INTRODUCTION

1. INTRODUCTION

Pea (Pisum sativum, L.) is one of the most important legume crops grown in Egypt. The acreage* planted with green peas during 1990 and 1991 was 20849 and 20973 feddans produced approximately 99626 and 99166 tons with an average of 4.78 and 4.73 ton/fed, respectively.

Pea as legume winter crop, plays an important role for human nutrition as a cheap source of proteins, vitamins and minerals. Moreover, some varieties of pea which are grown as forage crop are very important for animal consumption. In addition, it has an essential role in restoring soil fertility through nitrogen fixation and the copious quick decaied of plant residuals which enrich the soil fertility.

In the last decades, Egypt faced a national problem due to the fact that the population increasing rate is greater than that of crop production. Increasing crop production can be achieved through two ways.The first is horizontal through increasing the cultivated area. The second is vertical through increasing the yield per unit area. In addition,the reduction of postharvest losses is complementary considered as an important mean for increasing crop production.

Therefore, the first aim of this trail is to study the effect of some agricultural treatments such as planting date, variety and plant spacing on plant growth, and its chemical constituents as well as pea green

---

* Cited from the economic and statistical Dept. Ministry of Agric. Egypt.

pods yield and its quality. The second aim is to study the possibility of increasing the shelf life of pea green pods and decreasing the losses during the storage through either the application of suitable N,P and K fertilization level for the growing plants and or the application of some postharvest treatments namely methods of green pods disinfection and packing as well as storage period and conditions.

It is hoped that this work may find out the ideal planting date, varieties and spacing for high yielding ability under such conditions. In addition, it is hoped to find out the ideal postharvest treatments and storage conditions for green pea pods.