



P2-11. The effects of different irrigation regimes on the growth characteristics of saffron (*Crocus sativus* L.)

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Saffron (*Crocus sativus* L.) is one of the economic and revenue generating crops in Khorasan province. The growing period of saffron is mostly winter and spring, which makes it a popular crop in areas with limited water supply. In order to investigate the effect of different irrigation intervals on the growth characteristics of saffron an experiment was conducted during the growing season of 2008 in Agricultural Research Station, Ferdowsi University of Mashhad. For this purpose a randomized complete block design with three replications was used. Treatments included three irrigation intervals (every 7, 14 and 21 days) and control. The results indicated that the number of corms per plant, fresh and dry weight of corm and also fresh and dry weight of leaf were significantly affected by irrigation intervals. With increasing irrigation intervals the growth characteristics of saffron were enhanced. However, the highest number of corms per plant, fresh and dry weight of corm and also fresh and dry weight of leaf was achieved on the irrigation interval with every 21 days. The highest and lowest number of corms per plant were observed in the irrigation intervals of every 21 (31 corms per plant) and 7 (12 corms per plant) days, respectively. A positive significant ($p \leq 0.01$) correlation between number of corms per plant, fresh and dry weight of corm and also fresh and dry weight of leaf and leaf was observed. This study showed that different irrigation regimes can affect the growth characteristics of saffron.

Keywords: *Crocus sativus* L., irrigation regimes, medicinal plant, saffron

P2-12. Investigation on the influence of depth planting and summer irrigation saffron yield in Gonabad

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Saffron is one of the most important horticultural crops in South of Khorassan province and many farmers live on the profits obtained from this product which makes a considerable amount of currency annually. The study was conducted in a factorial experiment based on Randomized Complete Block Design with four replications. Field experiment was conducted three levels of planting depth and four levels of summer Irrigation during in 1999-2005 at Gonanbad Agricultural and Natural Foundation Research Station. Maximum yield and minimum loss was observed at the depth of 15-20cm. Summer irrigation was non significant.

Keywords: depth, saffron yield, summer irrigation

P2-13. Production potential of saffron (*Crocus sativus* L.) as influenced by irrigation levels and frequency at different stages of growth

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Saffron (*Crocus sativus* L.) the king of spices has for centuries been in global demand. It is a wonderful oldest autumn flowering, hysteranthous low-growing inter active perennial geophytes, highly coveted for its beautiful, fascinating fragrance, pleasant flavour, extraordinary healing powers and a host of other appealing qualities. Kashmir is the main state of growing saffron in India. It is the entity of Kashmir symbolizing Kashmiri culture and gives a fillip to ecological safety and social stability to farmers of Kashmir

Keywords: frequency, irrigation levels, saffron, stigma