

No effective herbicides for nutsedge control in strawberry?



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S-metolachlor (Dual Magnum)

- Acetamide herbicide: Root and shoot growth inhibition of germinating weeds
- Good nutsedge efficacy and safety in vegetable crops
- Added to IR-4 (minor crop) list in 2008 for strawberry:

need data on nutsedge control in strawberry and crop safety

2009

Yellow and purple nutsedge at Santa Paula, CA in summer-planted strawberry

- Nutsedge tubers placed in pots into beds
- DM 0.95 lb a. i. /acre on June 9
- Applied to beds and covered by mulch
- Strawberry transplanted 30 d later

Purple nutsedge

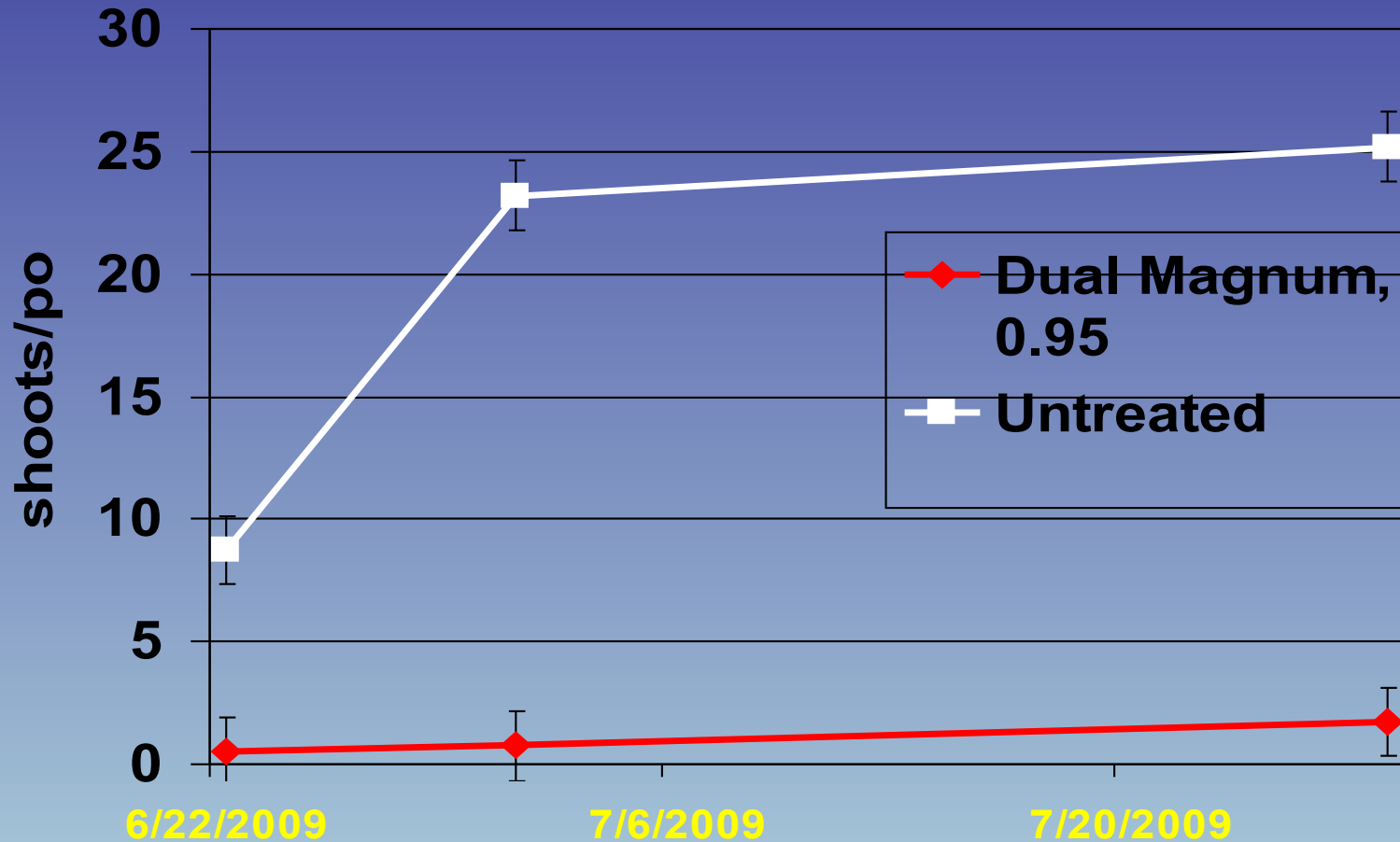
Untreated control



DM 0.95lb a. i./acre

