

Characterization of Banana Cultivar 'PA 42-44' Fruits under Regulated Irrigation Deficit in the North of Minas, Brazil

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The use of a suitable irrigation schedule that allows optimal banana growth and fruit quality along with increased water use efficiency is important for waste water reduction. The objective of this work was to evaluate the post-harvest quality of banana cultivar 'PA 42-44' fruits under reductions of irrigation water in specific growth phases (regulated irrigation). The field experiment and post-harvest evaluations were carried at Gorutuba Experimental Farm, Epamig, Nova Porteirinha city. The design was random block with seven treatments (levels of water reduction during specific growth phases) and five replicates. The following physical and chemical fruit quality variables were evaluated: dropping resistance, pulp strength, fruit length, fruit diameter, pulp/peel ratio, total soluble solids, titratable acidity and pH. Fruits from plots with total irrigation at phases I and II and 55% ETc at phase III, and with total irrigation at phases I and III and 70% ETc at phase II showed higher dropping resistance, pulp strength and total soluble solids. Fruits from plots with total irrigation at phases I and II and 70% ETc at phase III showed lower dropping resistance and total soluble solids. Larger fruit length and fruit diameter was obtained at total irrigation plots, but the ratio pulp/peel was smaller in this treatment. Fruits harvested with total irrigation at phases I and II and 85% ETc at phase III were larger. Titratable acidity of fruits from plots with total irrigation at phases I and II and 55% ETc at phase III was statistically higher.