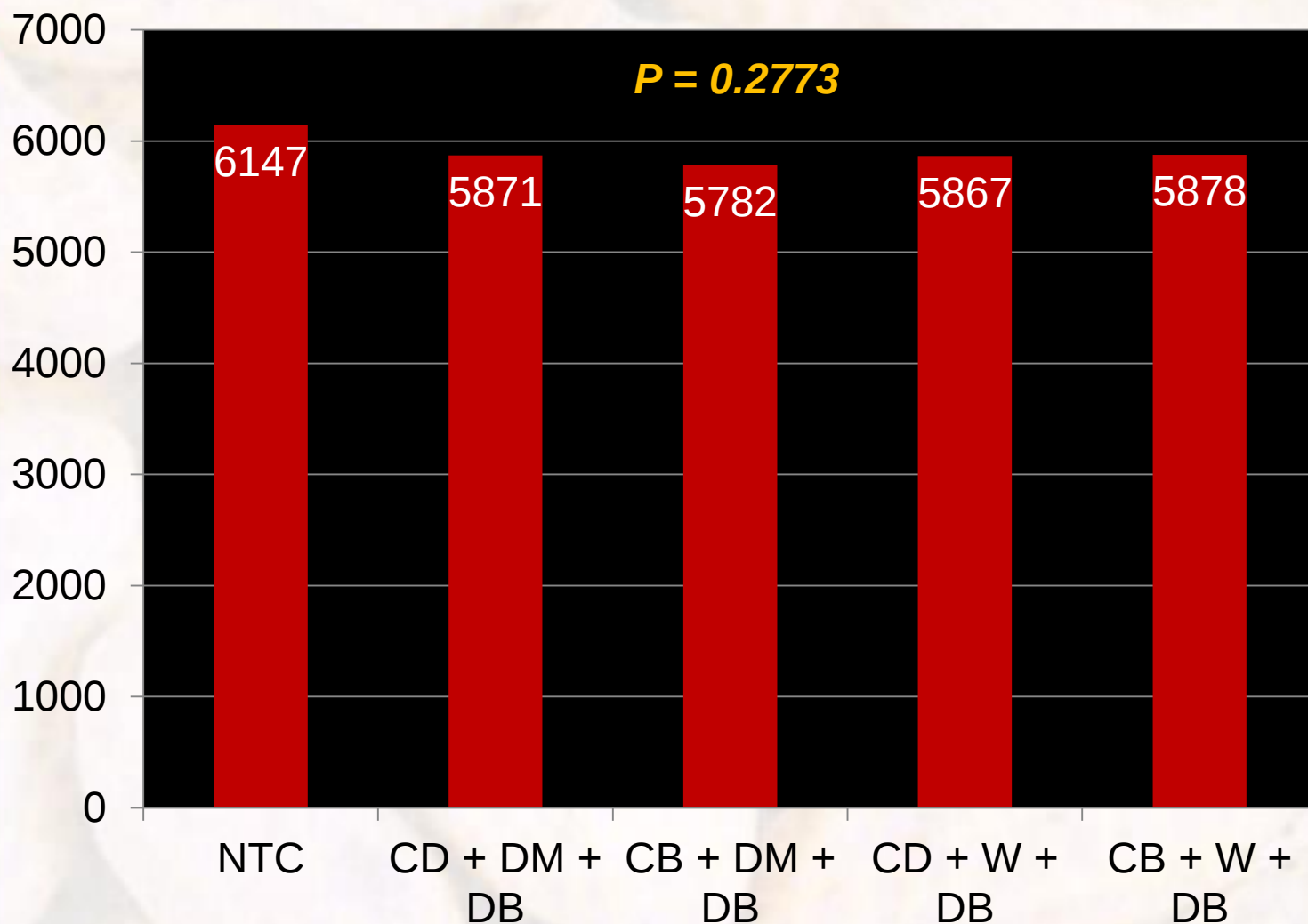


Cobra @ 12.5 oz/A
Warrant @ 48 oz/A
2,4-DB @ 18 oz/A
NIS @ 0.25% v/v
3 DAT

PE-01B-14
June 20
3 DAT

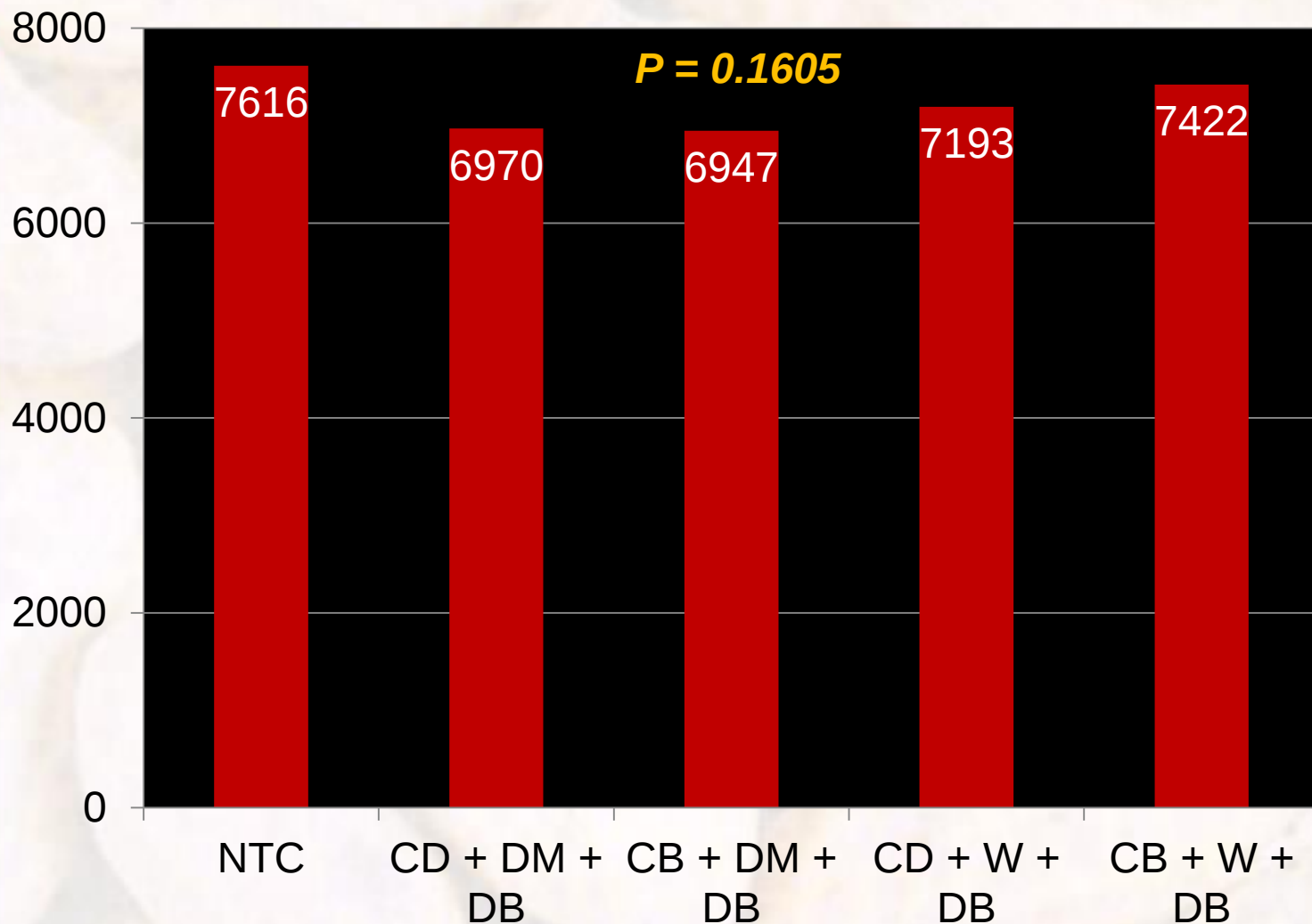


Cadre (CD), Cobra (CB), 2,4-DB, Dual Magnum (DM), and Warrant (W) Effects on Peanut Yield - I





Cadre (CD), Cobra (CB), 2,4-DB, Dual Magnum (DM), and Warrant (W) Effects on Peanut Yield - II



Tank-Mixtures

The Impossible Dream

- 17 POST herbicides
- 21 fungicides
- 16 insecticides
- B or Mn
- NIS or COC
- 7 am, 12 pm, 5 pm, 10 pm
- 91,392 possible combinations
- 4 reps = 365,568 plots
- I do ~2640 plots/year
- Thus, it would take me **138.5 years** if I dropped everything else





The Tank-Mixes Blues!



