

A study on greenhouse tomato cultivation in the Guilan province

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In order to initiate cultivation and extension of vegetables in greenhouses in Guilan province, tomato (*Lycopersicon esculentum*), which is a very important vegetable, was cultivated.

In this investigation two hybrids F1 indeterminate cultivars of tomato which are special greenhouse cultivars known as E 338 F1 and GC 774 F1 were sowed in two different dates with 20 days difference (26th Sept. and 16th Oct.). The experiments were conducted with randomized complete block design with 4 replications in Horticultural Department, College of Agriculture, Guilan University. During the course of experiments few morphological and pomological factors were noted down and the results were analyzed.

The results indicated that the time of sowing seed and the genotype had a significant effect at 1% level on the yield and the E 338 F1 cultivar had the maximum yield in first sowing time i.e. 7.83 kg in square meter.

The effects of sowing time on fruit, length, number of fruits, plant height till the place of the first flower, distance between two inflorescence and the Vitamin C was significant in 5% level. In the first sowing time the length of fruit was more and the number of fruits was also more in comparison to the second sowing time. The height of plant till the first inflorescence and the distance between two inflorescences in the first sowing time was relatively higher than the second sowing. But the amount of vitamin C was higher in second sowing time.

Among the experimental cultivars, the E 338 F1 cultivar was shown produce more fruits, vitamin C concentration and the soluble solid materials in comparison to GC 774 F1 cultivar.

On the whole, the results indicated that the seed sowing of tomato in greenhouse in Guilan area is suitable and it seems that with postponement of sowing time and the use of cultivars of tomato adapted to less light, could increase the quality and yield in square meter.