



Wood-Rotting Fungi from Phulambri Taluka, District Aurangabad (Maharashtra) India.

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ABSTRACT

In present investigation sixty-nine specimens were collected from various regions of Phlumbari Taluka Aurangabad District (Maharashtra) India, from that 21 species were identified according to morphological and microscopic character, belongs to 18 genera and 21 species. It was observed that *Auricularia mesenterica*, *Cellulariella acuta*, *Daldinia concentrica*, *Flavodon flavus*, *Ganoderma lucidum*, *Lopharia cinerascens*, *Macrocybe pachymeres*, *Navisporus floccosus*, *Phellinus badius*, *Pluteus cervinus*, *Schizophyllum commune*, *Truncospora tephropora* and *Xylaria multiplex* were most abundantly found while, *Auricularia delicata*, *Favolus roseus*, *Ganoderma australe*, *Leucocoprinus fragilissimus*, *Phellinus allardii*, *Pleurocybella* sp.1, *Pycnoporus sanguineus* and *Tremella mesenterica* are rarely observed macro-fungi.

Keywords: Basidiocarps, Heartwood, Macrofungi, Phlumbari, Specimens

INTRODUCTION

The wood-rotting macro-fungi that grows and produce basidiocarps on living trees, dried trees and wood logs are either restricted to interior, primary non-living portion of a living tree (heartwood) or are capable to degrade outer living sapwood. Though the Decay is not likely to progress much beyond the limits of wounded area but these fungi are true pathogens and are capable of invade and degrade living sapwood leading to the killing of the tree in many cases. These fungi generally don't attack the heartwood except a limited attack in certain cases. They usually invade trees through dead branch stubs and can tolerate the chemical and physical constraints within the tree trunks. The constraints which are obviously suspect in this regard are levels of oxygen, carbon dioxide, variation of moisture content and pH of the heart tissue, concentration and nature of volatile organic compounds, interaction macro-fungi and all the host responses. The macro-fungi attack mainly cellulose and the hyphae are mostly confined to the secondary wall (Bailey and Vestal, 1937; Savory, 1954). The list of southern Indian fungi given by

(Rangaswami et al, 1970) includes 44 polyporoid species belongs to 13 genera of which only 5 are from Kerala. The resupinate Aphyllophorales described by (Natarajan & Kolandavelu, 1985) from Tamil Nadu region and this includes poroid fungi. Checklist of 256 species of aphylophorales fungi from western-ghats of Maharashtra state included 170 species from 10 poroid families and 86 species from 20 non-poroid families (Ranadive et al 2011). Thirty-four genera and forty-nine species from Latur district of Maharashtra state reported by (Chouse and Mali, 2020). Recently (Gore and Mali, 2022) described fifteen genera and sixteen species of wood-decaying fungi from Gangapur teshil Aurangabad district Maharashtra.

MATERIALS AND METHODS

Survey and collection of wood rotting fungi were done 20 to 25 days after heavy rainfall month of July to November from year (2014-2019). Macroscopic character of macro-fungi are noted down in field book at site and microscopic observations done by taking freehand thin section cutting of fruiting bodies with the help of sharp razor blades, stained and studied in 10 % KOH, Lactophenol and Melzer's reagent under 40X and 100X Magnification (Olympus CX 41) in laboratory. Then specimens of macro-fungi were sun dried and kept in brown paper packet as per international mycological herbarium guidelines.

RESULT AND DISCUSSION

Auricularia delicata (Mont. ex Fr.) Henn.

Basidiocarp annual, solitary or in groups, 3.6 × 3.1 cm, up to 0.3 cm thick, ear-shaped, jelly like semi-transparent. Sterile surface smooth to slightly sulcate, orange brown to reddish brown when young, almost reddish brown to brownish black on drying. Fertile surface smooth, sulcate to vein like, creamy orange to orange brown. Hyphal system monomitic, generative hyphae 2.5–3 µm wide, clamped, thin to thick-walled, smooth, hyaline. Basidia 39–41 × 3.5–4.5 µm wide, elongated cylindrical. Spores 10.5–13 × 4.5–5.5 µm wide, allantoid.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambari, Bildha, 04/10/2016, on the wood log *Psidium guajava* L., 671m, 20°02'47"N 75°24'02"E, GVU/MVP- 460, Gore Vijay.

Auricularia mesenterica (Dicks.) Pers.

