

## **EFFECTS OF STORAGE HUMIDITY, TEMPERATURE AND HUMIDITY DURING RIPENING, AND ETHYLENE APPLICATION ON POSTHARVEST ROTS OF HASS AVOCADO**

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Two experiments were started on March 6<sup>th</sup> and April 5<sup>th</sup> 2006, during the heart of avocado picking season. In both of them, 15 trees were used as replicates in a complete factorial analysis with 3 factors: Two main storage treatments, for 14 days at 6° C, with 68 % or 88 % RH. They were followed or not by an ethylene treatment (24h – 54 ppm) at the start of 4 ripening treatments (15° C or 20° C with 68 % or 88 % RH) Control fruits were kept in a well ventilated room at approximately 15° C – 17° C and 55 % - 50 % RH. To simulate a decreased demand at the market in the second experiment, all fruits, except control, were kept at 6° C for 6 days.

Control fruits had similar or lower rotting percentages than fruits stored and ripened under controlled conditions. High humidity (88 % RH), with or without ethylene during ripening, increased body rot and stem end rot, but not always significantly. The percentage of totally clean fruits was slightly higher with low RH storage (68 %). Ripening at 15° C or 20° C and ethylene application had minor effects on fruit rotting. Ethylene did not significantly reduce ripening time. At 20° C, fruits ripened about 2 days earlier than at 15° C.