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# EFFECT OF SMARTFRESH® (1-METHYLCICLOPROPENE) ON THE MATURATION OF HASS AVOCADO UNDER SIMULATED STORAGE AND TRANSPORT CONDITIONS

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Avocado, as a climacteric and chilling-sensible fruit, requires appropriate postharvest techniques for its long-term conservation. The duration of the Mexican shipments to Europe and Asia, estimated in 20 to 22 days, significantly decreases the fruit shelf life and increase the fruit losses in the final destinations. Considering the transit time of the fruit to the final international markets, special handlings are required to secure the arrival of the fruit in the best commercialization conditions. As the shipment contains fruit with different oil and dry matter levels it is difficult to achieve an uniform and prolonged shelf life. *SmartFresh* (1-MethylCicloPropene) is a volatile compound, recently discovered and that has shown to be a powerful ethylene inhibitor, which is linked to the receptor sites of ethylene reducing its effect and delaying fruit maturation. In order to know the effect of *SmartFresh* on the maturation of Hass avocado, batches of export grade fruit with dry matter and oil levels of 21% and 12% respectively were exposed to 200, 300 and 400 ppb of *SmartFresh* during 12 hours. Batches of fruit of the same quality were included as controls. After the treatment the fruit was stored in cold storage rooms at 6°C during 18 days and, subsequently, transferred to shelf to evaluate its behavior. The results indicate that *SmartFresh* delays the maturation process in Hass avocado, maintaining firmness, colour and weight properties up to 12 days more than in fruits not exposed to *SmartFresh*. Additionally, *SmartFresh* decreases the sensibility to postharvest pathogens and the dehydration damage.