

## **1- INTRODUCTION**

Olives (*Olea europea*,L.) grow successfully under the prevailing conditions of the northern region west of Alexandria , north Saini and in most of Egyptian oases , where soil is poor and available water is limited with relatively high salinity. In addition , olive offers a great economic potential compared with other fruits grown under the same conditions . Olives also have good nutritional and medical uses as pickled fruits or for the production of oil. Olive production play an important role in the economy of many Mediterranean countries .

In Egypt , olive cultivation increased considerably during the last two decades due to the horizontal extension in new reclaimed soils and the introduction of new cultivars, in addition to the wide scale propagation of olive cultivars by leafy cuttings, under mist . Olive acreage reached 82685 feddans and the fruiting area recorded 55800 feddans with total fruit production of 208133 metric tons , according to statistics of the Ministry of Agriculture , Egypt (1996) .

Olives production is adversely affected by the alternate bearing habit . This habit is charactrized by a heavy crop in one season ("On" year) followed by a light crop in the following season ("Off" year) .

Alternate bearing habit in olives is governed by several factors particularly genetical , hormonal , nutritional and environmental factors (*Halevy,1990*) .This habit causes severe loss in olive growers

---