

Diversity And Checklist Of Aphyllorphorales From Osmanabad District

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Abstract- During field surveys and visits, sampling of mycobiota was done in dry deciduous forests of Osmanabad district. The survey area is characterized by semi-arid or subtropical climate, due to which water scarcity is a significant issue and the region is prone to droughts, this biome is known for its diverse vegetation mainly consists of dry deciduous forests, scrublands and grasslands. The heavy rainfall and high humidity favours the growth of aphyllorphoraceous fungi. Investigations were carried out in 8 tehsils of Osmanabad district including Paranda, Bhum, Washi, Kalamb, Osmanabad, Tuljapur, Lohara and Umarga. Total of 400 samples were studied. A checklist of the 23 genera of aphyllorphoraceous fungi is provided including 34 species under 11 families. All the species are new records for the area. The collection sites are briefly described and the hosts are listed. The checklist gives the total count of aphyllorphoraceous fungal diversity from Osmanabad district and it is also a valued addition for comparing aphyllorphoraceous diversity in the world

Index Terms- Aphyllorphoraceous fungi, semi-arid climate, dry deciduous forest. (*key words*)

I. INTRODUCTION

Osmanabad district is one of the eight districts situated in the southeastern part of the Marathwada region of Maharashtra, India. It is located between 17.4°N and 18.8°N latitude and 75.2°E and 76.8°E longitudes (Fig 1). The district consists of hilly terrains and plateaus interspersed with agricultural fields. The Bhogavati and Manjara rivers flow through the district. Due to the semi-arid climate, water scarcity is a significant issue and the region is prone to droughts, this biome is known for its diverse vegetation mainly consists of dry deciduous forests, scrublands and grasslands (Fig 2)

Fungi compose about 4% of the known species of life on earth and about 8% of estimated unknown species. In spite of their importance, less than 5% of the estimated 1.5 million fungi have been identified [1]. There are about 25000 species of basidiomycetes, of which about 500 are members of the Aphyllorphorales [2].

The first Indian record of Aphyllorphorales could be traced back to the work of [3] in his paper on Indian Polyporaceae. Later [4], who described few Indian Polypores. After a period over century, several Indian Aphyllorphorales were reported by [5], [6,7,8,9,10]. Bose was the first Indian Mycologist to provide the comprehensive account on Aphyllorphorales from Bengal [11,12,13,14,15], [16], [17,18], [19], [20], [21, 22] and [23]. A checklist of Aphyllorphoraceous fungal diversity from Western Ghats of Maharashtra [24]; from Nanded and Parbhani districts [25]; from Beed district, [26, 27], [28].

Taxonomic obstacles and the absence of long-term studies prevent conclusive answers even to basic questions about the number of species at a specific location or whether diversity is greater in one type of forest than in another [29]. It is known that the species of lignocellulolytic basidiomycetes are extremely abundant in all forest types and that they are the major wood decomposers in most ecosystems [30].

II. MATERIALS AND METHODS

Samples were collected during the period from 2014 to 2017. Macromorphological characterization was made from the fresh basidiomata. Field photographs of the fresh basidiomata were taken with the aid of Canon IXUS 132. Collected samples were firstly sun dried and then at 40 °C in hot air oven.

In the laboratory, Macro and micro phenotypic identification of fungus were carried out according to the relevant identification keys. For macroscopic characterization, the shape, consistency, color, dimension, and number of pores per mm of dry samples of basidiomata with the help of hand lens and dissecting microscope and photographs were taken Canon IXUS 132 camera.

Based on dry sample, for microscopic characterization cross sections through the basidiomata in distilled water and 5% KOH were examined, Phloxin and mounted in 30% Glycerol. Hyphal structure, hymenial setae, setal hyphae, basidia, basidiospores and their ornaments were examined. Melzer reagent was used to test the amyloid reaction of the microstructures. The color indication for all evaluated characters was based on Kornerup and Wanscher color cards [31].

