



**CHAPTER - V**

**SUMMARY**

### SUMMARY

The present work includes the observations based on the intramural studies of seed godown at Shahu Market Yard, Kolhapur, Maharashtra State. In this seed godown the stock consists mainly rice, wheat and jowar. The period of investigation is January to June 1992 that is when the fresh stock of Kharip crop is brought to the godown. In spite of the proper precautionary majors taken for storage of these cereal grains, the aerospora trapped by using Rotorod air sampler show presence of about 37 different spore genera, hyphae and insect parts.

About 75,881 fungal spores in addition to other biopollutants were recorded. Fungal spores and starch grains formed the major fraction of the biopollutants. As number of genera recorded were found to be harmful for the stored grains, the work was concentrated on fungal spores mainly.

Among the fungal spores those belonging to Basidiomycetes and Deuteromycetes are most dominant. They contribute about 56.476 and 40.708 percent to the total aerospora. During the period of six months highest concentration of Basidiomycetes is in the months of March and May. Deuteromycetes spores occur in highest percentage in the month of May. Ascomycetes and Phycomycetes are comparatively rare and contribute about 1.793 and 0.1238 percent respectively to the total population.

In general the aeromycoflora of seed godown at Shahu Market Yard as -

**Dominant spore genera :**

Smut, Tilletia ,Aspergillus, Alternaria.

**Subdominant spore genera :**

Helminthosporium, Epicoccum, Nigrospora, and Chaetomium

Those occurring consistently but in very low concentration that is less than 1 percent are Aeciospores, Uredospores, Drechslera and Pithomyces, others occur inconsistently and contribute least to the total aeromycoflora.

the occurrence of toxic biopollutants such as Aspergillus and Phytotoxic biopollutant such as Alternaria, Helminthosporium, Cladosporium and Curvularia which cause serious damage to the stored grains indicate necessity of proper precautionary majors for storage of the cereal grains.