## 1- INTRODUCTION

Both guava "Psidium guajafa" and apricot "Prunus armeniaca" occupy an important share in the total fruit production of Egypt. The total area reached about 5081 and 21280 Feddans in 1987\* for apricot and guava, respectively. Among all cultivars of each fruit species grown in Egypt Amaar apricot and Balady guava are the most wide spreading cultivars.

Unfortunately, apricot and guava fruits are highly perishable fruits. They are very sensitive and more subjected to several postharvest problems such as mechanical injuries, pathological and physiological disorders during postharvest handling systems, marketing or storage which always reflect negatively on their postharvest life.

In fact, any attempt aimed to limit useless fruit and prolong postharvest storage life of such sensitive fruits would certainly enhance growers income and satisfy the great demand of local consumption by faultless fruits for longer marketing time.

<sup>\*</sup> Agricultural Census of 1987, Ministry of Agric.
A.R.E.

Generally, several factors have been proved to be a prominent and must be taken into consideration in this regard i.e, determining suitable picking stage, type of containers used for transporting, some postharvest treatments...ect.

Judgement of picking stage should not be based only on the market price of fruits. Since, maturity at harvest is not only essential for marketing of good quality fruits, but also is one of the main factors which determine storage life of fruits, especially perishable ones such as stone-fruits.

Mature fruits are more subjected to shriveling, internal breakdown and mechanical damage, and are of inferior quality when/if ripe. Beside, over mature fruits are likely to become soft, mealy and attain inspide flavor soon after harvest. Fully ripened fruits on the tree can not survive during the postharvest handling systems.

Determining maturity indices is of most importance for deciding when a given fruits should be harvested to provide some marketing flexibility and to insure the atainment of acceptable eating quality. Thus one goal of this study is to determine maturity standards of Amaar apricot cv. to insure an extention

prolonging the short duration of such delicious summer fruits in local market. Moreover Sommer, (1982) recomended the harvesting of stone fruits before they were completley ripe in order to secure sufficient time for long distance transportation and marketing. He added also that harvesting before ripening began ensured that fruits were more firmer, less subjected to mechanical injury, higher resistance to certain diseases and consequently longer postharvest storage life than those harvested later.

Meanwhile, studies of some investigators pointed out that type (kind) of containers used for transporting of such perishable fruits were of great importance regarding its influence on mechanical damage occurred at destination. Gerdts and LaRue (1976), Foad (1984) and Kabell (1987).

However several studies have been tried to increase the storage life of such perishable fruits without complete success Ahlawal et al., (1980) but scarce researches showed some effeciency of applaying some postharvest treatments especially refrigeration combined with the higher RH which is the preferred

and more convenient method in this regard Roberto and "Maria" Colinas-Leon (1990).

Thus the present study was designed to determine maturity indices of Amaar apricot cv. and to evaluate suitability of some kinds of transporting containers on reducing mechanical damage of guava and apricot fruits. Besides, investigation of some postharvest treatments in relation to keeping quality of Amaar apricot and Balady guava fruits under different storage temperatures.