III. List of Poroid and Non-poroid Aphyllorphoraceous fungi

Abbreviations used: FHC – Faisal Hamad Chouse, VPM – Vasant Pandit Mali

Amyloporus campbellii (Berk.) Ryv. (Bondarzewiaceae)

On *Gliricidia sepium*, Tuljapur (FHC/VPM-328); Ramling wildlife sanctuary, Yedshi (FHC/VPM-243); On *Leucaena leucocephala*, Kalamb (FHC/VPM-354); Washi (FHC/VPM-370); On *Mangifera indica*, Osmanabad (FHC/VPM-89); on *Prosopis julifera*, Parnada (FHC/VPM-399) (Table 1 & 2)

Cellulariella acuta (Berk.) Zmitr. & Malysheva (Polyporaceae)

On *Acacia arabica*, Osmanabad (FHC/VPM-338); on *Azadirachta indica*, Paranda (FHC/VPM-384).

Corioloopsis brunneoleuca (Berk.) Ryv. (Polyporaceae)

On *Acacia arabica*, Tuljapur (FHC/VPM-325); Paranda (FHC/VPM-384).

Daedaleopsis confragosa (Bolt. : Fr.) Schroet. (Polyporaceae)

On *Acacia arabica*, Lohara (FHC/VPM-307).

Duportella tristicula (Berk. & Broome) Reinking (Peniophoraceae)

On *Annona reticulata*, Washi (FHC/VPM-54, 56); Tuljapur (FHC/VPM-31); Osmanabad (FHC/VPM-339); Bhum (FHC/VPM-378); on *Annona squamosa*, Umarga (FHC/VPM-294); Kalamb (FHC/VPM-358).

Earliella scabrosa (Pers.) Gilb. & Ryv. (Polyporaceae)

On *Ficus benghalensis*, Umarga (FHC/VPM-296); on *Ficus religiosa*, Washi (FHC/VPM-364).

Favolus tenuiculus P. Beauv. (Polyporaceae)

On *Butea monosperma*, Ramling wildlife sanctuary, Yedshi (FHC/VPM-247); on *Ficus elastica*, Tuljapur and Kalamb (FHC/VPM-315, 352); on *Gliricidia sepium*, Ramling wildlife sanctuary, Yedshi (FHC/VPM-245), Lohara (FHC/VPM-311), Kalamb (FHC/VPM-348), Paranda (FHC/VPM-386); on *Lantana camara*, Kalamb (FHC/VPM-347), Washi (FHC/VPM-365).

Flavodon flavus (Kl.) Ryv. (Meruliaceae)

On *Acacia arabica*, Osmanabad, Bhum (FHC/VPM-61, 47); on *Acacia nilotica*, Bhum, Osmanabad (FHC/VPM-74, 93); on *Albizia lebbek*, Paranda (FHC/VPM-390); on Angiospermic plant, Paranda (FHC/VPM-82); on *Annona reticulata*, Washi (FHC/VPM-55); on *Azadirachta indica*, Bhum (FHC/VPM-48); on *Balanites roxburghii*, Osmanabad (FHC/VPM-105); on *Citrus sinensi*, Osmanabad (FHC/VPM-331); on *Gliricidia sepium*, Osmanabad (64, 91, 99); on *Leucaena leucocephala*, Hatlayi devi temple, Osmanabad (FHC/VPM-86, 102, 228); on *Nerium oleander*, Umarga (FHC/VPM-290); on *Peltophorum pterocarpum*, Kalamb (FHC/VPM-355); on Plywood, Bhum (FHC/VPM-73); on *Tamarindus indica*, Bhum (FHC/VPM-49).

Funalia caperata (Berk.) Zmitr & Malysheva (Polyporaceae)

On *Ficus religiosa*, Osmanabad (FHC/VPM-368); on *Gliricidia sepium*, Osmanabad (FHC/VPM-334); on *Grevillea robusta*, Tuljapur (FHC/VPM-327).

Ganoderma colossus (Fr.) Baker (Ganodermataceae)

On *Acacia arabica*, Umarga (FHC/VPM-297), Tuljapur (313, 321), Osmanabad (335), Kalamb (360).