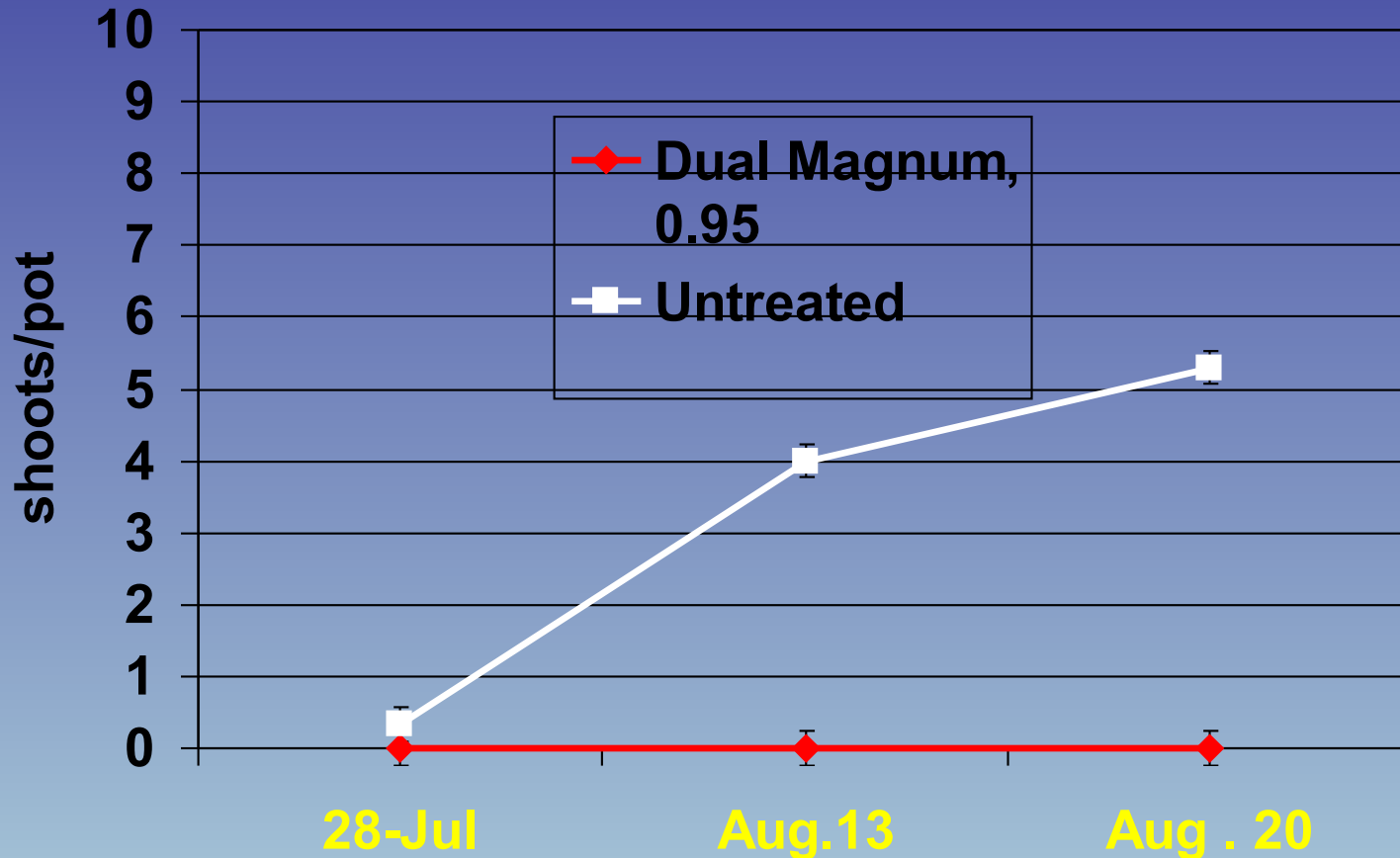


Purple nutsedge counts



No significant injury to strawberry

Yellow nutsedge counts



injury was not determined : poor quality transplants

2010

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

DM 0.95

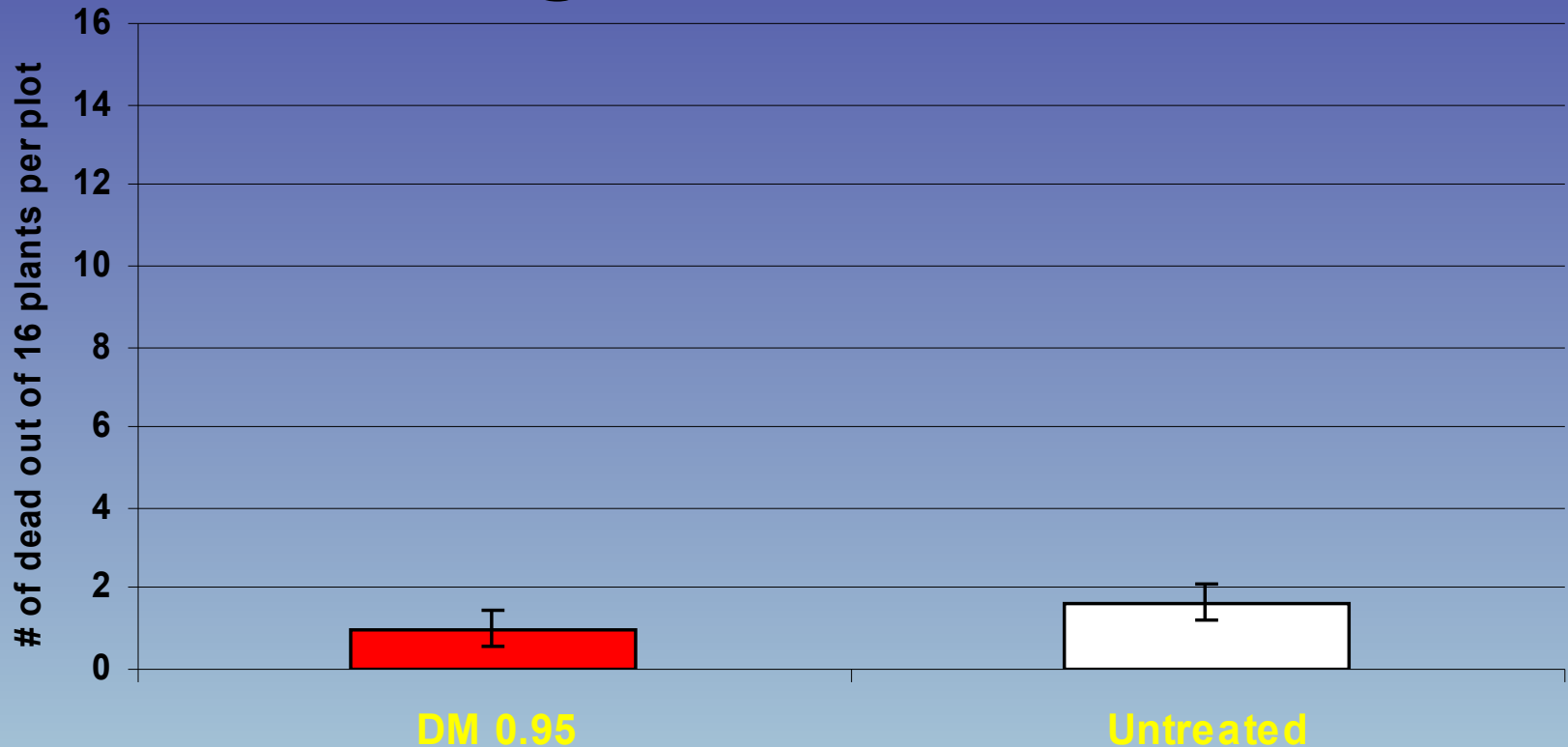


Untreated

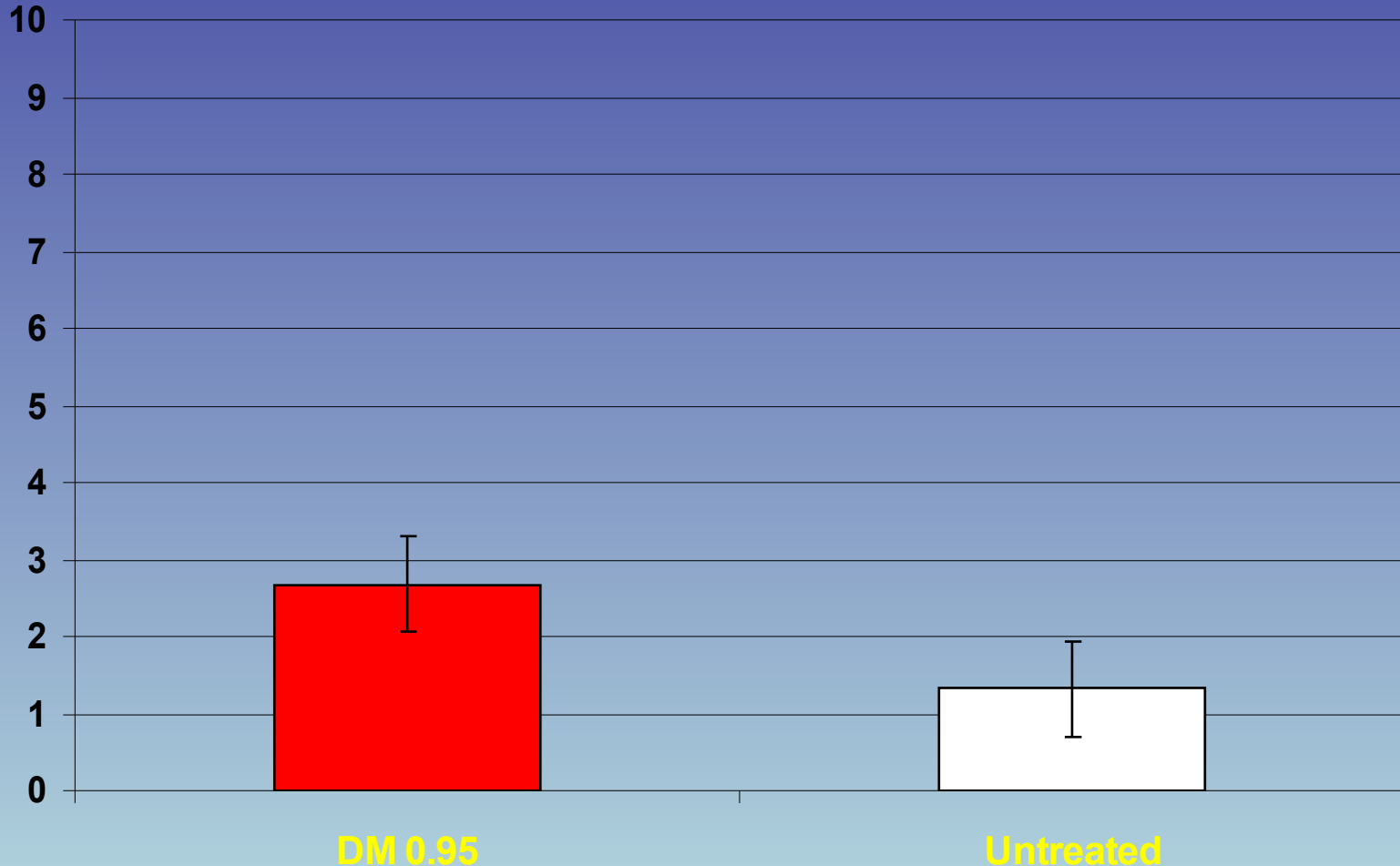


EFFECT ON STARWWBERY?

