

Summary

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Conclusion

1. Soil fungi of cultivated soil (Grape garden soil), uncultivated and saline soil were taken from different places.
2. Regarding fungal flora 33 species belonging to 17 genera were isolated from the soil.
3. Of these 33 species isolated 17 are common to all the soils studied, a few fungi restricted to their distribution.
4. Some species appeared only spordically, while others are predominant and were recorded more frequently in all the seasons. They include Rhizopus nigricans, Rhizopus oryzae, Mucor varians, Aspergillus nidulans, Aspergillus fumigatus, Aspergillus glaucus, Aspergillus flavipus, Aspergillus niger, Aspergillus candidus, Penicillium sp. I, II, Trichoderma, Cladosporium herberum, Alternaria fasciculata, Alternaria humicola, Alternaria tenuis, Fusarium oxysporum, Fusarium solani white mycelium.
5. The present study confirms the generally accepted view that the soil fungi are representative of Aspergillus, Penicillium, Rhizopus, Mucor, Fusarium, Cladosporium, Alternaria. It also confirms that Aspergilli sp. dominated in tropical soils.
6. The order of occurance of the chief genera was Aspergillus, Penicillium, Mucor, Rhizopus, Alternaria, Fusarium monilla.
7. Physico-chemical properties of soil and cover soil were studied.

8. Fertile soil (Grape garden) contain large number of fungi, while uncultivated (least fertile soil) contains less <sup>number of fungi</sup> than fertile soil and in saline soil contain <sup>the</sup> very low number of fungi.
9. Seasonal variation in fungal numbers were studied from <sup>in particular</sup> three types of soil. In <sup>all</sup> the soils under investigation the lowest number of fungi were recorded during summer months viz. March, April, May and highest numbers in September and October. A sudden fall was observed in all the soils with the abundant <sup>to</sup> of hot season in March.
10. Seventeen genera were isolated during this experiment; five were of high seasonal occurrence and these were Aspergillus, Penicillium, Mucor, Rhizopus, Fusarium.- <sup>the result</sup>
11. Seven genera were of moderate seasonal occurrence and these are Alternaria, Cheatomium, Aspergillus, Phoma, Monila, Trichoderma and Cladosporium.
12. Two genera were of low seasonal occurrence namely Curvularia, Helminthosporium, other genera are rare seasonal.
13. There is a general correlation between the abundance of fungi in the soil and the soil moisture.
14. In the present study pH of the soil, between 6.8 and 8.0 . There is no effect on the fungal flora according to pH of soil.

Poecilium

9

15. It appears that there is some relationship between two major nutrients <sup>like</sup> nitrogen and exchangeable potassium is affecting the fungal flora in soils.
16. It was observed that grape garden soil were the richest average of fungal counts.
17. In saline soil there is less fungal growth comparatively than the cultivated and uncultivated soil.
18. In the present study indicates that soil fungi are cosmopolitan geographically and to a certain extent ecologically also and do not differ significantly from the others reported by various parts of world.
19. The soil types under study differed with their plant cover due to which there was variation in the fungal flora.