

( )

**(*Cucumis sativus* L. cv. Superdaminus)**

//

( )

)

(

/ % )

(

%

( )

Archive of SID

)

(

(.)



)

(

(HP<sub>4</sub>) (HP<sub>2</sub>) (HP<sub>0</sub>)  
(M<sub>0</sub>)

)

(

(M<sub>1</sub>)

( )

MSTATC SPSS 10.0

(ppm)	(ppm)	(%)	EC (mmhos/cm)	pH	(%)
/	/	/	/	/	/

( )

.( )

%

(Grow More, USA)

.( )

%

)

.(

( )

( )

( )	( )	( )	( )	( )	( )	( )	( )
/ n.s.	n.s.	/ **	/ **	/ **	/ n.s.	/ n.s.	n.s.
/ n.s.	/ n.s.	/ **	/ n.s.	/ *	/ n.s.	/ *	n.s.
/ n.s.	/ n.s.	/ n.s.	/ n.s.	/ n.s.	/ n.s.	/ *	n.s.
/ n.s.	n.s.	/ n.s.	/ n.s.	/ n.s.	/ n.s.	/ n.s.	n.s.
/ **	/ **	/ **	/ **	/ **	/ **	/ **	n.s.
/ n.s.	n.s.	/ **	/ n.s.	/ n.s.	/ n.s.	/ n.s.	n.s.
/	/ n.s.	/ n.s.	/ n.s.	/ n.s.	/ n.s.	/ n.s.	n.s.
/ *	n.s.	/ n.s.	/ n.s.	/ n.s.	/ n.s.	/ n.s.	n.s.
/	/	/	/	/	/	/	n.s.

( )

.( )

.( )

%

.( )

%

.( )

.( )

)

%

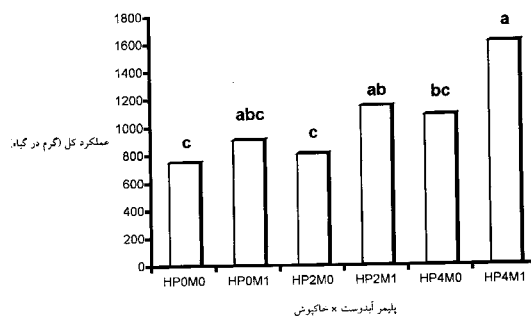
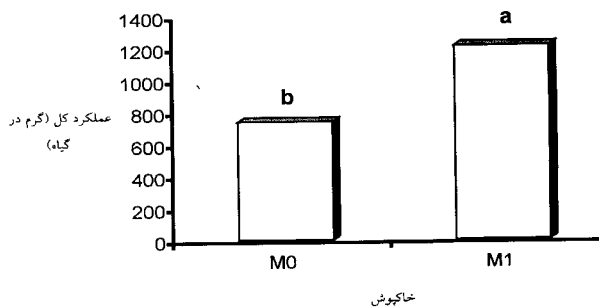
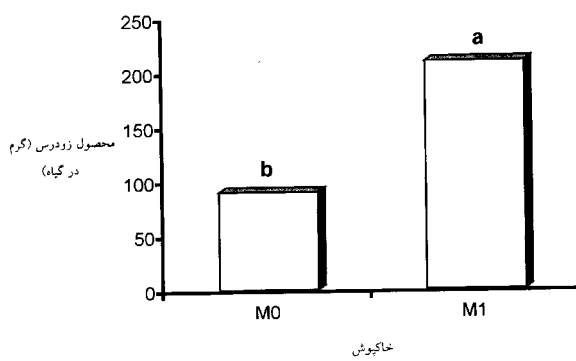
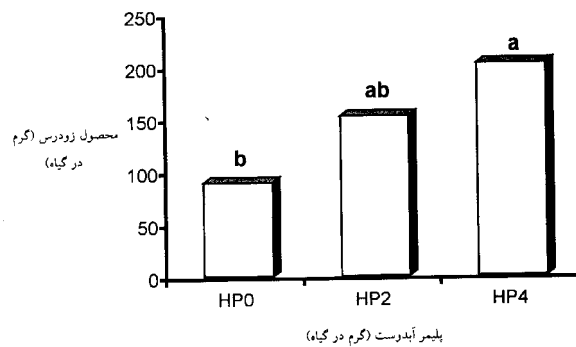
(