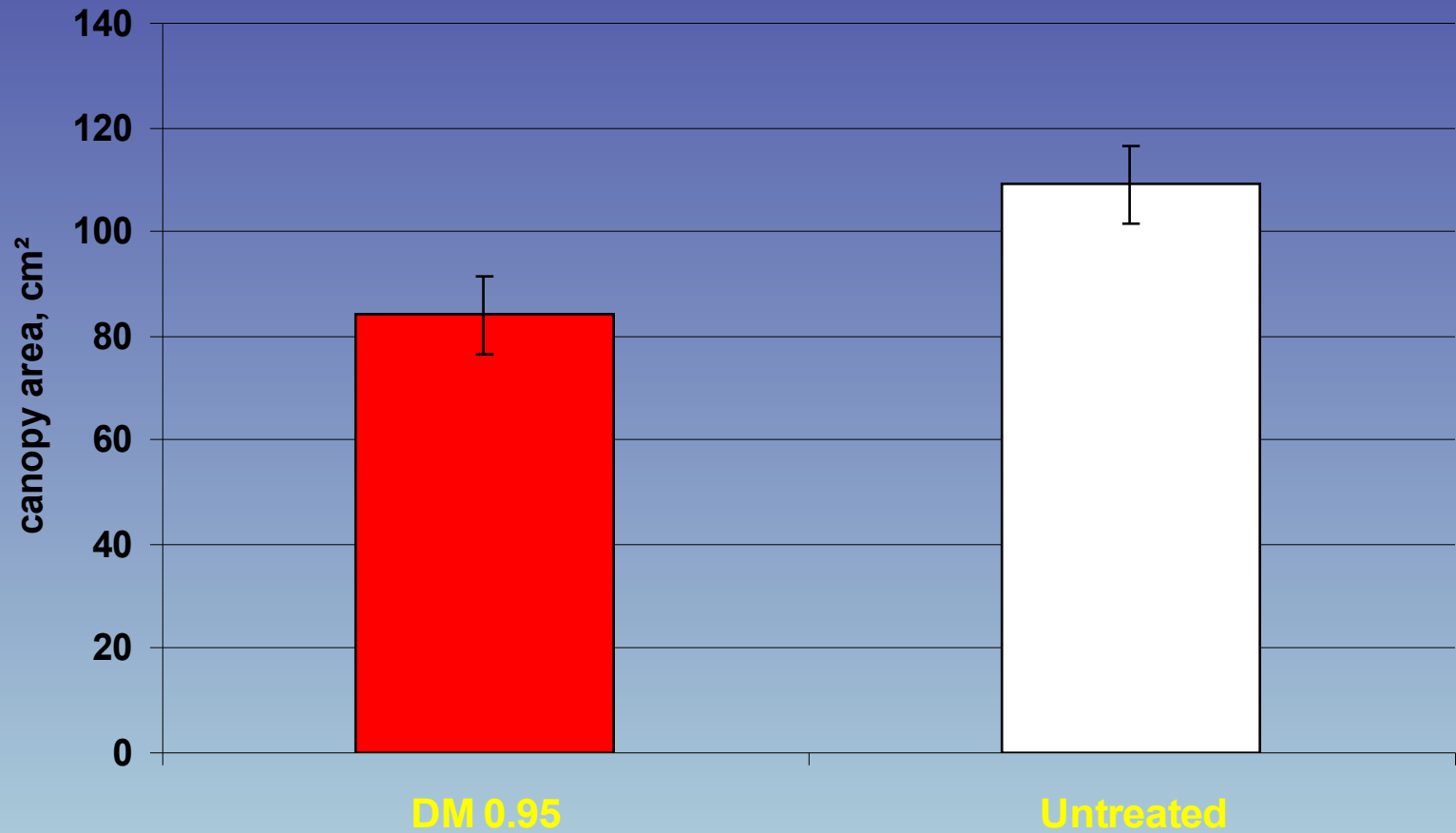
Plant mortality number, Nov. 9:
no signif. differences



