



## A Checklist of Wood Rotting Fungi (non-gilled Agaricomycotina) of Himachal Pradesh

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### ABSTRACT

Three hundred fifty five species of wood rotting fungi (non-gilled Agaricomycotina) are being recorded from state of Himachal Pradesh. These belong to 37 families spreading over 133 genera. These are recorded from 8 districts (Chamba, Kangra, Kinnaur, Kullu, Shimla, Solan, Bilaspur, and Mandi) of the study area. District Bilaspur and Mandi of Himachal Pradesh have been surveyed for the first time.

**Key Words:** Wood rotting fungi, Agaricomycotina (non- gilled), Himachal Pradesh, North Western Himalayas.

### INTRODUCTION

Wood rotting basidiomycetes include both gilled and non-gilled fungi. The non-gilled agaricomycotina includes members belonging to Polyporaceae and those belonging to Corticiaceae. These fungi degrade the wood chiefly by acting on cellulose and lignin through their enzyme system and have been classified as white rot or brown rot causing fungi. White rot fungi degrade lignin and cellulose both, leaving white residue and brown rot fungi which degrade only cellulose. White rot fungi account for 94% of the total known basidiomycetous fungi where as only 6% are brown rot fungi (Gilbertson, 1980). Brown rot fungi are able to more rapidly and selectively extract the cellulose from wood than white rot fungi. These are more often associated with conifer-dominated ecosystems and in the breakdown of conifer wood (Blemchtt, 1995). The state of Himachal Pradesh support both temperate and tropical both type of vegetation. The state of Himachal Pradesh have been floristically explored for wood rotting fungi by different workers: Fries (1821, 1823, 1828a, 1828b & 1832) Thind & Chatrath (1957,1959), Thind *et.al.* (1969,1969a,1970), Bakshi (1966,1971), Thind & Rattan (1971), Rattan (1977), Dhingra (1985, 1997), Thind & Dhanda (1979, 1978a, 1980, 1980a,1980b), Ryverden & Johansen (1980), Dhingra & Sood (1992), Ryverden & Gilbertson (1993, 1994), Dhingra & Rani (1991, 1994), Dhingra & Singla (1993, 1997), Dhingra & Malka (1994), Roy (1996), Dhingra & Singh (2008, 2009), Dhingra *et.al.* (2009, 2009 a,

2010, 2010a, 2010b, 2010c), Prasher *et.al.* (2011, 2012), etc.

### MATERIALS AND METHODS

The data provided in this communication is based on the examination of the collections made by us as well as collected by the previous workers and deposited in the Herbarium of Botany Department, Panjab University, Chandigarh (PAN), India. The observations are based on the fresh as well as dry specimens and those preserved in Formaldehyde, Alcohol and Water. Majority of the collections belonging to different species were critically examined macro and microscopically for different characters. However, the specimens of some collections were not available for examination by the authors; these have been mentioned on the basis of literature reports only. The fungi recorded in this paper are classified after Kirk *et. al.* (2008), Index Fungorum and Mycobank. Standard procedures were adopted to study the specimens after Prasher (1999).

The method of revival of the dried specimens and the different stains/reagents used are as follows: For microscopic study the section of dried fructifications were mounted in 3% KOH for measurements of various structures as basidiospores, basidia, cystidia, setae and stained with cotton blue(in lactic acid) for determining the cyanophilous reaction, melzer's reagent (for determining the amyloidity), 1% aqueous solution of congo red and Phloxine (to determine the presence or absence of clamps and for measuring the hymenial elements and hyphae), sulphobenzaldehyde (water 1.5 ml, pure sulphuric

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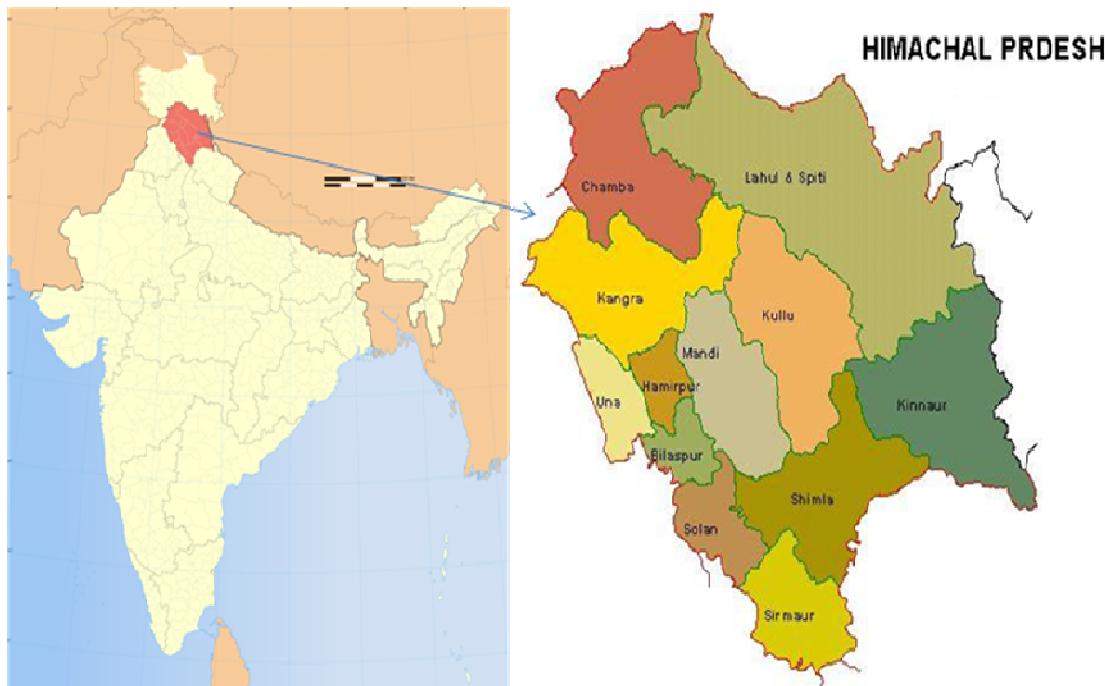
acid 5.0 ml and benzaldehyde 4.5 ml) for staining gloeocystidia after Slysh (1960). For each species the following data has been provided: a) Name of the genera with reference b) Name of the species with reference to the published report c) Distribution in Himachal Pradesh d) Substratum e) Reference to the published report from where full description can be obtained.

## STUDY AREA

The Himachal Pradesh extends between  $30^{\circ}22'40''$  –  $33^{\circ}12'40''$  North along latitude and  $75^{\circ}44'55''$  –  $79^{\circ}04'20''$  East along longitude. The state has 12 districts, Chamba, Kinnaur, Kangra, Shimla, Kullu, Solan, Bilaspur, Mandi, Hamirpur, Una, Sirmaur and Lahaul-Spiti. The state shares common boundaries with Punjab in west, Uttarakhand in the South-East, and China to the East, Haryana to the South-East and Jammu & Kashmir to the North. The climate of Himachal Pradesh varies due to large variation in altitude (450-6500 meters). The

climate varies from hot and sub-humid tropical (450-900 meters) in the southern low tracts, warm and temperate (900-1800 meters) cool and temperate (1900-2400 meters) and cold glacial and alpine (2400-4800 meters) in the northern and eastern high elevated mountain ranges. The annual precipitation ranges from 1000-2000 mm.

The vegetation of H.P. is diverse and Champion and Seth (1968) classified the forest of Himachal Pradesh. These forests are, Tropical dry deciduous forest, Sub-tropical pine forests, Sub-tropical dry evergreen forests, Himalayan dry temperate forests, Himalayan moist temperate forests, Dry alpine scrubs, moist alpine scrubs, Sub-alpine forests. These forests mainly consists of *Ephedra* sp., *Quercus semicarpifolia*, *Quercus dilatata*, *Juniperus macropoda*, *Salix* sp., *Berberis*, *Murraya indica*, *Pyrus pashia*, *Abies spectabilis*, *Populus ciliata*, *Woodfordia furticosa*, *Albizia chinensis*, *Pinus wallichiana*, *Embla officinalis*, *Rosa moschata*, *Indigofera pulchella* etc.



**Fig 1- Map of India showing Himachal Pradesh**

## Order- Agaricales

### Family- Amylocorticiaceae

*Amylocorticium* Pouzar, Česka' Mykol 13(1):1959.

*Amylocorticium subsulphureum* (P. Karst.)

Pouzar, Ceska' Mykol. 13(1):11, 1959.

**Distribution:** H.P.: Solan-Dharampur, Tara Devi.

**Substratum:** On dead wood of *Pinus roxburghii*.

*Amylocorticium indicum* Thind & Rattan, Trans. Brit. Mycol. Soc. 59:125. 1972.

**Distribution:** H.P.: Kullu; Shimla; Dalhousie.

**Substratum:** On log of *Cedrus deodara*.

*Ceraceomyces* Julich, Willd., Beih. 7: 146. 1972.

*Ceraceomyces bizonatus* Dhingra & Singh, Mycotaxon 106: 399-401, 2008.

**Distribution:** H.P.: Kullu-Manali, Kothi; Shimla.

**Substratum:** Decaying log of *Cedrus deodara*.

*Ceraceomyces cystidiatus* (J. Erikss. & Hjortst. In

Julich) Hjortst., Sv. Bot. Tidskr. 67: 105, 1973. = *Corticium violascens* (Fr.) var. *cystidiata* J. Erikss. & Hjortst.in Julich, Willd., Beih. 7: 165, 1972.

**Distribution:** H.P.: Shimla- Tara Devi.

**Substratum:** On wood stump.

*Ceraceomyces fibuliger* (Thind & Rattan) Rattan,

The Resupinate Aphylophorales of the North Western Himalayas, Biblthca. Mycol.60: 274(1977).

**Distribution:** H.P.: Shimla-Mahasu; Kullu.

**Substratum:** On bark of *Taxus baccata*, on wood of *Cedrus deodara* and *Picea smithiana*.

*Ceraceomyces reidii* (Thind & Rattan) Rattan, Basionym: *Corticium reidii* Thind & Rattan, Trans. Brit. Mycol. Soc. 59: 125. 1972.

**Distribution:** H.P.: Kullu.

**Substratum:** On stump.

*Ceraceomyces tessulatus* (Cooke) Julich, Willd. Beih. 7: 154. 1972.

**Distribution:** H.P.: Kullu- Manikaran.

**Substratum:** On logs of *Abies pindrow*.

### Family- Physalacriaceae

*Cylindrobasidium* Jülich Persoonia 8:1 p.72, 1974.

*Cylindrobasidium evolvens* (Fr.) Jülich, Persoonia 8(1): 72 1974.= *Basidioradulum evolvens* (Fr.)

Parm., Consp. Syst. Cort. p.112. 1968.

**Distribution:** H.P.: Kullu; Keylong.

**Substratum:** On fallen twigs.

## Family- Pterulaceae

*Aphanobasidium* Jülich Persoonia1979

*Aphanobasidium subnitens* (Bourd. & Galzin)

Jülich, Persoonia 10(3): 326 (1979) =*Xenasma subnitens* (Bourd.& Galz.) Liberta, Mycologia 52: 910. 1960.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda.

**Substratum:** Bark of *Rhododendron arboreum*.

*Radulomyces* Christ., Dansk. Bot. Ark. 19: 230. 1960.

*Radulomyces molaris* (Chaill. ex. Fr.) Chris. Dansk., Bot. Ark. 19: 232. 1960.= *Radulum molare* Chaill ex.Fr., Elench. 1828.

**Distribution:** H.P.: Kullu.

**Substratum:** On stump of *Pinus excelsa*.

*Radulomyces confluens* (Fr.) M.P. Christ., Dansk bot. Arkiv 19: 2 p.230, 1960= *Thelephora confluens* Fr., Syst. mycol. I p.447, 1821.

**Distribution:** Shimla-Narkanda, Tara Devi.

**Substratum:** On angiospermic twigs, forming.

### Family-Stephanosporaceae

*Cristinia* Parmasto, Consp. Syst. Cort. p. 47. 1968.

*Cristinia helvetica* (Pers.) Parmasto, Consp. Syst. Cort. p.48. 1968. =*Hydnus helveticum* Pers., Mycol. Eur. 2: 184. 1825.

**Distribution:** H.P.: Kullu; Shimla.

**Substratum:** On log of *Abies pindrow*.

### Family-Cyphellaceae

*Chondrostereum* Pouzar, Ceska Mycol. 13: 7. 1959.

*Chondrostereum himalaicum* (Thind & Rattan) Rattan Biblthca. Mycol.60, (1977).

**Distribution:** Kinnaur- Nichhar.

**Substratum:** fallen twigs under conifers.

*Chondrostereum purpureum* (Fr.) Pouz., Ceska Mykol. 13: 17. 1959.

**Distribution:** Chamba-Dalhousie, Kalatope; Shimla- Chail, Mahasu, Narkanda; Kullu- Rohtang.

**Substratum:** stump of *Cedrus deodara*, angiospermic trees, logs under mixed forest.

## Order- Athliales

### Family- Atheliaceae

*Amphinema* P. Karst., Bidr. Känn. Finl. Nat. Folk 51: 228. 1892.

*Amphinema byssoides* (Fr.) Erikss., Symb. Bot. Upsal. 16: 112.1958.

**Distribution:** H.P.: Kullu; Shimla; Chamba-Dalhausie.

**Substratum:** On angiospermous logs, on slash of *Pinus excelsa*, *Cedrus deodara*, *Abies pindrow*, *Picea smithiana*.

*Athelia* Pers. Persoon C.H. Traité champ. comest. 57, 1818

*Athelia decipiens* (Höhn & Litsch.) J. Erikss., Sym. Bot. upsal. 16 (1): 86, 1958= *Corticium decipense* Höhn. & Litsch., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., 117(1): 1116, 1908.

**Distribution:** Shimla; Chamba-Dalhaousie.

**Substratum:** On *Cedrus deodara*

*Athelia teutoburgensis* (Brinkmann) Jülich, Persoonia 7(3): 383 (1973) =*Hypoderma teutoburgense* (Brinkm.) Erikss., Symb. Bot. Upsal 16: 100, 1958.

