I. INTRODUCTION

Peaches (Prunus persica), have been recently achieved an important position in the production of temperate zone fruits in Egypt. A wide group of low and medium chilling cultivars are grown all over the country.

Total acreage of Peaches in Egypt according to the Ministry of Agriculture. Statistics of 1995 , exceeds 81 thousand and acares, producing around 331 thousand and 262 tons of fruits.

More than 80% of the production is located in newly reclaimed land, mainly in Sinai and Nobaria areas. The majority of peach trees which had been grown in Egypt, till the last decade were mainly planted directly by seeds. They are mainly cling stone fruits and related to the South China group which mature late in July.

The ADS Project of the Ministy of Agriculture have introduced many of low chilling, peach cultivars, in 1980. Some of these cultivars mature very early at the end of April.

However, the Season is extended up to June, concerning other cultivars.

The majority of these cultivars can grow successfully under Egyptian conditions.

Nemaguard peach and other root stocks have been used in propagation of peach, however seeds are imported every year from aborad and this practice makes nursery buddings very expensive and comprise a major percent of the orchard inputs.

Nevertheless, there is a despite need to keep the germplasm of the used cultivars free of pathogenes and at the mean time to produce easy and cheap nursery plants using up-to-date techniques.

Plant meristems are excellent condidates for the long-term preservation of germplasm by tissue culture and cryobiological methods procedures for the cryopreservation of meristems of a few crop species such as strawberry, pea, chickpea (cicer) etc... have been developoed (Kartha, 1981).

Meristem culture has been extensively used as a reliable tool in Production of disease-free plants in a genetically unaltered condition and also in the clonal propagation of selected genotypes.

The aim of this investigation is to study and iniatate the most effective and simple method of aseptic culture to propagate peach. This technique is highly needed for the previously mentioned reasons.

Three Peach cultivars are used in these experiments namely Florida Sun, Florida Prince and Early Grand. Various types of explants, methods of sterilization, ways of explant treatments, media, were under investigation with the hope of

achieving the most suitable method for shoot proliferation, rooting and minimum callusing production.