

EFFECT OF DIFFERENT CHEMICALS ON THE PHYSICO-CHEMICAL PROPERTIES AND STORAGE-LIFE OF DATE FRUIT (*Phoenix dactylifera* L.) CV. "ZAIDI"

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ABSTRACT

Research studies were envisaged to ascertain the effect of CH_3COOH (2%, 2.5%, 3%, 10%, 12%) and their combinations on colour, texture, weight loss, shelf-life, total sugars, reducing and non-reducing sugars, Vitamin C content, T.S.S. and acidity of date fruit cv. "Zaidi".

Colour of treated date fruit was found attractive with CH_3COOH 2.5% + NaCl 10% and CH_3COOH 3% + NaCl 12% than single entities. Texture of fruit was improved by CH_3COOH 3% + NaCl 12%. Maximum weight loss occurred in control, whereas, chemicals enhanced shelf-life in combinations. CH_3COOH 3% + NaCl 12% enhanced sugar content. Non-reducing sugars showed higher trend for CH_3COOH 3% + NaCl 12% followed by NaCl 12% over all other treatments. Higher sugar percentage was observed to prolong curing period of dates, while Vit. C content decreased, T.S.S. exhibited increasing trends. Like-wise acidity decreased with curing period.

INTRODUCTION

Date palm (*Phoenix dactylifera* L.) is the third most important summer fruit of Pakistan. It is perhaps the oldest fruit plant ever cultivated on the surface of this globe (1983). Its fruit is liked very much due to its high nutritive value assimilation and energy producing food. At present the total area under date cultivation in Pakistan is 42 thousand hectares with an annual production of 287.3 thousand tonnes (Agri. State of Pakistan 1992).

Date industry has not attained any commercial status in the districts of Punjab like Jhang, Sahiwal and Faisalabad due to the onset of early monsoon rains when leading commercial varieties such as Khudrawi, Zaidi, Hillawi etc., are at 'Doka' stage. Consequently fruit cannot be allowed to stay on tree beyond 'Doka' stage and has to be cured off the tree. Fruit harvested at 'Doka' stage is perishable and its quick disposal