

EFFECTS OF IRRIGATION LEVELS DURING THE FRUIT
GROWTH PERIOD ON THE QUALITY OF MANGO FRUITS IN
TERESINA, PI, BRAZIL

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The state of Piauí is one of the most important mango producing region of the Northeast of Brazil. In the Northeast, irrigation is essential to guarantee quantitatively and qualitatively the production of mango fruits. Then, in order to study the effects of variable levels of irrigation during the fruit growth period on quality parameters of mango fruits this work was carried out in an commercial area of mango plants of the cultivar 'Tommy Atkins', in the 1999 growing season. The treatments were set to represent six levels of irrigation depth corresponding to 0% (T₁), 44% (T₂), 55% (T₃), 86% (T₄), 100% (T₅) and 137% of the reference evapotranspiration based on the Classe A tank method. A randomized block design with four replication was used. The irrigation depth varied from 286 mm (T₂) to 888 mm (T₆). It was observed that the treatments induced significantly differences at the 5% level in the physical (% in weight of peel, % in weight of seed, % in weight of pulp, fruit length and fruit diameter) and chemical parameters (soluble solid contents, total acidity, pH and °Brix/acidity relationship) of the mango fruits.