Ganoderma curtisii (Berk.) Murr. (Ganodermataceae)

On *Citrus medica*, Nilanga (FHC/VPM-19); on *Gliricidia sepium*, Ramling wildlife sanctuary, Yedshi, Lohara (241, 305).

Ganoderma curtisii (Berk.) Murr. (Ganodermataceae)

On *Gliricidia sepium*, Tuljapur (FHC/VPM-324), Osmanabad (FHC/VPM-342), Washi (FHC/VPM-369), Bhum (FHC/VPM-376); on *Leucaena leucocephala*, Umarga (FHC/VPM-292); on *Ziziphus mauritiana*, Ramling wildlife sanctuary, Yedshi (FHC/VPM-239).

Ganoderma lucidum (Curt.) Karst. (Ganodermataceae)

On *Gliricidia sepium*, Bhum (FHC/VPM-44); on *Acacia arabica*, Paranda (FHC/VPM-395); on *Azadirachta indica*, Kalamb, Paranda (FHC/VPM-353, 391); *Balanites aegyptiaca*, Ramling wildlife sanctuary, Yedshi (FHC/VPM-236); *Delonix regia*, Paranda (FHC/VPM-400); *Lantana camara*, Ramling wildlife sanctuary, Yedshi (FHC/VPM-237); on *Leucaena leucocephala*, Paranda, Osmanabad (FHC/VPM-85); on *Mangifera indica*, Osmanabad (FHC/VPM-87); on *Tamarindus indica*, Washi (FHC/VPM-361).

Ganoderma multipileum Ding Hou (Ganodermataceae)

On *Gliricidia sepium*, Osmanabad (FHC/VPM-100); on *Leucaena leucocephala*, Ramling wildlife sanctuary, Yedshi (248).

Hexagonia tenuis (Hooke) Fr. (Polyporaceae)

On *Ficus elastica*, Osmanabad, Bhum (FHC/VPM-344, 374); on *Gliricidia sepium*, Umarga (FHC/VPM-298); on *Mangifera indica*, Bhum,, Washi, Umarga, Osmanabad, Kalamb (FHC/VPM-41, 57, 287, 333, 345).

Inonotus rickii (Pat.) Reid (Hymenochaetaceae)

On *Delonix regia*, Government Rest house, Naldurg (FHC/VPM-230), Washi (FHC/VPM-372), Paranda (FHC/VPM-389); on *Tamarindus indica*, Naldurg (FHC/VPM-229), Washi (FHC/VPM-366).

Irpex vellereus Berk. & Broome (Meruliaceae)

On *Annona reticulata*, Bhum (FHC/VPM-75), Ramling Wildlife sanctuary, Yedshi (FHC/VPM-246), Umarga (300), Paranda (383).

Loweporus tephroporus (Mont.) Ryv. (Polyporaceae)

On *Acacia nilotica*, Osmanabad (FHC/VPM-63, 341), Lohara (306); on *Azadirachta indica*, Naldurg fort (231), Bhum (379).

Navisporus floccosus (Bres.) Ryv. (Polyporaceae)

On *Annona reticulata*, Washi (FHC/VPM-53); on *Ficus benghalensis*, Tuljapur (FHC/VPM-316); on *Ficus racemose*, Umarga (293), Bhum (380); *Ficus religiosa*, Lohara (304).

Phellinus allardii (Bres.) Ahmad (Hymenochaetaceae)

On *Azadirachta indica*, Lohara (FHC/VPM-302), Bhum (377); on *Psidium guajava*, Osmanabad (329), Kalamb (356).

Phellinus badius (Cooke) Cunn. (Hymenochaetaceae)

On *Acacia arabica*, Kalamb (FHC/VPM-60), Bhum (FHC/VPM-78), Paranda (FHC/VPM-79), Osmanabad (FHC/VPM-78, 103); on *Albizia lebbek*, Kalamb (FHC/VPM-59); on *Gliricidia sepium*, Osmanabad (FHC/VPM-95, 98), Ramling wildlife sanctuary, Yedshi (FHC/VPM-242); *Leucaena leucocephala*, Paranda (FHC/VPM-83), Tuljapur (FHC/VPM-323); on *Peltophorum pterocarpum*, Ramling wildlife sanctuary, Yedshi (FHC/VPM-251), Kalamb (FHC/VPM-359).

