

THE EFFECT OF WATER STRESS ON TRANSPIRATION, AND STOMATAL RESISTANCE OF MANGO TREES UNDER IRRIGATION.

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The behavior of the transpiration rate, stomatal resistance and water potential for mango plants in an orchard in the Northeast of Brazil under a sprinkler system has been monitored. The main objective of this study was to see how the water stress imposed to the plant in order to make them to flower was affecting from plant transpiration. The study was carried out on eight-year-old mango plants cv. Tommy Atkins for both irrigated and nonirrigated period of the crop. Transpiration, and stomatal resistance were determined periodically at a fifteen days intervals using a porometer, whereas plant water potential was determined by a pressure bomb. The study demonstrated that transpiration rate and stomatal resistance were less during the irrigation than the stress period, and this could be the effect of the excessive irrigation causing water flooding of the root zone.