

RESUPINATE APHYLLOPHORALES OF INDIA

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PREFACE

The Western Ghats by and large, is the richest area in the context of composition of wood rotting mycobiots and there exists the endemic angiospermic taxa in this region (Kulkarni, 1979). It was suggested that since a long time, the subtropical vegetations in the Western Ghats of India are related (Palaeontologically or Geologically) with that of tropical Africa, South east Asia and with the part of tropical America which was revealed in the studies of lichen flora (Awasthi, 1965) and in rust flora (Ajrekar, 1912; Sathe, 1969).

The present work has great Mycological significance and will update the knowledge of Resupinate Aphyllophorales of Maharashtra, which presently lacks in the scenario of Indian Mycology. This will be of help for further studies and investigations. Taking into consideration the taxonomic study of Wood Rotting Fungi, this kind of approach is studied for the first time for understanding thoroughly the compilation of the Resupinate Aphyllophorales from a particular region. This work will facilitate further understanding of important pathogens from the vegetation of Maharashtra. The major work deals with the species studied from the family Corticiaceae with non-poroid hymenium; Polyporaceae and Hymenochaetaceae with poroid hymenium. The external morphology of the basidiocarps of non-poroid and poroid Aphyllophorales differ from each other. The morphology of non-poroid Aphyllophorales was studied by Prof. Talbot and he Published a review "Micro morphology of the lower Hymenomycete" (1954), while the morphology of poroid Aphyllophorales were Published by Gilbertson and Ryvarden (1986) in "North American Polypores, Vol. 1" and by Ryvarden (1991) in "Genera of Polypores. Nomenclature and taxonomy".

The present investigation was therefore undertaken to reveal the floristic affinities of the resupinate Aphyllophorales from Western Ghats of India with that of Tropical Africa, South-East Asia and Tropical America. The investigation was undertaken along with a thorough understanding of resupinate Aphyllophorales with respect to its taxonomic identity, floristic affinities, distribution patterns, detailed macro and micro morphological characters, enzymatic patterns, along with their culture characters. In the present study a total of 110 fungal species from the 46 respective hosts were identified out of 355 collected specimens. In the present study a total of 110 species of resupinate Aphyllophorales (27 families and 54 genera) from the 46 respective hosts were identified out of 355 collected specimens throughout the Western Ghats.

Our aim is to provide an entry point for the students in to the World of Aphyllophorales. The work is supplemented with an index of genera, index of hosts/ substrata along with fungi recorded thereon and the list of references. The present publication would prove useful to Mycologist, Plant pathologists, Plant Biotechnologists and also to research students and teachers alike in the disciplines of Mycology and Plant Pathology. Through this book readers are going to get a comprehensive guide of Resupinate Aphyllophorales. Our special thanks to the Scientific Publishers (India), Jodhpur for taking efforts to publish the same. We are especially grateful to Dr. Jamaluddin for his constant encouragement and critical comments to improve the quality of the book. Any suggestions for improving the book will be kindly received and acknowledged.

Authors

ABBREVIATIONS

AM	:	Amyloid
ASL	:	Above sea level.
BR	:	Brown Rot
cm.	:	Centimeter.
cms.	:	Centimeters.
DEX	:	Dextrinoid
diam.	:	Diameter.
Dist	:	District.
DP	:	District Pune
DR	:	District Ratnagiri
DS	:	District Satara
DST	:	Dead Standing Tree
e.g.	:	For example.
EF	:	Effused
EFR	:	Effuso Reflexed
FBT	:	Fallen Branches of Tree
Fig.	:	Figure.
g.	:	Grams.
H₂O₂	:	Hydrogen peroxide.
hrs.	:	Hours.
KOH	:	Potassium hydroxide.
LST	:	Live Standing Tree
mm.	:	Millimeter.
NAM	:	Non Amyloid

No.	:	Number.
nov.	:	Novel/new.
NPO	:	Non - Poroid.
NTI	:	New To India
NTM	:	New to Maharashtra
p-cresol	:	Para - cresol.
PDA	:	Potato Dextrose Agar.
PO	:	Poroid.
PU	:	Pune
PUCC. B.	:	Pune University Culture Collection, Botany.
RS	:	Rainy Season
RSU	:	Rsupinate
RT	:	Ratnagiri
SA	:	Satara
Sp.	:	Species.
VH	:	Vaidya - Hakimi.
WR	:	White Rot
WS	:	Winter Season
α-napthal	:	Alpha - napthal.
µm.	:	mili - micron.

Plate 1



Aleurodiscus aberrans



A. cremeus



Amylocorticium cebennense



A. olivaceoalbum



Amylocystis sericea



Amylosporopus bracei



Amylostereum laevigatum



Auriporia dumontii



Auriporia aurulenta



Botryohypochnus



Candelabrochaete verruculosa



Cejpomyces terrigenus



Cerrena unicolor



Cystostereum murrayi



Diplomitoporus hondurensis

Plate 2



Earliella scabrosa



Fibriciellum silvae-ryae



Fibriciellum flavous



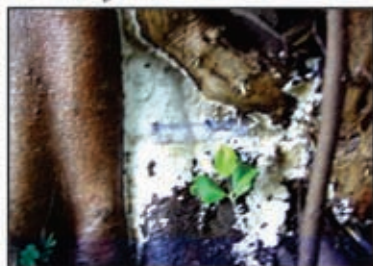
Gloeocystidiellum citrinum



G. convolver



G. fistulatum



G. flammeum



G. furfuraceum



G. insidiosum



G. irpiscense



G. kenyanse



G. lactescens



G. lacticolor



G. leucoxanthum



G. luridum

Plate 3



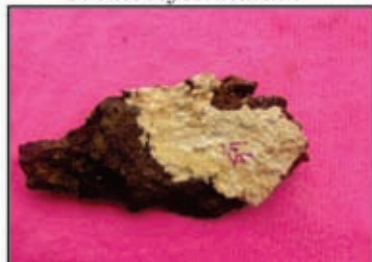
G. luteocystidiatum



G. percuriosum



G. sulcatum



G. turpe



Grammothelopsis p. sp.



Hymenochaeta attenuata



H. cinnamomea



H. subiginosa



H. tabacina



Hymenogramme sp.



Hyphoderma radula



Hyphodontia alienate



Hypochnicium cymosum



H. eichleri

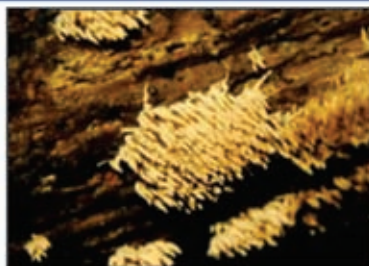


H. globosum

Plate 4



Junghuhnia crustacean



Kavinia himantia



Laeticorhiza simplicibasidium



Laxitextum lutescens



Lepidomyces subcylindricus



Leucogyrophana mollis



Lopharia fulva



Melanconia flavidolba



Oxyporus cervino-gilvus



Oxyporus latamarginatus



Peniophora aurantiaca



Peniophora farinosa



Peniophora gladiola



Peniophora laurentii



Peniophora nuda

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