Phellinus gilvus (Schwein.) Pat (Hymenochaetaceae)

On *Acacia arabica*, Ramling wildlife sanctuary, Yedshi (FHC/VPM-238); on *Azadirachta indica*, Kalamb (FHC/VPM-351), Washi (FHC/VPM-367); on *Gliricidia sepium*, Ramling wildlife sanctuary, Yedshi (FHC/VPM-250); on *Leucaena leucocephala*, Lohara (FHC/VPM-310), Osmanabad (FHC/VPM-330); on *Mangifera indica*, Paranda (FHC/VPM-392).

Phellinus pomaceus (Pers.) Maire (Hymenochaetaceae)

On *Gliricidia sepium*, Umarga (FHC/VPM-295); on *Leucaena leucocephala* Osmanabad (FHC/VPM-96), Paranda (FHC/VPM-397).

Phellinus rimosus (Berk.) Pilát (Hymenochaetaceae)

On *Acacia arabica*, Osmanabad (FHC/VPM-62), Lohara (FHC/VPM-308), Tuljapur (FHC/VPM-318), Kalamb (FHC/VPM-350), Paranda (FHC/VPM-396).

Podoscypha petalodes (Berk.) Boidin (Podoscyphaceae)

On *Ficus elastica*, Bhum (FHC/VPM-68).

Porostereum spadiceum (Pers.) Hortst. & Ryv. (Phanerochaetaceae)

On *Tamarindus indica*, Bhum (FHC/VPM-71), Osmanabad (FHC/VPM-94).

Pyrofomes albomarginatus (Lev.) Ryv. (Polyporaceae)

On *Azadirachta indica*, Bhum (FHC/VPM-70).

Rhodofomitopsis feei Cui, Han & Dai (Fomitopsidaceae)

On *Acacia arabica*, Tuljapur (FHC/VPM-319), Osmanabad (FHC/VPM-337).

Schizophyllum commune Fr. (Schizophyllaceae)

On *Agave americana*, Bhum (FHC/VPM-45, 46); on *Acacia arabica*, Bhum (FHC/VPM-69), Paranda (FHC/VPM-80); on *Acacia nilotica*, Osmanabad (FHC/VPM-92); on *Azadirachta indica*, Bhum (FHC/VPM-43); on *Delonix regia*, Paranda (FHC/VPM-84); on *Ficus racemose*, Paranda (FHC/VPM-81); on *Leucaena leucocephala*, Bhum (FHC/VPM-77), Osmanabad (FHC/VPM-90); on *Mangifera indica*, Bhum (FHC/VPM-67, 76), Osmanabad (FHC/VPM-88); on Plywood, Bhum (FHC/VPM-72); on *Tectona grandis*, Tuljapur (FHC/VPM-322); on *Vitex negundo*, Bhum (FHC/VPM-65), Paranda (FHC/VPM-388).

Scytinostroma duriusculum (Berk. & Br.) Donk (Lachnocladiaceae)

On *Balanites aegyptiaca*, Ramling wildlife sanctuary, Yedshi (FHC/VPM-249); on *Dalbergia sissoo*, Kalamb (FHC/VPM-346); on *Ficus benghalensis*, Washi (FHC/VPM-362); on *Leucaena leucocephala*, Bhum (FHC/VPM-50), Osmanabad (FHC/VPM-97), Washi (FHC/VPM-363).

Scytinostroma rhizomorparum Rattan (Lachnocladiaceae)

On *Azadirachta indica*, Bhum (FHC/VPM-66), Ramling wildlife sanctuary, Yedshi (FHC/VPM-240, 244); on *Citrus medica*, Bhum (FHC/VPM-51); on *Gliricidia sepium*, Osmanabad (FHC/VPM-101); on *Leucaena leucocephala*, Umarga (FHC/VPM-299), Paranda (FHC/VPM-382).

