

The Effect of Different Leaf/Bunch Ratios on Yield and Fruit Quality of Nebut Seif and Ruzeizi Date Palm Cultivars

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ABSTRACT. The effect of leaf/bunch ratios (5, 7 and 9 leaves/bunch) on yield and fruit quality of Nebut Seif and Ruzeizi date palm cultivars was studied for 3 successive years. Yield and average bunch weight gradually increased with increasing leaf/bunch ratio in both cultivars. Leaf/bunch ratio had a slight effect on physical quality of the fruit and a significant effect on total soluble solids (TSS). Moisture content of fruit at rutab stage increased with increasing leaf/bunch ratio, though the differences between treatments were not significant.

In pruning date palms, the importance of leaving a sufficient number of fully expanded green leaves per bunch to obtain high yields of fruit of good quality has been emphasized by several investigators. Nixon (1940, 1947, 1957) reported that an average of 7.5 leaves/bunch of the Deglet Noor Cultivar was needed to obtain high yields of fruit of good quality and to assure the production of an adequate number of bunches the following year. Hussein and Abdalla (1973) found that a 9 leaves/bunch was most suitable for Sakkoti cultivar. Abdulla *et al.* (1982) stated that increment in the leaf/bunch ratio in Hayany cultivar influenced yield and all fruit properties except for titratable acidity, tannins and crude fiber. Although, Hussein *et al.* (1977) reported that 12 leaves/bunch was sufficient to obtain a suitable yield of good quality fruits in Barhi cultivar under Qassim conditions but nevertheless, these effects are not widely investigated under the conditions of Saudi Arabia.

Therefore, the present experiment was carried out at Dirab Experiment Station, College of Agriculture, King Saud University to study the effect of