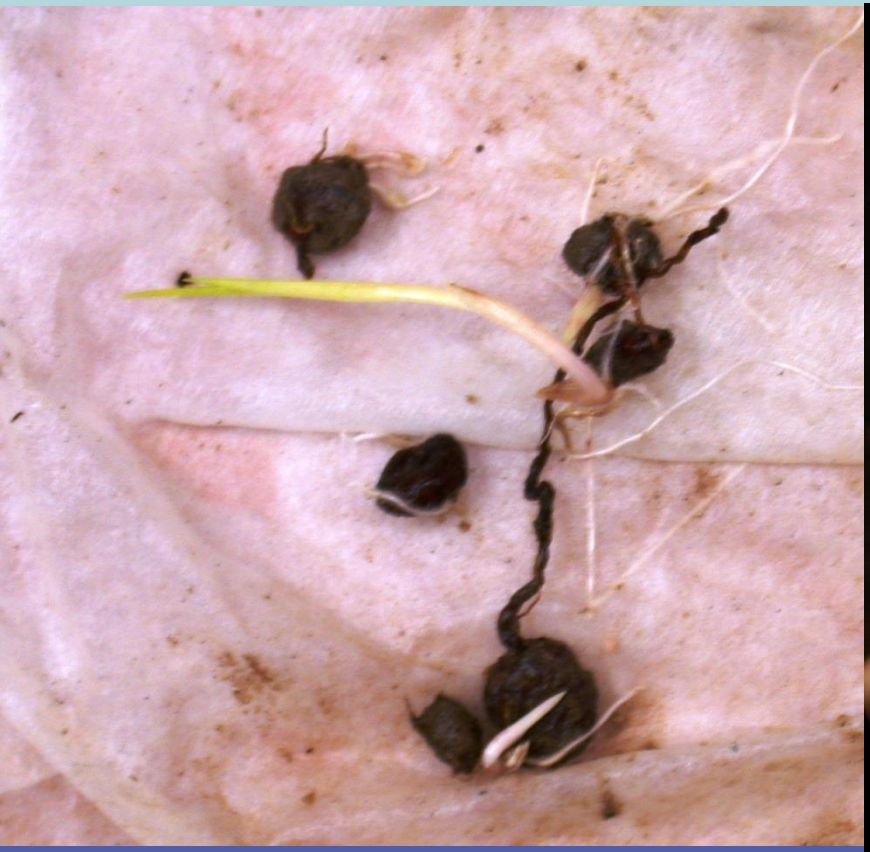
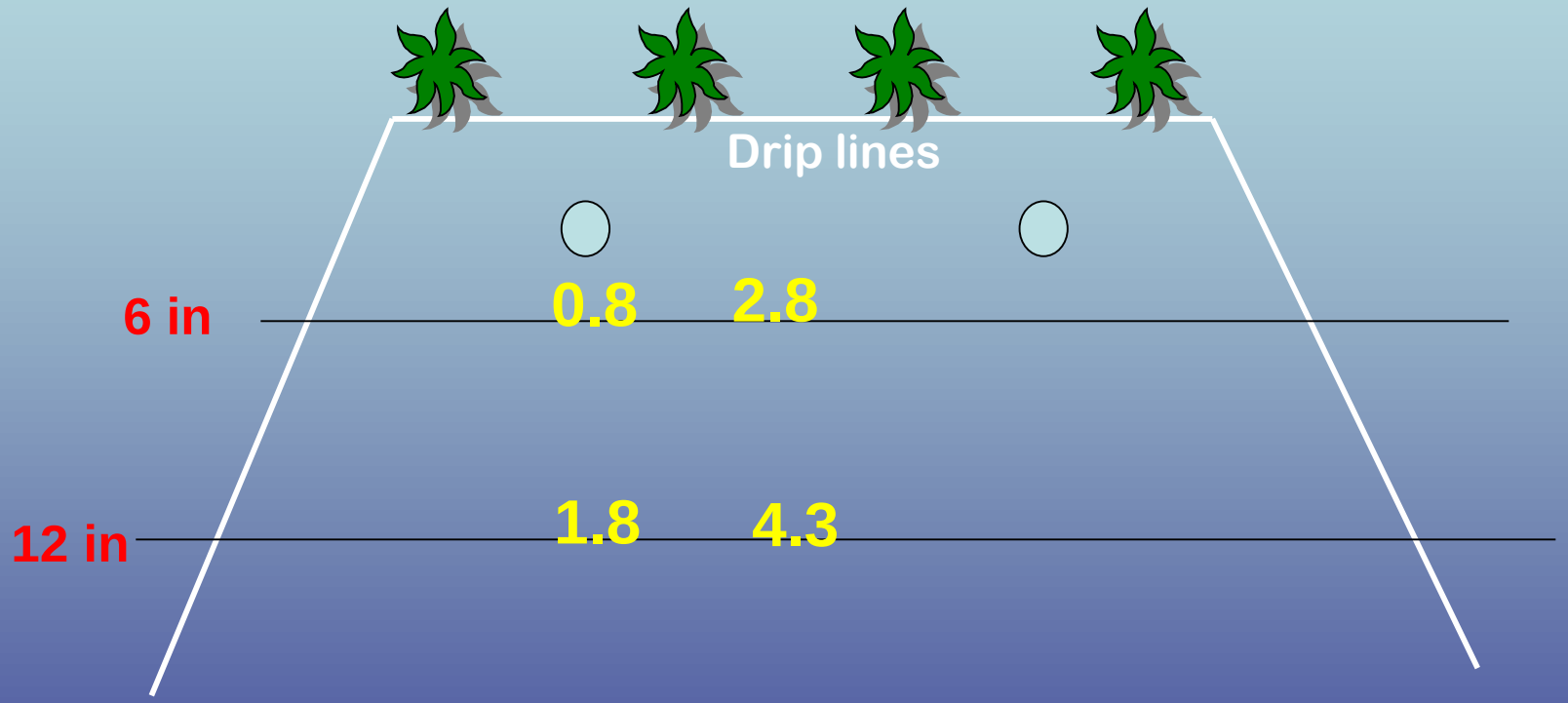
Yellow nutsedge management in what looks like strawberry