$\alpha = %$

/ % %

.( )

$\alpha = %$





(Blossom end rot)

PR3003 A

6. Al-Harbi, A. R., A. M. Al-Omran, A. A. Shalaby, & M. I. Choudhary. 1999. Efficacy of a hydrophilic polymer declines with time in greenhouse experiment. Hort. Sci. (34): 223-224.
7. Al-Omran, A. M., A. Shalaby, H. Wahdan, & M. I. Choudhary. 1996. Growth response of cucumber to hydrophilic polymer application under different soil moisture levels. J. Veg. Cr. Prod. (2): 57-64.
8. Boatright, J. L., D. E. Balint, W. A. Mackay, & J. M. Zajicek. 1997. Incorporation of a hydrophilic polymer into annual landscape beds. J. Environ. Hort. (15): 37-40.
9. El-Sayed, H., R. C. Kirkwood, & N. B. Graham. 1991. The effects of a hydrogel polymer on the growth of certain horticultural crops under saline conditions. J. Exp. Bot. (42): 891-899.
10. Huttermann, A., M. Zommodi, & K. Reise. 1999. Addition of hydrogels to soil for prolonging the survival of *Pinus Halepensis* seedlings subjected to drought. Soil and Tillage Res. (50): 295-304.
11. Joshi, V. R., Y. C. Panchal, & S. M. Mutanal. 1998. Effect of hydrophilic polymer on the germination and seedling growth of rabi sorghum (*Sorghum bicolor* (L.) Moench). Karnataka J. Agric. Sci. (11): 216-219.
12. Maqsood, A. & H. Verplancke. 1994. Germination and biomass production as affected by salinity in hydrogel treated sandy soil. Pakistan J. For. (44): 53-61.
13. Monks, C. D., D. W. Monks, T. Basden, A. Selders, S. Poland, & E. Rayburn. 1997. Soil temperature, soil moisture, weed control, and tomato (*Lycopersicon esculentum*) response to mulching. Weed Tech. (11): 561-566.
14. Runham, S. R. & S. J. Town. 1995. An economic assessment of mulches in field scale vegetable crops. Brighton Crop Protection Conference – Weeds (3): 925-930.
15. Salokangas, K. 1973. Effect of polyethylene and paper mulching on yield and earliness of pickling cucumber. Acta Hort.(27): 223-227.
16. SanLiang, G., L. H. Fuchigami, S. H. Guak, & C. Shin. 1996. Effects of short-term water stress, hydrophilic polymer amendment, and antitranspirant on stomatal status, transpiration, water loss, and growth in 'Better Boy' tomato plants. J. Amer. Soc. Hort. Sci. (121): 831-837.
17. Sari, N., H. Y. Guler, K. Abak, & Y. Pakyürek. 1994. Effect of mulch and tunnel on the yield and harvesting period of cucumber and squash. Acta Hort. (371): 305-310.
18. Save, R., M. Pery, O. Marfa, & L. Serrano. 1995. The effect of a hydrophilic polymer on plant water status and survival of transplanted pine seedlings. HortTech. (5): 141-143.
19. Silberbusha, M., E. Adarb, & Y. De Malach. 1993. Use of a hydrophilic polymer to improve water storage and availability to crops grown in sand dunes II. Cabbage irrigated by sprinkling with different water salinities. Agric. Water Man. (23): 315-327.
20. Szegedi, R., I. Cserni, & P. Milotay. 1993. Turgid flowers are essential for good fruit and seed set in cucumber. Rep. Cucur. Genet. Coop. (16): 3-4.
21. Szmidt, R. A. K. & N. B. Graham. 1991. The effect of poly (ethylene oxide) hydrogel on crop growth under saline conditions. Acta Hort. (287): 211-218.