**Distribution:** Kullu.

**Substratum:** On log of *Abies pindrow*.

*Athelopsis* Oberw. ex Parmasto Sydowia 19: 48, 1965 ex Parmasto. Consp. Syst. Cort. p. 41, 1968

*Athelopsis lunata* (Romell ex Bourdot & Galzin) Parmasto, Consp. System. Coticiac.: 43, 1968-  
*Grandinia lunata* Romell ex ourdot & Galzin, Hymenomyc. De France: 41, 1928.

**Distribution:** H.P.: Manali, Sundernagar.

**Substratum:** On decaying wood and rotten twigs.

*Athelopsis parvispora* Singh A.P., Dhingra & J. Kaur, Mycotaxon 113, 327-329. 2010.

**Distribution:** H.P.: Kullu.

**Substratum:** On stump of *Quercus incana*.

*Athelopsis subinconspicua* (Litsch.) Julich, Persoonia 8(3): 292, 1975, - *Corticium subinconspicuum* Litsch., Glasn. Skopsk. Naucn. Drustval 18: 178, 1938.

**Distribution:** H.P.: Kullu-Manali, Kothi, Keylong..

**Substratum:** On Bark of *C. deodara* and decaying twigs.

*Fibulomyces* Julich Willd. Beih. 7 p. 178, 1972.

*Fibulomyces mutabilis* (Bres.) Julich, Willd. Beih. 7: 182, 1973.

**Distribution:** H.P: Chamba-kalatope.

**Substratum:** On decaying gymnospermic log.

*Hypochniciellum*(Jülich) Hjortstam & Ryvarden Mycotaxon, 12(1):176, 1980.

*Hypochniciellum ovoideum* (Jülich) Hjortstam & Ryvarden, Mycotaxon 12(1): 177 (1980)= *Leptosporomyces ovoideus* Jülich, Willdenowia, Beih. 7: 203 (1972)

**Distribution:** H.P.: Shimla-Narkanda, Mahasu.

**Substratum:** On stump under conifers

*Leptosporomyces* Julich, Wild. Beih. 7: 192. 1972.

*Leptosporomyces adnatus* (Rehill & B.K. Bakshi) S.S. Rattan, Biblthca Mycol. 60: 270 , 1977 Basionym: *Corticium adnatum* Rehill & Bakshi, Ind. For. Bull. (n.s.) 242: 10. 1965.

**Distribution:** Shimla-Narkanda; Kullu.

**Substratum:** On bark of *Taxus baccata*, *Abies pindrow*, *Cedrus deodara*, *Quercus dilatata*.

*Leptosporomyces galzinii* (Bourdot) Jülich, Willd. Beih. 7 p.208, 1972.-*Corticium galzinii* Bourdot Rev. Sci. Bourb. Centr. Fr. 23(1): 11, 1910.

**Distribution:** Manali-Kothi.

**Substratum:** On decaying stup of *C. deodara*.

*Leptosporomyces globosum* S.S. Rattan Biblthca Mycol. 60: 269, 1977.

**Distribution:** Kullu- Pulga.

**Substratum:** On slash under conifers.

*Leptosporomyces roseus* Jülich, Willd. Beih. 7 p.208, 1972.

**Distribution:** Chamba-Dalhausie, Shimla.

**Substratum:** On a decaying coniferous log, stumps.

## Order-Boletales

### Family-Coniophoraceae

*Coniophora* Ddolle & Lamarck, Fl. France. Edu. 3(Paris)6: 34, 1815.

*Coniophora arida* (Fr.) Karst, Nat. Salsk Fauna et Fl. Fenn. Fenn. Forh 9:370, 1868.

**Distribution:** H.P.: Dalhausie- Kalatope; Shimla-Mahasu; Kullu.

**Substratum:** Stump of *Abies pindrow* and bark of *Cedrus deodara*.

*Coniophora cordensis* S.S. Rattan Bibliotheca Mycologica 60: 78, 1977.

**Distribution:** H.P.: Shimla-Mahasu- Khadrala-Narkanda.

**Substratum:** Wood, bark and logs of *Abies pindrow*.

*Coniophora fusispora* (Cooke & Ell.) Cooke, in Sacc. Syll. Fung. 6, p.650, 1889.

**Distribution:** H.P.: Shimla-Chaupal.

**Substratum:** On decaying angiospermic log, on decaying gymnospermic log.

*Coniophora olivacea* (Fr.) Karst., Hattsvampar 2: 162,1889= *Hypochnus olivaceous* Fr., Observ. Mycol. 2: 282, 1818.

**Distribution:** H.P.: Shimla- Chaupal; Solan.

**Substratum:** On decaying gymnospermic wood.

**Coniophora puteana** (Schum.) Karst., Not. Sällsk. Fauna et Fl. Fenn. Forh. II 6(6) : 370 (1869).

**Distribution:** H.P.: Dalhousie- Lakkarmandi; Mahasu- Narkanda, Kullu, Kothi to Manali.

**Substratum:** Coniferous wooden poles and stumps of *Abies pindrow*, logs of *Pinus roxburghii*, *Cedrus deodara*.

#### Family- Hygrophoropsidaceae

**Leucogyrophana** Pouzar Z. Ceska Mykol. 12(1) 32 (1958)

**Leucogyrophana mollusca** (Fr) Pouzar, Čerká Mykol. 12: 33, 1958.-*Merulius molluscus* Fr., Syst. Mycol. 1: 329, 1821.

**Distribution:** H.P.: Shimla, Tara Devi.

**Substratum:** Cut stump of *P. roxburghii*.

**Leucogyrophana olivascens** (Berk. & M.A. Curtis) Ginns & Weresub, Mem. N. Y. bot. Gdn 28: 96 1976.

**Distribution:** H.P.: Kullu- Jaggat suk; Solan

**Substratum:** Wood under mixed forest.

#### Family Serpulaceae

**Serpula** (Pers.) Gray, Nat. Arrang. Brit. Pl 1: 637. 1821.

**Serpula himantoides** (Fr.) P. Karst., Meddn. Soc. Fauna Flora fenn, 11: 21, 1885.

**Distribution:** H.P.: Dalhousie- Lakkarmandi; Shimla-Mahasu, Narkanda; Kullu.

**Substratum:** Coniferous wooden poles and stumps of *Abies pindrow*.

**Serpula lachrymans** Gray, Nat. Arrang. Brit. Pl 1: 637. 1821.

**Distribution:** H.P.: Chamba-Dalhousie, Lakkarmandi; Shimla- Mahasu, Narkanda.

**Substratum:** On log of *Abies pindrow*.

**Serpula mollusca** (Fr.) Donk. Persoonia 3: 209. 1964.

**Distribution:** H.P.: Kullu; Chamba- Dalhousie, Lakkarmandi; Shimla-Mahasu, Narkanda.

**Substratum:** Coniferous wooden poles and stumps of *Abies pindrow*.

#### Order- Cantharellales

##### Family -Botrybasidiaceae

**Botryobasidium** Donk, Medded.Nedl. Mycol. Ver. 18-20: 116, 1931.

**Botryobasidium vagum** (Berk. & Curtis) D. P. Rogers, Univ. Iowa Stud. Nat. Hist. 17(1): 17, 1935.

**Distribution:** Chamba-Dalhausie, Khajjiar.

**Substratum:** On logs of *C. deodara*.

**Botryobasidium candidans** Erikss., Sven. Bot. Tidskr. 52: 6.1958.

**Distribution:** H.P.: Shimla; Kangra- Dharamshala; Kinnaur.

**Substratum:** On angiospermic twig.

**Botryobasidium isabellinus** (Fr.) J. Eriksson, Sv. Bot. tidskr. 52: 2, 1958. – *Thelephora isabellinus* Fr., Epicr. p. 544, 1838.

**Distribution:** Chamba; Kullu; Shimla.

**Substratum:** On a gymnospermic wood.

**Botryobasidium obtusisporum** J. Erikss., Symb. Bot. Upsal. 16: 57, 1958.

**Distribution:** H.P.: Shimla-Glen.

**Substratum:** On burnt stump of *P. Roxburghii*.

**Botryobasidium subcornutum** (Hoehn. & Litsch.) Donk, Medd. Nederl. Mycol.Ver. 18-20: 117. 1931= *Corticium subcornutum* Hoehn. & Litsch., Sitz. Kais. Akad. Wiss. Wien, Math.-Natur. Klasse 116: 822. 1907.

**Distribution:** H.P.: Shimla.

**Substratum:** On angiospermic twigs.

**Botryobasidium subbotryosum** S.S. Rattan, Biblthca Mycol. 60: 210, 1977.

**Distribution:** H.P.: Kullu- Pulga; Shimla-Mahasu, Hatoor, Narkanda.

**Substratum:** On angiospermic twig.

**Botryohypochnus** Donk, Medd. Nederl. Mycol. Ver. 18-20: 118. 1931.

**Botryohypochnus isabellinus** (Fr.) Erikss. Sven. Bot. Tidskr. 52:2. 1958. = *Thelephora isabellina* Fr., Epicr. P. 544. 1838.

**Distribution:** H.P.: Chamba- Khijjiar; Shimla- Mahasu, Narkanda, Khadrala; Kullu- Jaggat Sukh;

**Substratum:** On angiospermic twig.

##### Family-Ceratobasidiaceae

**Ceratobasidium** D. P. Rogers, Univ. Iowa Stud. Nat. Hist. 17 (5): 4, 1935.

**Ceratobasidium obscurum** D. P. Rogers, Univ. Iowa Stud. Nat. Hist. 17: 6, 1935.

**Distribution:** Chamba-Dalhausie, Bilaspur, Manikaran.

**Substratum:** On decaying gymnospermous logs & twigs.

**Scotomyces** Jülich, Persoonia,10(1):139, 1978.

**Scotomyces subviolaceus** (Peck) Jülich, Persoonia 10(3): 334 (1979)= *Ceratobasidium subatratum* S.S. Rattan, Biblioth. Mycol. 60: 203 (1977).

**Distribution:** H.P: Kullu-Manali.

**Substratum:** On stump under conifers.

### Family-Clavulinaceae

***Clavulicium*** Boid., Bull. Soc. d'Hist. Nat. Toul. 92: 280, 1957.

***Clavulicium hallenbergii*** Avneet P. Singh, J. Kaur & Dhinra, Mycotaxon. 120: 353, 2012.

**Distribution:** Chamba.

**Substratum:** On trunk of *P. Wallichiana*.

### Family-Hydtnaceae

***Paullicorticium*** J. Eriksson Symb. bot. Upsal. 16: 66, 1958.

***Paullicorticium delicatissimum*** (Jacks.) Liberta, Brittonia 14: 222, 1962.- *Corticium delicatissimum* Jacks., can. Jour. Bot. 28: 722, 1950.

**Distribution:** H.P.: Shimla-Glen, Tara Devi.

**Substratum:** On decaying log of *P. Roxburghii*.

***Sistotrema*** Fries., E.M. Systema Mycol. 1: 426, 1826.

***Sistotrema binucleosporum*** Hallenb., Mycotaxon 21: 409, 1984.

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** Under surface of gymnospermic log.

***Sistotrema brinkmannii*** (Bres.) John Erikss., K Fysiogr. Sallsk. Lund Forh. 18 (8): 17, 1948-  
*Odontia brinkmannii* Bres., Ann. Mycol. 1: 88, 1903.

**Distribution:** H.P.: Shimla.

**Substratum:** On bark of *Cedrus deodara*.

***Sistotrema lachrymisporum*** S.S. Rattan, Biblth. Mycol. 60, 1970.

**Distribution:** H.P.: Kullu.

**Substratum:** On coniferous wood

***Sistotrema porulosum*** Hallenb., Mycotaxon 21: 407, 1984.

**Distribution:** H.P.: Chamba-Banikhet.

**Substratum:** On decaying angiospermic stump.

***Sistotrema sernanderi*** (Litsch.) Donk, Fungus 26: 4, 1956.-*Gloeocystidium sernanderi* Litsch., Sv. Bot. Tidskr. 25: 437, 1931.

**Distribution:** H.P.: Shimla.

**Substratum:** Decaying gymnospermic wood.

***Sistotrema subtrigonospermum*** Rogers, Univ. Iowa Stud. Nat. Hist. 17: 22, 1935.

**Distribution:** H.P.: Kullu- Shoja; Shimla-Narkanda; Chamba-Dalhausie.

**Substratum:** On log of *Cedrus deodara* and *Pinus roxburghii*.

### Order-Corticales

#### Family-Corticiaceae

***Corticium*** Pers., Neues Mag. Bot. 1:111, 1794.

***Corticium confine*** Bourdot & Galzin, Bull. Soc. Mycol. Fr. 27(2): 260 (1911)=*Trechispora confinis* (Bourd. & Galz.) Liberta Taxon 15: 318, 1966.

**Distribution:** Shimla-Khadrala, Mahasu.

**Substratum:** On stump of *Abies pindrow*.

***Dendrothele*** Hohn. & Litsch., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., 116: 819, 1907.

***Dendrothele alliacea*** (Quél.) P.A. Lemke, Persoonia 3: 366, 1965. = *Corticium alliaceum* Quél., Compt. Rend. Assoc. Franc. Avancem. Sci. 12: 505, 1884.

**Distribution:** Shimla- Glen, Chail, Manali..

**Substratum:** Stump of gymnospermic branches of *C. deodara*.

***Dendrothele incrassans*** (P.A. Lemke) P.A. Lemke, Persoonia 3(3): 366, 1965. = *Aleurocorticium incrassans* P.A. Lemke, Can J. Bot. 42: 739, 1964.

**Distribution:** H.P.: Shimla; Chamba-Dalhausie, Mandi-Sundernagar.

**Substratum:** On stump under angiosperms.

***Dendrothele seriata*** (Berk. & M.A. Curtis) P.A. Lemke, Persoonia 3: 367, 1965.-*Stereum seriata* Berk. & M.A. Curtis, J. Linn. Soc., Bot. 10: 332, 1868.

**Distribution:** H.P.: Chamba-Dalhaousie, Kalatop, Manali, Kothi.

**Substratum:** Decaying wood.

***Galzinia*** Bourdot, Compt. Rend. Assoc. France. Avanc. Sc. 45: 577. 1922.

***Galzinia ellipspora*** S. S. Rattan Biblth. Mycol. 60: 212, 1970.

**Distribution:** H.P: Shimla.

**Substratum:** On stump under angiosperms.

***Galzinia incrassans*** (Hohn. & Litsch.) Parmasto, Eesti NSV Tead. Akad. Toim. Biol. 14: 225, 1965.-*Corticium incrassans* Hohn. & Litsch., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt.115: 1602.