Tubers produce new shoots over time

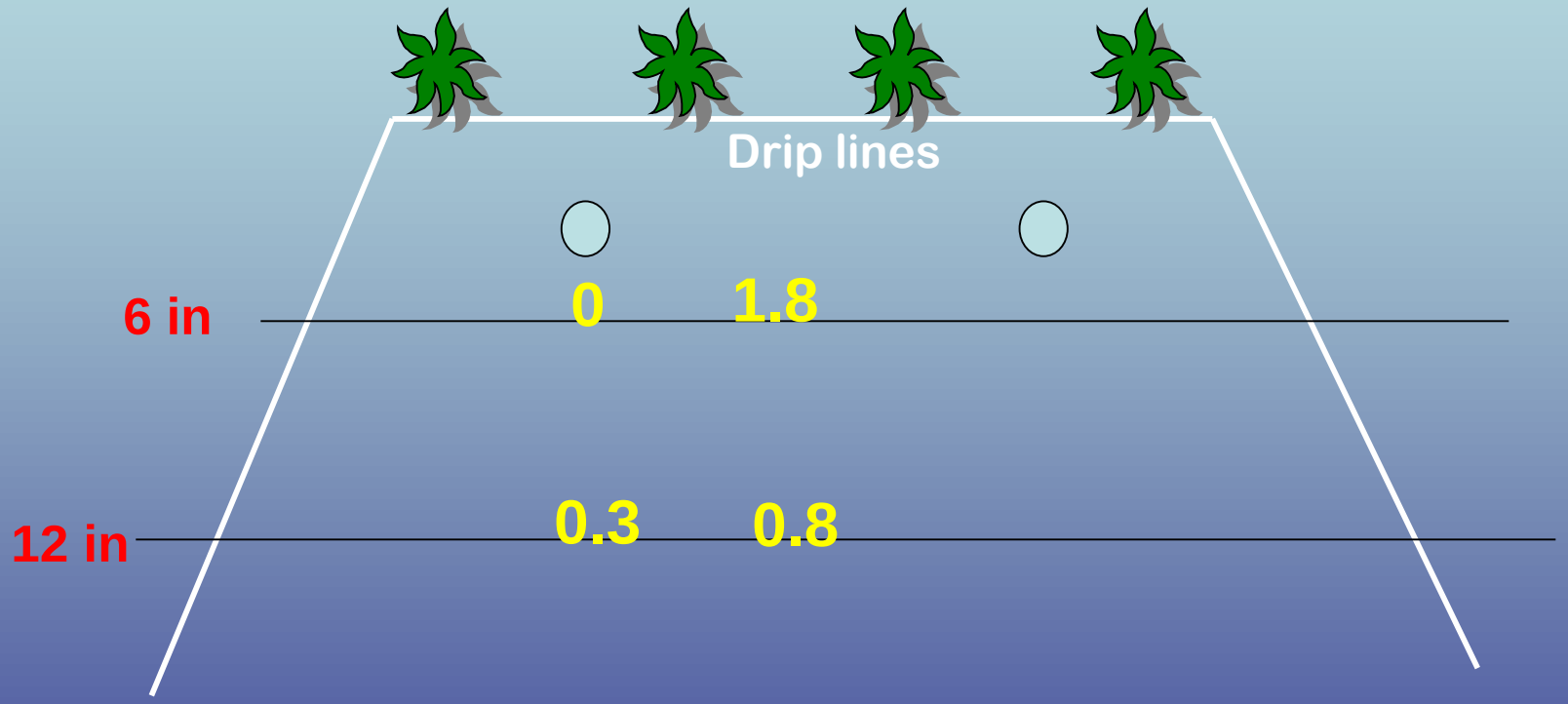


2018:
Nutsedge shoots /4 tubers in Untreated soil



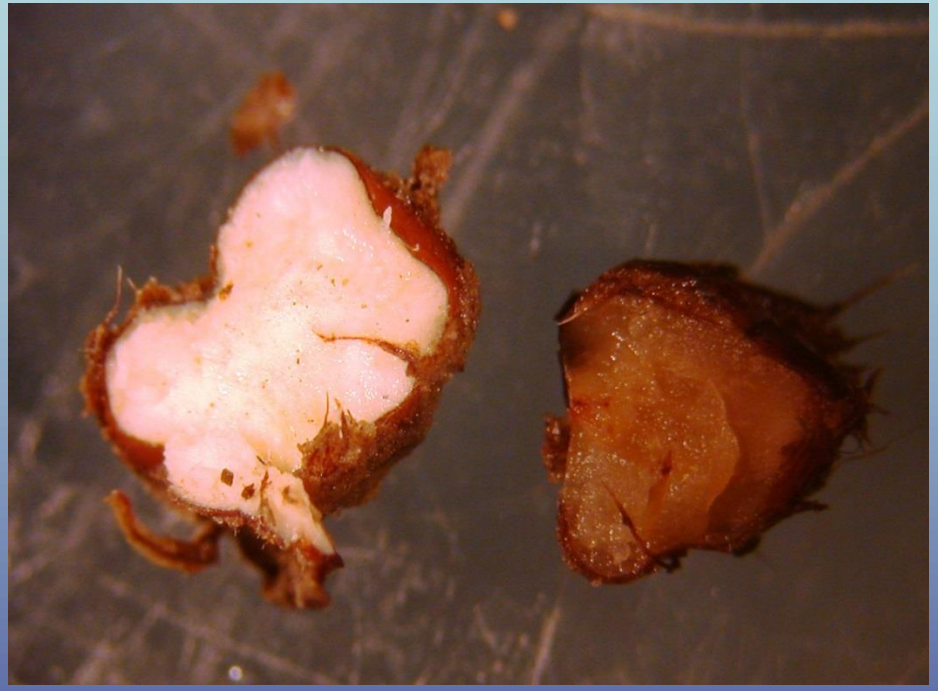
61% germinated in first week

2018:
Nutsedge shoots /4 tubers after 30 gal/A K-Pam



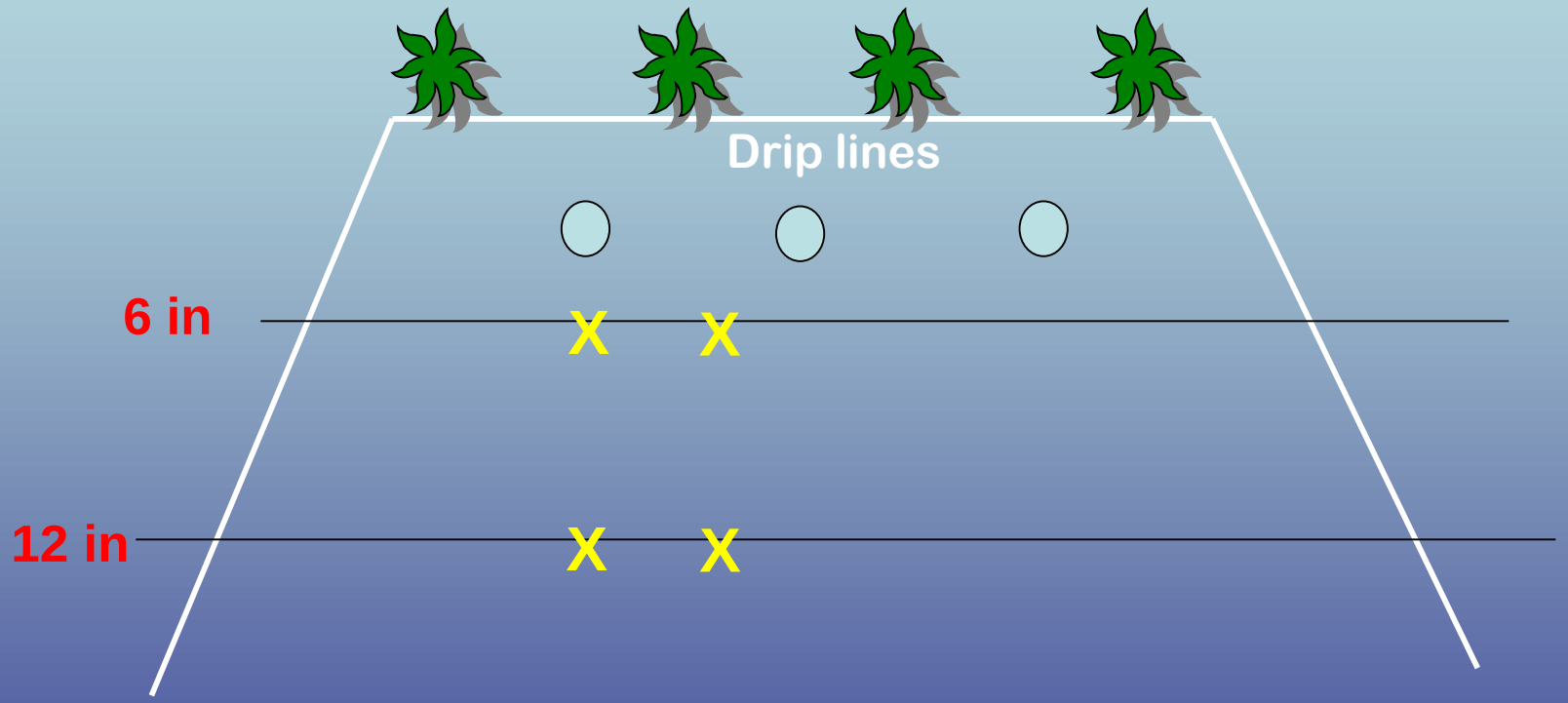
18% germinated in first week

Depth was not important but location was

