

INTRODUCTION

Wheat (*Triticum aestivum* L.) is one of the most important cereal crops in the world, especially in Egypt. The local production of wheat grains is not sufficient to supply demands of the local consumption.

The total cultivated area of this crop in Egypt reached about * 2.420 million feddans in the 1995/96 season, produced about 5.69 million tons.

During storage, wheat grains were attacked by many mould fungi that deteriorate the grains completely.

The present study was carried out to overcome the following objectives :

- 1- Isolation and identification of fungi associated with wheat grains cultivars before storage and during varies period of storage.
- 2- Study the effect of storage temperature and % of humidity on weight of grains, moisture contents, % of infection, percentage of germination and fungi associated with wheat grains during 6 months storage.
- 3- Study the effect of macronutrients and micronutrients under field conditions on weight of 1000-grain, % of infection and fungi associated with wheat grains stored for 6 months.

* A. R. Egypt, Ministry of Agriculture, final report (1996).

- 4- Study the effect of spraying wheat plants with some fungicides and ammonium sulphate under field condition on weight of 1000-grains, % of infection and fungi associated with wheat grains after storing for 6 months in natural conditions.
 - 5- Study the effect of storage temperature, grains moisture content and storage period on infection percentage, aflatoxins production, protein content and total carbohydrate content of wheat grains infected with *A. flavus*.
 - 6- Study the effect of some field treatments i.e, micronutrients, N/P ratio and fungicides on aflatoxins production in wheat grains infected by *A. flavus* after storing for 6 months at natural conditions.
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