Study Of the effect of planting date, density and planting method on quantity & quality characters of leek

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The effect of planting date (2 July, 23 July and 12 August) planting density (150000, 200000 and 250000 plant/ha) and planting method (planting in hole and traditional planting followed by earting-up) were investigated on the yield and quality characters of "Otina" leek *(Allium ampeloprasum)*, using a randomized complete block design with two factors and four replicates, during 1996 at the Horticulture Research Center, Faculty of Agriculture, the University of Tehran.

Planting date significantly affected total yield, marketable yield, the ratio of marketable yield to total yield, average weight of plants, marketable plant weight, height of plants, shaft diameter, leaf number, percentage and weight of plants less than 2 cm in diameter. The thirth planting date (12 August) did not reach to harvest and the first one (2 July) was the best.

Although planting density had no significant effect on total yield, marketable yield and shaft length, but significantly affected the average plant weight, marketable plant weight and percentage and yield of plants with less than 2 cm in diameter. The best density was 150000 plants per hectar.

Transplanting in holes increased the total yield, marketable yield, average plant weight marketable plant weight and shaft diameter but decreased the percentage and yield of plants with less than 2 cm in diameter.

planting season was significant on seed yield per hectare ($\alpha=0.01$). In automn planting bulb onion with diameter over 7 cm was showed higher seed yield per hectare. Comparison of results of the two cultivation seasons showed that, as result of better growth and flowering conditions, as well as the longer growth period the automn cultivation was better than the spring cultivation with regard to all measured traits.