

## **EFFECT OF SUMMER IRRIGATION ON SAFFRON FLOWERING**

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In 1999 the total area of saffron farms in korasan province increased to 36000 ha with 169 Tons of dry stigma. saffron culture in Iran occupies the lands 8 years, in respect to summer soil moisture during dormancy, would help the corms to produce more flowers, A 3 year study (1995-96-97) was conducted to evaluate the effect of summer irrigation on yield of this plant.

A randomised complete block design with 4 replications and 4 treatments was used as fallows.

A= One Irrigation at 10th july

B= One Irrigation at 10th August

C= Tow Irrigation at 10th July+10th August

D= No Irrigation as control

it was carried out in two experimental stations, one in BEJESTAN that has a desertic and warm weather and the other in GHAEN with a hillside and cooler area. The experiments were also repeated on both new established farms, and 4-5- 6 years old ones. 700 m<sup>3</sup> of water irrigated per hectar in basin method. The first anual irrigation for all treatments was at the 20th october with a hand hoeing after. flowews were picked, counted, weighted in 20 days and then analised.

At both sites a high significant difference ( $P > 0.01$ ) was obtained for old farms and ( $p < 0.05$ ) for new farms. The highest yield obtained from one irrigation at 10th August that increased %17 in new farms and %40 in old farms and lowest yield was from irrigation of 10th July. The results of site 1 are summarised in table 1 & 2. All irrigated plots and old farms had bigger