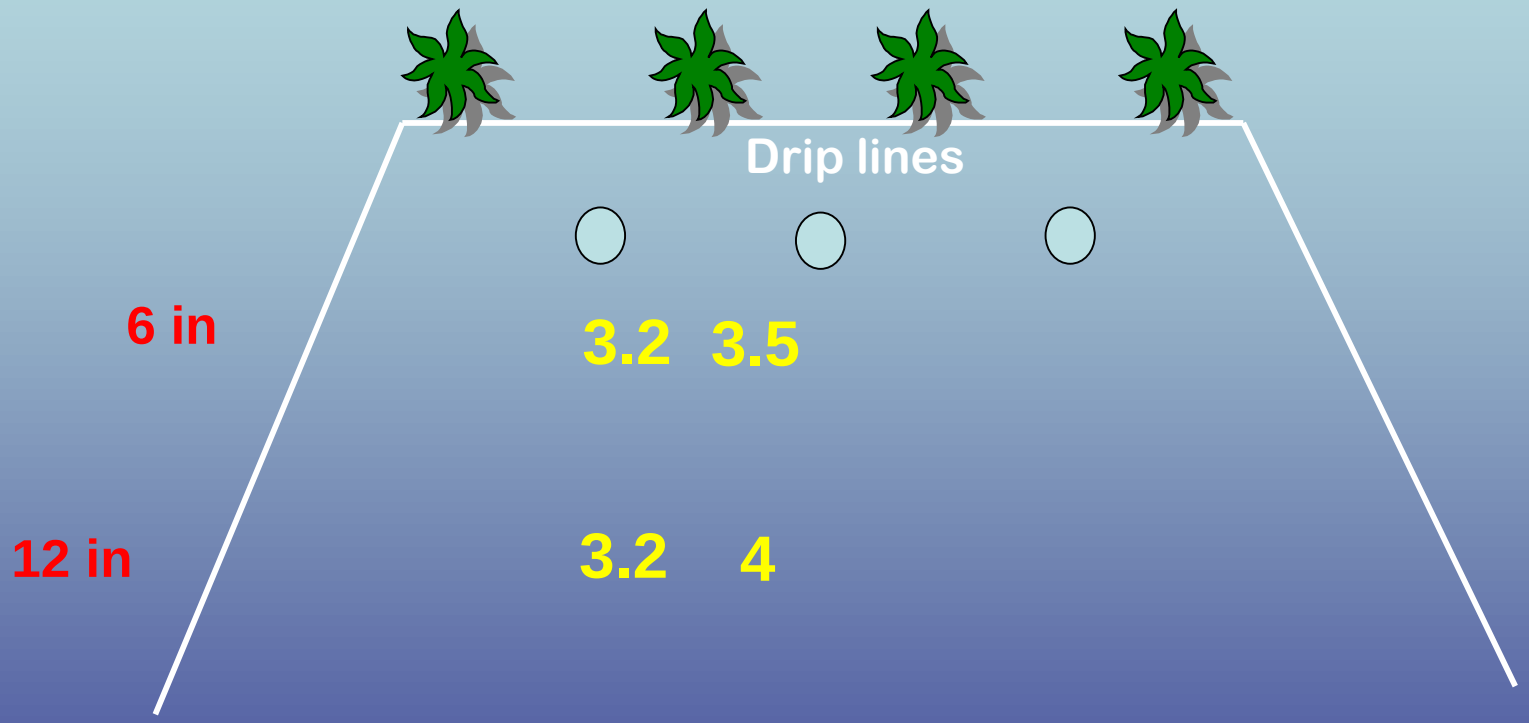


Yellow nutsedge affected by drip-applied metam

End of the season Vapam via drip 50 gal/acre

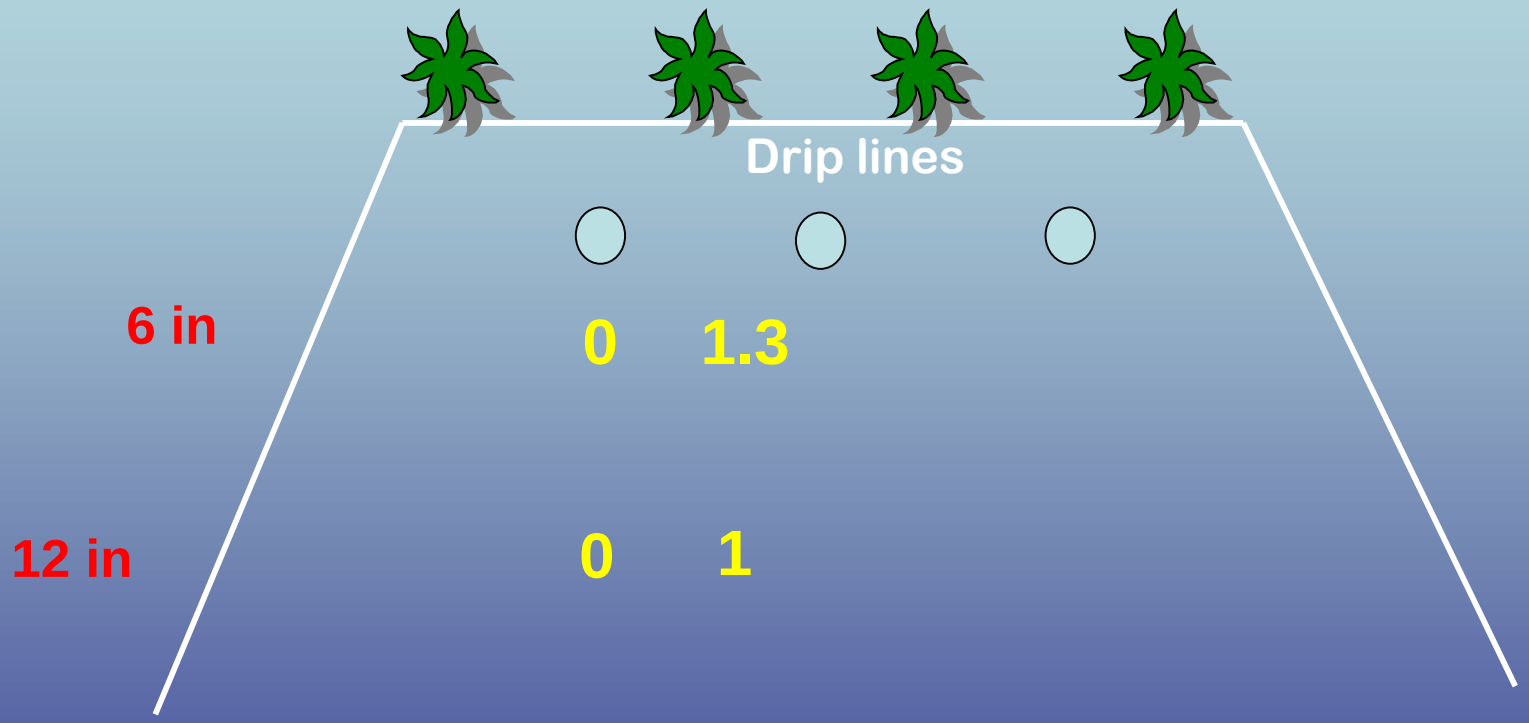


Yellow nutsedge shoots / 4 tubers in UNTRETEAD



87% germination

Yellow nutsedge shoots / 4 tubers <u>after VAPAM</u>

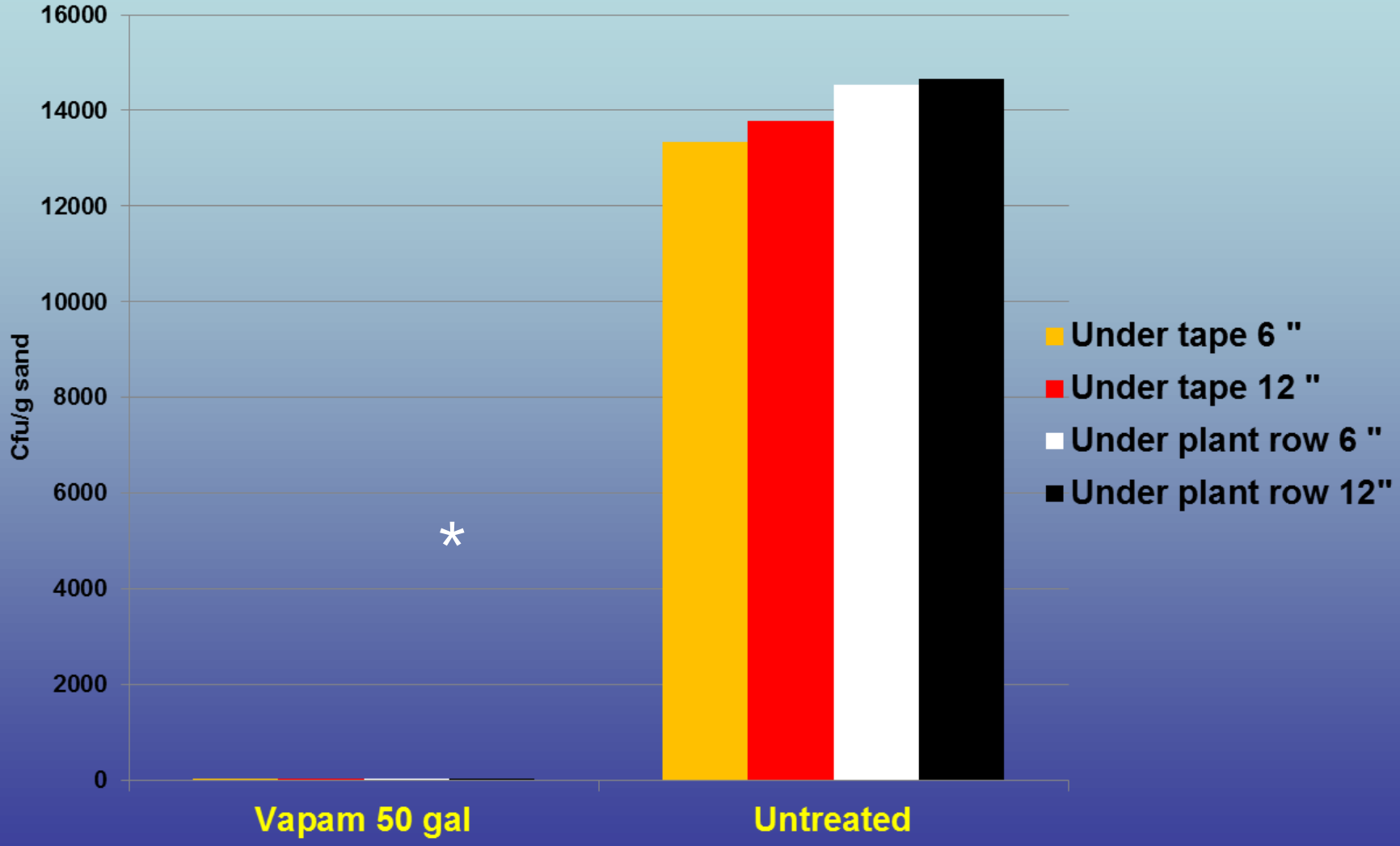


14% germination

HOME
FSC

