Gomal Univ. J. Res.
Vol. 9 No. 1&2 pp 111-117 (1989)
Printed in Pakistan

EFFECT OF VARIOUS DOSES OF GAMMA IRRADIATION OF THE PHYSICO-CHEMICAL CHANGES AND STORAGE BEHAVIOUR OF DATE FRUIT (PHOENIX DACTYLIFERA L.) CV. "HILLAWI"

Muhammad Siddique, M. Ashraf, Nisar Ahmad.
Agriculture University, Faisalabad.

Yousaf Ali
University College of Agriculture, Rawalakot, Azad Kashmir.

Received 16-04-88
Accepted 05-02-89

ABSTRACT

Date fruit Phoenix dactylifera L. is highly perishable in nature and its value can only be appreciated if the fruit is preserved for prolonged storage. Different doses of gamma irradiation were used. Regarding ripening, all the treatments have shown significant results. 1 kGy was the best treatment to delay ripening while 3 kGy was the best treatment to delay ripening while 3 kGy enhanced the ripening percentage of date fruit ahead of all other treatments. The various levels of irradiation resulted in the loss of moisture contents and weight. 2 kGy and 3 kGy treatments had shown higher moisture loss over control and 1 kGy. Due to more moisture the fruit was saved from shrivilling. Total sugars and protein contents did not exhibit statistical difference in the treatments. Keeping quality, storage behaviour and organoleptic evaluation proved to be better in 1 kGy. Likewise, more in the same treatment, the trace element (Fe and Cu) turned out to be more in the same treatment

INTRODUCTION

Date as food stuff, is rich in proteins, fats, carbohydrates and minerals, which are essential for human health. It is also a rich source of vitamins A, B, and C. date fruit is highly perishable under natural conditions and its value can only be appreciated