Trametes cingulata Berk. (Polyporaceae)

On *Mangifera indica*, Paranda (FHC/VPM-393); on *Santalum album* Osmanabad (FHC/VPM-104), Tuljapur (FHC/VPM-317), Washi (FHC/VPM-371).

Trametes leonina (Kl.) Imazeki (Polyporaceae)

On *Delonix regia*, Naldurg fort (FHC/VPM-232), Lohara (FHC/VPM-301); on *Mangifera indica*, Bhum (FHC/VPM-42), Tuljapur (FHC/VPM-320), Osmanabad (FHC/VPM-320, 332), Kalamb (FHC/VPM-349), Paranda (FHC/VPM-381, 394).

Trametes pubescens (Schw. : Fr.) Pilat. (Polyporaceae)

On *Azadirachta indica*, Osmanabad (FHC/VPM-343); on *Gliricidia sepium*, Paranda (FHC/VPM-387); on *Santalum album*, Umarga (FHC/VPM-291).

Trametes variegata (Berk.) Zmitr., Wasser & Ezhov (Polyporaceae)

On *Mangifera indica*, Lohara (FHC/VPM-303), Tuljapur (FHC/VPM-326), Bhum (FHC/VPM-375), Paranda (FHC/VPM-398).

REFERENCES:

- McKenzie, E.H.C. Tech. Paper 206. SPC, Noumea, New Caledonia. Brooks, F.E. (2004). Tech. Paper 41. ASCC Land Grant, Malaemi, AS.. 1996
- Jordan, K.Z. Biologically Active Compounds from Aphyllophorales (Polypore) Fungi. *J. Nat. Prod.*, 67, pp 300-310, 2004
- Klotzsch, J.F. Mycologische Berichtigungen. *Linnaea* 7, 193-204., 1832
- Berkeley, M.J. Description of Exotic fungi in the collection of Sir W.J. Hooker from Memoirs and notes of J.F. Klotzsch with additions and corrections. *Ann. Nat. Hist.* 3: 375-401, 1839
- Lloyd, C.G. Mycological Notes, Nos. 1- 75. Cincinnati, Ohio, U. S. A. pp. 1364, 1898-1925
- Sydow, H., Sydow, P. & Butler, E.J. Fungi Indiae orientalis II. *Annales Mycologici* 5, 485-515, 1907
- Sydow, H., Sydow, P. & Butler, E.J. Fungi Indiae orientalis III. *Annales Mycologici* 9, 372-421, 1911
- Sydow, H., Sydow, P. & Butler, E.J. Fungi Indiae orientalis IV. *Annales Mycologici* 10, 243-280, 1912
- Sydow, H., Sydow, P. & Butler, E.J. Fungi Indiae orientalis V. *Annales Mycologici* 14, 177-220.
- Sydow, H. Ferdinand Theissen S.J. *Annales Mycologici* 17 (2-6): 134-139, 1916
- Bose, S.R. Description of fungi in Bengal I. Proceedings of the Science Convention, *Indian Association for Cultivation of Science* 4, 109-114, 1919
- Bose, S.R. Polyporaceae of Bengal. Part VII. *Rept. Indian Assoc. for the Cultivation of Sci., and Proc. Sc. Convention for the year 1920-1921, Calcutta* 1923: 27-36, 8 tabs, 1923
- Bose, S.R. Les Polyporaceae du Bengal. *Revue Path. Veg. et. Ent. Agric.* 11, 134-139, 1924
- Bose, S.R. A new species of Polyporaceae from Bengal. *Annals of Mycology* 23, 179-181, 1925
- Bose, S.R. Polyporaceae of Bengal— Part IX. *Journal of the Department of Science, Calcutta University* 9, 35-44, 1927
