EFFECT OF CONSTANT AND ALTERNATE TEMPERATURES ON POSTHARVEST ROT IN HASS AVOCADOS

J. M. Hermoso[1] and J. M. Farré[2]
[1] Estación Exp. La Mayora. C. S. I. C. 29750 Algarrobo-Costa, Málaga, España.
Correo electrónico: jmhermoso@eelm.csic.es
[2] IFAPA de Málaga. Cortijo de la Cruz. 29140 Churriana, Málaga, España.

Two experiments were carried out in early and late April 2004, in a rainy spring and with very vigorous trees. Probably because of this scenario, the incidence of fruit rots, basically by *Colletotrichum gloeosporoides*, was very high. Eight storage regimes were applied in different cold rooms. Two were constant, 3º C and 5º C, and six were combinations of alternate temperatures within the day:

9 hours at 15º C or 20º C, and 15 hours at 3º C or 5º C

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All treatments were applied during 10 or 20 days. All fruits ripened at room temperature (20 – 24º C). Control fruits were ripened at ambient temperature without a previous storage period. Rainfall was abundant in the 10 days prior to the first experiment, which probably increased rotting. Twenty five trees were used as blocks, using two fruits per each treatment and tree. Almost all treatments reduced the incidence and development of fruit rots when compared to controls. Only those fruits exposed 15 hours at 20º C and 9 h at 5º C for 20 days increased rots over control in both dates. In the second date, with alternate temperatures, body and stem end rot were higher after 20 days of storage than when stored for 10 days. The constant storage temperatures, 5º C and 3º C, strongly reduced rots, even more after 20 days of storage when compared to 10-day storage. Only in the second date, rotting was similar to control after 20 days at 3º C.