**Distribution:** H.P.: Chamba-Dalhaousie.

**Substratum:** On the bark of *C. deodara*.

***Laeticorticium*** Donk, Fungus 26: 16, 1956.

***Laeticorticium expallens*** (Bres.) J. Erikss. & Hjortst., Cortic. N. Eur. 6: 1069, 1981.- *Corticium expallens* Bres., Annls mycol. 6: 43, 1908.

**Distribution:** H.P: Shimla-Tara Devi, Manali.

**Substratum:** Fallen twigs, Cut stumps.

***Licrostroma*** P.A. Lemke, Can.J. Bot. 42: 762, 1964.

***Licrostroma subgiganteum*** (Berk.) Lemke, Can. J. Bot. 42: 763, 1964. - *Corticium subgiganteum* Berk., Grevillea 2: 3, 1873.

**Distribution:** Shimla, Kufri.

**Substratum:** Dead wood.

### Order-Gloeophyllales

#### Family-Gloeophyllaceae

*Gloeophyllum* Karst. Bindr. Kann. Finl. Nat. Folk 37:79, 1882.

*Gloeophyllum carbonarium* (Berk. et Curt.) Ginns, Mycotaxon 22: 559, 1984.

**Distribution:** H.P.: Kullu; Shimla.

**Substratum:** On decaying angiospermic log

*Gloeophyllum sepiarium* (Wulfen) P. Karst. [as 'Gleophyllum'], Bidr. Kann. Finl. Nat. Folk 37: 79 1882.

**Distribution:** H.P.: Shimla; Chamba-Dalhausie; Mandi.

**Substratum:** On decaying log.

*Gloeophyllum striatum* (Sw. ex Fr.) Murr., Torr. Bot. Cl. 32: 370, 1905.

**Distribution:** H.P.: Chamba-Dalhausie; Shimla.

**Substratum:** On decaying *C. deodara*, *Pinus longifolia*, *Shorea robusta* log.

*Gloeophyllum subferrugineum* (Berk.) Bond. & Sing. Annals Mycol. 39: 64, 1941.

**Distribution:** H.P.: Chamba-Dalhausie; Kullu; Shimla.

**Substratum:** On decaying *Pinus roxburghii* log

*Veluticeps* (Cooke) Pat., Bull. Soc. mycol. Fr. 10: 78, 1894.

*Veluticeps abietina* (Pers.) Hjortstam & Telleía, Mycotaxon 37: 54, 1990.- *Thelephora abietina* Pers., Syn. Meth. Fung. 2: 573, 1801.

**Distribution:** Palampur, Sundernagar

**Substratum:** On decaying wooden log.

### Order-Gomphales

#### Family-Lentariaceae

*Kavinia* Pilat, Stud. Bot. Cechslov. 1: 3.1938.

*Kavinia alboviridis* (Morgan) Gilb. & Budington, J. Ariz. Acad. Sci. 6(2): 95 1970.

**Distribution:** H.P.: Kulu; Shimla.

**Substratum:** On coniferous log.

### Order-Hymenochaetales

#### Family- Hymenochaetaceae

*Auricularia* D.A. Reid Kew Bull 17(2):278, (1963)

*Auricularia indica* (Massee) D.A. Reid, Kew Bull. 17(2): 279, 1963.

**Distribution:** H.P.: Kulu; Shimla.

**Substratum:** On living deciduous tree.

*Coltricia* S.F. Gray A nat.arrang. Of Br. pl. 1. 644, 1821.

*Coltricia cinnamomea* (Pers.) Murr., Bull. Torrey Bot. Club 31: 343, 1904.

**Distribution:** H.P.: Chamba-Dalhausie; Kullu.

**Substratum:** At the base of decaying stump.

*Cycloporus* Murrill W.A. ,Bull. Torrey Bot. Club 31(8):423, 1904.

*Cycloporus greenei* (Berk.) Murr., Bull. Torrey bot. Club 31: 423, 1904.

**Distribution:** H.P.: Chamba-Dalhausie.

**Substratum:** On stump of *Pinus excelsa*.

*Fuscoporia* Murrill W.A. N. Amer. Flora 9(1):3, 1907.

*Fuscoporia contigua* (Pers.) G. Cunn., Bull. N.Z. Dept. Sci. Industr. Res., Pl. Dis. Div. 73: 4 (1948)= *Phellinus contiguus* (Pers. ex Fr.) Bourd. & Galz. Hym. France p. 624. 1928.

**Distribution:** H.P.: Chamba-Dalhausie, Khajjar; Kangra- Dharamsala, Yol camp, Rasan.

**Substratum:** Stumps under mixed forest, Cut stump of *Pinus*.

*Fuscoporia ferruginosa* (Schrad.) Murrill [as 'ferruginosus'], N. Amer. Fl. (New York) 9(1): 5 (1907) =*Phellinus ferruginosus* (Schrad. ex Fr.) Bourd. & Galz., Hym. Fr.,P. 625, 1928.

**Distribution:** H.P.: Kullu- Kasol.

**Substratum:** Beam of Deodar.

*Hymenochaete* Lev., Ann. Sci. Nat. Bot. 5: 150. 1846.

*Hymenochaete leonina* Berk. & Curt., J. Linn. Soc. Bot. 10: 334. 1868.

**Distribution:** H.P: Shimla; Chamba-Dalhausie.

**Substratum:** On *Cedrus* log.

*Hymenochaete mougeotii* (Fr.) Cooke Grevillea 8: 147. 1880.=*Thelephora mougeotii* Fr., Elenchus p. 188. 1828.

**Distribution:** H.P.: Shimla-Narkanda; Chamba-Dalhausie.

**Substratum:** On twigs of *Quercus*.

*Hymenochaete luteobadia* (Fr.) Hoehn. & Listch., Wien. Sitz. 116: 754. 1907.= *Thelephora luteoalba* Fr., Linnea 5: 526. 1830.

**Distribution:** H.P.: Kullu; Chamba- Dalhausie.

**Substratum:** On twigs under mixed forests.

**Hymenochaete semistupposa** Petch; Ann. Roy. Bot. Gdns. Perad. 9: 278. 1925.

**Distribution:** H.P.: Shimla-Narkanda; Chamba.  
**Substratum:** On twigs of *Berberis sp* & *Cedrus*.

**Inonotus** P. Karst., Medd. Soc. Fauna Fl. Fenn. 5: 39, 1879.

**Inonotus cuticularis** (Bull.) P. Karst., Meddn Soc. Fauna Flora fenn. 5: 39 (1879)= *Polyporus cuticularis* (Bull.) Fr., Syst. mycol. (Lundae) 1: 363 (1821).

**Distribution:** H.P.: Chamba-Dalhousie; Kangra-Dharamshala; Kullu; Shimla; Solan- Kasole.

**Substratum:** On living trees and stump of *Quercus incana*.

**Inonotus nothofagi** G.H.Cunn., Bull. N.Z.Dep. Scient. Ind. Res. 78:1, 1948.

**Distribution:** H.P.: Shimla-Bashahr division; Kullu.

**Substratum:** Dead tree of *Quercus semecarpifolia*.

**Onnia** P. Karst., Bidr. Kann. Finl. Nat. Folk 48:326, 1889

**Onnia circinata** (Fr.) P. Karst., Bidr. Känn. Finl. Nat. Folk 48: 326 (1889).

**Distribution:** H.P.: Kullu; Shimla; Chamba-Dalhousie.

**Substratum:** On rotten stump, on needles of *Cedrus deodara*

**Onnia tomentosa** (Fr.) P. Karst., Revue mycol., Toulouse 11(no. 47): 205 (1889)=*Coltricia tomentose* (Fr.) Murr. Bull. Torrey Bot. Club 31: 346, 1904.

**Distribution:** H.P.: Kullu; Shimla.

**Substratum:** At the base of angiospermic stump, on the exposed roots, at the base of decaying stump.

**Phellinus** Quel., Enchir. Fung. (Paris): 172 (1886)

**Phellinus caryophylli** (Racib.) Bres., Ann. Mycol., 10, 498, 1912= *Fomes caryophylli* (Racib.) Bres., Annls mycol. 10(5): 498 (1912).

**Distribution:** H.P.: Chamba-Dalhousie, Panjpulla, Thali; Shimla- The Glen; Kullu- Pulga, Hidamba Devi; Kangra-Dharamsala, Forsyth ganj; Mandi.

**Substratum:** stumps and fallen twigs under angiospermic forest and mixed forest, burnt logs, dead wood, roots of *Rhododendron*, *Quercus semecarpifolia*, base and stumps of *Quercus incana*, *Cedrus deodara*, *Juglans regia*.

**Phellinus ferruginosus** (Schrad.) Pat., Essai Hymen. : 97, 1900

**Distribution:** H.P.: Kullu.

**Substratum:** On gymnospermic log.

**Phellinus gilvus** (Schw.) Pat., Essai tax. Hym., p. 97, 1900= *Phellinus scruposus*( Fr.) G.H.Cunn., Bull. N.Z. Dep. Scient. Ind. Res. 164: 230, 1965.

**Distribution:** H.P: Chamba- Thali, Dalhousie, Jandrightat springs; Kangra-Dharamsala- Dadh, Sidhbari; Shimla- Narkanda; Kullu-Manali- Gojra; Mandi.

**Substratum:** On decaying fencing log.

**Phellinus grenadensis** (Murr.) Ryv., Norw. J. Bot. 19: 234, 1972.

**Distribution:** H.P.: Kangra-Dharamshala.

**Substratum:** On cut stump under angiospermic forest.

**Phellinus igniarious** (L.) Quél., Quel. Ench. Fung. : 172 (1886)

**Distribution:** H.P.: Mandi-Bijni.

**Substratum:** On fallen log.

**Phellinus nilgheriensis** (Mont.) G.H.Cunn., Bull. N.Z. Dep. Scient. Ind. Res. 164: 226, 1965.

**Distribution:** H.P.: Shimla- Baghi, Narkanda; Chamba- Dalhousie- Baloon, Khajjiar.

**Substratum:** Bark of living angiosperms, *Juglans regia*, decaying log of *Pinus excelsa*, stumps of *Taxus baccata* and angiospermic stumps.

**Phellinus sanfordii** (Lloyd) Ryvarden, Norw. Jl Bot. 19: 235 (1972)= *Fomes sanfordii* Lloyd, Mycol. Writ. 4 (Synopsis of the Genus Fomes): 258 (1915).

**Distribution:** H.P.: Kullu-Manali.

**Substratum:** On living deciduous tree.

**Phellinus xeranticus** (Berk.) Pegler Kew Bull. 21: 44, 1967= *Polyporus xeranticus* Berk. Hook. J. Bot. 6 : 161, 1854.

**Distribution:** H.P.: Chamba-Dalhousie; Shimla.

**Substratum:** On fallen log.

**Phylloporia** Murrill Torreya 4:141(1904).

**Phylloporia pectinata** (Klotzsch) Ryvarden, Syn. Fung. (Oslo) 5: 196 (1991)= *Fomes pectinatus* (Klotzsch) Gillet, Grevillea 14(no. 69): 20 (1885)

**Distribution:** H.P.: Kangra-Dharamsala, Siwalik hills.

**Substratum:** Cut stumps and tree of *Murraya exotica*, On living deciduous tree.

**Phylloporia ribis** (Schumach.) Ryvarden, Polyp. N. Eur. (Oslo) 2: 371 (1978)=*Phellinus ribis* (Schum. exFr.) Ques., Ench. Fung., P. 173, 1886.

**Distribution:** H.P.: Kullu- pulga; Kangar-Dharamsala, Mcleod ganj, Yol camp, Sidhbari; Shimla- Chadwick falls; Chamba-Dalhousie, Khajjiar.

**Substratum:** living angiospermic trees, stumps of *Quercus incana*, *Cedrus deodara*, Buried wood and cut stumps of *Pyrus patio*.

*Phylloporia spathulata* (Hook.) Ryvarden, Syn. Fung. (Oslo) 5: 196 (1991)

**Distribution:** H.P.: Kullu- Manali.

**Substratum:** On angiospermic stump.

*Tubulicrinis* Donk, Fungus 26: 13. 1956.

*Tubulicrinis chaetophorus* (Hoehn.) Donk, Fungus 26: 14. 1956.

**Distribution:** H.P.: Chamba- Khijjar,Dalhousie, Kalatope; Shimla- Chail.

**Substratum:** stumps of *Cedrus deodara* and *Abies pindrow*, stumps under conifers.

*Tubulicrinis hamatus* (H.S. Jacks.) Donk [as 'hamata'], Fungus, Wageningen 26(1-4): 14 (1956)

**Distribution:** H.P.: Chamba-Kalatope.

**Substratum:** Decaying gymnospermic stump.

*Tubulicrinis strangulatus* Larss. & Hjortst., Mycotaxon 26: 438, 1986.

**Distribution:** H.P.: Chamba-Kalatope; Shimla.

**Substratum:** Decaying stump.

*Tubulicrinis subulatus* (Bourdot & Galzin) Donk [as 'subulata'], Fungus, Wageningen 26: 14 (1956)

**Distribution:** H.P.: Kullu- Rohtang.

**Substratum:** stumps under a mixed forest.

#### Family-Rickenellaceae

*Peniophorella* P. Karst. Bidr. Kann.Finl. Nat.Folk. 48, 1889.

*Peniophorella praetermissa* (P. Karst.) K.H. Larss., Mycol. Res. 111(2): 192 (2007)=*Hyphoderma praetermissum* (Karst.) J.Eriksson & Strid, in J.Eriksson and Ryv., Cort. N. Europe 3 p.505, 1975

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** On decaying angiospermic and gymnospermic logs and branches.

*Peniophorella pubera* (Fr.) P. Karst., Bidr. Känn. Finl. Nat. Folk 48: 427 (1889)=*Hyphoderma puberum* (Fr.) Wallr., Fl. crypt. Germ. p.576, 1833.

