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EFFECT OF SMARTFRESH® (1-METHYLCYCLOPROPENE) AND ETHYLENE ON THE REGULATION OF MATURATION IN AVOCADO HASS

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SmartFresh occupies ethylene receptors inside the fruits, reducing respiration rate and ethylene endogenous production. However, it is important to know the effect of exogenous ethylene applied to avocado fruits cv. Hass previously treated with *SmartFresh* and its influence on the maturation process. Export grade avocado fruits cv. Hass with dry matter and oil levels of 27% and 19% respectively were exposed to 200 ppb of *SmartFresh* during 12 hours and subsequently transferred to a cold storage room for 21 days at 6°C. At the end of the cold chain, treated fruits were exposed to 100 ppm ethylene for 24, 48 and 72 hours at 21°C and a relative humidity higher than 80%. After ethylene exposure, fruits were maintained in the laboratory under shelf conditions and daily evaluations of maturation rate, colour, firmness, dry matter and weight loss were carried out. The results indicate that the effect of *SmartFresh* is reversible by ethylene action with an efficiency directly related to exposure time, without damage in consumer quality traits.