

Post Harvest Treatments for Chinese Water Chestnuts

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Post harvest treatments for Chinese Water Chestnut corms have been trialed to extend the storage life and maintain corm quality. Australian growers have experienced difficulties in establishing an extended cool storage protocol beyond a two month storage period. Trials were conducted during 1997/98 to identify the effect of MAP storage at 0°C. Corm quality including sheen, texture, colour, sweetness, odour and presence of pathogens was monitored. After three months storage, corms were considered unsaleable due to internal discolouration, mainly yellowing and black flecking, possibly from a combination of chilling and handling damage. Although overall corm quality was unacceptable (at three months), there were some promising results from the MAP trial where there was a reduced severity of yellow staining and black flecking of the flesh compared to storage in high humidity air, although some had slightly alcoholic off flavours. Further work is required to reduce physical damage from harvest and handling procedures prior to further investigations into suitable atmospheric conditions using MAP technologies.

Recommendations for further post harvest investigations and best bet options for existing growers are discussed.