

**Title** Effect of Equilibrium Modified Atmosphere Packaging on Shelf Life of Minimally Processed Sweet Bamboo Shoot cv. *Bambusa oldhamii* Munro

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### Abstract

The research was aimed at studying the effect of equilibrium modified atmosphere on storage life of minimally processed sweet bamboo shoot. Minimally processed sweet bamboo shoot were packaged in different types of packaging films, including PP, LDPE, PE-H and PE-VH, then stored at 4 °C. The results showed that types of packaging film had significant effect on protein, fat, fiber contents, total plate count, yeast, mold, moisture content, oxygen and carbon dioxide concentration in the packaging bags, respiration rate, browning and color changes ( $p \leq 0.05$ ) but had no effect on ash, vitamin C and oxalate content and firmness ( $p \geq 0.05$ ). Minimally processed sweet bamboo shoot packaged in PP bags had the longest storage life of 24 days.

Furthermore, packaging of minimally processed sweet bamboo shoot with minimally processed lettuce and carrot in different types of packaging films, namely PP, LDPE, PE-H and PE-VH and stored at 4 °C were also studied. The results from the study revealed that types of packaging film had significant effect on weight loss, browning of sweet bamboo shoot, pink cut of minimally processed lettuce, oxygen and carbon dioxide concentration and storage life ( $p \leq 0.05$ ). Combination of minimally processed sweet bamboo shoot, lettuce and carrot packaged in PP and LDPE bags had the longest shelf life of 10 days.