

Abstract

Two Japanese type plum (*Prunus salicina* Lindl) cultivars, 'Angeleno' and 'Golden King' , were harvested at optimal maturity and treated with 1-Methylcyclopropene (1-MCP) or packed in modified atmosphere (MA) bags. 'Angeleno' and 'Golden King' plum cultivars were stored at 0°C for 90 and 75 days, respectively. Both 1-MCP and MA packaging reduced softening, shriveling, respiration rate and loss of weight, flesh firmness titratable acidity, total soluble solids, deteriorations and skin color as compared to the control fruit. Storage duration was different for each cultivar, but the effect of 1-MCP and 1-MCP+MA packaging combination in terms of increased shelf life, inhibition of softening and higher quality attributes when compared with control was significant for both cultivars. It was concluded that 1-MCP and MA packaging combination have a beneficial effect on reducing softening and other quality parameters in Japanese type plums.