Basidiocarp annual, solitary or in groups, 0.5–4.2 × 0.5–2 cm, up to 0.2 cm thick, resupinate to effused reflex to pileate, ear-shaped, jelly like semi-transparent. Sterile surface, hairy, yellowish-brown to greyish brown. Fertile surface smooth to slightly wrinkled, bluish to purplish brown with a whitish gray bloom. Hairs thick-walled, up to 3 mm long. Hyphal system monomitic generative hyphae 2.5–5.5 µm wide. Basidia cylindrical, hyaline, 40–55 × 4.5–5.5 µm wide, 3–12 × 1–10 µm wide. Spores hyaline, 11–13.5 × 5–5.5 µm wide, reniform to allantoid.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambari, Pharshi phata, 04/10/2016, on wood log *Acacia nilotica* (L.) Delile, 609m, 20°08'08"N 75°29'35"E, GVU/MVP-469, Gore Vijay.

Cellulariella acuta (Berk) Zmitr. & Malysheva.

Basidiocarp annual, solitary or in groups, 4.2–6.4 × 2.8–4.7 × 1.8 cm. semicircular to fan-shaped. Sterile surface concentrically zonate, wrinkled, grayish-yellow to pale yellow. Margin entire, acute. Fertile surface poroid to maize-like, 1–4 per mm, yellowish to pale orange. Context up to 6 mm wide, pale yellow to ochraceous. Tube up to 12 mm long. Hyphal system trimitic, generative hyphae hyaline 1.6–3 µm wide, skeletal hyphae thin-walled, up to 5.8 µm wide, binding hyphae 2.5–4 µm wide, Spores 7–8 × 2.5–3.5 µm wide, cylindrical.

Specimens examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Aaland, 04/10/2016, on wood log *Acacia nilotica* (L.) Delile, 621m, 20°08'57"N 75°30'17"E, GVU/MVP-471, Gore Vijay.

Daldinia concentrica (Bolton) Ces. & De Not.

Basidiocarp annual, solitary or in groups, 3.4–5.5 cm diameter, hemispherical to variously shaped cushions purplish brown to reddish-brown, later changes to black. The outer surface is smooth, glabrous, notches with minute pores formed by the ostiole of the perithecia. Vertical section show distinct concentric zonation. Perithecia in a single layer just below the outer layer possess a conical neck. Asci within the perithecium immersed in mucilage, cylindrical, 85 – 150 × 9 – 12 µm wide, with a long stalk. Ascospores are uniseriate, elliptical to inequilateral, 13–16 × 6.5 – 9 µm wide.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri,

Phulambri, 21/08/2016, on living tree but on dried trunk *Delonix regia* (Hook.) Raf, 632m, 20°05'06"N 75°24'47"E, GVU/MVP-270, *Gore Vijay*.

***Favolus roseus* Lloyd.**

Basidiocarp annual, solitary or in groups, 2.5–5.8 × 1.1–2.1 × 0.1–0.4 cm, spatulate to dimidiate, semicircular. Sterile surface grooved to papillate, glabrous, light yellow to grayish golden yellow, yellowish brown toward margin. Margin distinct, sterile, acute. Fertile surface poroid, hexagonal to pentagonal, pale yellow to orange yellow. Context 1 mm wide toward base grayish yellow to pale yellow. Tube 1–3 mm wide. Stipe 1–4 × 1–3 mm, pale yellow to amber yellow. Hyphal system dimitic; generative hyphae 2.5–5 µm wide, skeleto-binding hyphae 2.5–5.5 µm wide. Basidia 22–27 × 7.5–9 µm wide. Spores 8.5–12 × 3–5.1 µm wide, cylindrical.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Pharshi phata, 04/10/2016, on the living tree main trunk *Ficus benghalensis* L, 616m, 20°08'16"N 75°29'40"E, GVU/MVP- 455, *Gore Vijay*.

***Flavodon flavus* (Klotzsch) Ryvarden.**

Basidiocarp annual, solitary or in groups, 1.5–10.5 × 1.1–4.9 × 0.1–0.4 cm, resupinate to pileate. Sterile surface 0.7–3.5 × 0.3–0.5 × 0.1–0.4 cm, zonation, pale yellowish to yellowish-brown. Fertile surface poroid, round to angular, 1-2 per mm, white-yellow to pale yellow. Context up to 1 mm, grayish-yellow, Tubes up to 3 mm wide, faint yellowish to yellowish-brown. Hyphal system dimitic, generative hyphae 2.5 – 4.5 µm wide, skeletal hyphae 3.5–6.5 µm wide. Basidia 25–30 × 5–6 µm wide. Spores 5.5–7 × 3.5–4 µm wide, ellipsoid.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Bildha, 04/10/2016, on wood logs *Peltophorum pterocarpum* (DC.) K. Heyne, 671m, 20°02'47"N 75°24'02"E, GVU/MVP- 461, *Gore Vijay*.