Reflex
Zidua
B-Moly
Glyphosate
Brandt Smart Trio
(N + S + B + Mn + Zn)

***Always pre-slurry dry formulations
in water before adding to tank!!!**

Select Max @ 16 oz/A + NIS @ 0.25% v/v
fb Priaxor @ 6 oz/A + Boron @ 1 qt/A Applied 1 hour later
Photo = 3 DAT



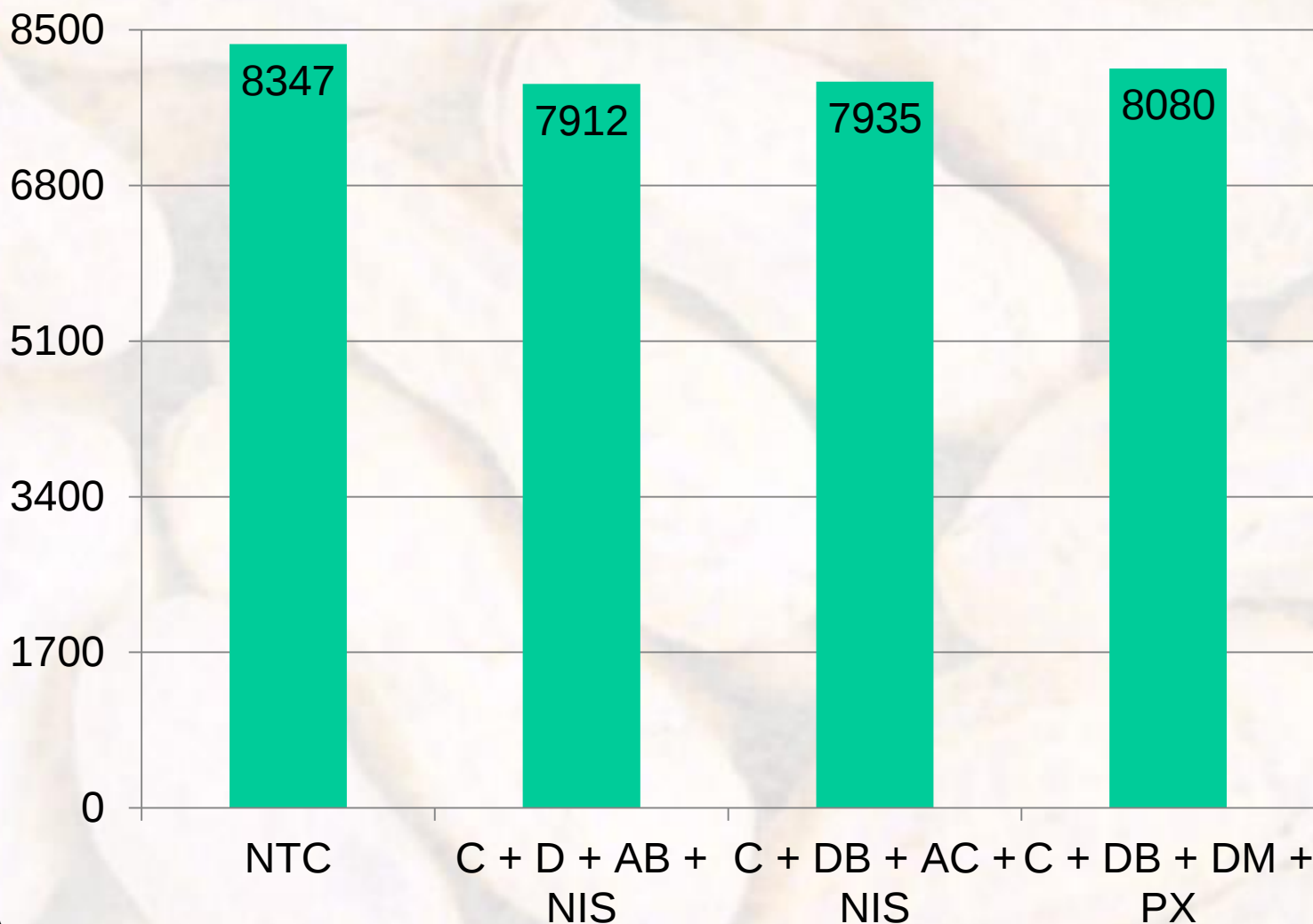
Cadre + 2,4-DB + Dual Magnum + Priaxcor – 3 DAT