**Distribution:** H.P.: Chamba-Dalhosie, Jandright; Shimla- Narkanda, Mahasu, The Glen, Kalatop.

**Substratum:** On decaying stump of *C. japonica*, On a decaying *Pinus* log.

*Peniophorella tsugae* (Burt) K.H. Larss., Mycol. Res. 111(2): 192 (2007) =*Hyphoderma tsugae* (Burt) J.Eriksson & Strid, in J.Eriksson and Ryv., Cort. N. Europe 3 p.541, 1975. =*Corticium tsugae* Burt, Ann. Miss. Bot. Gard. 13 p.276, 1926.

**Distribution:** H.P.: Chamba- Dalhousie.

**Substratum:** On a decayed stump.

*Resinicium* Parm., Consp. Syst. Cort. p.97. 1968.

*Resinicium bicolor* (Fr.) Parm., Consp. Syst. Cort. p. 98. 1968. = *Hydnnum bicolor* Fr., Syst. Mycol. 1: 417. 1821.

**Distribution:** H.P.: Kullu; Shimla; Chamba.

**Substratum:** On angiospermic log, on log of *Abies pindrow* & *Cedrus deodara* and *Taxus baccata*.

*Resinicium friabile* Hjortstam & Melo, Mycotaxon 65: 324, 1997.

**Distribution:** H.P: Chamba-Dalhousie.

**Substratum:** On decayin stump of *C. deodara*.

*Sidera* Miettinen & K.H. Larss. Mycol. Progress 10(2):136.2011.

*Sidera lenis* (P. Karst.) Miettinen, in Miettinen & Larsson, Mycol. Progr. 10(2): 136 (2011)= *Antrodia lenis* (P. Karst.) Ryvarden, Norw. Jl Bot. 20: 8 1973.

**Distribution:** H.P.: Shimla-Khadrala.

**Substratum:** On under surface of burnt *Pinus* log.

#### Family Schizophoraceae

*Alutaceodontia* (Parmasto) Hjortstam & Ryvarden Syn. Fung. 15:7,2002.

*Alutaceodontia alutacea* (Fr.) Hjortstam & Ryvarden, Syn. Fung. (Oslo) 15: 8 (2002)=*Hyphodontia alutacea* (Fr.) J.Eriksson, Symb. bot. Ups. 16: 1 p.104, 1958.

**Distribution:** Manali.

**Substratum:** On a decaying gymnospermic log.

*Basidioradulum* Nobles, Mycologia 59: 192. 1967. Emend. Parm., Consp. Syst. Cort. p. 112. 1968.

*Basidioradulum tuberculatum* (Berk. & M.A. Curtis) Hjortstam, Mycotaxon 54: 183 (1995)=*Phlebia albida* Post. Ex Fr. emend. Bres., Ann. Mycol. 1: 90. 1903.

**Distribution:** H.P.: Shimla-Mahasu.

**Substratum:** On log of *Rhododendron arboreum*, *Quercus semicarpifolia*, *Picea smithiana*

*Hyphodontia* Erikss., Symb. Bot. upsal. 16: 103. 1958.

*Hyphodontia abieticola* (Bourdot & Galzin) J. Erikss., Symb. bot. upsal. 16(1): 84, 1958= *Odontia barba-jovis* subsp. *abieticola* Bourdot & Galzin, Hyménomyc. De France: 426, 1928.

**Distribution:** Manali, reserve forests.

**Substratum:** On stump of *Cedrus deodara*.

*Hyphodontia alienata* (S. Lundell) J. Erikss., Symb. Bot. Upsal. 16: 104, 1958. - *Peniophora alienata* S. Lundell, Fungi Exsiccati Suecici 21-22: 28, 1941.

**Distribution:** Manali-reserve forests, Shimla.

**Substratum:** twigs and stump of *Cedrus deodara*.

***Hypodontia altaica*** Parm. Consp. Syst. Cort. p. 211. 1968.

**Distribution:** H.P.: Shimla-Narkanda, Mahasu; Kullu.

**Substratum:** On bark of *Abies pindrow*, On stump of *Cedrus deodara*.

***Hypodontia alutaria*** (Burt.) Erikss. Symb. Bot. Upsal. 16: 104. 1958.= *Peniophora alutaria* Burt, Ann. Mo. Bot. Gard. 12: 332. 1925.

**Distribution:** Shimla; Narkanda; Kullu; Chamba; Solan, Manali, Manali.

**Substratum:** On bark of *Cedrus deodara*.

***Hypodontia arguta*** (Fr.) Erikss., Symb. Bot. Upsal. 16: 104. 1958.= *Hydnnum argutum* Fr., Syst. Mycol. P. 424. 1821.

**Distribution:** H.P.: Shimla-Narkanda, Mahasu; Kullu; Chamba-Dalhousie.

**Substratum:** On base of *Abies pindrow*, On stump of *Cedrus deodara*.

***Hypodontia aspera*** (Fr.) J. Erikss., Symb. Bot. Upsal. 16: 104, 1958.- *Grandinia aspera* Fr., Hymenomyc. Eur.: 627, 1874.

**Distribution:** Manali-reserve forests

**Substratum:** On bark & stump of *Cedrus deodara*.

***Hypodontia barbajovis*** (Bull.) J. Erikss., Symb. Bot. Upsal. 16 (1): 104, 1958. - *Hydnnum barbajovis* Bull., Herb. Fr. 11: 481, 1791.

**Distribution:** Manali-Hadimba, reserve forests.

**Substratum:** twigs of *Cedrus deodara*.

***Hypodontia crustosa*** (Pers.) J. Erikss., Symb. Bot. Upsal. 16 (1): 104, 1958.- *Odontia crustosa* Pers., Observ. Mycol. 2: 16, 1800.

**Distribution:** Dalhousie, Shimla.

**Substratum:** On gymnospermous logs & twigs.

***Hypodontia efulata*** Erikss. & Hjortst. forma *tetraspora* Rattan Bibl. Myco. J. Cramer, 1977.

**Distribution:** H.P.: Kullu; Chamba.

**Substratum:** On wood of *Picea smithiana*.

***Hypodontia hastata*** (Litsch) J. . Erikss., Symb. Bot. Upsal. 16 (1): 104, 1958.- *Peniophora hastata* litsch., Ost. Bot. Z. 77: 130, 1928.

**Distribution:** H.P.: Solan-Chail.

**Substratum:** On fallen stick of *Cedrus deodara*.

***Hypodontia juniperi*** (Bourdot & Galzin) J. Erikss. & Hjortst., Cortic. N. Eur. 4: 666, 1976.- *Corticium serum* var. *Juniper* Bourdot & Galzin, Bull. Soc. mycol. Fr. 27(2): 246, 1911.

**Distribution:** Sundernagar, Mandi, Bilaspur.

**Substratum:** On rotten stick.

***Hypodontia pallidula*** (Bres.) Erikss., Symb. Bot. Upsal. 16: 104. 1958. = *Gonatobotrys pallidula* Bres., Ann. Mycol. P. 127. 1903.

**Distribution:** H.P.: Chamba; Manali; Shimla; Glen, Sundernagar.

**Substratum:** On bark of *Abies pindrow*, On stump of *Cedrus deodara* and decaying logs.

***Hypodontia propinqua*** Hjortst., Mycotaxon 17: 553, 1983.

**Distribution:** Chamba.

**Substratum:** On angiospermous wood.

***Hypodontia spathulata*** (Schard. Ex Fr.) Parm. Consp. Syst. Cort. p. 123. 1968.= *Hydnnum spathulatum* Schard. Ex Fr., Syst. Mycol. 1: 423. 1821.

**Distribution:** H.P.: Shimla; Kullu; Chamba, Manali.

**Substratum:** On wood of *Cedrus deodara*, on log of *Betula utilis*.

***Xylodon*** (Pers.) Fr., Observations mycological 2: 267, 1818

***Xylodon pruni*** (Lasch) Hjortstam & Ryvarden, Syn. Fung. (Oslo) 23: 100 (2007) = *Phanerochaete pruni* (Litsch.) Rattan.

**Distribution:** Manali, Shimla-Glen.

**Substratum:** On decaying stump of *Q. leucotrichophora*.

***Xylodon rimosissima*** (Peck) Gilb., Mycologia 54(6): 667, 1962.- *Odontia rimosissima* Peck, Ann. Rep. N.Y. St. Mus. 50(1): 114, 1897.

**Distribution:** Manali, Manikaran

**Substratum:** On logs of *Pinus roxburghii* and *Cedrus deodara*.

***Oxyporus*** (Bourd. & Galz.) Donk Med. Bot. Mus. Univ. Utrecht 9: 202, 1933

***Oxyporus ravidus*** (Fr.) Bond. et Sing., Ann. Mycol. 39: 63, 1941= *Polyporus ravidus* Fr., 457, 1838. = *Trametes ravidus* (Fr.) Pilat., Atl. Polyp. 272, 1939.

**Distribution:** H.P.: Shimla- Narkanda, Manali.

**Substratum:** On decaying angiospermic logs.

***Schizophora*** Velen. Ceska Houby p. 638, 1922. Emend. Donk- Persoonia 5: 76, 1967.

***Schizophora paradoxa*** (Schard. ex Fr.) Donk Persoonia 5: 104. 1967= *Hydnnum paradoxum* Schrad. ex Fr., Syst. Mycol. 1: 424. 1967.= *Poria versipora* (Pers.) Rom. Svensk. Bot. Tidskr. 20: 5. 1926.

**Distribution:** H.P.: Kullu; Shimla.

**Substratum:** On log.

## Order-Polyporales

### Family-Cystostereaceae

*Cystostereum* Pouz., Ceska Mykol. 13:18. 1959.

*Cystostereum murrayi* (Berk. & Curt.) Pouz. Ceska Mykol. 13: 18. 1959. = *Thelephora murrayi* Berk. & Curt., J. Linn. Soc. Bot. 10: 329. 1869

**Distribution:** H.P.: Chamba-Dalhousie, Lakkarmandi; Shimla-Mahasu, Narkanda; Kullu.

**Substratum:** Coniferous wooden poles and stumps of *Abies pindrow*.

### Family-Fomitopsidaceae

*Antrodia* P. Karst. Emend. Donk Medd. Soc. Fauna Fl. fenn. 5: 40, 1879, emend. Donk, Persoonia 4: 339, 1966.

*Antrodia gossypium* (Speg.) Ryv., Norw. J. Bot. 20: 8, 1973.

**Distribution:** H.P.: Shimla.

**Substratum:** On log of *Abies pindrow*.

*Antrodia serialis* (Fr.) Donk, Persoonia 4: 340: 1966= *Daedalea serialis* (Fr.) Aoshima Trans. Mycol. Soc. Japan 8(1): 2, 1967.

**Distribution:** H.P.: Shimla-Mahasu; Kullu.

**Substratum:** On stump of *Abies pindrow*, on stump of *Pinus excelsa*.

*Antrodia xantha* (Fr.) Ryv., Norw. J. Bot. 20: 8, 1973.

**Distribution:** H.P.: Shimla.

**Substratum:** On decaying brunt log of *Pinus*.

*Daedalea* (Pers.) Syn. Meth. Fung.: 499, 1801.

*Daedalea flava* Lév., Annls Sci. Nat., Bot., sér. 3 2: 198 (1844)= *Lenzites adustus* Mass. Kew Bull. 11: 250, 1910.

**Distribution:** H.P.: Kullu; Mandi.

**Substratum:** On fallen gymnospermous log.

*Daedalea quercina* (L.) Pers., Syn. Meth. Fung.(Gottingen)2:500(1801)Fr., Syst. Mycol. 1:333, 1821.

**Distribution:** H.P.: Chamba.

**Substratum:** On decaying angiospermic stumps.

*Daedalea xantha* (Fr.) Roy & De

**Distribution:** H.P.: Kullu.

**Substratum:** On stump of *Shorea robusta*, *Albizia stipulata*.

*Dacryobolus* Fr. Summaveg. Scand 2. 404,1849 emend. Overw., Z. Pilzk. 31: 40. 1965.

*Dacryobolus karstenii* (Bers.) Overw. ex. Parm., Conspl. Syst. Cort. p. 98. 1968. = *Stereum karstenii* Bers., Atti. I.R. Acad. Agiati. III, 3: 108. 1897.

**Distribution:** H.P.: Chamba; Kullu; Shimla.

**Substratum:** On stump of *Cedrus deodara*, *Abies pindrow*, *Pinus excelsa*.

*Dacryobolus sudans* (Fr.) Fr., Summa Veg. Scand. 404. 1849.

**Distribution:** H.P.: Shimla-Narkanda.

**Substratum:** On log and under conifers & *Quercus incana*.

*Fomitopsis* Karst., Medd. Soc. Fl. Fauna 6: 9, 1881.

*Fomitopsis rosea* (Alb. et Schw. ex Fr.) Karst., Krit. Ofv. Finl. Basidv. P. 306, 1889= *Polyborus roseus* (Alb. et Schw. Fr.) Karst., Soc. F. F. Fenn. Meddel. 5:39, 1879.

**Distribution:** H.P.: Chamba; Kullu; Shimla.

**Substratum:** On decaying *Cedrus deodara*, *Pinus excelsa* logs.

*Fomitopsis rufolaccata* (Bose) Dhanda [as 'rufolaccatus'], in Thind & Dhanda, Indian Phytopath. 33(3): 386 (1981) [1980] = *Fomitopsis rufolaccatus* (Bose) Dhanda, Comb. nov.

**Distribution:** H.P.: Chamba-Dalhousie, Khajjar; Manali- Kothi; Kullu- Pulga.

**Substratum:** *Cedrus deodara* and logs of *Abies pindrow*.

*Laetiporus* Murr., Bull.Torrey Bot. Cl. 31: 607, 1904.

*Laetiporus sulphureus* (Bull. ex Fr.) Murr. Mycologia 12(1):11, 1920.= *Polyborus sulphureus* Bull. ex Fr., Syst. Mycol. 1: 357, 1821.

**Distribution:** H.P.: Shimla-Bashahr; Chamba; Kangar-Dharamshala; Kullu; Bilaspur.

**Substratum:** On decaying angiospermic log.

*Phaeolus* (Pat.) Pat. N., Egsai. Taxonomique: 86, (1900)

*Phaeolus schweinitzii* (Fr.) Pat., Essai Tax. Hyménomyc. (Lons-le-Saunier): 86 (1900)= *Polyborus schweinitzii* Fr., Syst. mycol. (Lundae) 1: 351 (1821)

**Distribution:** H.P. Shimla; Chamba; Kullu.

**Substratum:** On cut stump.

*Postia* Fr., Hymen. Europe p. 586, 11: 422, 1982.

