

AEROMYCOFLORA OF VEGETABLE AND FRUIT MARKET OF BEED CITY, MAHARASHTRA INDIA.

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Abstract: Aeromycoflora of vegetable and fruit market constitutes fungal spores' hyphal fragments, insect pollengrains, bacteria, etc. most of them are pathogenic causing serious damage to vegetable and fruit. And their higher concentration may causes air pollution and allergic diseases in human being. The present Aerobiological investigation was carried out by using Tilak Air Sampler for a period of one year. Total 23 fungal spores were recorded during the investigation period.

Aspergillus 15.2%, cladosporium 8.3% Rhizopus 7.3%, Curvularia 4.3% were recorded as the predominant forms were as Exosporium, Hetrosporium, etc. were found with comparatively less concentration. It was observed the concentration of the spores in the Air varies from season to season.

The vegetable & fruit market environment had higher population of Aspergillus and cladosporium that is the source of contamination and damage & to the vegetable & Fruits of the market.

INTRODUCTION:

The present works deals with the study Aeromycoflora over vegetable and fruit market of Beed City. There is no previous work on this type of study from this area. The investigation was carried out during the period Jan. 2010 to Dec. 2010.

In the present period the Aerobiological studies have been assuming great importance in the formulating basis for establishing for casting system of various diseases occurring on vegetable & fruits of market.

MATERIAL AND METHODS:

The monitoring of atmosphere fungal spores was carried out for 12 months. The fungal spores were trapped by using Tilak Air sampler the sampler was installed at a higher of 05 fit above the ground level.

After sampling the air the cello tape was mounted on glass slide and mounted with glycerin jelly. The slides were scanned under binocular microscope and the identification of spores was done on the basis of morphological character with the help of available literature.

RESULT & DISCUSSION:

Total 23 types of fungal spores were recorded out of which deuteromycotina shows the highest 65% concentration followed by Zygomycotina-10.35%, Basidiomycotina – 8.75% and Ascomycotina 1.25%.

In the present investigation it is reported that fungal population is closely linked with season and climatic condition. Peak concentration was recorded in the month of November and December second peak concentration was recorded in the month of July & August it was found that moderate temperature high relative humidity and mildrain favored fungal growth.

The minimum concentration was recorded in the month of February it was due to the absence of rain & high humidity from the present study it is suggested that high temperature does not favor fungal growth in the atmosphere.

CONCLUSION:

From the investigation it is concluded that fungal population growth is closely linked with season climatic condition, rain & humidity these aspects play an important role in the concentration of fungal spore and amongst the recorded fungal spores *Aspergillus* followed by *cladosperium* was dominant contribution of *Aeromycoflora*.

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