

SUMMARY

The air spora of the Library was carried out from 1st April to 30th September (1981) with the help of "Rotored Air Sampler". During this work the total number of spores trapped was 16155.

In all there are 61 bi-pollutants including 58 fungal spores, Algal fragments, hyphal fragments, insect scales, xylem Fibers and unidentified group of fungal spores.

Taking total number into consideration the spores of the smut (chlamydo-spore) stood first with a concentration of 17.202 % to the total air spora. This is followed by Microspora 17.004 %, Alternaria 11.699 %, Curvularia 9.248 %, Sciurospora Q.ospore 7.972, Helminthosporium 5.429 % and Urediospores of rust 4.475 % and as such.

The phycomycetous group was represented only by the genus sclerospora whose spores were recorded. Their contribution was 7.972% to the total air spora.

During the period of investigation the total number of Ascospores encountered was 785 M³, with 4.859 % contribution to the total air spora. Out of these Ganoderium, Hysteroglyphium, Malicia and Patellaria are newly recorded.

Among the Basidiomycetous members the spores of rust, and smuts were trapped and these are uredospores, Telio-spores and smut spores. Their number was (3511 M³) with 21.733 % to the total air spora.

As far as Deuteromycetous spores are concerned, they were in the highest concentration (9348 M^3) and contributed 57.846 % to the total air spora.

From this study of the air spora of the Library it can be clear that there was no spore free period in the Library. Air spora of the library is very rich in fungal spores with the peak period in the months of september (2391 M^3) and August (2239 M^3). Their lowest concentration was in the months of June (963 M^3). Out of these fungal spores the following are allergenic in nature.

1. Alternaria
2. Helianthosporium
3. Phoma
4. Chaetomium
5. Cladosporium
6. Smut spores
7. Pleospora
8. Curvularia
9. Epicoccum