PE-99-14
June 20
3 DAT



Peanut (GA-12Y) Yield Response (lb/A) to Odd Tank-Mixtures - 2014



LSD 0.10 = 197
CV = 2

C = Cadre @ 4 oz/A
D = Diamond @ 9 oz/A
AB = Absolute @ 5 oz/A
NIS = Induce @ 0.25% v/v
DB = 2,4-DB @ 18 oz/A
AC = Acephate @ 6 oz/A
DM = Dual Magnum @ 16 oz/A
PX = Priaxor @ 8 oz/A
Applied 34 DAP



Dual Magnum, Warrant, Zidua, Fungicide Tank-Mixes 2014

- No negative yield effects when tank-mixed with Tilt/Bravo, Abound, Fontelis, Provost, Priaxor, Artisan, Absolute.
- More likely to see peanut leaf burn with Dual Magnum mixtures.



Dual Magnum @ 21 oz/A +
Tilt/Bravo @ 32 oz/A – 7 DAT



Our Next Resistance Issue or Timing Issue????



Terrell Co., September 2014



Sicklepod Survey

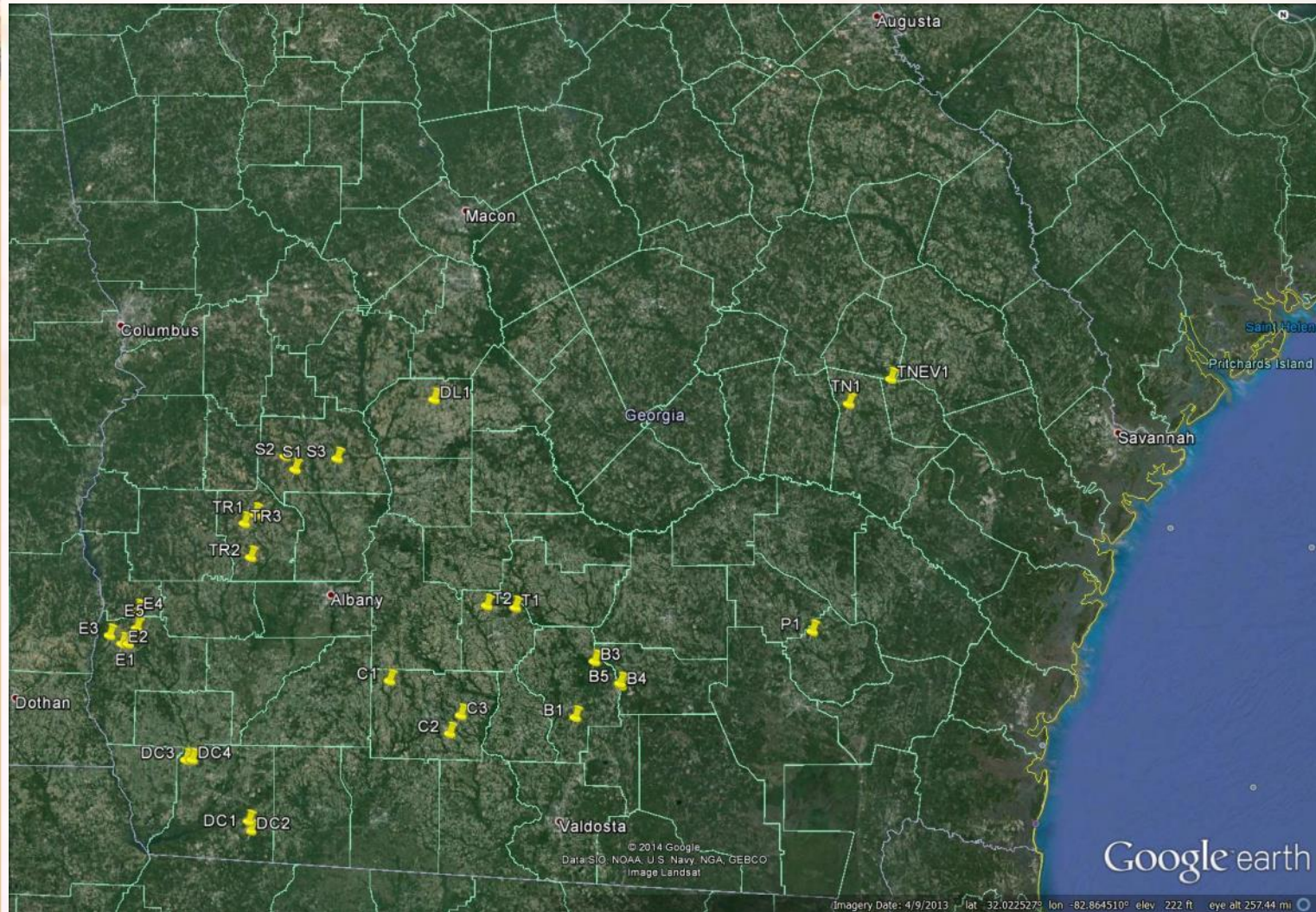


- Fall 2014
- Sicklepod seed collected from
 - *Berrien, Colquitt, Decatur, Dooly, Early, Evans, Pierce, Sumter, Tattnall, Tift, Terrell*
- *29 populations*



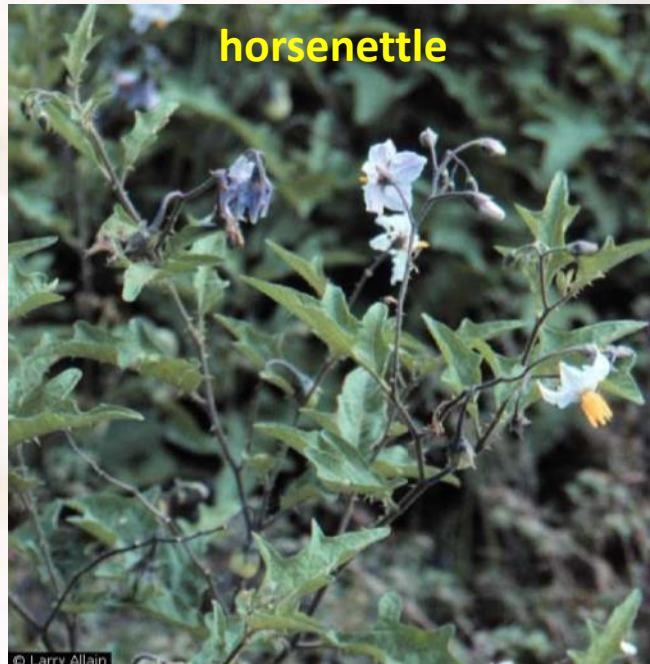


2014 Sicklepod Seed Survey





Perennial Weeds in Peanut - I



horsenettle



dogfennel



trumpet creeper



Perennial Weeds in Peanut - II



- Will take a few years to get under control
- Fall applications of glyphosate
- After digging but 2 weeks before 1st frost
- Long-term program

New Labels 2016?



- Zidua 85WG = pyrooxasulfone (BASF)
- Anthem Flex 4SE = Zidua + Aim (FMC)
 - 3.733 lbs Zidua + 0.267 lbs Aim
- POST
- With Gramoxone and/or Cadre
- UGA will not support PRE use
 - Why? No 2X safety margin

Anthem Flexx Injury from POST Apps



PE-12B-14
June 19



What do the top growers do?

2013 Georgia Peanut Achievement Club Winners

- 10 growers
- 6283 lb/A average yield
 - GA State Avg. = 4430 lb/A
- 10/10- irrigated
- 7/10 – bottom plow
- 10/10 – twin rows
- Rotation (Peanut)
 - 1-4 years = 2/10
 - 1-3 years = 8/10
- Herbicides
 - 9/10 – Sonalan
 - 10/10 – Valor
 - 3/10 – Dual
 - 9/10 – Cadre
 - 3/10 – 2,4-DB
 - 1/10 – Prowl
 - 2/10 - Strongarm



Questions???

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www.gaweed.com