*Postia guttulata* (Peck ex Sacc.) Jülich, Persoonia 11(4): 423 (1982) = *Tyromyces guttulatus* (Peck.) Murr. North Am. Flora 9: 31, 1907.

**Distribution:** H.P: Shimla; Kullu.

**Substratum:** On decaying angiospermic log.

*Postia leucomallella* (Murrill) Jülich, Persoonia 11(4): 423 (1982)= *Postia fragilis* (Fr.) Julich. Sesu auct; fide Checklist of Basidiomycota of Great Britain & Ireland(2005) Persoonia 11, 423, 1982= *Polyborus fragilis* Fr., Elench. Fung. 1: 86, 1828= *Tyromyces fragilis* (Fr.) Donk. Meded. bot.

*Mus. Herb. Rijks- Univ. Utrecht* 9: 148, 1933.

**Distribution:** H.P.: Chamba; Shimla- Khadrala.

**Substratum:** On decaying *Cedrus deodara* log.

*Postia sericeomollis* (Romell) Jülich, Persoonia 11(4): 423 (1982)=*Tyromyces sericeo-mollis* (Rom.) Bond. & Sing., Annls. Mycol., 39:51, 1941.

**Distribution:** H.P.: Kullu.

**Substratum:** On stump of *Cedrus deodara*.

*Postia tephroleuca* (Fr.) Julich, Personia 11 (4): 424 (1982)= *Polyporus tephroleucus* Fr. 1821.

**Distribution:** Kullu.

**Substratum:** On decaying angiospermic log.

### Order-Polyporales

#### Family – Ganodermataceae

*Ganoderma* P. Karst., *Revue mycol.*, Toulouse 3 (no. 9): 17 (1881)

*Ganoderma applanatum* (Pers. ex. S.F.Gray) Pat., *Bull. Soc.bMycol. Fr.* 5: 67, 1889.

**Distribution** Shimla- Narkanda, Khadrala, Hattoo peak, Tutupani, Baghi ; Kullu- Pulga; Chamba-Dalhousie, Kalatope, Lakkarmandi, Manali- Jagat sukh; Kangra-Dharamsala- Yol camp, Sidhbari; Bilaspur-Raura Sector.

**Substratum:** stumps, buried woods, logs and stumps of *Abies pindrow*, *Acer oblongum*, *Juglans regia* and gymnosperms, logs under mixed forest and stumps of *Cedrus deodara*.

*Ganoderma australe* (Fr.) Pat. 1890 =*Ganoderma tornatum* (Pers.) Bres., *Annls Mycol.* 10: 502, 1912.

**Distribution** Shimla- kumarsain.

**Substratum:** Buried woods.

*Ganoderma lucidum* (Curtis ex Fr.) P. Karst., *Revue mycol.* 3(9): 17, 1881.

**Distribution** Shimla- The glen, Summer hills, Tara devi, Chadwick falls, Narkanda; Manali- Gojra, jagat sukh, Kothi; Chamba-Dalhousie, Khajjiar, Kalatope, Jandrighat, Banik; Kullu- Pulga; Kangra-Dharamsala, Yol, village rasan; Bilaspur-Raura sector.

**Substratum:** Base of angiospermic trees, soil, buried woods under mixed forest, stumps of *Cedrus deodara*, exposed roots of *Quercus incana*, base of *Acer oblongum*.

*Ganoderma resinaceum* Boud. apud Pat., *Bull. soc. Mycol. Fr.* 5: 72, 1889.

**Distribution:** Chamba-Dalhousie, Bakrota.

**Substratum:** *Quercus incana* and base of *Quercus semecarpifolia*.

#### Family Meripileaceae

*Physisporinus* P. Karst., *Bidr. Kann Finl. Nat. Folk* 48:324, 1889.

*Physisporinus rivulosus* (Berk. & M.A. Curtis) Ryvarden [as 'rivulosa'], *Mycotaxon* 20(2): 353 (1984)=*Poria rivulosa* (Berk. & M.A. Curtis) Cooke, *Grevillea* 14(no. 72): 109 (1886)

**Distribution:** H.P.: Kullu- Rangri.

**Substratum:** stumps of *Cedrus deodara*.

*Rigidoporus* Murr. *Bull. Torrey Bot. Club* 32: 478, 1905.

*Rigidoporus ulmarius* (Sowerby) Imazeki, *Bull. Gov. Forest Exp. St. Tokyo* 57: 119 (1952)=*Fomes ulmarius* Fr., *Hymenomyc. eur.* (*Upsaliae*): 683 (1874).

**Distribution:** H.P.: Kullu- Pulga, Manikaran to Pulga; Chamba-Dalhousie, Lakkarmandi to Khajjiar; Shimla- Narkanda, The glen.

**Substratum:** On trunks of living tree of *Rhododendron* sp.

#### Family Meruliaceae

*Abortiporus* Murrill.

*Abortiporus biennis* (Bull.) Singer, *Mycologia* 36(1): 68 (1944).

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** On Stump of *Pinus roxburghii*.

*Bjerkandera* Karst. *Medd. Soc. Fauna F1. Fenn.* 5:38, 1879.

*Bjerkendra adusta*(Fr.) Karst., *Medd. Soc. Fauna F1. Fenn.* 5: 38, 1879.

**Distribution:** H.P.: Shimla-Narkanda; Kangara-Dharamshala; Kinnaur; Kullu.

**Substratum:** On under surface of decaying angiospermic log.

*Bjerkendra fumosa* (Pers.: Fr.) Karst., *Medd. Soc. Fauna F1. Fenn.* 5: 38, 1879.

**Distribution:** H.P.: Shimla.

**Substratum:** On decaying angiospermic log.

*Cabalodontia* M. Piatek Polish. Bot. J. 49(1):2, 2004.

*Cabalodontia queletii* (Bourdot & Galzin) Piętek, Polish Botanical Journal 49(1): 3 (2004)

*Metulodontia queletii* (Bourd. & Galz.) Parm. Conspl. Syst. Cort. 118. 1968.= *Odontia queletii* Bourd. & Galz., Bull. Soc. Mycol. France 30: 270. 1912.

**Distribution:** H.P.: Shimla-Kufri; Chamba-Dalhousie.

**Substratum:** On angiospermic twig, on log of *Quercus incana*.

*Cabalodontia subcretacea* (Litsch.) Piętek, Polish Botanical Journal 49(1): 3 (2004)= *Phlebia subcretacea* (Litsch.) Christ. Dansk Bot. Ark. 19:

165. 1960. = *Corticium subcretaceum* Litsch., Ostr. Bot. Zeitschr. 88: 110. 1939.

**Distribution:** H.P.: Shimla-Mahasu.

**Substratum:** On stump under conifers.

*Gloeoporus* Mont. Ann. Sci. Nat. Bot. Set. 2, 17: 126, 1842.

*Gloeoporus dichorus* (Fr.) Bres. Ann. Mycol. 14: 230, 1916= *Polyporus dichorus* Fr., Syst. Mycol. 1: 364, 1821.

**Distribution:** Shimla; Chamba; Kullu.

**Substratum:** On decaying angiospermic log.

*Gyrophanopsis* Julich Persoonia 10(3):329, 1979.

*Gyrophanopsis polonensis* (Bres.) Stalpers & P.K. Buchanan, N.Z. Jl Bot. 29(3): 333 (1991)=

*Hypochnicium polonense* (Bres.) Strid, Wahlenb. 1 p.68, 1975.

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** On decaying angiospermic twigs, on a decaying stump of *Cryptomeria japonica*.

*Hyphoderma* Wallr.Fl. crypt.2 p.576, 1833., emend. Donk Fungus 27 p.13, 1957.

*Hyphoderma argillaceum* (Bres.) Donk, Fungus 27, p.14, 1957. – *Corticium argillaceum* Bres., Fung. trid. 2 p.63, 1898.

**Distribution:** H.P.: Chamba-Dalhousie; Kullu.

**Substratum:** On decaying angiospermic branch.

*Hyphoderma definitum* (Jacks.) Donk Fungus 27: 15. 1957.

**Distribution:** H.P.: Chamba-Dalhousie, Kalatope.

**Substratum:** Wood under conifers.

*Hyphoderma macedonicum* (Litsch.) Donk, Fungus, Wageningen 27: 15, 1957= *Gloeocystidium macedonicum* Litsch., Glasnik (Bull.) Soc. Scient. Skoplje 18(6) : 181, 1938.

**Distribution:** H.P.: Shimla.

**Substratum:** On stump of *Cedrus deodara*.

*Hyphoderma pallidum* (Bres.) Donk Fungus 27: 15, 1957.= *Corticium pallidum* Bres., Fung. Trid. 2: 59. 1898.

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** On wood under conifers.

*Hyphoderma parvispora* Singh A.P., Priyanka, Dhingra & Singla Mycotaxon 2010.

**Distribution:** H.P.: Chamba-Dalhousie

**Substratum:** On a decayed gymnospermous wood.

*Hyphoderma setigerum* (Fr.) Donk Fungus 27L 15. 1957. = *Thelephora setigera* Fr., Elench. Fung. 1: 208. 1828.

**Distribution:** H.P.: Shimla; Chamba-Dalhousie.

**Substratum:** On stump of *Cedrus deodara*.

*Hyphoderma singularibasidium* Dhingra, A.P. Singh & Singla, Mycotaxon 108: 197 2009.

**Distribution:** H.P.: Chamba.

**Substratum:** Decayed gymnospermous log.

*Hyphoderma tenue* (Pat.) Donk Fungus 27: 15. 1957.

**Distribution:** H.P.: Chamba-Dalhousie, Kalatope, Khijjiar; Shimla- Mahasu, Narkanda.

**Substratum:** On stumps of *Cedrus deodara*, On twigs under a mixed forest and stumps under angiosperms.

*Hypochnicium* J. Erikss., Symb. Bot. Upsal. 16: 100. 1958.

*Hypochnicium cystidiatum* Boid. & Gill. Cah. Mabok. 9: 90. 1971.

**Distribution:** H.P.: Shimla.

**Substratum:** On stump under angiosperms.

*Hypochnicium longicystidiosum* (S.S. Rattan) Hjortstam & Ryvarden, Mycotaxon 20(1): 135 (1984)=*Hypodontia longicystidiosa* S.S.Rattan 1977.

**Distribution:** H.P.: Kullu-Manali.

**Substratum:** On twigs of *Cedrus deodara*.

*Hypochnicium lundellii* (Bourd. ) Erikss. Symb. Bot. Upsal. 16: 101. 1958. = *Corticium lundellii* Bourd. In Erikss., Svensk. Bot. Tidskr. 43: 56. 1949.

**Distribution:** H.P.: Shimla.

**Substratum:** On stump under mixed forest.

*Hypochnicium punctulatum* (Cooke) Erikss. Symb. Bot. Upsal. 16: 101. 1958. =*Corticium punctulatum* Cooke, Grevillea 6: 132. 1878.

**Distribution:** H.P.: Kullu; Chamba- Dalhousie; Shimla.

**Substratum:** On log of *Abies pindrow*, On bark of *Cedrus deodara*, *Quercus incana*.

*Hypochanicium sphaerosporum* (Hoehn. & Litsch.) Erikss. Symb. Bot. Upsal. 16: 101. 1958. =*Peniophora sphareospora* Hoehn. & Litsch., K. Acad. Wiss. Wien. Math.-Nat. Klasse Sitzber. 115: 1559. 1906.

**Distribution:** H.P.: Shimla-Narkanda; Kullu.

**Substratum:** On stump of *Pinus excelsa*, *Abies pindrow*.

*Irpea* Fr., Syst. Orb. Veg. P.81, 1825; Elench. Fung. 1: 142, 1828.

*Irpea consors* Berk., J. Linn. Soc. Bot. 16: 51. 1877.

**Distribution:** H.P.: Chamba-Dalhousie, Banikhet; Shimla- The Glen.

**Substratum:** stump of *Quercus*

*Irpex lacteus* (Fr.) Fr. Elench. Fung. 1: 145, 1828.

**Distribution:** H.P.: Kullu; Mandi; Bilaspur.

**Substratum:** On decaying *Pinus roxburghii* log.

*Junghuhnia* Corda, Anl. Zum. Stud. der Mycol.: 195, 1842., Emend. Ryv., Persoonia 7: 17-21, 1972.

*Junghuhnia collabens* (Fr.) Ryvarden, Persoonia 7(1): 18 (1972)= *Irpex collabens* (Fr.) Ryv. Persoonia 7: 18, 1972= *Polyporus collabens* Fr., Hym. Europ., p. 572, 1874= *Poria rixosa* Karst., Rev. Mycol. 3,9: 19, 1881.

**Distribution:** H.P.: Kullu; Chamba- Dalhousie.

**Substratum:** On decaying log of *Abies pindrow*, *Pinus excelsa*.

*Junghuhnia nitida* (Pers. ex Fr.) Ryv. Persoonia 7: 18, 1972. = *Polyporus nitidus* Pers. ex Fr., Syst. Mycol. 1: 379, 1821.= *Poria eupora* (Karst.) Cooke, Grevillea 14: 110, 1886.

**Distribution:** H.P.: Kullu; Chamba; Shimla.

**Substratum:** On log under a mixed forest.

*Mycoacia* Donk, Med. Nederl. Mycol. Ver. 18-20: 150, 1931.

*Mycoacia stenodon* (Pers.) Donk Med. Nederl. Mycol. Ver. 20: 151, 1931. = *Hydnus stedon* Pers., Mycol Eur. II, 188, 1825.

**Distribution:** H.P.: Shimla; Chamba.

**Substratum:** On angiospermic twig.

*Phlebia* Fr., Systema Mycol. 1: 4-6, 1821. emend. Donk, Fungus 27: 8, 1957.

*Phlebia crassisubiculata* Singh A.P., Priyanka, Dhingra & Singla Mycotaxon 112, 21-24.

**Distribution:** H.P.: Chamba, 2 km from Dalhousie in direction to Banikhet.

**Substratum:** On underside of gymnospermous stump.

*Phlebia livida* (Pers. ex Fr.) Bres., Atti, Accad. Agiati III. 3: 105, 1897.

