

**Title** Control of post-harvest pericarp browning of litchi (*Litchi chinensis* Sonn)  
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#### **Abstract**

Pericarp browning is the major post-harvest problem of litchi (*Litchi chinensis* Sonn) fruit, resulting in reduced commercial value of the fruit. Control of post-harvest pericarp browning of fruit using 9 different post-harvest treatments were studied. The treated fruits were packed in transparent perforated (0.2% ventilation) low density polythene bags (100 gauge). On storage, pericarp browning increased irrespective of treatments with the decrease in pericarp specific activity, total pericarp phenol and total anthocyanin. Anthocyanin degradation index and polymeric colour increased during storage. Pre-cooled (10°C) fruits treated with 0.6% sodium metabisulphite solution for 10 min, air dried followed by dipping in 2% HCl for 5 min and packing in perforated LDPE bags recorded the lowest polyphenol oxidase specific activity (2.2 units/mg protein) with maximum retention of total anthocyanin (47.3 mg/100g) leading to the lowest pericarp browning after 9 days of storage with attractive red colour, freshness and enhanced shelf life of 9 days at ambient conditions (27.7 ± 1.2°C, RH 78 ± 4%).

<http://www.springerlink.com/content/b333154172851765/fulltext.pdf>