

**Title** Modifications in cell wall composition after storage of 1-MCP-treated peach fruit  
**Author** A. Ortiz, M. Vendrell and I. Lara  
**Citation** ISHS Acta Horticulturae 858:221-224. 2010.  
**Keyword** controlled atmosphere; pectin; *Prunus persica*; shelf life; softening

### **Abstract**

Rapid softening of peach (*Prunus persica* L. Batsch) fruit after harvest considerably limits commercial life of produce. The decline in fruit firmness during ripening and storage is largely the result of partial disassembly of the primary cell wall arising from compositional changes. In this work, suitability of controlled atmosphere (CA) storage and 1-methylcyclopropene (1-MCP) treatment to delay these changes and to extend storage potential of a late-harvesting peach cultivar was tested. Cell wall materials were extracted and fractionated 0 and 7 d after storage to assess possible relationships to changes in fruit firmness. The yield of soluble materials increased during the shelf life period at 20°C, consistent with a decline in the contents of cell wall materials and of pectin-containing fractions, possibly in relation to the decrease in flesh firmness. The increase in the yield of soluble fractions after storage was attenuated by 1-MCP treatment, which proved more effective than CA storage in delaying solubilisation of cell wall polymers.