**Distribution:** H.P.: Shimla-Narakanda; kullu; Chamba- Dalhousie.

**Substratum:** On log of *Abies pindrow*, *Pinus excelsa*

*Phlebia radiata* Fr. Syst. Mycol. 1: 427, 1821; Elench. Fung. I: 154, 1828.

**Distribution:** H.P.: Shimla.

**Substratum:** On stump of *Junghunia regia*.

*Phlebia segregata* (Bourdot & Galzin) Parmasto, Eesti NSV Tead. Akad. Toim. Biot. Seer 16 (4): 393, 1967= *Peniophora segregata* Bourdot & Galzin, Hyménomyc. De France: 284, 1928.

**Distribution:** H.P.-Shimla.

**Substratum:** On a decaying angiospermic log.

*Phlebia subserialis* (Bourd. & Galz.) Donk Fungus

27: 12, 1957.= *Corticium subseriale* Bourd. & Galz., Hym. France p. 219, 1928.

**Distribution:** H.P.: Shimla.

**Substratum:** On a decaying angiospermic log.

*Phlebia subochracea* (Alb. & Schwein.) J. Erikss. & Ryvarden, Cortic. N. Eur. (Oslo) 4: 873 (1976) *Mycoacia subochracea* (Bres.) Parm. Consp.. Sust. Cort. p. 99, 1968.= *Grandinia subochracea* Bres., Hedwigia 33: 206, 1894.

**Distribution:** H.P.: Shimla.

**Substratum:** On angiospermic stump.

*Radulodon* Ryverden, Can. J. Bot. 50: 2073, 1972.

*Radulodon americanus* Ryverden, Can. J. Bot. 50: 2074, 1972.

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** On log under conifers.

*Radulodon erikssonii* Ryverden, Can. J. Bot. 50: 2075, 1972.

**Distribution:** H.P.: Shimla-Narkanda; Chamba- Dalhousie.

**Substratum:** On log under angiosperms.

*Scopuloides* (Massee) Höhn. & Litsch. Linsbauer, K., Wiesner Festschrift 57, 58, 1908.

*Scopuloides hydnoides* (Cooke & Massee) Hjortstam & Ryvarden, Mycotaxon 9(2): 509 (1979) = *Phlebia hydnoides* (Cooke. & Mass.) Christ. Dansk. Bot. Ark. 19: 175, 1960.= *Peniophora hydnoides* Cooke & Madd. In Massee, Monogr. P. 154, 1889.

**Distribution:** H.P.: Kullu; Chamba-Dalhousie.

**Substratum:** On stump of *Cedrus deodara*, *Abies pindrow*.

*Sarcodontia* Schulzer, in Schulzer von Müggenburg et al., Verh. Zool.-Bot. Ges. Wien 16 (Abh.): 41 (1866).

*Sarcodontia pachyodon* (Pers.) Spirin, Mycena 1(1): 64-71 (2001)= *Radulomyces pachyodon* (Pers.) Christ. Dansk. Bot. Arkiv 19: 232, 1960.

**Distribution:** H.P.: Shimla-Mahasu, Sarahan.

**Substratum:** logs under mixed forest.

*Steccherinum* Gray, Nat. Arrang. Br. P1.1: 651, 1821.

*Steccherinum ciliolatum* (Berk. & Curt.) Gilb. & Bud. Journ. Arizona Acad. Sci. 6: 97, 1970.

**Distribution:** H.P.: Shimla- Glen, Annandale; Chamba- Khijjar.

**Substratum:** Twigs and wood under mixed forest, angiospermic stumps.

**Steccherinum fimbriatum** (Pers.: Fr.) Erikss., Symb. Bot. Upsal. 16:134. 1958.= *Hydnnum fimbriatum* Pers. : Fr. Syst. Mycol. 1:421, 1821.

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** On angiospermic stumps.

**Steccherinum laeticolor** (Berk. & Curt.) Banker Mycologia 4: 316. 1912.= *Hydnnum laeticolor* Berk. & Curt., in Berk., Grevillea 1: 99. 1873.

**Distribution:** H.P: Kullu.

**Substratum:** On angiospermic twig.

**Steccherinum ochraceum** (Pers. : Fr.) Gray, Nat. Arrang. Brit. Pl. 1: 651. 1821.= *Hydnnum ochraceum* Pers. : Fr. , Syst. Mycol. 1: 414. 1821.= *Steccherinum rhois* (Schw.) Banker, Mem. Torrey Bot. C1. 12: 12. 1906.=*Steccherinum resupinatum* Cunn, Trans. Roy. Soc. N.Z. 85: 596. 1958.

**Distribution:** H.P: Kullu-Manali; Shimla; Chamba- Dalhousie.

**Substratum:** On angiospermic wood, On female cone of *Picea smithiana*.

### Family Phanerochaetaceae

**Antrodiella** Ryvarden & I. Johans. A prelim. Polyp. Flor. Of E. Afri:256,1980

**Antrodiella zonata** (Berk.) Ryvarden, Boln Soc. argent. Bot. 28(1-4): 228 (1992)=*Irpea zonatus* Berk., Hooker J. Bot. 6: 168, 1854.

**Distribution:** H.P.: Chamba-Dalhousie, Lakkar mandi, Khajjar, Kalatope, Panjpulla, Lover's walk, Jandrighat, Banikhet; Shimla- Mashobra, The Glen, Chadwick falls, Narkanda; Kullu- Manali,Gojra; Bilaspur.

**Substratum:** Stumps of *Cedrus deodara*, *Picea smithiana*, *Quercus*, *Abies pindrow*, *Q. semecarpifolia*, *Q. incana*. Stumps under mixed forest and angiospermic forest.

**Botryohypochnus** Donk, Medd. Nederl. Mycol. Ver. 18-20: 118. 1931.

**Botryohypochnus isabellinus** (Fr.) Erikss. Sven. Bot. Tidskr. 52: 2. 1958. = *Thelephora isabellina* Fr.,Epicr. P. 544. 1838.

**Distribution:** H.P.: Chamba; Kullu; Shimla.

**Substratum:** On angiospermic twig.

**Phanerochaete** Karst. Bidr. Kann. Finl. Nat. 48:426, 1889.,emend Donk, Persoonia 2: 223. 1962.

**Phanerochaete affinis** (Burt) Parm. Consp. Syst. Cort. 84: 1968.

**Distribution:** H.P.: Chamba- Dalhousie, Bakrota.

**Substratum:** stumps under mixed forest.

**Phanerochaete deflectans** (P. Karst.) Hjortstam, Windahlia 17: 58, 1987=*Grandinia deflectans* P. Karst., Bidr. Kann. Finl. Nat. Folk 37: 239, 1882.

**Distribution:** H.P.: Shimla.

**Substratum:** On decaying stump of *Cedrus deodara*.

**Phanerochaete tuberculata** (Karst.) Parm. Consp. Syst. Cort. 83: 1968.= *Corticium tuberculatum* Karst., *Hedwigia* 35: 45. 1895.

**Distribution:** H.P.: Kullu.

**Substratum:** On log under angiosperms.

**Phlebiopsis** Jülich Persoonia 10:137, 1978.

**Phlebiopsis gigantea** (Fr.) Jülich, Persoonia 10 p.137, 1978= *Thelephora gigantea* Fr., Syst. mycol. I p.448, 1821= *Phanerochaete gigantea* (Fr. ex Fr.) Rattan.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda; Kinnaur- Nichhar; Chamba-Dalhousie, Lower Bakrota Kalpa, Pangi nullah; Kullu- Gojra, Rohtang.

**Substratum:** stumps and logs of *Abies pindrow*, decorticated stump and bark of *Cedrus deodara*, log of *Pinus gegardiana*, logs under conifers, stumps under mixed forest.

**Phlebiopsis ravenelii** (Cooke) Hjortstam, Windahlia 17: 58 (1987)=*Phlebiopsis roumeguerii* (Bres.) Jülich & Stalpers, Verh. Kon. Ned. Akad. Wet. Ser. 2. vol.74: 190, 1980= *Corticium roumeguerii* Bres. Fungi trid. 2 p.36, 1892.= *Phlebia roumegueri* (Bers.) Donk Fungus 27: 18. 1957.= *Corticium roumegueri* Bres., Fungi Trident. 2: 36. 1892.

**Distribution:** H.P.: Shimla-Narkanda, Mahasu; Chamba, Kullu.

**Substratum:** On bark of *Abies pindrow*, On stump of *Cedrus deodara*.

**Porostereum Pilát**

**Porostereum spadiceum** (Pers.) Hjortstam & Ryvarden, Syn. Fung. (Oslo) 4: 51 (1990) = *Lopharia fulva* (Lev.) Boidin Bull. Soc. Linn. Lyon 28: 213. 1959.

**Distribution:** H.P.: Kinnaur- Nichhar; Kullu-Bandal.

**Substratum:** fallen logs and rotten stumps.

**Rhizochaete** Gresl., Nakasone & Rajchenb. Mycologia 96(2):261, 2004.

**Rhizochaete filamentosa** (Berk. & M.A. Curtis) Gresl., Nakasone & Rajchenb., Mycologia 96(2): 267 (2004)= *Phanerochaete filamentosa* (Berk.& Curt.) Parm. Consp. Syst. Cort. 83. 1968. Basionym: *Corticium filamentosum* Berk.& Curt., Grevillea 1: 178. 1873.

**Distribution:** H.P.:Kullu- Khanag, Jalori; Chamba- Dalhousie- Lover's walk, Khijjar; Shimla-Taradevi, Chail, Mahasu, Narkanda, Bagi.

**Substratum:** stumps of *Quercus incana* and *Rhododendron arboreum*, logs of *Abies pindrow*, fallen logs, stumps under angiosperms and mixed forest.

### Family- Polyporaceae

**Datronia** Donk Persoonia 4(3): 337, 1966.  
**Datronia mollis** (Sommerf. Ex Fr.) Donk Persoonia 4: 338, 1966= *Daedalea mollis* Sommerf. Ex Fr., Elench. Fung. P. 71, 1828.  
**Distribution:** H.P.-Kullu.  
**Substratum:** On decaying angiospermic log.

**Datronia scutellata** (Schwein.) Gilb. & Ryvarden, Mycotaxon 22(2): 364 (1985)= *Hexagonia scutellata*(Schw.) Roy & De, comb. nov. Basionym: *Polyporus scutellatus* Schw., Trans. Amer. Phil. Soc. II, 4: 157, 1832= *Fomes scutellatus* (Schw.) Cke., Grevillea 14: 19, 1885.  
**Distribution:** H.P.: Chamba- Dalhousie.  
**Substratum:** On decaying *Cedrus deodara* log.

**Dichomitus** Reid Rev. Biol. 5: 149, 1965.  
**Dichomitus leucoplacus** (Berk.) Ryvarden, Norw. Jl Bot. 24: 222 (1977) = *Poria leucoplaca* (Berk.) Sacc. 1888.  
**Distribution:** H.P: Chamba.  
**Substratum:** On decaying angiospermic twigs.

**Diplomitoporus** Dom. Acta Soc. Bot. Pol. 39: 191, 1970.  
**Diplomitoporus rimosus** (Murrill) Gilb. & Ryvarden, Mycotaxon 22(2): 364 (1985)= *Poria ramosa* Murrill, Mycologia 12(2): 91 (1920).  
**Distribution:** H.P.: Shimla- Shillaroo.  
**Substratum:** Burnt logs in mixed forest.

**Epithelopsis** JUlich, Persoonia 8(4): 457, 1976.  
**Epithelopsis fulva** (G. Cunn.) Jülich, Persoonia 8(4): 457 (1976)= *Epithele fulva* G. Cunn., Trans. Roy. Soc. N.Z. 83: 631 (1956).  
**Distribution:** H.P.: Shimla  
**Substratum:** On bark of *Rhododendron arboreum*.

**Fomes** Fr. Summa Veg. Scand. 2:319, 1849..  
**Fomes fomentarius** (L.) Kickx Fl. Crypt. Flandres 2: 237, 1867  
**Distribution:** H.P. : Chamba; Kullu; Shimla.  
**Substratum:** On deaying angiospermic logs.

**Fomes johnsonianus** (Murr.) Lowe, State Univ. Coll. For. Techn. Publ., 80, 36, 1957.  
**Distribution:** H.P.: Shimla-Mahasu.  
**Substratum:** On stump under an angiospermic forest.

**Fomes pini** (Brot.) P. Karst. 1882  
**Distribution:** H.P.: Shimla-Mahasu; Chamba; Kullu.  
**Substratum:** On *Cedrus deodara*, *Abies* sp. stump.

**Hexagonia** Fr. Fl. Scan. 339, 1835.

**Hexagonia tenuis** Hook, ex, Fr. Epicr. Syst. Mycol. 498, 1838= *Boletus tenuis* Hook. Ex Kunth, Syn.. Pl. 1:10, 1822.

**Distribution:** H.P.: Mandi- Siniardi.

**Substratum:** On decaying angiospermic log.

**Lentinus** Fr. Syst. Orb. Veg. 1: 77, 1825

**Lentinus fasciatus** Berk. J. Bot. 2: 146, 1840

**Distribution:** H.P.: Shimla-Mahasu; Kullu.

**Substratum:** On *Cedrus deodara*, *Abies* sp. stump.

**Lenzites** Fr. Fl. Scan. P. 339,1835; Gen. Hyn.,P.10, 1836; Epicr., P. 403, 1838

**Lenzites betulina** (Fr.) Fr. epicr., P. 405, 1838.

**Distribution:** H.P.: Kullu- jaree, Grhamnal, Manali, Gulaba; Shimla- Taradevi, Narkanda, Baghi, Khadrala; Chamba-Dalhousie, Jandrighat, Baloon, Banikhet, Lakkarmandi, Khajjiar, lower Bushahr, Singri to Baholi; Bilaspur-Changar.

