

Title Impact of controlled atmosphere on the stability of Dhakki dates
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Abstract

The dates equilibrated at water activity (a_w) of 0.52, 0.58 and 0.75 were stored at 40 °C for 4 months under the controlled atmosphere of nitrogen, oxygen and air. The samples were evaluated monthly for darkening, pH, and titratable acidity. The study indicates that the darkening and titratable acidity increased whereas the pH declined gradually during the storage. The change in quality appeared to be a function of storage atmosphere and water activity. Among all the investigated options, the sample stored under the nitrogen atmosphere at lowest water activity ($0.52a_w$) showed the greatest stability.