

Efficacy of ethanolic extract of propolis in maintaining postharvest quality of dragon fruit during storage

Abstract

Significant ($P \leq 0.05$) differences were observed in dragon fruit quality when treated with different concentrations of ethanolic extract of propolis (EEP) (0.25, 0.50, 0.75 and 1.0%) and stored at 20 ± 2 °C and 80 ± 5 % relative humidity (RH) for 20 days. Fruit treated with 0.50% EEP showed the most promising results, while fruit treated with 0.75 and 1.0% EEP showed some phytotoxic effects even after 8 days of storage. The results of gas exchange analysis also proved the efficacy of 0.50% EEP concentration. Thus, it can be concluded from the present investigation that EEP at 0.50% concentration could be used to extend the storage life of dragon fruit without any negative effects on the quality.

Keyword: Antioxidant; Decay incidence; Dragon fruit; Propolis; Postharvest quality