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# Performance of date palm cultivars in Kachchh region

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### **ABSTRACT**

Date palm (Phoenix dactylifera L) is an important crop of North-West arid region of India. Date plam is commercially cultivated mainly in the costal belt of Kachchh, from Anjar to Mandvi. Date palms grow in Kachchh is developed mainly through seed propagation hence, the majority (70 to 80 per cent) of the produce is of inferior in quality. In due course offshoots of date palm varieties were procured from different date growing countries under U.N.D.P. and their subsequent evaluation was under taken for the Kachchh region. Five introduced date palm varieties viz., Zahidi, Halawy, Barhee, Khadrawy, Sayar and one Local Red variety as check were evaluated during 1999 to 2001 at Date palm Research Station, Gujarat Agricultural University, Mundra-Kachchh. Significantly the highest yield per palm (83.00 and 80.60 kg) was recorded in variety Barhee during 2000 and 2001, respectively. Based on three years pooled the maximum yield 66.17 kg/palm was recorded in variety Barhee. The lowest yield was recorded in the variety Sayar and Khadrawy. The maximum number of strand (62.08) and length of strand (44.92) were recorded in variety Barhee, however, it was statistically at par with variety Halawy. Maximum number of fruits /strands were observed in variety Barhee. The maximum fruit weight was recorded in variety Halawy during 1999, where as, fruit weight of Barhee recorded maximum during 2000, 2001 and in pooled i.e. 15.40, 12.63 and 12.74, respectively. The fruit length of different varieties were found non-significant during 2000 and 2001. However, the significant maximum fruit length was recorded in variety Halawy during 1999 and in pooled. The significant maximum fruit width was recorded in variety Barhee. Variety Zahidi, Khadrawy and Sayar fetched very low price due to fruit quality and taste was also astringent in khalal stage, where as, variety Halawy, Barhee and Local Red fetched higher rate (15 Rs./kg). The maximum return Rs. 992.70 per palm was observed in variety Barhee due to sweet in taste and soft at khalal stage.

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The date palm (*Phoenix dactylifera* L.) belongs to ▲ family palmaceae The commercial cultivation of date palm (*Phoenix dactylifera* L.) occurs only in the western border of India and ninety per cent of plantation is restricted to the coastal belt of Kachchh district of Gujarat. The date palm growing in kachchh might be about 200 years old (Pareek and Sodagar, 1986). Presently in kachchh about 1.5 million date palm in the form of date grows as well as plantation spread over the coastal belt from Anjar to Mandvi including Mundra and other areas. Due to seed propagation, the majority (80 -90 %) of the produce is of inferior in quality and fetches very low price. In due cource offshoots of the date palm varieties were procured from different date growing countries under U.N.D.P. and their subsequent evaluation was under taken for the Kachchh region. Five introduced date palm varieties viz., Zahidi, Halawy, Barhee, Khadrawy, Sayar and one Local red variety as check were evaluated during 1999 to 2001 at Date palm Research Station, Gujarat Agricultural University, Mundra- Kachchh. Therefore, this experiment was conducted to the study performance of date palm cultivars in Kachchh region.

## MATERIALS AND METHODS

The present investigation was conducted at the Date palm Research station, Gujarat Agricultural University, Mundra- Kachchh during the year 1999 to 2001. Offshoots of different date palm varieties were planted in the year 1985–86 at 8 x 8 m spacing. Experiment was carried out in Randomized Block Design with four replications. Five plants of each variety were selected for observation. The observations on fruit yield and yield attributing characters were recorded annually from 1999 to 2001.

### RESULTS AND DISCUSSION

### Yield attributing characters:

The significant higher number of bunches per palm were recorded in Zahidi, Halawy and Local red on pooled basis (Table 1). However, the effect was found non significant for number of bunches per palm during 1999 and 2001. These results have been supported by Sourial *et al.* (1983) and Thatai (1997). The number of strand per bunch was recorded significantly higher in Halawy