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1-METHYLCYCLOPROPENE (1-MCP) FOR EXTENDING POSTHARVEST QUALITY OF “QUINTAL” AVOCADOS UNDER BRAZILIAN CONDITIONS

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There are approximately 88,000 tons of avocados produced annually in Brazil, and most of this production is commercialized in the local market. Avocados (*Persea americana*) present high respiratory rate and high ethylene production, being the control of ripening of this fruit fundamental for the increase of shelf life. Avocados “Quintal” were treated with 1-methylcyclopropene (1-MCP) at concentrations of 0, 30, 90 and 270 nL L⁻¹ for 12 hours at 24°C followed by storage at room temperature (24°C) during nine days. Peel and pulp color, firmness, percentage of ripened fruits (firmness < 8 Newtons), percentage of decay, respiration rate and ethylene production were measured. The experimental design adopted was the completely randomized with factorial scheme 4 x 10 and four replications of four fruits. The application of 1-MCP delayed color development of peel and pulp besides to proportionate higher firmness and to reduce decay. Fruits not treated presented the beginning of ripening after four days at 24°C while fruits treated with 1-MCP 270 nL L⁻¹ presented the beginning of ripening after seven days. The 1-MCP (270 nL L⁻¹) reduced fruit respiration rate and ethylene production. The 1-MCP presents commercial potential use to reduce the ripening process of avocados and to enlarge their shelf life.