

INTRODUCTION

The mango(Mangifera indica L.) is one of the most popular tropical fruits cultivated in Arab Republic of Egypt. The fruit is considered to be a rich source of vitamin "C" and provitamin "A" carotenoides (Hulme, 1971) According to Singh (1960) the vitamin "A" content of mangoes may be equal to that of butter. A comparative assessment of various tropical fruits have shown mangoes possess maximum vitamin "A " activity.

Among the various commercially important varieties," Hindi Be-Sinnara " mangoes is particularly prized for it's aroma, flavour, taste and attractive orange - yellow flesh color Czyhrineu (1969).

The fruits appear on local markets from July, till September. As a perishable fruit, the mango undergo many biochemical changes leading to a short storage life. Clearly mango, as a tropical fruit, is not tolerant to near freezing temperatures and lengthy storage.

Transport of perishables in tropical and sub-tropical regions contributes to high loss, except under refrigerated

conditions, which are seldom used in most developing countries. Ripening therefore takes place rapidly and unevenly during transit, with attendant softening and rotting of the fruit tissues.

Irradiation, some growth regulators and antitranspirants could be of help in delaying the ripening process, as has been shown recently in a number of reports for mangoes and other fruits.

The purpose of this investigation was to study the effect of gamma radiation, some growth regulators, Benlate (as a fungicide) and antitranspirants on ripening and senescence of fruits of the " Hindi Be-Sinnara " variety including quality attributes, and to determine the effect of such treatments on the shelf-life extension of mango fruits.