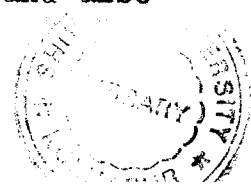


SUMMARY

AND

CONCLUSION

The topic of research entitled "Studies in the family Geoglossaceae (Discomycetes)" has been selected to investigate and workout taxonomically the members of this family from the District - Kolhapur of S.W. parts of the Maharashtra State. The objective is very clear and well defined. This is not, ofcourse, the first attempt to investigate but the work was very scanty and almost the whole family which is so conspicuous of the order Helotiales was almost neglected upto 1980. Patil and Patil (1980) attempted for the first time to investigate and studied some members of this family. The students of the same laboratory have also persueied the work. But the widely occuring members in late monsoon were completely ignored from the Maharashtra State. Eventhough, in this state maximum number of Mycologists and Plant Pathologists being known and studied the mycoflora of this State. The two things viz. abundance occurance and ignorance towards this family has stimulated or iniated to work out systematically this family from this District. Collections, about 125 were made from 1975 to 88 from the well known, botanically rich localities of the S.W. parts of Maharashtra - especially from Western Ghats of Sahyadries ranges like Amboli, Ajara, Amba, Amba Ghat, Gavase, Radhanagari, Manjar-Khind, Gaganbavada, Panhala, Salvan, Vishalgad etc. by previous workers and also



the fresh collections from these localities were made repeatedly in late Mansoon so that quite abundant and variety of forms were studied. From the study the following conclusions have been drawn which are as follows :

1. Five genera viz. Geoglossum Pers ex. Fries, Trichoglossum Boudier, Neolecta Spegz., Spathularia Mains and Thuemenidium O.Kuntze have been collected and studied.

2. Out of these five genera, two genera viz. Neolecta Spegz. and Thuemenidium O.Kuntze have been recorded for the first time in India and thus, the new generic records.

3. One new species has been proposed here of the genus - Thuemenidium Kuntze viz. T.macrospora sp.nova which is new to science.

4. Totally 25 taxa belonging to the five genera have been work out.

5. The genus Geoglossum Pers.ex Fries is dominant and represented by twelve species.

6. The next dominant genus is Trichoglossum Boudier which is represented by eight species.

7. Remaining three genera represented by a single species each.

8. Sixteen varieties belonging to three genera viz. Geoglossum Pers. ex Fr., Trichoglossum Boudier and Spathularia Mains have been studied.

9. Out of these sixteen varieties nine varieties have been raised as new varieties thus, new to Science. Six varieties have been recorded for the first time in India. One variety is new to Maharashtra State.

10. Nine species belonging to these genera have been reported for the first time in India.

11. The Genus Spathularia Mains has been recorded for the first time in the Maharashtra State.

12. All the taxa studied here are terricolous and grow luxuriantly among the leaf-litter or in humus rich alkaline soil under the shades of forest trees.

13. All the collections were matched and compare on the basis of their morphology and measurements to the existing taxa and new taxa were raised purely on the morphologically ground.

14. Among the taxa studied belonging to these five genera the genus Trichoglossum Boudier is dominant in its occurrence but the genus Geoglossum Pers ex.Fr. represented by many

species and varieties but its occurrence is not as dominant as Trichoglossum Boudier.

15. Among the species studied here the species T.hirsutum (Pers.ex Fr.) Boudier is widely occurring species as to compare the other species.

16. G.pygmaeum Gerard ex Durand appears to be quite rare.

17. The species occurred quite abundantly at Radhanagari as compare to other localities studied.

18. The genera viz. Geoglossum Pers.ex Fr. and Trichoglossum Boud. are quite unstable as far as their species are concerned and showed lot of variations in their morphology especially in their septation of ascospores and therefore, the spores and their septation were studied statistically and expressed in terms of percentages to note the degree of variation of their septation.

Therefore, the topic selected for taxonomical study of the family Geoglossaceae have been well justified.

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