INTRODUCTION

INTRODUCTION

Corn or maize (*Zea maize*, L.) ranks as one of the most important field crops in A.R.E. It is used principally as human food, animal feeding, and also in some industries. The annual yield of the country attained 17.0, 18.9, 19.9 and 23.9 million ardabs in 1979,80,81 and 82 respectively (Anon 1983). The local yield almost does not cover the consumption. The difference is usually compensated by importation. Both local and imported amounts are almost kept in stores for a few months and may exceed one year. Thus prolonging the commercial season on the yield which starts from November and extends to the sequent October (Anon, 1983).

There is a wide range of storage facilities in the country. At the farm level, they range from the earthenware jars or containers, in which the farmers usually store their family supply, to the room- type brik-wallet granaries in large farms. On the other hand, for the large scale collecting and storing of grains, there are the "Shuna". The "Shuna" is an encircled open area where grains are stocked in sacks or in bulk. Although, establishment of soils network has started all over the country in 1983, through the first five year plan, the vast majority of corn tonnage is still stored essentially using the primitive procedure in open air "Shuna", because the whole capacity of the established soils just suffices wheat.

Holding corn under such unfavourable conditions expose the maize grains to dangerous hazards resulting from higher moisture content, fungal , deterioration and quality decrease.

Present studies were carried out to detect the following :

1- Mold flora associated with stored maize grains.
2- Identification and pathogenic capabilities of molds of higher frequency of occurrence and it's severity.
3- Indentification of different spores adhering on the outer surfaces of stored maize grains.
4- Isolation of different fungi attaching maize grains as noticed by their distinct symptoms on the diseased or discoloured grains.
5- Storage studies including biochemical changes accompanying moldness and deterioration problem during commercial, laboratory long and short storage periods.
6- Effect of use dressing maize grains with different fungicides on deterioration during storage.