

## LABORATORY BASED EVALUATION OF 1-METHYL CYCLOPROPENE (1-MCP): WITH FIVE SOUTH AFRICAN COMMERCIAL EXPORT AVOCADO CULTIVARS

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In the past, the firmness of South African export avocados was maintained by reducing the storage temperature during transport. More recently, controlled atmosphere (CA) has been added to further reduce ripening during storage. This certainly improved the chances of landing a hard fruit in Europe, but certain physiological and monetary concerns remain. During the 2000 and 2001 seasons, we evaluated the effectiveness of 1-methyl cyclopropene (1-MCP), an ethylene inhibitor on avocados, at the ARC-ITSC laboratory in Nelspruit, South Africa. The trials were done with all the major export cultivars and covered aspects such as storage potential, respiration rate and fruit quality upon ripening. The results were extremely positive and the manufacturer (Rohm & Haas, USA) has obtained registration (SmartFresh™) on avocados in South Africa. Static container trials followed during the 2002 season, the results of which are published in a second paper.