



Research paper

**Effect of Irrigation Intervals on Growth and Yield of
Semi-dry Date Palm Cultivars in River Nile State,
Sudan**

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ABSTRACT

The experiment was conducted at Korgus area 17 km south of Abu Hamad in the River Nile State during two seasons (2005/6 and 2006/7) to study the effect of irrigation intervals on growth and yield of two semi-dry date palm cultivars; Mishrig Wad Laggai and Mishrig Wad Khateeb. The treatments were three irrigation intervals (10 days, 20 days and 30 days). The parameters studied were annual gain in leaves number per plant, plant height, plant stem diameter (cm) and yield (kg/tree). The results showed that the irrigation intervals had significant effect on all parameters measured. The 10 days irrigation interval gave the maximum mean values for all parameters in both seasons, followed by 20 days irrigation interval, whereas the 30 days irrigation interval gave the lowest values. The effect of irrigation intervals on plant stem diameter and yield showed significant difference between the two date palm cultivars, but the number of leaves per plant and plant height were not affected.

Keywords: *Date palm cultivars, growth, irrigation intervals, yield*