177

1 UNDER TO CROP

ı, C.G.²

1age, 8384

nia.

unirrigated dex, potato overs links, - water use tress - yield sustain the - 588 mm

YIELD AND DISTRIBUTION OF BIOMASS AND NUTRIENTES IN PEACH PALM CROPPED UNDER IRRIGATION IN THE SEMI-ARID AREA OF BRAZILIAN NORTHEAST

Drumond, M. A.; Flori, J. E.; Faria, C. M. B. and D'Oliveira, L. O. B.

Embrapa Semi-Árido CP 23, CEP 56300-000 Petrolina-PE, Brazil.

The objective of this paper was to quantify the biomass and the nutrient concentration in the components of the peach palm (Bactris gasipaes H.B.K) (stem, leaves and hearts of palm), under irrigation in the semi-arid area of the Brazilian Northeast. The study was developed in Petrolina-PE, Lat. 09°09' S and Long. 40°22' W. The plant spacing was 2,0 x 1,0 m, with a basic application of 300 kg/ha of N, 100 kg/ha of P₂O₅ and 300 kg/ha of K₂O. At 19 months of age 24 plants were cut, being selected based on the optimum size (± 2.0 m of height and 9.5 cm of diameter at the height of 80 cm of the soil) for evaluating the growth of the peach palm in irrigation conditions. It was verified that the mean yield of dry biomass was of 6,600 Kg/ha (50.4%) for stem, 6,000 Kg/ha (48%) for leaves and 200 kg/ha (1,6%) for hearts of palm. The humidity text presented for each component was 86.75; 84.02; 67.6% and, respectively, for hearts of palm, stem, leaf, while the concentration of the macronutrients was higher in the hearts of palm followed by the leaves and stem. The concentration of nutrients in the biomass (upper part soil) of peach palm, plants in a decreasing order was: K (185.3 kg/ha)> N (179.7 kg/ha)> Ca (59.2 kg/ha)> .P (33.9 kg/ha)> Mg. (25.1 kg/ha).



3rd International Symposium on Irrigation of Horticultural Crops, Estoril, Portugal

BOOK of abstracts ... Lisboa: 15A-UTE, 1999. p. 177