- Vaidya, J.G., Bhor, G.L. Medicinally important wood rotting fungi with special emphasis on Phansomba. *Deerghyu* 6, 1- 4, 1990
- Sathe, A.V., Rahalkar, S.R. Agaricales from south-west India - I. *Biovigyanam* 1 (1): 75-78, 1975
- Sathe, A.V., Rahalkar, S.R. Check list of Polyporaceae from south West India. I. *Biovigyanam* 2, 103-105, 1977
- Vaidya, J.G., Nanda, M.K., Rabba, A.S. Community and substratum composition for wood rotting Aphyllophorales from Bhimashankar, Western Ghats. Proceedings of the Sixth Engineering Congress on Transdisciplinary premise of Ecology and Environment, Institute of Engineers, Pune, India 2, 56-70.
- Rabba, A.S. Studies in the genus *Phellinus* Quel. from Maharashtra. Ph.D. Thesis, University of Pune, Pune. pp. 1- 221, 1994
- Sharma, J.R. *Hymenochaetaceae of India*. Botanical Survey of India, Calcutta, pp 1-219, 1995
- Sharma, J.R. Diversity in Indian fungi and their conservation status. *Bull. Bot. Surv. Ind.* (sp. volume) 36: 243-255, 1997
- Nanda, M.K. *Wood Rotting Fungi from Bhimashankar* Ph. D. Thesis, Department of Botany, University of Pune. pp.1-397, 1996
- Ranadive, K.R., Vaidya, J.G., Jite, P.K., Ranade, V.D., Bhosale, S.R., Rabba, A.S., Hakimi, M., Deshpande, G.S., Rathod, M.M., Forutan, A., Kaur, M., Naik-Vaidya, C.D., Bapat, G.S. & Lamrood, P. Checklist of Aphyllophorales from the Western Ghats of Maharashtra State, India. *Mycosphere*, pp. 91-114, 2011
- Raibole, U.K., Mali, V.P. *Aphyllophorales from Parbhani and Nanded*. Ph.D. Thesis, Department of Botany, Dr. B.A.M. University, Aurangabad, pp. 1-234, 2012
- Mali, V.P. Wood Rotting Fungi (Aphyllophorales) from Ashti-1. *Journal of Medicinal Chemistry and Drug Discovery*. Pp-699-705, 2015
- Mali, V.P. Preliminary investigation of Aphyllophorales from Saurashtra University campus, Rajkot (Gujrat) India. *International Journal of Science Info (IJSI)* Vol. 1(3): 144-149, 2016
- Mali, V.P., Raibhole, U.K., Hembrom, M., Parihar, A. Taxonomy and Diversity of *Trametes* from the Marathwada (Maharashtra) India, *Journal of Medicinal Chemistry and Drug Discovery*. Vol.1 (2):537-546, 2016
- Lodge, D.J., Ammirati, J., O'Dell, T.E. & Mueller, G.M. Collecting and describing macrofungi. In Biodiversity of Fungi: Inventory and Monitoring Methods, Mueller, G.M., Bills, G.F., Foster, M.S., Eds. New York, Academic Press, pp. 123-168, 2004
- Fryar, S.C., Kirby, G.C. & Hyde, K.D. Species abundance patterns of two wood decay basidiomycete communities. *Fungal Diversity* 3: 39-56, 1999
- Kornerup, A., Wanscher, J.H. *Methuen handbook of colour*. 3rd ed. London, UK: *Eyre Methuen*, 1978