***Leucocoprinus fragilissimus* (Ravenel ex Berk. & M.A. Curtis) Pat.**

Basidiocarp annual, solitary or in groups, up to 12 cm high. Cap 3–3.5 cm in diameter, flat to planoconvex, with slightly depressed at centre, white with greenish tint. Fertile surface gills free 8– 10 per cm, sub-distant to close creamy white. Stalk 3.5–6.1 × 0.1–0.3 cm, cylindrical, creamy. Context very thin, soft, chalky. Annulus present, attached at mid of stalk creamy

white. Spore print white. Hyphal system monomitic; generative hyphae 3.5–7 µm wide, septate, thinwalled, smooth, hyaline. Basidia 23–28 × 8–13 µm wide, clavate. Spores 9–13.5 × 5.5–7.5 µm wide, ellipsoid.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Aaland, 04/09/2016, on the wood log of *Leucaena leucocephala* (Lam.) de Wit, 627m, 20°11'37"N 75°32'56"E, VUG/VPM-453, *Gore Vijay*.

***Lopharia cinerascens* (Schwein.) G. Cunn.**

Basidiocarp annual, gregarious, 1.6–10.9 × 1.2–7.4 cm up to 0.2 cm thick when fresh, crust-like, resupinate to effused- reflexed to pileate, leathery to membranous when fresh, papery thin to brittle on drying. Sterile surface 1.1–5.7 × 0.5–1.1 cm, up to 0.2 cm thick, azonate to concentrically zonate, sulcate, camel brown to smoky brown. Margin sterile, distinct when young chalky white. Fertile surface, smooth, cracked when mature, smoky brown to brownish black. Context thin, homogenous, light brown to grayish brown to smoky brown. Hyphal system monomitic; generative hyphae 3.5–5.5 µm wide, thin-walled. Basidia 16.5–21 × 4–6 µm wide. Spores 7.5–9 × 3–4 µm wide, cylindrical to ellipsoid.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Aaland, 04/10/2016, on the wood log of *Albizia lebbbeck* (L.) Benth, 627m, 20°11'37"N 75°32'56"E, VUG/VPM-452, *Vijay Gore*.

***Ganoderma australe* (Fr.) Pat. (Fr.) Pat.**

Basidiocarp annual to perennial, solitary, 8.9 × 4.3 cm, up to 4.1 cm thick at base, ungluate. Sterile surface smooth, glabrous, surface covered with a cinnamon powder of deposited spores, dull brown to cocoa brown. Margin sterile, obtuse, white when young. Lower fertile surface poroid, round, regular, pores 3–5 per mm, white to cream. Context up to 28 mm thick at base, dark bay brown, rarely with some white spots. Tubes up to 13 mm long, dark brown. Hyphal system trimitic, generative hyphae 1.5–2.5 µm wide, skeleto-binding hyphae 2.5–5 µm wide, binding hyphae 1–2 µm wide. Basidia 18–23 × 8.5–11 µm wide, clavate. Spores 7.5–13 × 5–8.5 µm wide, ovoid to broadly ellipsoid.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Phulambri, 31/08/2014, on the living tree of main trunk *Tamarindus indica* L. 634m, 20°05'05"N 75°24'48"E, GVU/MVP- 71, *Vijay Gore*.

***Ganoderma lucidum* (Curtis) P. Karst.**

Basidiocarp annual, solitary, 13.2 × 7.8 cm, 2.1 cm thick at base, sessile to laterally stipitate. Sterile surface semicircular to dimidiate, concentrically zonate, shiny, reddish-brown. Fertile surface pores 3–6 per mm. Context 5–12 mm wide. Tube 3–9 mm wide. Hyphal system trimitic generative hyphae hyaline 3–4 µm wide, skeletal hyphae thick-walled, 3–4.5 µm wide, binding hyphae 1–2.2 µm wide. Basidia 19–22 × 9–11 µm wide. Spores 8.5–10 × 6–7 µm wide, ovoid.

Specimens examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Bildha; 31/08/2014; on the living tree of *Peltophorum pterocarpum* (DC.) K.Heyne; alt 658m, 20°03'29"N, 75°24'15"E; GVU/MVP- 73, *Vijay Gore*.