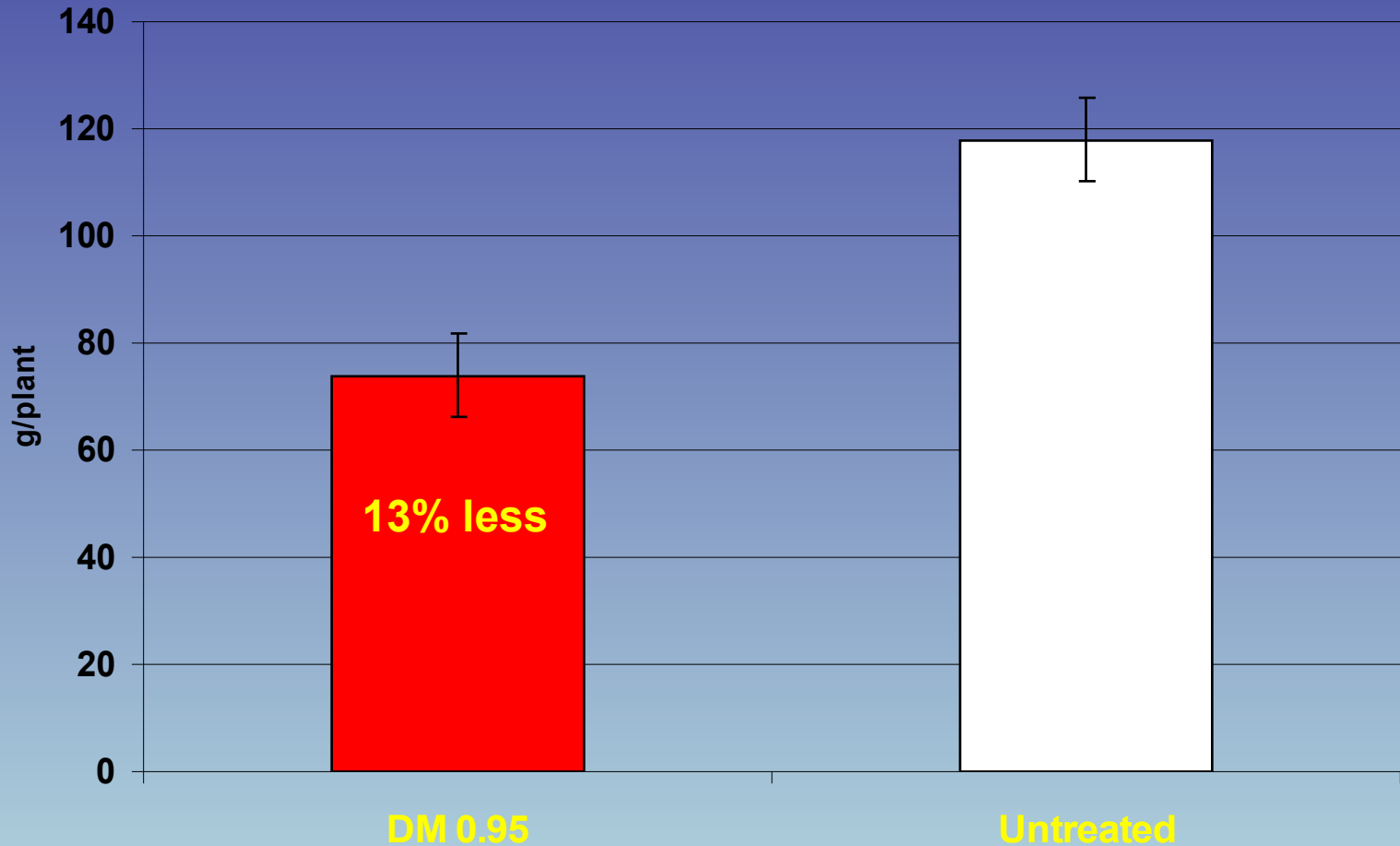
Plant injury 1 (none) – 10 (dead), Nov. 9: no signif. differences



