

CHAPTER V

CONCLUSION

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1. In the present investigation the genus Podospora Cesari^t of the family sordariaceae of the order sphaeriales (Pyrenomycetes) has been worked out in detail.
2. Thirty five species of the genus have been recorded and studied. Out of 107 known species of the genus i.e. approximately one third (33 %) of the known species.
3. All these species are coprophilous except a few and isolated from the dung or droppings.
4. More than seventeen different animal droppings were collected and studied belonging to herbivorous, carnivorous, Omnivorous animals, birds, amphibians and reptiles too.
5. Out of these, only five animal droppings viz. Cow, Rabbit, Goat, Sheep and Donkey showed the development of Podospora, i.e. only on droppings of herbivorous ruminant animals.
6. Droppings collected during the month of July to November produced good number of species of Podospora in laboratory while the droppings collected January onwards gave the negative results suggested the non availability of spores.

asci ^{and} perithecia in fields, Pasturs when generally
animals graze or droppings without spores or spores may
under dormancy.

7. Dung samples collected from high rainfall areas showed no Podospora (~~at~~, Amboli and Mahabaleshwar) as far as the present investigation is concerned. This may be due to high altitude or heavy rain washed out the inoculum of Podospora from fields.
8. Dried dung samples yield the good number of species as compared to the fresh dung of the same animal or animal type. This may be probably due to high water content or less availability of oxygen or dormancy of the spores (specific period).
9. The same pattern of ecological succession has also been observed during this investigation.
10. All these Thirty five species are the new records to the fungi of India.

Frequency and distribution of species of Podospora Cesati

Sr.No.	Dung sample	No of species	Percentage %	Remarks
1.	Goat	6	17%	
2.	Cow	20	57%	Cow dung dominant
3.	Rabbit	7	20%	
4.	Donkey	1	3.0%	
5.	Sheep	1	3.0%	

11. Other coprophilous fungi have been also isolated during the present investigation, which are listed as follows :

OTHER COPROPHILOUS FUNGI

- I Zygomycetes
- | | | |
|-------------------------|---------------------------|---------------------------|
| 1. <u>Basidiobolus</u> | 2. <u>Cokeromyces</u> | 3. <u>Cunninghamella</u> |
| 4. <u>Dispira</u> | 5. <u>Gongronella</u> | 6. <u>Mucor</u> |
| 7. <u>Pilobolus</u> | 8. <u>Piptocephalis</u> | 9. <u>Spirodictyon</u> |
| 10. <u>Spiromyces</u> | 11. <u>Syncephalis</u> | 12. <u>Syncephalastum</u> |
| 13. <u>Thaminidium</u> | 14. <u>Thamnocephalis</u> | 15. <u>Tieghemiomyces</u> |
| 16. <u>Utharoumyces</u> | | |

II Ascomycetes

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|--------------------------------------|------------------------------------|-------------------------|
| 1. <u>Ascodesmis</u> | 2. <u>Bombardia</u> | 3. <u>Chaetomium</u> |
| 4. <u>Coniochaeta</u> | 5. <u>Dasybolus</u> | 6. <u>Delitschia</u> |
| 7. <u>Hypocopra</u> | 8. <u>Idophanus</u> | 9. <u>Pezia</u> |
| 10. <u>Phomatospora</u> | 11. <u>Podosordaria</u> | 12. <u>Rhopalomyces</u> |
| 13. <u>Saccobolus</u> | 14. <u>Selinia</u> | 15. <u>Sordaria</u> |
| 16. <u>Sporarmia²ella</u> | 17. <u>Zygo¹plurage</u> | |

III Deuteromycetes

- | | | |
|-------------------------|-------------------------|-------------------------------------|
| 1. <u>Alternaria</u> | 2. <u>Arthroborys</u> | 3. <u>Bartalinea</u> |
| 4. <u>Cephalophora</u> | 5. <u>Curvularia</u> | 6. <u>Dactylaria</u> |
| 7. <u>Desmidiospora</u> | 8. <u>Echinobotrys</u> | 9. <u>Fusarium</u> |
| 10. <u>Isaria</u> | 11. <u>Oedocephalum</u> | 12. <u>Rhino¹cladium</u> |
| 13. <u>Sclerotia</u> | 14. <u>Spegazzinia</u> | 15. <u>Stem²pylium</u> |
| 16. <u>Sympodiella</u> | 17. <u>Trichoderma</u> | 18. <u>Trichothecium</u> |

IV Basidiomycetes

1. Coprinus
2. Cyathus
3. Lepiota

V Plectomycetes

1. Toxotrichum