***Macrocybe pachymeres* (Berk. & Broome) Pegler & Lodge.**

Basidiocarp annual, in groups. Cap 5.9–10.2 cm diameter, fleshy, large-sized, hemispherical to convex, pale yellowish-brown becoming paler towards the margin, margin inrolled, projecting beyond the lamellae. Fertile surface gills free, 10–13 per cm, lamella sinuato-adnexed, greyish-yellow with a pale pinkish tint on surface, up to 10 mm wide, very crowded, Stipe 4.5–8.5 × 2–4 cm long, stout, cylindrical or swollen either at the base, greyish brown. Context 19 mm thick. Hyphae monomitic 4.5–8 µm wide. Basidia 19–35 × 5–8 µm wide, clavate. Spores 5–7 × 4–5 µm wide, subglobose to ovoid.

Specimens Examined INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Pharshi phata, 08/09/2016, on the living tree at the base of trunk *Ficus benghalensis* L., alt 609m, 20°08'08"N, 75°29'35"E, GVU/MVP- 369, *Vijay Gore*.

***Navisporus floccosus* (Bres.) Ryvarden.**

Basidiocarp annual, solitary, 16.8 × 11.4 cm, up to 7.2 cm thick at the base, pileate. Sterile surface yellowish-brown to dull brown, smooth, glabrous, soft, white to brown powdery appearance when old. Fertile surface pale orange to grayish orange, pores round, regular, 2–3 per mm. Margin obtuse, smooth. Context up to 62 mm. Tube up to 10 mm long, light brown. Hyphal system dimitic, generative hyphae thin-walled, hyaline, 2–2.5 µm wide, skeletal hyphae thick-walled, hyaline, 5.5–7 µm wide. Basidia 16–20 × 4.5–6 µm wide. Spores 8–11 × 5–6 µm wide, slightly thick-walled, oblong to navicular.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri,

Umravati, 15/08/2014, on living tree at main trunk *Ficus benghalensis* L., 611m, 20°13'22"N 75°32'12"E, GVU/MVP-21, *Vijay Gore*.

***Phellinus allardii* (Bres.) S. Ahmad.**

Basidiocarp perennial, solitary or in groups, 3.3–15.2 × 2.9–7.3 × 0.2–2.1 cm thick at centre, mostly resupinate, effused reflex to pileate, heavy when fresh, corky hard on drying, broadly attached and elongated. Margin fertile, sharp, undulating, velvety. Fertile surface poroid, round, pores 5–8 per mm, yellowish brown to brownish black. Context thin or absent. Tubes up to 3 mm wide in each layer. Hyphal system dimitic, generative hyphae thin-walled, 1.5 – 2.5 µm wide, skeletal hyphae thick-walled, 2.5–3.5 µm wide. Basidia 9.5–13 × 4.5–6 µm wide. Spores 4.5–6 × 3.5–4 µm wide, broadly ellipsoid to subglobose.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Aaland, 21/08/2016, on living tree at main trunk *Dalbergia sissoo* DC., 627m, 20°11'58"N 75°33'20"E, GVU/MVP-274, *Vijay Gore*.

***Phellinus badius* (Cooke) G. Cunn.**

Basidiocarp perennial, solitary, 10.4 × 5.2 × 3.1 cm thick at base, pileate, sessile, semicircular, easily separable from the host. Sterile surface velvety yellowish brown to dull brown. Margin obtuse, sterile. Fertile surface poroid, pores 4–7 per mm. Context up to 27 mm. Tube up to 4 mm deep. Hyphal system dimitic, generative hyphae hyaline, 3–4 µm wide, skeletal hyphae thick-walled, 3–5 µm wide. Basidia broadly clavate 11–14 × 5.5–7 µm wide. Spores 6–7.5 × 5–6 µm wide, ellipsoid to sub-globose.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Lahanyachiwadi, 04/10/2016, on the living tree on main trunk *Acacia nilotica* (L.) Delile., alt 625m, 20°07'02"N 75°28'02"E; GVU/MVP-466, *Vijay Gore*.