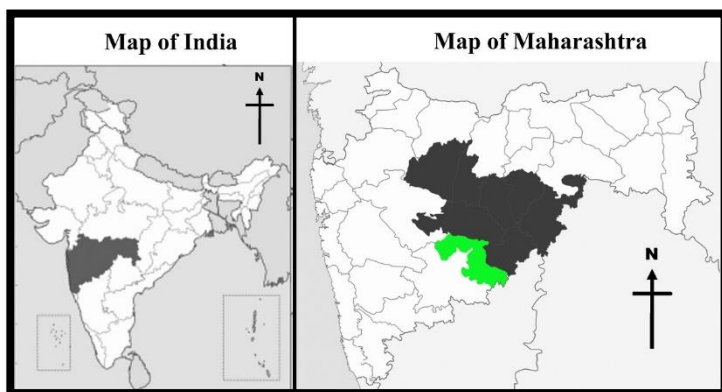


Fig 1. Map of India Showing Marathwada in Maharashtra State

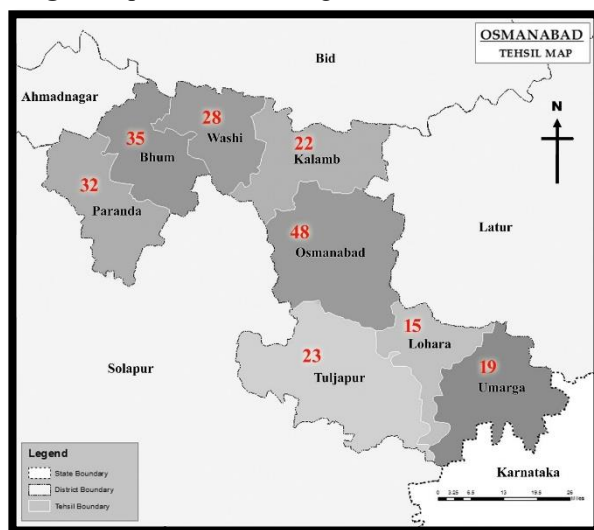


Fig 2. - Map of Marathwada, with collecting localities

Table 1. Key localities of specimen collection

Collection sites	Latitude Longitude	Altitude	Vegetation type	Dominant plant species
Paranda	N 18°15'38.4" E 75°27'54.3"	508 m	Mixture of dry deciduous forest with patches of thorny scrublands	<i>Gliricidia sepium</i> , <i>Albizia lebbbeck</i> , <i>Azadirachta indica</i>
Bhum	N 18°27'39.2" E 75°39'31.1"	528 m	Mixture of semi-evergreen and dry deciduous forests with few isolated patches of evergreen vegetation in deep ravines	<i>Acacia nilotica</i> , <i>Azadirachta indica</i> , <i>Gliricidia sepium</i>
Washi	N 18°32'29.3" E 75°46'31.6"	554 m	Top hills show mixture of dry deciduous forest with patches of thorny scrublands with few isolated patches of evergreen vegetation in deep ravines	<i>Leucaena leucocephala</i> , <i>Annona reticulata</i> ,
Kalamb	N 18°34'32.5" E 76°1'28.9"	674 m	Mixture of dry deciduous forest with patches of thorny scrublands	<i>Leucaena leucocephala</i> , <i>Lantana camara</i> , <i>Gliricidia sepium</i>
Osmanabad	N 18°11'9.83" E 76°2'30.9"	653 m	Mixture of semi-evergreen and dry deciduous forests with few	<i>Citrus sinensis</i> , <i>Mangifera</i>

			isolated patches of evergreen vegetation in deep ravines	<i>indica</i> , <i>Acacia arabica</i> ,
Tuljapur	N 18°0'36.13" E 76°4'15.84"	648 m	Mixture of dry deciduous forest with patches of thorny scrublands	<i>Gliricidia sepium</i> , <i>Acacia arabica</i> , <i>Ficus elastica</i> , <i>Delonix regia</i>
Lohara	N 17°59'16.4" E 76°19'34.1"	796 m	Mixture of dry deciduous forest with patches of thorny scrublands	<i>Acacia arabica</i> , <i>Azadirachta indica</i> , <i>Leucaena leucocephala</i>
Umarga	N 17°50'15.4" E 76°37'7.15"	572 m	Mixture of dry deciduous forest with patches of thorny scrublands	<i>Ficus religiosa</i> , <i>Azadirachta indica</i> , <i>Delonix regia</i>

Table 2. Poroid and non-poroid families, and total number of genera and species.

Family	No. of genera	No. of Species
Bondarzewiaceae	01	01
Fomitopsidaceae	01	01
Ganodermataceae	01	04
Hymenochaetaceae	02	06
Lachnocladiaceae	01	02
Meruliaceae	02	02
Peniophoraceae	01	01
Phanerochaetaceae	01	01
Podoscyphaceae	01	01
Polyporaceae	11	14
Schizophyllaceae	01	01
Total 11 families	Total 23 genera	Total 34 species