What about Fusarium?

F. oxysporum in sand inoculum in soil



End-season/termination at *Fusarium* infested field at Watsonville (M. Bolda and P. Henry 2016)

- After **60 gal/A of metam potassium**: worked the bed tops, replaced drip, plastic and planted in fall.
- **Yield increases over untreated:**

127% in Fronteras,

630% in Cabrillo,

52% in Monterey,

75% in Petaluma,

166% in San Andreas.

EPTC (Eptam 7E)

- Good control of nutsedge when pre-plant incorporated in the desert

CAN BE USED END-SEASON/FALLOW in STRWABERRY

- We tested it applied via 2 drip lines:

No significant effect on tubers shoot production or established plants

CAN IT BE SHANKED BEFORE BED-UP?

S-metolachlor (Dual Magnum)

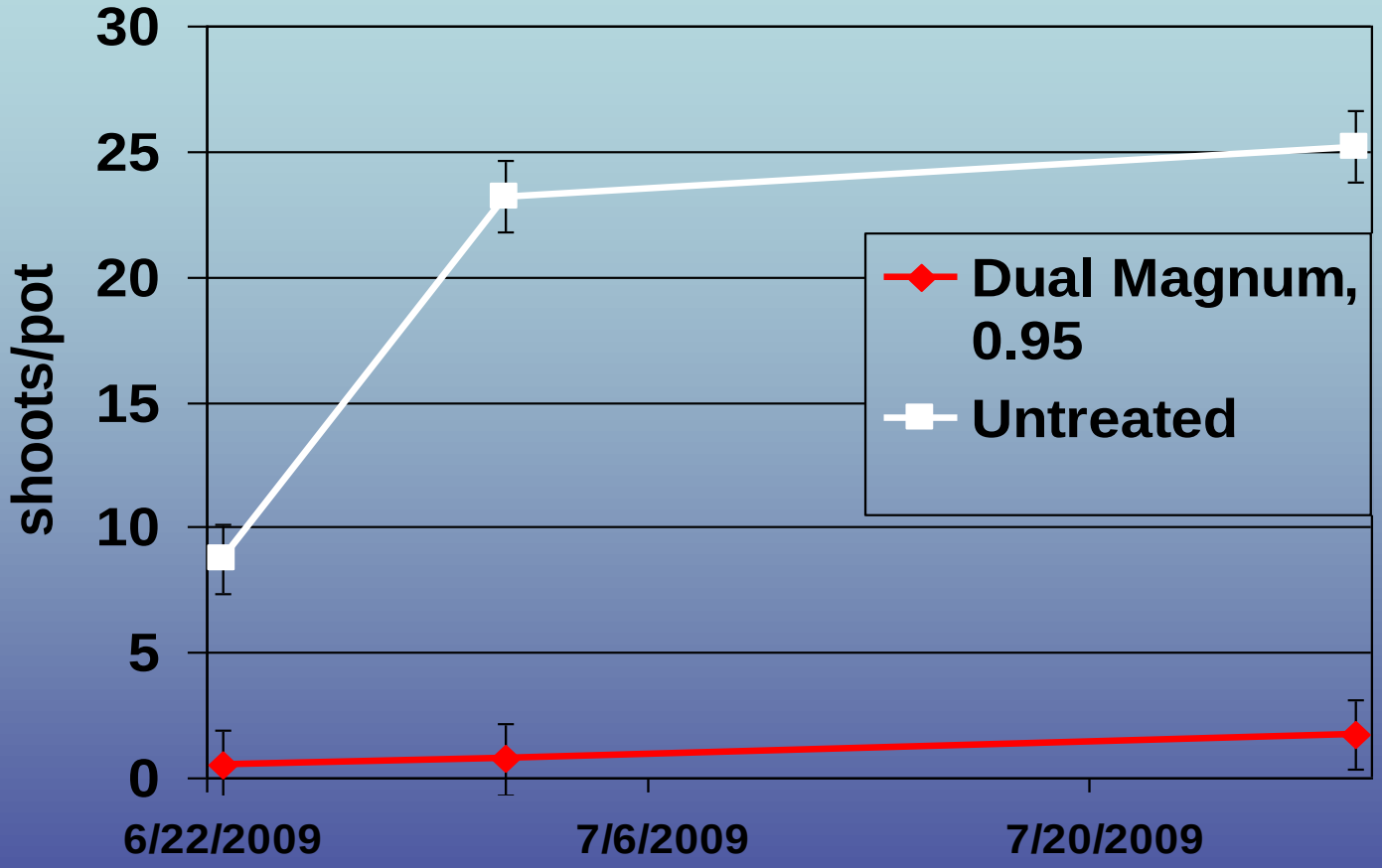
What’s new ?

