INTRODUCTION

Onion *Allium cepa*, L (Alliaceae) is considered as one of the most important field crops in Egypt. It is cultivated in many governorates for the bulbs which are stored for local consumption and export to different countries.

According to the report of Department of Agricultural Economics, Ministry of Agriculture, the total area cultivated with onion in Egypt reached 114312 feddans in 1994. This area produced 821491 tons of this crop as winter, summer and interplanted yields. As in other edible crops, onion is liable to insects infestation in the nursery and permanent field, and also in store. In Egypt *Elbolock (1990)*, surveyed 37 insect species and 2 mite species as pests on onion in both onion fields and stores in Giza and Assiut Governorates.

The onion maggot, *Delia alliaria* Fonseca (Diptera : Anthomyiidae) may be considered as one of the most serious onion insect pests in the nursery and permanent field. Heavy infestations with larvae of this pest cause great damage to shoots and bulbs which render, completely, and become unvalid for exportation of lower grade for local marketing. But fortunately, the insect was found of very low infestation rates throughout the course of the present investigation that extended for about two years (1993 - 1995). In the Soviet union, *Bundzhe (1966)* stated that *D. alliaria* caused great damage to onion crop as it killed up to 50 - 60% of the shoot of local varieties.

The onion thrips, *Thrips tabaci* Lind (Thysanoptera : Thripidae) is well known as a serious pest of onion in Egypt. Nymphs and adults of
this insect suck the plant sap. *Chapman (1947)* and *Pearson (1958)* indicated that heavy thrips infestation to onion plants may cause sterility, while *Vierbergen (1990)* reported that *T. tabaci* individuals transmit the tomato spotted wilt disease to several crops.

As for the economic importance of the two mentioned pests on onion, the present study was carried out as a trial to shed light on some aspects including varietal susceptibility, planting dates, nitrogen levels for fertilization and colour traps in relation to infestation rates with each of the two pest species. It is hoped if this study may add new for better understanding of the ecology and behaviour of the mentioned species. This will, undoubtedly, be helpful in planning for any integrated program for controlling these pests.