Plant size, Dec. 10:



Fruit yield (fresh market, Feb. –April 2010): $P = 0.05$



2010-2011

Nov 22, 2010:

DM 0.63



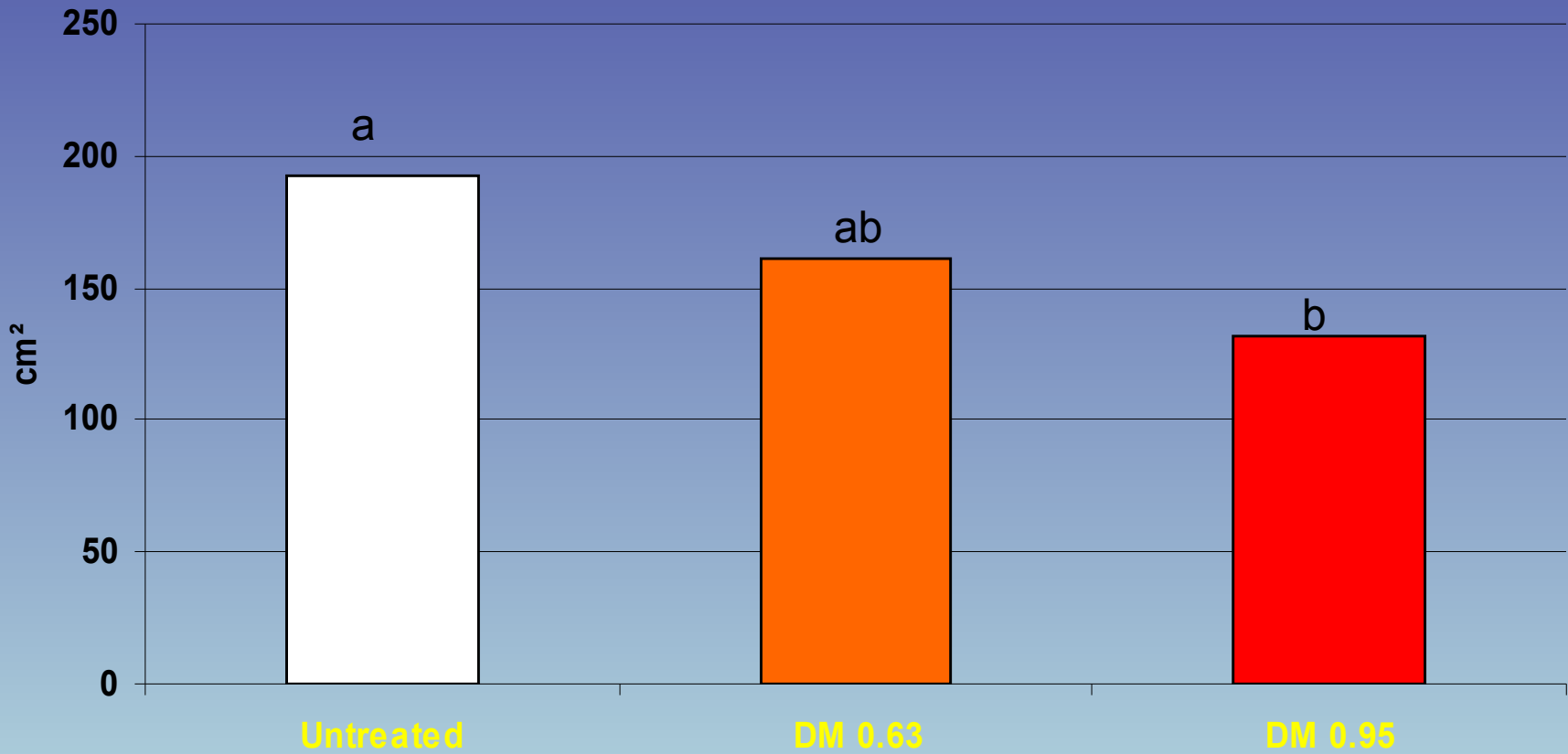
