

Abstract

Pineapple fruits are subjected to a physiological disorder resulting in core breakdown and internal browning under cold storage conditions. The initial symptom of this deterioration is formation of watery tissues in the core and its adjacent areas. The symptoms are undetectable externally since the fruits appear normal. This study was conducted in Sri Lanka to control internal browning. Experiments were conducted under two stages, first stage as the preliminary stage, eight suggested treatments under chemical, physical and chemo-physical methods were tested. The fruits were stored in the cold room (10°C, and 85% RH) and samples were taken at day 12, 14, 16, 18, 20 and 22 of storage period. They were kept for one day at room temperature 28.9°C (RH 97 %). Wax (5 %) and Benlate (1 g/L) treated fruits were wrapped in cellophane were used to the second stage. Wrapping of cellophane sheet around the fruit prevents internal browning up to 18 days. However, application of wax for fruit was selected as the most effective treatment to reduce internal browning by 87.5 % while control showed 100 % induction at day 20.