

#### Abstract:

Plum (*Prunus salicina* Lindl. cv. Golden Japan) harvested in a pre-climacteric ripening stage were used. Three different doses of 1-MCP were used: 250, 500 and 750 ppb. Fruit were stored at cold 1°C. Weekly, samples from the cold chamber were analysed and then other lots were stored at 20°C to study shelf-life for 4 and 7 days. Results showed a strong inhibition of ethylene emission, especially during shelf-life. This ethylene suppression was correlated with increased fruit firmness and reduced weight losses, the 750 ppb dose being the most efficient. With respect to colour changes, the effects of the 1-MCP was shown after 3 weeks of cold storage, with higher L and b and lower a colour values. No significant differences were observed in titratable acidity, while total soluble solids increased in control plum compared with treated ones. Thus, 1-MCP could be used as an agrochemical to maintain quality during postharvest storage of plums, which usually have a very short shelf-life.