DM 0.95



Untreated



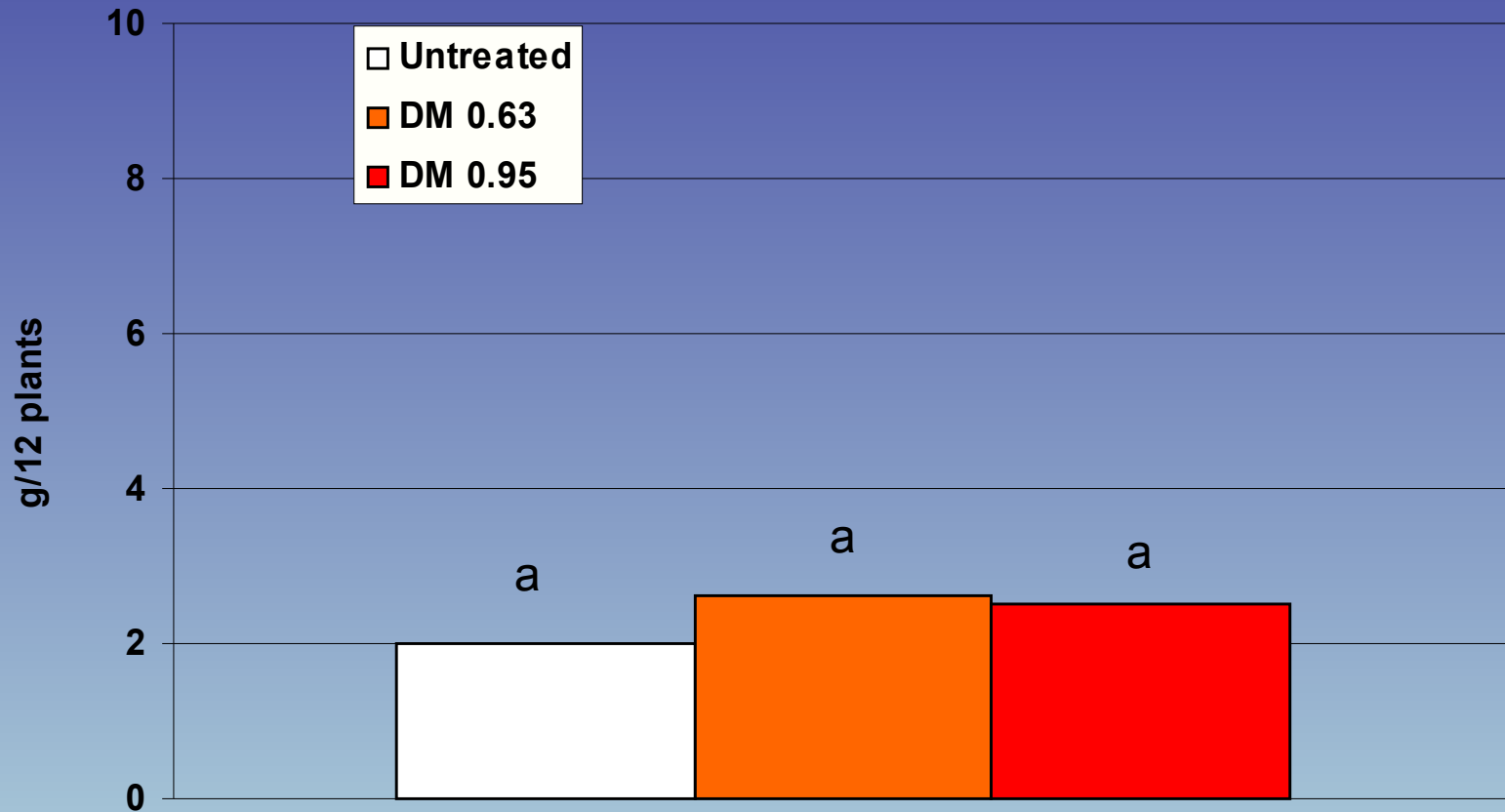
Plant Canopy Area, Nov 22, 2010



Is there an effect of DM on this plant?

