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EFFECT OF FOLIAR TREATMENTS WITH CALCIUM NITRATE ON RIPENING AND CHILLING INJURY OF 'FUERTE' AVOCADOS

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Avocado trees cv. 'Fuerte' were sprayed with 0, 0.3, or 0.5 % solutions of Ca(NO3)2. Six preharvest sprays were applied from May 4, 2001 to January 2002. Fruits were harvested in January 2002 and stored at room temperature or 5°C for 5 weeks. Fruits were evaluated after 0, 3, and 5 weeks of storage. A completely randomized experimental design was used. Results showed an increase of skin and flesh calcium levels on fruits treated with calcium nitrate. Preharvest 0.3 and 0.5 % calcium nitrate treatments enhanced fruit firmness and reduced fruit weight loss. Furthermore, CO2 and ethylene production, polyphenoloxidase enzyme (PPO) activity, and chilling injury symptoms were lower on treated fruits.