

**Title** Study on the effect of chemical treatments and storages on postharvest life of Valencia orange  
**Author** A. Aboutalebi, M.S. Arabzadegan  
**Citation** Program and Abstract. 2007 Australasian Postharvest Conference. Crowne Plaza Terrigal, NSW, Australia. 12 September 2007. 87 p.  
**Keywords** orange; blue mold rot; green mould rot

#### **Abstract**

In order to study the effect of chemical treatments and storages on postharvest life of Valencia orange, this experiment was conducted in complete randomized design in factorial arrangement with four replications. Fruits were harvested in mid March. After wounding and inoculation with blue(*Penicillium italicum*) and green mold (*P. digitatum*) spores, groped in two balk and treated with Sodium Carbonate, Potassium and Sodium Bicarbonate, Calcium Chloride at concentration of 1/5 and 3%, Ethanol 20 and 30%, hot water 50 and 60 °C and washing with tap water for 5 minutes. Control fruits in three levels included none wounded, wounded plus inoculation and wound plus inoculation and washing. After treatments, fruits were kept in polyethylene bags individually. One grope of fruits were stored in common storage and other stored in cold storage at 6 °C for 4 months. Results showed that wound was the main factors in decay of fruits. Percentage of decayed fruits was different among treatments. In cold storage decayed fruits were lesser and fruits had better appearance. Among treatments, hot water 50 °C and Sodium carbonate at 40 °C were the highest effect on controlling decay of blue and green mold.