

CHAPTER - 5

CONCLUSIONS

C O N C L U S I O N S

The present investigation on Hymenomycetous (Basidiomycetes) fungi is confined to the South Western part of the Maharashtra State and mainly based on the orders viz. Tremellales, Auriculariales, Dacrymycetales and Aphylophorales. The work comprises the floristic and taxonomic study; in which the order Aphylophorales makes a major contribution. The ~~extensive~~ ^{have been made} study of the families viz. Tremellaceae, Auriculariaceae, Dacrymycetaceae, Clavariaceae, Thelephoraceae, Gantharellaceae, Corticiaceae and Ganodermataceae. Statistical summary of the investigation is given in Table 1. The localities were selected and visited time to time during rainy season for collections as follows -

Satara, Kas, Yawateshwar, Koyananagar (Dist.: Satara); Lonavala-Khandala (Dist.: Pune); Khopoli, Panvel, Karnala (Dist.: Raigad).

During this investigation, by repeated visits, to the different localities confined to this area especially from the Western Ghats of the Sahyadri Ranges, ^{were made} throughout the year. And large number of collections were made which mainly occurred on the variety of substrates but especially on the woods, barks and other plant debris. The collections were mainly belonged to the four orders, viz. - Aphylophorales,

Tremellales, Auriculariales and Dacrymycetales. Of these, the members of the orders Auriculariales, Tremelleles and Dacrymycetales were very delicate, ephemeral and only occurred in the short period of rainy seasons while the members of the Aphyllophorales are somewhat leathery or woody and remain for long time and thus, provided the collections throughout the year. All these forms are saprophytes. Among the four orders studied, the order Aphyllophorales ^{was} is dominant and ^{was} represented by 23 species belonging to 16 genera of 6 families (See table No.1). Among the six families, the family Clavariaceae ^{was} is dominant and ^{was} represented by 12 species belonging to 8 genera in which one is a new species, 5 are new records to the fungi of India and the genus Dimorphocystis Corner is a new generic record to the fungi of India. The remaining families of the order Aphyllophorales ^{are} are represented by one or two species of the respective genera (see Table No.1). The second important order is the Auriculariales which is represented by 5 species belonged ^{ing} to 3 genera; order Dacrymycetales studied from which 4 species belonged to 2 genera and the last order Tremellales represented by 4 species belonging to 3 genera. All these species have been worked out in detail. During ^{the} visit ^{to} of different localities the collections were quite fruitful and were mostly lignicolous, humicolous and foliicolous saprophytes. The ecological factors influence the mycological flora from region to region and

from locality to locality throughout the year. The saprophytic fungal flora of Basidiomycetes have been found to be more rich in the present area. The hymenomycetous fungi were growing abundantly and luxuriently on dead organic matter, tree trunks, barks and valuable woods. The present investigation includes the study of 36 species and one variety belonging to 24 genera of the 9 families of the 4 orders out of these 2 species are new and thus new to Science, 15 species are the new records to the fungi of India and remaining species and a variety are new to the Maharashtra State.

During present investigation, 47 reported species were studied. The fungi studied in this work are quite abundant but were neglected by most of the Mycologists either due to their ephemeral nature or inaccessibility. These are quite promising organisms as they are lignicolous in habit and causing the wood-destruction in nature. The area under investigation is quite rich as far as the mycoflora is concerned and there is a lot of scope for the further work.

Therefore, the topic "Studies in Hymenomycetous Fungi" selected for the present study is indeed, a piece of work, is well justified and is beginning of the future work on the Hymenomycetous fungi.