

Abstract

The objectives of this study were to determine the optimum concentration of 1-MCP and to evaluate the effects of 1-MCP on mangosteen quality after cold storage. Fruit at stage 2 (yellow-pink) were placed in the 1.00 liter Ziploc, sealed, and injected with 1-MCP at various concentrations 0, 1.00, 2.50, 5.00, and 10.00 ppm then placed at 15°C and 90-95 % relative humidity. At 2 and 4 weeks after storage, the treated fruit tended to have more L (Lightness) and b (yellow) values of both peel and calyx color, and firmness than control but 1-MCP could not slow down the a (red) value of peel color. 1-MCP had no affect on Total Soluble Solid (TSS), appearance and taste. At 6 weeks after storage, only 5.00 ppm treated fruit had significantly more L, b values, firmness and TSS than control. Furthermore, they had more calyxes fresh, peel color, texture, sweetness and the acceptance of consumer than control. 1-MCP could also slow down the a value of calyx color, but the weight loss percentages were not significantly different among treatments.