Purple nutsedge

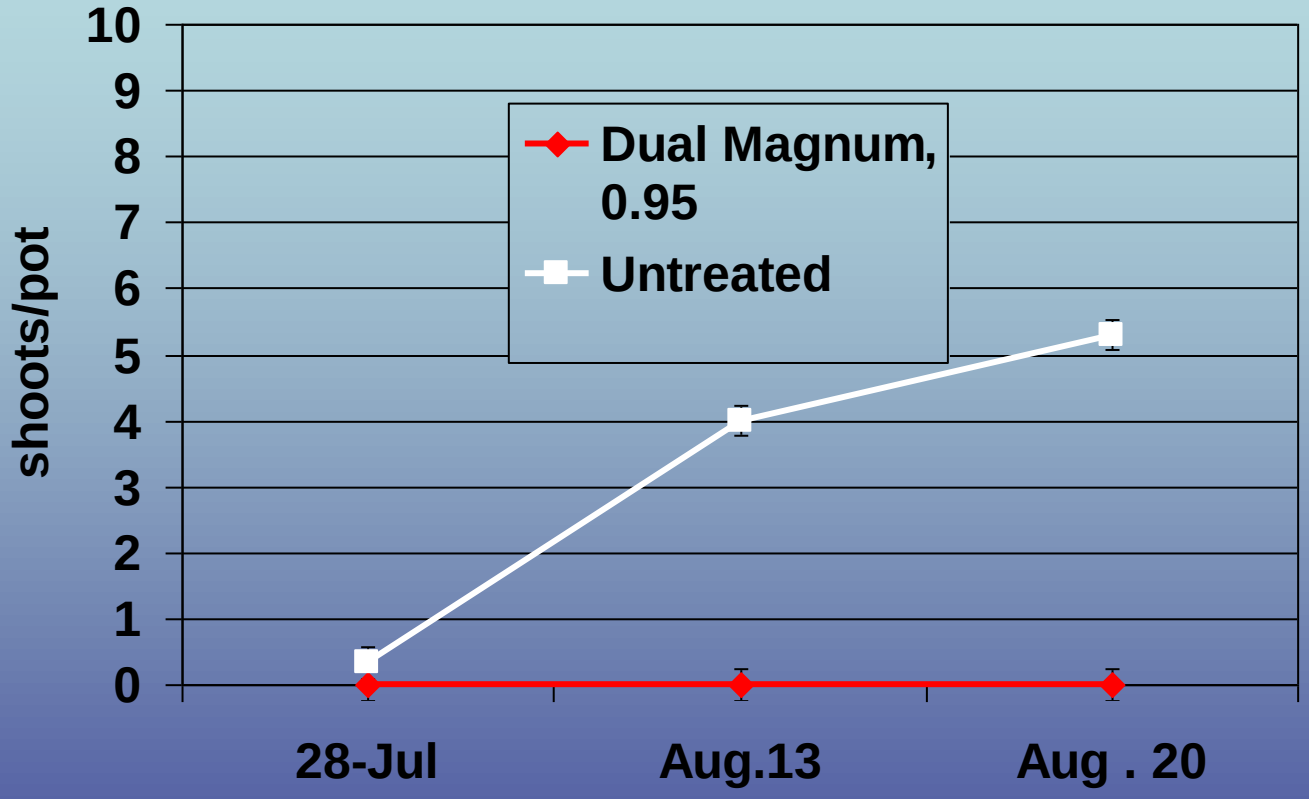
Untreated control

DM 0.95lb a. i./acre

Purple nutsedge counts



Yellow nutsedge counts

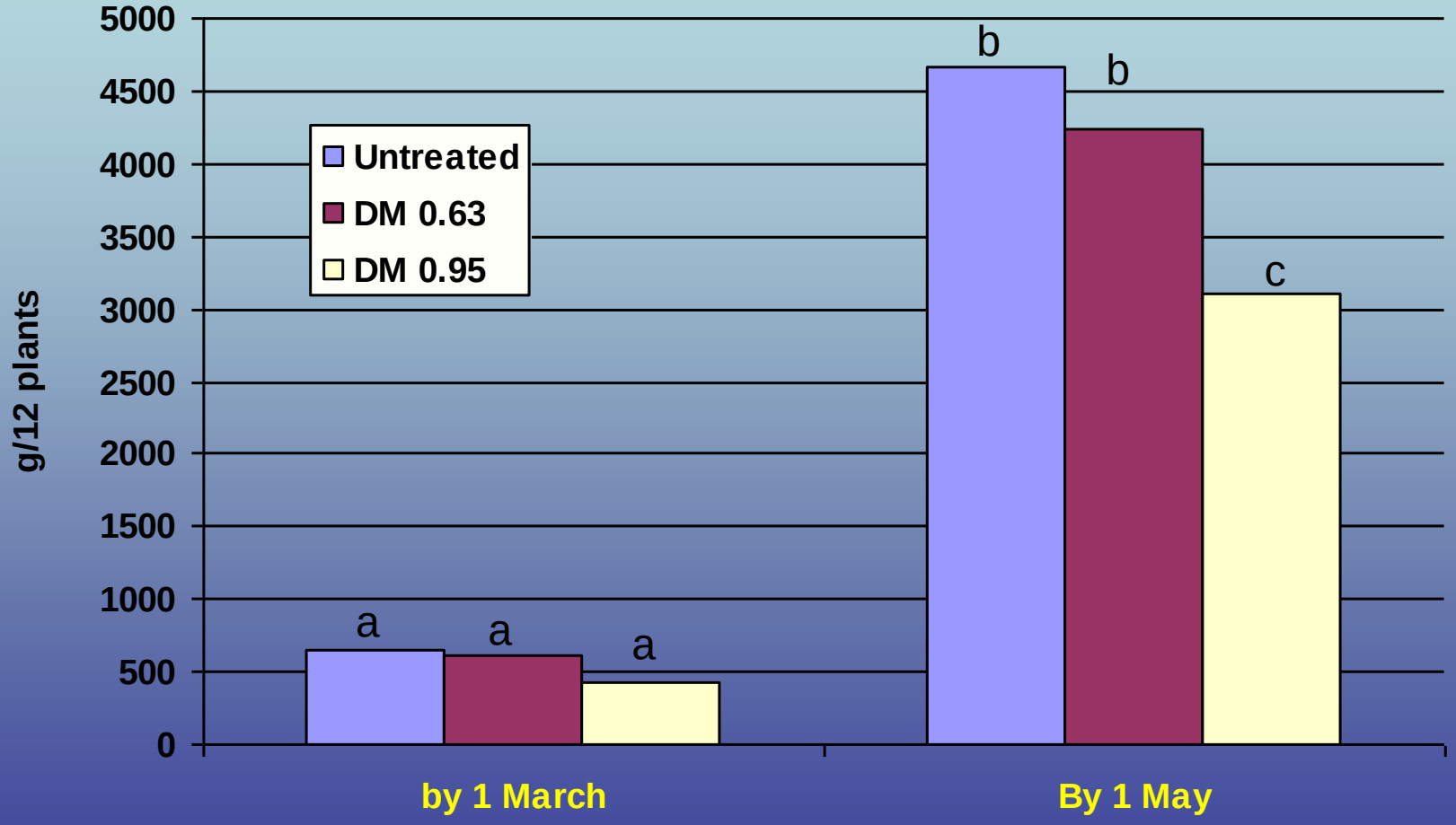


March 19, 2010: yellow nutsedge re-emergence in untreated

DM 0.95

Untreated

Marketable fruit yield, 2011



Unmarketable yield: similar trend

2013:
Look at lower rates

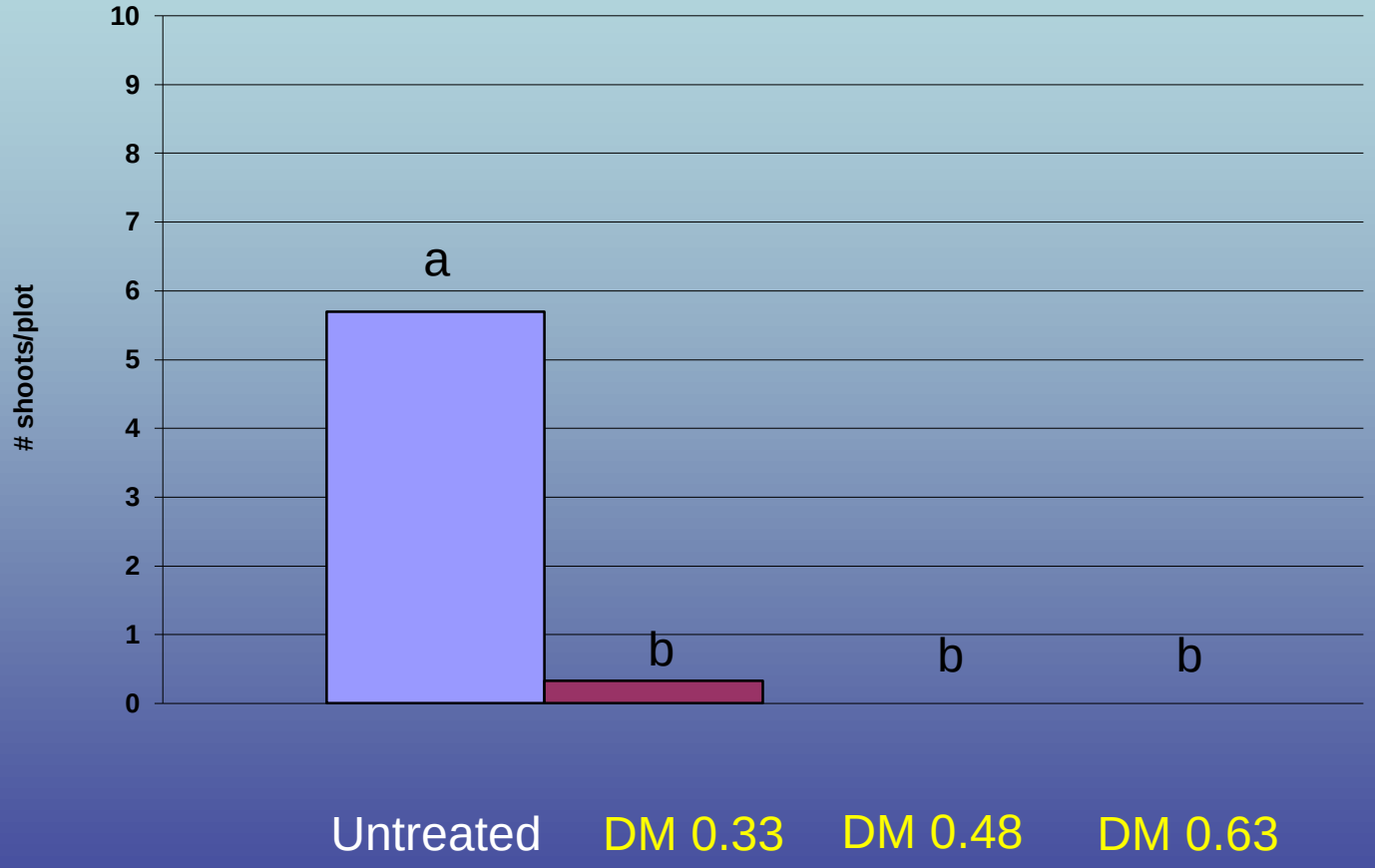
DM 0.33

Untreated

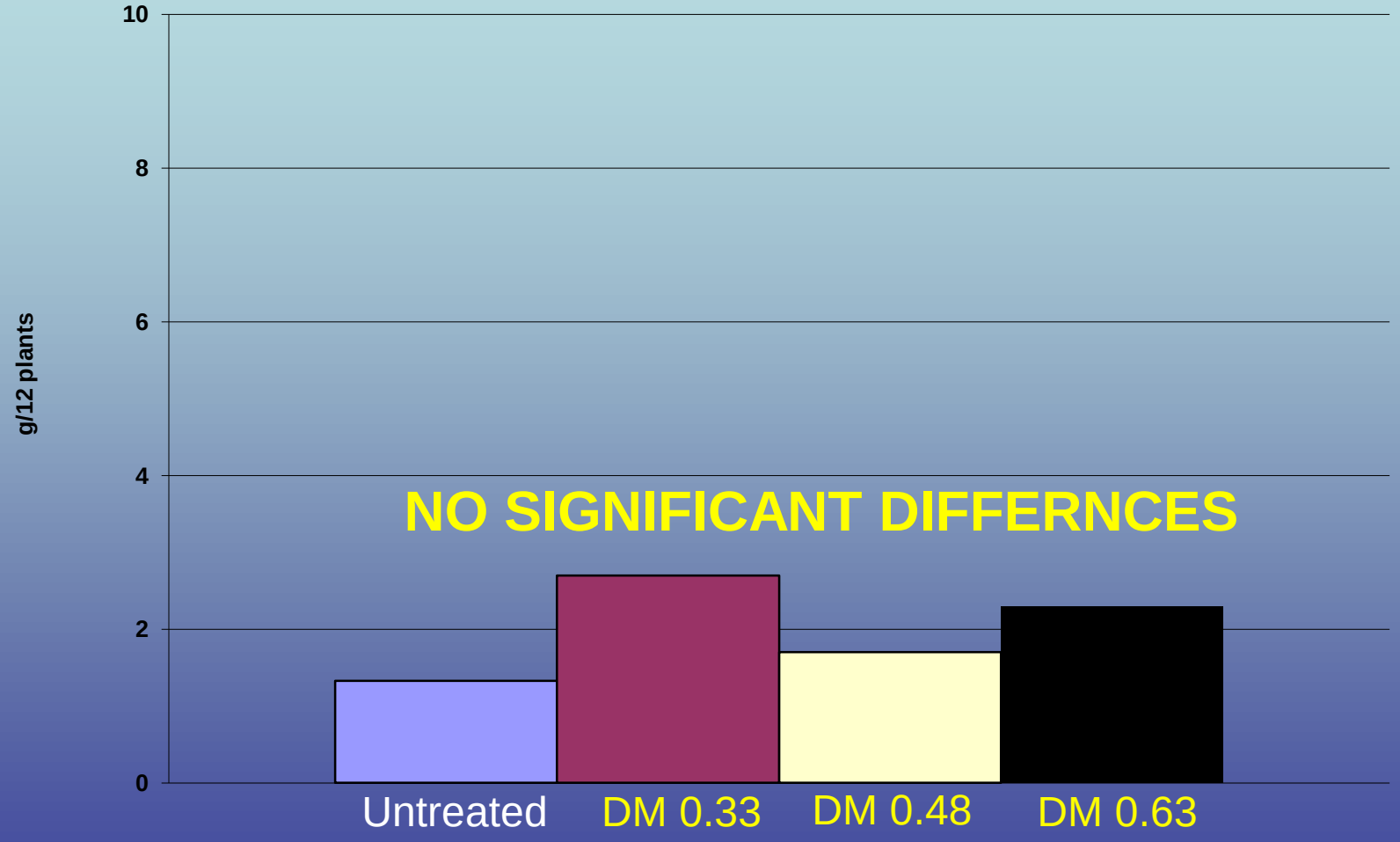
DM 0.48

DM 0.63

Yellow nutsedge shoots

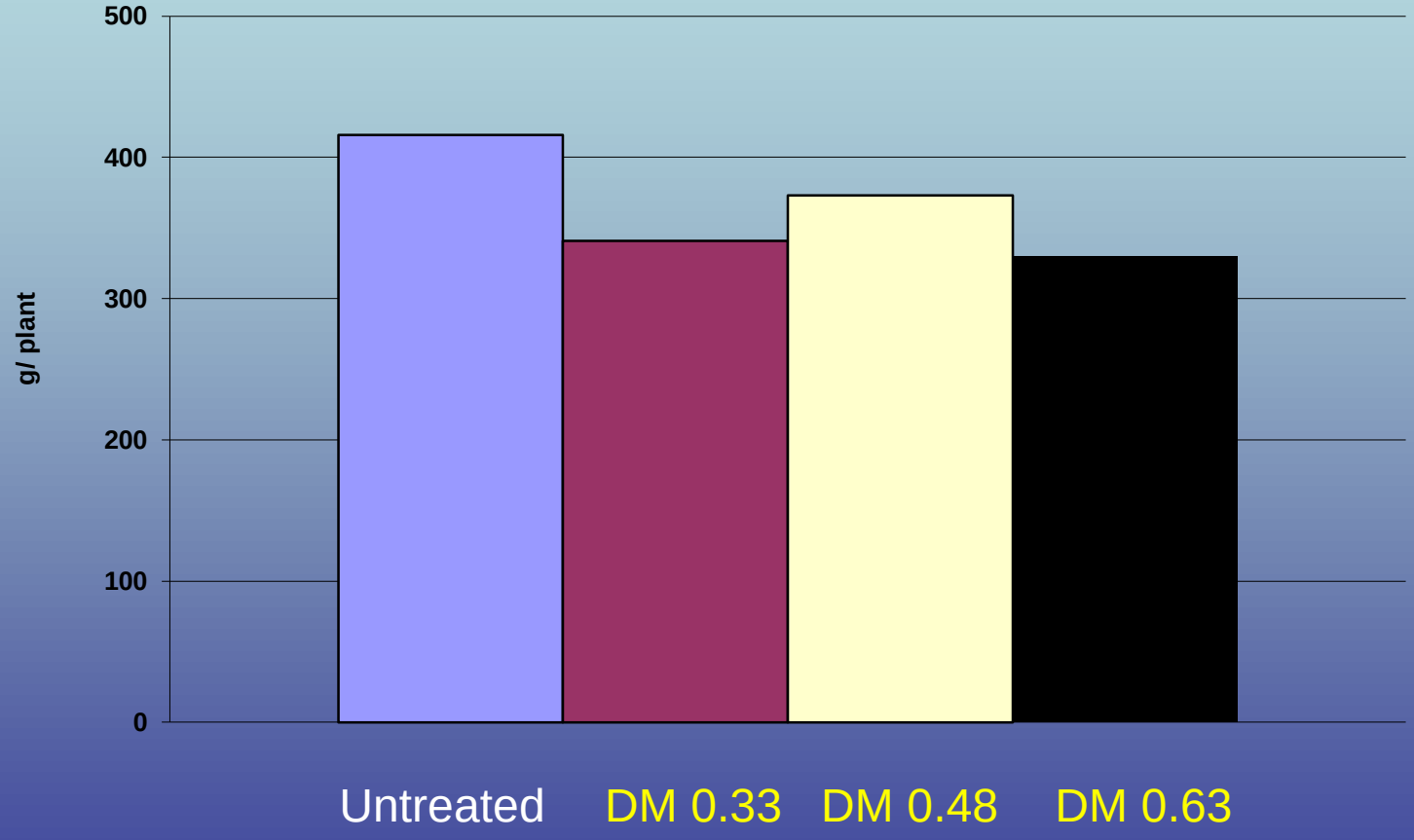


Injury (0=none to 10 =dead)



Mortality: identical in all treatments <2%

Fruit yield (first 4 harvests)



NO SIGNIFICANT DIFFERNCES

S-metolachlor (Dual Magnum)

- Use pattern: 30 d pre-plant to bed tops; Similar to our current herbicides and can be tank mixed
- Petition submitted to EPA in Feb 2014.

If crops are grown on plastic mulch, the Dual Magnum pre-emergence application should be made before laying the plastic. Dual Magnum may also be applied as a row middle application after the laying of the plastic mulch.

- 30 d pre-harvest if applied to furrows

S-metolachlor (Dual Magnum): rates

Application Timing	Crop Growth Stage	Rate (pt/A)[1]
Preplant[3]	Before transplanting	0.67 - 1.33 (0.64-1.27 lb ai/A)

Residue data for low rates available and is satisfactory

2018:

Syngenta is packaging strawberry with several vegetable crops for establishment of 24C indemnified label for next year

The estimated timeline for registration of this indemnified label would be 1 year at the earliest based on having to get it through CA DPR.

Acknowledgements

- DW Berry Farms and Success Valley Produce
- Crop Production Services
- Cal Strawberry Commission (support)