

Title Evaluation of the browning activity of minimally processed pineapple stored in super atmospheric condition

Author R. Nur Azlin, M. P. Nur Aida, M. T. Mohd Kamal, M. Hairiyah

Citation Abstracts of 7th International Postharvest Symposium 2012 (IPS2012). 25-29 June, 2012. Putra World Trade Centre (PWTC), Kuala Lumpur, Malaysia. 238 pages.

Keywords pineapple; browning

Abstract

This study was conducted to investigate the effect of super atmospheric condition on the browning activity of minimally processed (MP) pineapple stored at 10 °C for 15 days. The MP pineapple which cut in longitudinal shapes (5 cm) was packed in biaxially oriented polypropylene (BOPP) packages. Then all the samples were subjected to different oxygen (O₂) concentrations; 60% (T1), 80% (T2) and 100% (T3). Untreated sample was used as control (TO). Samples were evaluated for colour (L, a *, b* and hue value), pH and total titratable acidity (TTA). Polyphenol oxidase (PPO) activities were also monitored as to relate with surface browning of the MP pineapple. Results showed that the PPO activity of the samples treated with 80% O₂ was significantly lowered compared to control. This finding was supported by hue value which stated that samples treated with 80% O₂ had the lowest value. Furthermore, sample treated with 80% O₂ also had the highest TTA value. No significant difference was observed to the pH values of the treated and control samples until the end of the storage period.