

## **study the effect of different N levels and plant density on quality and quantity of green pepper**

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Pepper is one of the useful and valuable vegetables. In recent years its consumption especially in our country has been increased. Therefore study in its cultivation and growing is essential. One way of increasing its yield is applying nitrogen and using suitable plant density.

A field experiment was carried out to study the influence of above factors on cultivar of the california wonder. The design used in this study was split plot. Following results were obtained:

1. Maximum yield was obtained from those plots which were supplied with 160 to 240 KgN/hect. The difference between N levels were significant .
2. Supplying all fertilizer as a basal fertilizer during transplanting gave, better results than when half of the N was used when transplanting and the remainder during fruit setting.
3. there was no significant difference in fertilizer application, but the best results were obtained when it was broadcasted.
4. By adding the N rates, The vitamin C of the fruits were increased.
5. Earliness of crop was affected by 80 to 160 KgN/hect.
6. Total yield was affected by increasing the plant density. the ideal plant density was 75×10 Cm.
7. Earliness was influenced by decreasing the plant density . Therefore the earliest crops was obtained in 50×10 and 75×10 treatments.
8. Increasing the number of plants per unit area reduced the vitamin C content of the fruit.

2- In Karaj experiments all characteristics, except the number of branch per plant and number of seed in each pod were different and their differences were significant.

3- In Zanjan all characteristic were significantly different.