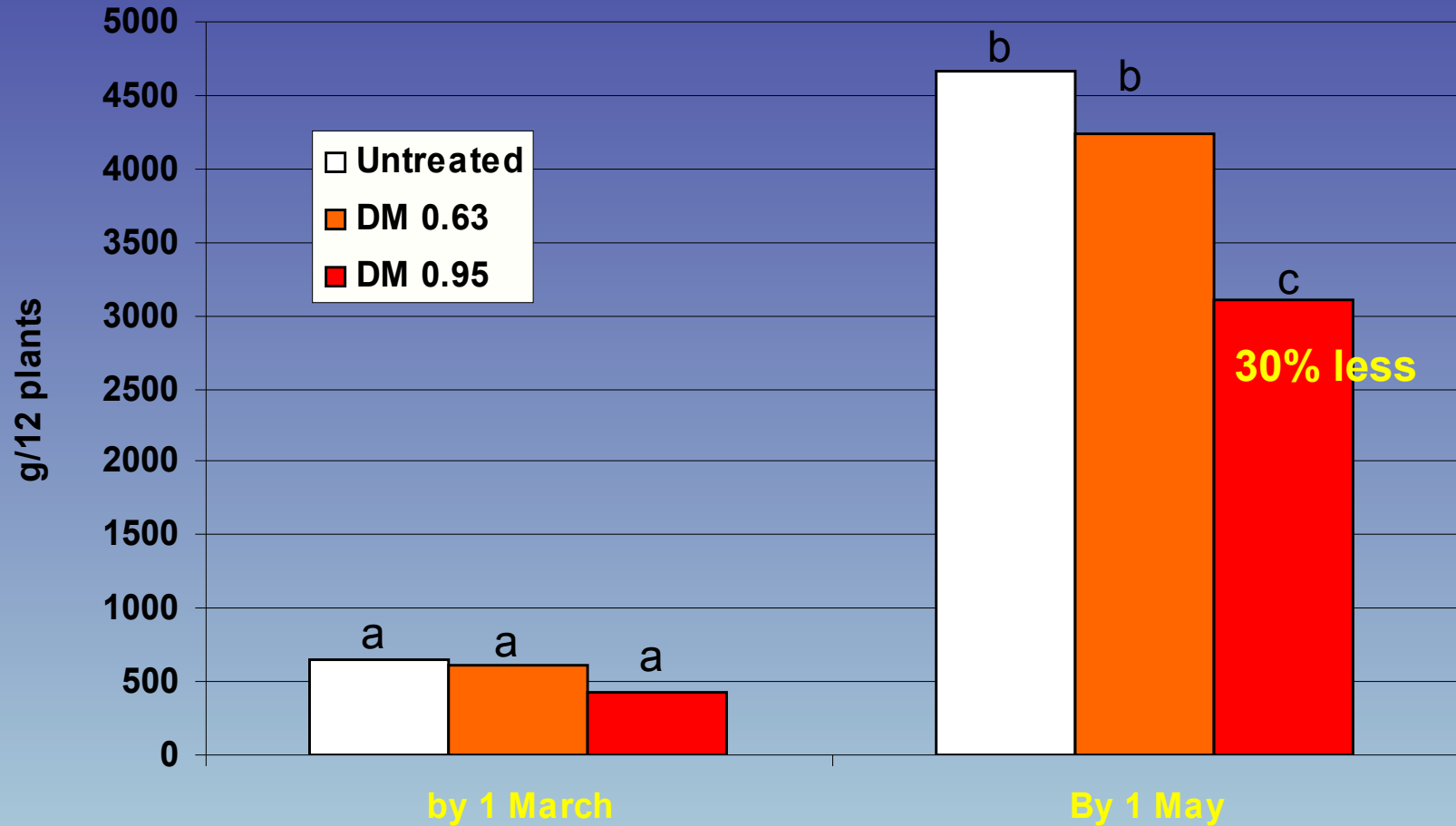


Injury (1=none to 10 =dead)



Mortality: identical in all treatments ~1.5%

Marketable fruit yield, 2011



Unmarketable yield: similar trend

Dual Magnum

- Rates 0.63 and $<$ likely safe on strawberry
- Effective for moderate nutsedge density

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