**EFFECT OF HARVEST MATURITY OF AVOCADO (*Persea americana* Mill. CV. HASS) ON 1-METHYLCYCLOPROPENE EFFICACY.**

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Previous investigations with 1-methylcyclopropene (1-MCP) on avocado (*Persea americana* Mill. cv. Hass) fruit demonstrated the potential of 1-MCP to manipulate maturity of Hass avocado fruit. Therefore, 1-MCP efficacy, depending on initial fruit maturity (dry matter content), is an important factor from a commercial perspective. The current study investigated the effect of fruit maturity on 1-MCP efficacy. Avocado fruits harvested bi-weekly during the 2006 commercial harvesting season, were obtained from a commercial packing-house and selected by size (size 20). Percent dry matter content was determinate on five fruit sample. Then, twenty fruits per treatment were exposed to 200 and 300 nll-[1] 1-MCP for 12 h at 6° C. After the treatment, the fruits were cold-stored at 6°C for 20 days and then placed at 22°C for ripening assessment. Control fruits were maintained under identical storage conditions. Polygalacturonase activity and firmness were monitored during ripening process. 1-MCP treatment suppressed increases in PG activity for 4 days. The effect of fruit maturity on firmness was significant. Non-treated fruits presented ripening after 1.9 days, while fruits treated with 1-MCP presented ripening after 4.9 days. The results permit to confirm that 1-MCP is a potential tool to delay avocado fruit ripening, even those harvested with high levels of dry matter.