I. INTRODUCTION

The mango (Mangifera indica, L.) is one of the oldest widely cultivated fruits. It is also one of the popular tropical fruits cultivated in both the world and Arab Republic of Egypt. Fruits quality relished for its succulence, exotic flavour and delicious taste. The fruit is considered to be a rich source of vitamin "C" and provitamin "A" and carotenoids (Hulme, 1971).

Mango is regard in Egypt as one of the major local fruit crops and may be considered the fifth crop after Citrus, Dates, Grapes and Bananas. The total area reached about 65417 Feddans in 1997*. Among all cultivars grown in Egypt Alphonse mango is the most wide spreading cultivar.

The fruits appear on local markets from July, till September. Mango is highly perishable fruit. It’s very sensitive and more subjected to several postharvest problems such as pathological and physiological postharvest, disorders as well as many biochemical changes leading to a short storage life.

Fruits are not allow to ripe on the tree (1) because of certain economic aspects concerning the majority of fruits drop from the tree before they are ripe enough for consumption and (2) because tree ripe fruits are inferior in taste and aroma to fruits that ripe after harvest and their keeping quality is reduced.

In fact, any attempt aimed to limit useless fruit and prolong post harvest 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.

Determining maturity indices is of most importance for deciding when a given fruit should be harvested to provide some marketing flexibility and to insure the attainment of acceptable eating quality. Thus one goal of this study is to determine maturity standards of Alphonse mango cv. to insure an extension in their life during storage.

The use of cold storage is important but if improperly done can create major problems. mangoes are subject to chilling injury at temperatures below 13 degrees centigrade.

In the last few years sea transport of perishable crops has increased significantly. Most of the exported mango in the world is shipped by sea. Sea transport is less expensive than air transport but slower and thus fruit need to be handled adequately to have a long post harvest life.

Hot water, Borax and antitranspirants could be of help in delaying the ripening process, as has been shown recently in a number of reports for mango and other fruits.

Thus the present investigation was carried out to determine maturity indices of Alphonse mango cv. and study of some post harvest treatments in relation to keeping quality of Alphonse mango fruits under different storage temperatures.