Bunch Thinning Improves Fruit Yield and Quality of Date Palm

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Abstract

The influence of bunch thinning as related to different leaf/bunch ratios (No thinning/control, 6:1, 8:1, 10:1 and 12 leaves:1 bunch) on fruit yield and quality of ‘Ghur’ date palm cultivar was investigated. Bunch weight, fruit and seed parameters were not affected by thinning intensity. Furthermore, increment of leaf/bunch ratio did not improve other bunch components (fruit/strand, strands/bunch and strand length). Many interrelated factors including tree and leaf condition and environment may have dominant impact on the overall yield components that may possibly reduce or eliminate effects of thinning intensity. Despite the negative effects of thinning intensity on yield components, an interesting inverse relationship between fruit and seed weights could be observed. Fruit weight relatively increased while seed weight decreased with increasing leaf/bunch ratio. Flesh/seed ratio was similarly and significantly increased with increasing leaf/bunch ratio, particularly with 10:1 and 12:1 ratios. Reducing and non-reducing sugars were positively increased while fruit moisture content was not affected. The improvement of sugar content could be attributed to possible abundant accumulation of photosynthetic assimilates with more leaves per bunch.