***Pleurocybella* sp. 1.**

Basidiocarp annual, in groups, 2.1–7.4 × 1.4–5.6 cm, up to 0.6 cm thick at base, fleshy, small to medium sized, smooth when mature. Sterile surface creamy white when young, creamy white to pale white when matured. Margin entire, slightly recurved. Fertile surface gills decurrent, 8–12 per cm, creamy white. Stalk 0.5–1.3 × 0.3–0.6 cm, cylindrical, lateral, creamy white at base. Context homogenous, solid, creamy white. Spore print white. Hyphal system monomitic generative hyphae 2.5–9 µm wide. Basidia 21–28 ×

6.5–9 µm wide, clavate. Spores 7–9 × 4.5–6 µm wide, ellipsoid.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Aaland, 04/10/2016, on wood log *Mangifera indica* L, 620m, 20°12'02"N 75°33'29"E, GVU/MVP-449, Vijay Gore.

***Pluteus cervinus* (Schaeff.) P. Kumm.**

Basidiocarp annual, solitary or in groups. Cap 2.5–4.1 cm in diameter, fleshy, small to medium size, campanulate to broadly convex, cracked at centre, wet when fresh, cream to grey to pale pinkish when young becoming brownish grey. Margin acute, fibrillose. Fertile surface gills 8–12 per cm, free, crowded, grey to pale pinkish to brownish grey. Stalk 2.5–4 × 0.4–0.7 cm, central, fibrillose, solid, equal, wide at the base, chalky white. Context homogenous, fleshy, soft, white. Spore print white. Hyphal system monomitic generative hyphae 3–6 µm wide, thin-walled, smooth, hyaline. Basidia 16–20 × 5–9 µm wide, clavate. Spores 6–7.5 × 5.5–6.5 µm wide, ovoid to ellipsoid.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Phulambri, 07/11/2019, on wood log *Acacia nilotica* (L.) Delile, 646m, 20°05'06"N 75°24'20"E, GVU/MVP-768, Vijay Gore.

***Pycnoporus sanguineus* (L.) Murrill, Bull.**

Basidiocarp annual, solitary or in groups, 2.6–5.4 × 1.1–2.1 × 0.4–2.1 cm thick at the base, pileate, semicircular, sessile, broadly attached. Sterile surface glabrous, smooth, sulcate, pale orange red to cinnabar red when fresh, brick red on drying. Margin distinct, sterile, obtuse. Fertile surface poroid, round to angular 4–6 per mm. Context up to 18 mm thick near base, soft, pale orange to red orange. Tubes up to 3 mm wide, brick red. Hyphal system trimitic generative hyphae hyaline, thin-walled, 2–3.5 µm wide, skeletal hyphae 2.5–5 µm wide, binding hyphae 2.5–3 µm wide. Basidia 12–15 × 4.5–6 µm wide, clavate. Spores 5–6 × 2–3 µm wide, cylindrical.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Pharshi phata, 04/10/2016, on the cut wood log of *Zizyphus mauritiana* Lam, 609m, 20°08'08"N 75°29'35"E, GVU/MVP-467, Vijay Gore.

***Schizophyllum commune* Fr.**

Basidiocarp annual, in groups, 0.5–2.9 × 0.4–1.8 cm, up to 0.3 cm thick, pileate, laterally attached by a small

base. Sterile surface white greyish to dark grayish brown, villose lobed. Fertile surface falsely gilled, separating along gill's-edge. Context up to 1 mm thick. Hyphal system monomitic generative hyphae thin to thick-walled not inflating, 4–7 µm wide. Basidia 16–20 × 4–6 µm wide, narrowly clavate. Spores 3–5 × 1.4–2.5 µm wide, allantoids.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Pharshi phata, 03/11/2019, on the cut wood log of *Zizyphus mauritiana* Lam, 609m, 20°08'08"N 75°29'35"E, GVU/MVP-699, Vijay Gore.

***Tremella mesenterica* Retz.**

Basidiocarp annual, solitary, 1.9 × 1.7 × 1.4 cm, cerebriform or lobed, jelly, moist, bright golden yellow to yellowish-orange, becomes greasy or smily during the wet weather. Hypal system monomitic Generative hyphae 2–5 µm wide. Basidia 15–30 × 10–22 µm wide, with clamps. Spores 11.5–15 × 4–6 µm wide, broadly ellipsoid to subspherical.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Bildha, 04/10/2016, on wood logs *Peltophorum pterocarpum* (DC.) K. Heyne, 671m, 20°02'48"N 75°24'01"E, GVU/MVP-465, Gore Vijay.

