

**Title** The effects of different postharvest applications and different modified atmosphere packaging types on fruit quality of Angeleno plums

**Author** Kenan Kaynas, Mustafa Sakaldas, F. Cem Kuzucu, Utku yurt and ahmet Demir

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### **Abstract**

In this research, the effects of different postharvest applications as 1-methylcyclopropene (1-MCP), sucrose-esters of fatty acids and different modified atmosphere packing types as low density polyethylene (LDPE), polyvinylchloride (PVC) shrink film on fruit quality of Angeleno plums grown in Çanakkale were evaluated.

For this purpose, fruits harvested from Çanakkale Umurbey province were treated with 1-MCP (Smartfresh™) and coating material including sucrose esters of fatty acids (Semperflesh™). In addition other group of fruits were packaged with LDPE and PVC shrink film. These 4 group of fruits that untreated and unpackaged were stored at 0°C-1 °C and 85-90% RH for 30, 60, 90 and 120 days respectively. After each storage period fruit were kept at 18 °C-22 °C for 3 days as shelf life. After harvest and each storage period, some quality parameters as fruit firmness, soluble solids content, sugar content, titratable acidity, fruit flesh colour and fruit taste were measured.

According to the results, both of the applications had positive effects on the quality parameters and biochemical properties after each storage period. Furthermore modified atmosphere packaging in LDPE and 1-MCP applications had a clear effects.