

### Abstract:

'Tommy Atkins' mangoes were harvested at stage 2 maturity and treated in a day later with 1-methylcyclopropene (SmartFresh™, 100 and 500 nL.L-1), at room temperature for 12 hours. Some fruits were wrapped with Xtend™, for modified atmosphere generation and the effects of 1-MCP and modified atmosphere (with or without MA) were evaluated during 25 days of storage at  $11.5 \pm 1.7$  °C and  $86.1 \pm 8.4$  % RH, followed by 7 days at  $25.4 \pm 0.2$  °C and  $97.6 \pm 1.2$  % RH. Sensory analysis was carried out once, after storage. Luminosity (\*L) measured in the green part of the mango skin was affected by 1-MCP doses until the 25th day, and values were higher in fruits stored without MA. Effects of were only noticed in \*L and Chroma (C) characteristics of pulp color. \*L values were lower and C values were higher when MA was used. Modified atmosphere was efficient in protecting fruits from weight loss during cold storage. Fruits stored without MA and treated with 100 nL.L-1 were firmer but this was not detected by the sensory panel. Sensory analysis revealed that ripening was accelerated for fruits stored under MA and for those treated with 500 nL.L-1 and kept without MA. Judges did not notice differences in aroma, color or firmness between the control and 100 nL.L-1 treated fruits.