***Truncospora tephropora* (Mont.) Zmitr.**

Basidiocarp perennial, gregarious, 67 × 29 cm, up to 1.5 cm thick at the centre, resupinate to widely effused, tough to hard when fresh, woody hard on drying, broadly elongated. Margin sterile, obtuse, grayish-yellow to yellowish. Fertile surface poroid, round, 4–7 per mm pores, cracked when mature, grayish-yellow to grayish brown on drying. Context papery thin to almost absent, hard, homogenous, greyish-yellow to greyish brown. Tubes up to 15 mm wide, duplex or in the layer, each layer or strata up to 3 mm wide, dull brown to coffee brown. Hyphal system trimitic, generative hyphae 2.5–3 µm wide, skeletal hyphae 3–4 µm wide, thick-walled, binding hyphae 3 µm wide. Basidia 13–16 × 4–5 µm wide, narrowly clavate. Spores 5–6 × 3.5–4.5 µm wide, broadly ellipsoid.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Aaland, 21/08/2016, on dried tree at main trunk *Eucalyptus obliqua* L'Hér., 639m, 20°05'05"N 75°24'31"E, GVU/MVP-271, Vijay Gore.

Photo plate 1



Auricularia delicata (Mont. ex Fr.) Henn.



Auricularia mesenterica (Dicks.) Pers.



Cellulariella acuta (Berk) Zmitr. & Malysheva.



Daldinia concentrica (Bolton) Ces. & De Not.



Favolus roseus Lloyd.



Flavodon flavus (Klotzsch) Ryvarden



Ganoderma australe (Fr.) Pat. (Fr.) Pat.



Ganoderma lucidum (Curtis) P. Karst.



Leucocoprinus fragilissimus (Ravenel ex Berk. & M.A. Curtis) Pat.



Lopharia cinerascens (Schwein.) G. Cunn.



Macrocybe pachymeres (Berk. & Broome) Pegler & Lodge.



Navisporus floccosus (Bres.) Ryvarden.



Phellinus allardii (Bres.) S. Ahmad.



Phellinus badius (Cooke) G. Cunn



Pleurocybella sp. 1.



Pluteus cervinus (Schaeff.) P. Kumm.



Pycnoporus sanguineus (L.) Murrill, Bull.



Schizophyllum commune Fr.



Tremella mesenterica Retz.



Truncospora tephropora (Mont.) Zmitr.



Xylaria multiplex (Kunze) Fr.

***Xylaria multiplex* (Kunze) Fr.**

Basidiocarp annual, in groups, upright, up to 2.1 cm in length, corky, flattened, simple, clavate, cylindrical, grayish brown to black, context white. Perithecia black, sub-globous, embedded in fertile head, arrange in single layer, 290–375 × 180–240 µm wide. Asci cylindrical, 95–125 × 5–6.5 µm wide, 8-spored.

CONCLUSIONS

Sixty-nine wood-rotting fungi collected during the present study represented the 14 families, 18 genera and 21 species. From that two genera and two species belonged to Ascomycota, while sixteen genera and nineteen species belonged to Basidiomycota. Mostly dominating macrofungi were observed *Auricularia mesenterica*, *Cellulariella acuta*, *Daldinia concentrica*, *Flavodon flavus*, *Ganoderma lucidum*, *Lopharia cinerascens*, *Macrocybe pachymeres*, *Navisporus floccosus*, *Phellinus badius*, *Pluteus cervinus*, *Schizophyllum commune*, *Truncospora tephropora* and *Xylaria multiplex* while, *Auricularia delicata*, *Favolus roseus*, *Ganoderma australe*, *Leucocoprinus fragilissimus*, *Phellinus allardii*, *Pleurocybella* sp.1, *Pycnoporus sanguineus* and *Tremella mesenterica* were rare occurrence. The macrofungi reported during this study belonged to twelve hosts *Acacia nilotica*, *Albizia lebbbeck*, *Dalbergia sissoo*, *Delonix regia*, *Eucalyptus oblique*, *Ficus benghalensis*, *Leucaena leucocephala*, *Mangifera indica*, *Peltophorum pterocarpum*, *Psidium guajava*, *Tamarindus indica*, and *Zizyphus mauritiana*.

Conflict of interest: The authors declare that they have no conflict of interest.

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Ascospores smooth, non-septate, ellipsoid-inequilateral, black, 9–11 × 5.5–6 µm wide.

Specimen examined: INDIA; Maharashtra, Marathwada, Aurangabad district, Taluka Phulambri, Aaland, 04/10/2016, on wood log of *Leucaena leucocephala* (Lam.) de Wit, 627m, 20°11'37"N 75°32'56"E, GVU/MVP-454, *Vijay Gore* advanced study in Botany- University of Madras, Tamil Nadu.

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