**Substratum:** On decaying angiospermic twigs.

**Lenzites eximia** Berk. & Curt. Hooker J. Bot. 6: 134, 1854.

**Distribution:** H.P.: Shimla- Baghi, khadrala, Mashobra; Kullu- Pulga; Mandi.

**Substratum:** On decaying angiospermic log

**Lenzites palisoti** (Fr.) Fr. Syst. Mycol. 1:335, 1821= *Lenzites elegans* (Fr.) Pat., Essai Tax. P. 89, 1900.

**Distribution:** H.P.: Shimla- Kufri, Narkanda; Chamba-Dalhousie, Khajjiar.

**Substratum:** On decaying angiospermic and *Shorea robusta*, *Quercus* sp. Log.

**Lopharia** Kalchbr. & MacOwan Gravillea 10(54): 58, 1881., emend Cunn., Trans. Roy. Soc. N.Z. 83: 621. 1956.

**Lopharia cinerascens** (Schw.) Cunn., Trans. Roy. Soc. N.Z. 83: 622.1956.= *Thelephora cinerascens* Schw., Trans. Amer. Phil. Soc. 4: 167. 1832.

**Distribution:** H.P.: Shimla-Mahasu; Kinnaur.

**Substratum:** On dead stump of *Quercus incana*.

**Macrohyporia** I. Johans. & Ryvarden Trans. Brit. Mycol. Soc. 72(2): 1922, 1979.

**Macrohyporia inflata** Overh. ex I. Johans. & Ryvarden, Trans. Br. mycol. Soc. 72(2): 192 (1979)= *Poria inflata* Overh., Proc. Pa. Acad. Sci. 13: 123, 1939.

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** On stump of *Shorea robusta* forests.

**Microporus** P. Beauv., Fl.Oware. Benim Afr.: 1:12, 1805., emend. Kuntz ,Pat. Rev. Gen. P1. 3: 494, 1898.

***Microporus xanthopus*** (Fr.) Kuntze, Rev. Gen. Pl. 3: 494, 1898.

**Distribution:** H.P.: Shimla; Kullu.

**Substratum:** On decaying angiospermic twigs

***Nigroporus*** Murrill Bull. Torrey Bot. Club 32: 361, 1905.

***Nigroporus vinosus*** (Berk.) Murrill, Bull. Torrey Bot. Club 32: 361, 1905.

**Distribution:** H.P.: Bilaspur.

**Substratum:** On decaying angiospermic log

***Perenniporia*** Murr. Mycologia 34: 595, 1942

***Perenniporia fulviseda*** (Bers.) Dhanda, Comb. nov.

**Distribution:** Shimla- The glen; Chamba-Dalhousie, Benikhet, Lover's walk.

**Substratum:** Stumps in angiospermic forest, roots of deciduous trees and stumps of *Quercus incana*.

***Perenniporia medulla-panis*** (Jacq.) Donk, Persoonia 5(1): 76 (1967).= *Polyporus medullapanis* Jacq. ex Fr., Syst. Mycol. 1: 380. 1821.

**Distribution:** H.P.: Chamba-Dalhousie, Kalatop; Kangar-Dharamshala.

**Substratum:** On stump of *Cedrus deodara*.

***Polyporus*** Michel. ex. Adams Familles des plantes 2: 10, 1763 Syst. Mycol. 1: 341, 1821. Emend. Donk, Meded. Bot. Mus. Univ. Utrecht 9: 123, 1933.

***Polyporus arcularius*** (Batsch) Fr., Syst. Mycol. 1: 342, 1821.

**Distribution:** H.P.: Kullu- Pulga; Kangra-Dharamsala, Yol camp; Shimla- Taradevi; Chamba-Dalhousie, Banikhet.

**Substratum:** On decaying angiospermic twigs.

***Polyporus durus*** =*Polyporus picipes* Fr., Epicrisis p. 440, 1838.

**Distribution:** Shimla- Jakhoo, Narkanda, Rampur road, Khadrala, Tutupani; Chamba- chhatri, Dalhousie- Lakkarmandi to Khajjiar.

**Substratum:** logs under coniferous forest, buried wood, logs and stumps of *Abies pindrow* and *Picea morinda*.

***Polyporus grannocephalus*** Berk., London J. Bot. 1: 148 (1842)

**Distribution:** Bilaspur- Swarghaat.

**Substratum:** On fallen log.

***Polyporus squamosus*** Huds. ex Fr., Syst. Mycol. P. 343, 1821.

**Distribution:** H.P.: Kullu- Manali ; Shimla.

**Substratum:** On decaying angiospermic log.

***Poria*** Adans. Fam. Des. Plantes 2:10.1763.

***Poria auricoma*** (Lev) Cooke, Grevilles 15: 26, 1886.

**Distribution:** H.P.: Chamba-Dalhousie; Mandi-Siniardi.

**Substratum:** On stump of *Shorea robusta*.

***Poria conferata*** Overh., Pa Agr. Exp. Sta., Tech. Bull. 418: 25, 1942.

**Distribution:** H.P.: Shimla- Narkanda.

**Substratum:** On log of *Juglans regia*.

***Poria fulviseda*** Bres., Accad. Rover. Agiati. 3: 84: 1897.

**Distribution:** H.P.: Chamba- Dalhousie, Banikhet, Lover's walk; Shimla- The Glen.

**Substratum:** On stump of *Quercus incana*.

***Poria melleopora*** (Murr.) Sacc. And Trott., Sylloge Fung. 21: 330, 1912.

**Distribution:** H.P.: Chamba-Dalhousie; Mandi-Siniardi.

**Substratum:** On dead angiospermic tree.

***Poria mesoleuca*** (Petch) Ryv., Norw. J. Bot. 19: 233, 1972.

**Distribution:** H.P.: Solan-Kausali.

**Substratum:** At the base of an angiosperm.

***Poria monticola*** Murr., Mycologia 12: 90. 1920.

**Distribution:** H.P.: Kullu.

**Substratum:** On stump of *Pinus excelsa*.

***Skeletocutis*** Kotl. & Pouz. Ceska Mykol. 12: 103, 1958.

***Skeletocutis amorphia*** (Fr.) Kotl. & Pouz., Česka Mykol. 12: 103, 1958.

**Distribution:** H.P.: Kullu; Shimla.

**Substratum:** On decaying *Pinus* log.

***Trametes*** Fr., Fl. Scan.: 339 (1836)

***Trametes gibbosa*** (Pers.) Fr., Epicr. P. 492, 1838.

**Distribution:** H.P.: Kullu; Bilaspur.

**Substratum:** On decaying angiospermic stem.

***Trametes hirsutus*** (Fr.) Pilat Atlas Champ. Europ. 3: 268, 1939= *Coriolus hirsutus* (Wulfen) Pat. 1897= *Coriolus velutinus* P. Karst., Trudy Troitsk. Otd. imp. russk. geogr. obsc. 8: 61 (1906).

**Distribution:** H.P.: Kullu- Pulga, Manali, Gulaba, Gojra, Jagatsukh; Chamba- Kilorgala, Dalhousie, Khajjiar, Banikhet, Lakkarmandi; Shimla- Baghi, Narkanda, Khadrala, Rampur road; Kangar-Dharamsala, Yol; Bilaspur.

**Substratum:** On decaying angiospermic twigs.

***Trametes lactinea*** (Berk.) Pat. Essai. Tax. p.92, 1900= *Coriolus lactineus* (Berk.) G. Cunn. 1950.

**Distribution:** H.P.: Kullu-Manali, Gulaba.

**Substratum:** On decaying *Shorea robusta*, *Pinus longifolia* log.

**Trametes menziesii** (Berk.) Ryvarden, [as 'menzeisii'], Norw. Jl Bot. 19(3-4): 236 (1972)=*Polyporus vittatus* Berk., Lond. J. Bot. 6: 505, 1847.

**Distribution:** H.P.: Shimla- Khadrala.

**Substratum:** stumps of *Quercus incana*.

**Trametes ochracea** (Pers.) Gilb. & Ryvarden, N. Amer. Polyp., Vol. 2 Megasporoporia - *Wrightoporia* (Oslo): 752 (1987)=*Coriolus zonatus* (Nees) Quél., Enchir. fung. (Paris): 175 (1886).

**Distribution:** H.P.: Kinnaur-Kalpa, Tacklech; Kullu- Pulga ,Manali, Gojra, Jagatsukh, Gulaba; Chamba- sara, Dalhousie- Khajjiar; Shimla-Narkanda, Baghi.

**Substratum:** logs, stumps, bark, rotten stumps, stumps under mixed forest, dead logs and stumps of *Quercus incana*.

**Trametes versicolor** (L.) Lloyd, Mycol. Notes (Cincinnati) 65: 1045 (1921) [1920]= *Coriolus versicolor* (L.) Quél., Enchir. fung. (Paris): 175 (1886).

**Distribution:** H.P.: Chamba; Kangra-Dharamshala; Kullu; Shimla- The Glen, Jakhu, Narkanda; Mandi-Nerchauk.

**Substratum:** On decaying angiospermic twigs.

**Trametopsis** Tomsovský Czech Mycol. 60(1):7, 2008.

**Trametopsis cervina** (Schwein.) Tomšovský, Czech Mycol. 60(1): 8 (2008) =*Coriolus cervinus* (Schwein.) Bondartsev 1953.

**Distribution:** H.P.: Shimla- Narkanda; Chamba-Dalhousie,Lover's walk, Baloon, Kangra-Dharamsala, Forsyth ganj.

**Substratum:** On decaying angiospermic log.

**Trichaptum** Murrill Bull. Torrey Bot. Club 31: 608, 1904.

**Trichaptum abietinum** (Dicks ex Fr.) Ryv., Norw. J. Bot. 19: 237, 1972.

**Distribution:** H.P.: Chamba-Dalhousie,Kalatope, Khajjiar, Lakkarmandi; Shimla- Narkanda; Kinnaur- Kalpa, Pang, Nallah; Kullu-Manali,Gulaba; Kangra-Dharamsala, Dharampur, Rasan, Yol.

**Substratum:** On decaying angiospermic stump.

**Trichaptum byssogenum** (Jungh.) Ryvarden, [as 'byssogenus'], Norw. Jl Bot. 19(3-4): 237 (1972)=*Trichaptum venustum* (Berk.)G.H.Cunn., Bull. N.Z.Dep. Scient. Ind. Res. 164: 97, 1965.

**Distribution:** H.P.: Shimla- Chail, Chamba-Dalhousie, Banikhet, Jandri Ghat.

**Substratum:** Stumps of *Cedrus deodara* and *Quercus*.

**Trichaptum fusco-violaceum** (Ehrenb. ex. Fr.) Ryv., Norw. J. Bot. 19: 237, 1972.

**Distribution:** H.P.: Kangra-Dharamshala.

**Substratum:** On decaying *Pinus* log.

**Trichaptum biforme** (Fr.) Ryv., Norw. J. Bot. 19: 237, 1972.=*Trichaptum targamenum* (Fr.) G.H.Cunn., Bull. N.Z.Dep. Scient. Ind. Res. 164:100, 1965.

**Distribution:** H.P.: Shimla- Narkanda, Hattoo peak, The Glen; Chamba-Dalhousie, Jandri Ghat spring; Kullu-Manali, Gulaba.

**Substratum:** logs and stumps of *Quercus incana* and stumps of *Cedrus deodara*.

**Tyromyces** P. Karst. Revue mycol. 3(9):17, 1881.

**Tyromyces lacteus** (Fr.) Murrill, N. Amer. Fl. (New York) 9(1): 36 (1907) =*Postia lactea* (Fr.) Roy & De, Comb. Nov. Basionym: *Polyporus lacteus* Fr., Syst. Mycol. 1: 359, 1821.

**Distribution:** H.P.: Shimla; Chamba-Dalhousie, Kalatope.

**Substratum:** On decaying *Pinus* log.

#### Family- Xenasmataceae

**Xenasmatella** Oberw., Sydowia 19(1-6):28, 1996.

**Xenasmatella vaga** (Fr.) Stalpers, Stud. Mycol. 40: 37 (1996)=*Trechispora vaga* (Fr.) Liberta taxon 15: 319. 1966. = *Phlebia vaga* fr., Syst. Mycol. 1: 428. 1821.

**Distribution:** H.P.: Chamba Khajjiar.

**Substratum:** On bark under mixed forest.

#### Order- Russulales

##### Family Albatrellaceae

**Albatrellus** S.F. Gray, Nat. Arr. Brit. Pl. 1: 645, 1821.

**Albatrellus canthrellus** (Lloyd) Pouz, Česka Mykol. 26: 196, 1972.

**Distribution:** H.P.: Chamba-Dalhousie, Jandri Ghat.

**Substratum:** on soil among gymnospermous needles.

**Albatrellus dispansus** (Lloyd) Canf. & Gilb. Mycologia 63: 965, 1971.

**Distribution:** H.P.: Shimla- Tara Devi; Chamba-Dalhousie.

**Substratum:** On soil in mixed forest.

##### Family- Amylostereaceae

**Amylostereum** Boidin, Reveue Mycol. 23: 345. 1958.

**Amylostereum chailletii** (Pers.: Fr.) Boidin , Reveu Mycol. 23: 345. 1958.= *Thelephora chailletii* Pers. Fr., Elench. 1: 188. 1828.

**Distribution:** H.P.: Shimala-Mahasu, Narkanda, Bagi; Kullu- Kasole, Kothi; Shimla- Chadwick Falls; Chamba-Dalhousie- Jandrihat.

**Substratum:** On dead stump of *Cedrus deodar*, *Abies pindrow*.

#### Family Bondarzewiaceae

**Heterobasidion** Brefeld Unters. Gesamtgeb. MyKol. 8: 154, 1888.

**Heterobasidion araucariae** P.K. Buchanan, Mycotaxon 32(1): 325 (1988) =*Fomes annosus* (Fr.) Cooke var. *indicus* Wakef. Apud Hole in Indian For. 53, 437, 1927= *Heterobasidion annosum* var. *indicum* (Wakef.) Dhanda, Indian Phytopath. 33(3): 386, 1980.

**Distribution:** H.P.: Chamba-Dalhousie, Jandrihat, Kalatope, Khajjiar; Shimla- The glen, Kufri, Narkanda, Khadrala, Baghi, Rampur road; Kullu-Pulga, Manali , Jagat sukh.

**Substratum:** On *Picea morinda*, on decaying *Abies pindrow*, *Pinus excelsa* log

**Heterobasidion insulare** (Murrill) Ryvarden [as 'insularis'], Norw. JBot. 19: 237 (1972) = *Trametes insularis* Murr., Bull. Torr. Bot. Cl. 35:405, 1908.

