VEGETATIVE GROWTH OF EIGHT MANGO CULTIVARS GROWN UNDER TWO MICROIRRIGATION SYSTEMS AT THE COASTAL ZONE OF THE PIAUI STATE, BRAZIL

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The study was carried out in an mango orchard of the Embrapa Meio-Norte, located at the coastal zone of Piaui State, in a sandy soil, Koppen's Aw climate, annual average temperature of 27.2 °C, air relative humidity of 75% and annual average precipitation of 1.300 mm. The plants were 7-year-old, grown at spacing of 9 x 8 m, under a trickle and a drip irrigation systems. The cultivars evaluateds were: Tommy Atkins, Haden, Kent, Keitt, Ruby, Sensation, Irwin and Sandersha. The plant height ranged from 5.67 m (Sandersha) to 7.52 m (Irwin), in the trickle irrigation system, and from 6.01 m (Irwin) to 8.04 m (Sensation), in the drip irrigation system, while the canopy diameter ranged from 7.95 m (Irwin) to 9.34 m (Keitt) and from 8.36 m (Irwin) to 10.14 m (Sensation), to the trickle and drip irrigation systems, respectively. The rootstock trunk diameter varied from 18.33 cm (Irwin) to 23.98 cm (Tommy Atkins), in the trickle irrigation system, and from 20.19 cm (Irwin) to 25.38 cm (Sensation and Keitt), in the drip irrigation system, whereas the scion trunk diameter ranged from 18.12 cm (Sandersha) to 23.32 cm (Ruby) and from 19.44 cm (Sandersha) to 25.60 cm (Kent), to the trickle and drip irrigation systems, respectively. The data showed that the cultivars had a vigorous vegetative growth rate, needing a pruning management around the 6- to 7-years-old.