

## **Investigation on the effects of irrigation interval and blackpolyethylene mulch on the growth and yield of muskmelon**

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Due to the current years drought danger and lack of water, practicing a suitable method in optimum utilization of water resources for producing the required food of world population is indispensable. One of the modern approaches in saving the consumption of water is using of polyethylene mulch. For this reason, the effects of black polyethylene mulch and irrigation interval on growth and yield of muskmelon (*Cucumis melo cv. Semsory-e-Varamin*) were investigated at Research center of Horticulture Department faculty of, Agriculture University of Tehran in 1999. The experimental design was split plot with two factors irrigation as main plot in 3 levels (7, 14 and 21 days) and mulch as sub-plot in 2 levels (black polyethylene mulch and bare ground) in four replications. The results showed that effects of irrigation and mulch were significant at 1%. In bare ground treatments, the marketable yield, total yield, mean weight of fruits, fruit number per plant, plant length and weight, leaf area, leaf and stem fresh and dry weight were significantly decreased with increasing irrigation intervals, but in black polyethylene mulch treatments, there were not significant difference between irrigation intervals (7 and 14 days) on marketable yield, total yield, number of fruits per plant, percent of earliness, T.S.S.(%), number of branches. Polyethylene mulch with irrigation

differences between purslane and control group treatments.

On the other hand ,alfa alfa treatment proved not only increases the nutritional value of soil ,but also showed lower growth rate of weed.

In conclusion ,this study showed that intercropping of vegetable and forage between date palm have economical profit for gardener.