**Distribution:** H.P.: Chamba-Dalhousie; Kangar-Dhramshala; Kullu; Shimla.

**Substratum:** On decaying *Pinus* stump.

#### Family Echinodontiaceae

**Echinodontium** Eill. & Ev., Bull. Torrey Bot. Club 27; 49. 1900.

**Echinodontium japonicum** Imazeki Jap. J. Bot. 11: 520. 1935.

**Distribution:** H.P.: Shimla-Mahasu; Chamba-Dalhousie.

**Substratum:** On bark of coniferous log.

**Scotoderma** (Berk.) Jülich, Proc. Kon. Ned. Akad. Wetensch. C77:149, 1974.

**Scotoderma viride** (Berk.) Jülich, Proc. K. Ned. Akad. Wet., Ser. C, Biol. Med. Sci. 77(2): 151 (1974)= *Coniophora viridis* (Berk.) Sacc., Sylloge Fungorum 6: 649.

**Distribution:** H.P.: Shimla-Chaupal.

**Substratum:** On log of *Cedrus deodara*.

**Scytinostromella** Parm. Conspl. Syst.Cort.p.171, 1968.

**Scytinostromella heterogenea** (Bourd.& Galz.) Parm., Conspl.syst. Cort. P.171, 1968 = *Peniophora heterogena* Bourd.& Galz., Bull. Soc. Mycol. France 28: 393, 1913.

**Distribution:** H.P.: Kullu; Chamba-Dalhousie.

**Substratum:** on a decaying log.

**Scytinostromella olivaceoalba** (Bourdot & Galzin) Ginns & M.N.L. Lefebvre, Mycol. Mem. 19: 141 (1993)= *Confertobasidium olivaceoalbum* (Bourdot & Galzin) Jülich, Willdenowia, Beih. 7: 167 (1972).

**Distribution:** H.P.: Kullu; Chamba-Dalhousie.

**Substratum:** On dead stump of *Cedrus deodar*, *Abies pindrow*.

**Xylobolus** P. Karst. Meddel. Soc. Fauna Fl. Fenn. 6: 11, 1881., emend. Boidin, Revue Mycol. 23: 340-41. 1958.

**Xylobolus frustulatus** (Pers. : Fr.) Boidin, Revue Mycol. 23: 341. 1958.= *Thelephora frustulata* Pers. ex Fr. , Syst. Mycol. 1: 445. 1821.

**Distribution:** H.P.: Kullu; Chamba-Dalhousie; Shimla.

**Substratum:** On stump of *Cedrus deodara*.

**Xylobolus subpileatus**(Berk. & Curt.) Boidin, Revue Mycol. 23: 341. 1958.= *Stereum subpileatus* Berk & Curt., Hook. J. Bot. And Kew Gard. misc. 1: 238. 1829.

**Distribution:** H.P.:Kullu; Chamba-Dalhousie; Shimla.

**Substratum:** On fallen log, On stump of *Quercus incana*.

#### Family -Gloeocystidiellaceae

**Gloeocystidiellum** Donk, Meded. Ned. Mycol. Ver. 18-20:156, 1931.,emend Donk, Fungus 26: 8. 1956.

**Gloeocystidiellum clavuligerum** (Hohn. & Litsch.) Nakasone, Mycotaxon 14 (1): 320, 1982.- *Gloeocystidiellum clavuligerum* Hohn. & Litsch., sber. Akad. Wiss. Wien, Math.- naturw. Kl., Abt. 1 115: 1906.

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** On fallen stick of *Cedrus deodara*.

**Gloeocystidiellum luteocystidium** var. *brevisporum* Rattan, Bibliotheca Mycologica 60:103, 1977.

**Distribution:** H.P.: Chamba-Dalhousie, Dunera.

**Substratum:** Fallen twigs under angiospermic forest.

**Gloeocystidiellum odontoides** Khara H.S. Indian Phytopath. 41(1).1988.

**Distribution:** H.P.: Chamba-Dalhousie, Kalatope.

**Substratum:** fallen log of *Cedrus deodara*.

**Gloeocystidiellum sulcatum** (Rehill& Bakshi) Boidin, Cah. Maboke 4: 10. 1966.

**Distribution:** H.P.:Chamba-Dalhousie, Bakrota, Jandrihat, Banikhet, Kalatope, Khijjiar; Shimla-Kufri, Summer hill, Mashobra, Mahasu, Narkanda,

Bagi; Kullu- Pulga, Naggar, Jaggatsukh, Rohtang, Gojra..

**Substratum:** Stumps and logs of *Cedrus deodara*, fallen logs of *Abies pindrow*, logs and stumps under a mixed and coniferous forest.

#### Family-Hericiaceae

*Dentipellis* Donk, Persoonia, 2(2): 232, 1962.

*Dentipellis leptodon* (Mont.) Maas Geest., Persoonia 7(4): 558 1974.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda, Dharanghati.

**Substratum:** Log under conifers and on bark of fallen logs.

*Laxitextum* Lentz em. Boidin, Revue Mycol. 23:341. 1958.

*Laxitextum bicolor* (Pers. ex Fr.) Lentz U.S. D.A. Agri. Monogr. 24: 19.1955.= *Thelephora bicolor* Pers., Syn. Meth. Fung. P. 568. 1801. Fries, Syst. Mycol. 1: 438.1821.

**Distribution:** H.P.: Chamba-Dalhousie, Dunera; Kullu; Shimla; Solan-Jaabali.

**Substratum:** Fallen twigs under angiospermic forest.

*Laxitextum incrustatum* Hjortstam & Ryvarden, Mycotaxon 13: 35, 1981.

**Distribution:** H.P.: Shimla, Manali.

**Substratum:** On bark of *P. roxburghii* & *Cedrus deodara*.

#### Family- Lachnocladiaceae

*Asterostroma* Massee, J. Linn. Soc. Bot. 25: 154. 1889.

*Asterostroma cervicolor* (Berk. & Curt.) Mass. J. Linn. Soc. Bot. 25: 154. 1889.= *Corticium cervicolor* Berk. & Curt., Grevillea 1: 179. 1891.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda; Chamba- Dalhousie; Solan.

**Substratum:** On rotten stumps.

*Asterostroma musicola* (Berk. & M.A. Curtis) Massee, J. Linn. Soc., Bot. 25(no. 170): 155 (1889), *Asterostroma musicolum* (Berk.& Curt.) Mass. J. Linn. Soc. Bot. 25: 154. 1889.= Hymenochaete musicolum Berk. & Curt., J. Linn. Soc. Bot. 10: 334.1868.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda; CHamba- Dalhousie; Kullu; Mandi, Bilaspur.

**Substratum:** On log of *Abies pindrow*, dead twigs.

*Dichostereum* Pilát, Ann. Mycol., 24:1223, 1926

*Dichostereum effuscatum* (Cooke & Ellis) Boidin & Lanq., Mycotaxon 6(2): 284 (1977)=*Vararia effuscata* (Cooke & Ellis) Rog. & Jacks. Farlowia

1: 290. 1943.= *Corticium effuscatum* Cooke & Ellis, Grevillea 9: 113. 1881.

**Distribution:** Shimla, Manali.

**Substratum:** On stump of *C. deodara*.

*Dichostereum pallescens* (Schwein.) Boidin & Lanq., Mycotaxon 6(2): 284 (1977)= *Vararia pallescens* (Schw.) Rog. & Jacks. Farlowia 1: 309. 1943. =*Thelephora pallescens* Schw. Trans. Am. Phil. Soc. n.s. 4: 167. 1832.

**Distribution:** H.P.: Chamba; Kangara-Dharamshala; Kullu; Shimla;Solan, Sundernagar.

**Substratum:** On stump of *Quercus incana*, twigs.

*Dichostereum rhodosporum* (Wakef.) Boidin & Lanq., Mycotaxon 6(2): 284 (1977)=*Vararia rhodospora* (Wakef.) Cunn. Proc. Linn. Soc. NSW 77: 291. 1953.= *Asterostromella rhodospora* Wakef., Kew Bull. 372. 1915.

**Distribution:** H.P.: Chamba-Dalhousie; Kullu; Shimla.

**Substratum:** On stump of *Cedrus deodara*.

*Dichostereum kenyense* Boidin & Lanq., Bull. Trimmest. Soc. mycol. Fr. 96: 394, 1981.

**Distribution:** Kinnaur, Keylong.

**Substratum:** On stump of *P. wallichiana*.

*Scytinostroma* Donk, Fungus 26: 19. 1956.

*Scytinostroma albocinctum* (Berk. & Br.) Boidin & Lanq., Kew bull. 31: 621, 1976.- *Stereum albocinctum* Berk. Broome, J. Linn. Soc., Bot. 14: 66, 1873.

**Distribution:** Manikaran road, Mandi.

**Substratum:** On angiospermic twigs.

*Scytinostroma alutum* Lanq. Bull. Mens. Soc. linn. Lyon, Num. Spec. 53: 187, 1984.

**Distribution:** Shimla, Mandi.

**Substratum:** stick and log of *C. deodara*.

*Scytinostroma crassum* (S.S. Rattan) Hjortstam, Mycotaxon 54: 192 (1995)= *Scytinostroma odoratum* forma *crassum* Rattan, Trans. Brit. Mycol. Soc. 63: 6. 1974.

**Distribution:** H.P: Chamba-Dalhousie; Kullu; Shimla.

**Substratum:** On wood of *Picea smithiana*.

*Scytinostroma cystidiatum* Boidin, Bulletin du Jardin Botanique de l'État, Bruxelles 30: 285, 1960.

**Distribution:** Mandi, Sundernagar, Manikaran.

**Substratum:** On angiospermic twigs.

*Scytinostroma duriusculum* (Berk. & Br.) Donk, Fungus 26: 20. 1956.= *Stereum duriusculum* Berk. & Br. J. Linn. Soc. Bot. 14: 66. 1873.

**Distribution:** H.P.: Shimla-Mahasu, Bagi; Kullu-Jalori, Pulga; Chamba-Dalhousie, Panjpulla, Lover's walk, Thali.

**Substratum:** On angiospermic twigs.

*Scytinostroma ochroleucum* (Bers. & Torrend.) Donk, Fungus 26: 20. 1956.= *Gloeocystidium ochroleucum* Bers. & Torrend., in Torrend., Broteria Ser. Bot. 11: 81. 1913.

**Distribution:** H.P.: Shimla-Mahasu, Bagi; Kullu-Jalori, Pulga; Chamba-Dalhousie; Solan, Manali.

**Substratum:** On coniferous stump.

*Scytinostroma portentosum* (Berk. & Curt.) Donk, Fungus 26: 20. 1956.= *Corticium portentosum* Berk. & Curt., in Berk., Grevillea 21: 3. 1873.

**Distribution:** H.P.: Kullu- Pulga, Bahu, Khanag; Shimla- Mahasu, Narkanda; Chamba- Sara.

**Substratum:** On stump under an angiospermic forests.

*Vararia* P.Karst., Kritisk of versigt af Finlands Basidsvampar:32, 1898.

*Vararia brevispora* S.S. Rattan, Bibliotheca Mycologica 60:142 1977.

**Distribution:** H.P.: Kullu.

**Substratum:** On rotten stump.

*Vararia minidichophysa* Boid. & Lanq., Bull. Soc. Mycol. France 91: 463, 1975.

**Distribution:** Manali, Dalhousie.

**Substratum:** On fallen sticks of *Q. leucotrichophora* and logs.

*Vararia ochroleuca* (Bourd. & Galz.) Donk Ncd. Kru. Arch. P. 79. 1930.

**Distribution:** H.P.: Chamba; Kullu; Shimla.

**Substratum:** logs and stumps of *Cedrus deodara*, stumps of *Abies pindrow*

*Vararia rugosispora* Boidin, Lanq. & Gilles, Cryptog. Mycol. 1: 328, 1980.

**Distribution:** H.P.: Solan, Shimla, Sirmour.

**Substratum:** On decaying stump of *Q. leucotrichophora*, *Cedrus deodara*.

*Vararia vassilievae* Parmasto, Eesti NSV Tead. Akad. Toimet Biol. Sear 14: 231. 1965.

**Distribution:** H.P.: Shimla- Chadwick falls, Mahasu, Khadrala; Kullu- Pulga, Rohtang; Chamba-Dalhousie, Kalatope.

**Substratum:** On stump of *A. pindrow*.

#### Family- Peniophoraceae

*Gloiothele* Bres., Annls mycol. 18 (1/3): 44 (1920)

*Gloiothele citrina* (Pers.) Ginns & G.W. Freeman, Biblthca. Mycol. 157: 55, 1994.-*Thelephora citrine* Pers., Mycol. Eur. 1: 136, 1822.

**Distribution** Kullu- Gojra; Shimla-Manali.

**Substratum:** On decaying stump of *C. deodara*.

*Gloiothele lactescens* (Berk.) Boidin C.R. Acad. Sci. Paris 233: 1668. 1951. = *Thelephora lactescens* Berk., in Smith, Engl. Fl. 5(2) : 169. 1836.

**Distribution:** Chamba-Dalhousie, Dunera; Shimla.

**Substratum:** On stump of *Cedrus deodara*.

*Metulodontia* Parm., Consp. Syst. Cort. p. 117. 1968.

*Metulodontia nivea* (P. Karst.) Parm., Consp. Syst. Cort. : 118. 1968.= *Kneiffia nivea* P. Karst., Hedwigia 35: 173. 1896.

**Distribution:** H.P.: Chamba- Khijjar, Dalhousie, Dainkund; Shimla- Summer hill,Mahasu, Bagi.

**Substratum:** On stump under mixed forest, on stump of *Cedrus deodara*, *Quercus incana*.

*Peniophora* Cooke Grevillea 8: 20, 1879.

*Peniophora aff. pusilla* Jacks., Can. J. Res. 26C: 137. 1948.

**Distribution:** Shimla- Mahasu, Bagi.

**Substratum:** Stumps under a mixed forest.

*Peniophora cinerea* (Pers.) Cooke, Grevillea 8: 20. 1879.= *Corticium cinereum* Pers., Neues Mag. Bot. 1:111,1794.

**Distribution:** Kullu- Jaggar such, Pulga; Chamba-Khijjar; Shimla; Sirmaur.

**Substratum:** Twigs under *Betula utilis*, fallen sticks under mixed forest, burnt angiospermic logs.

*Peniophora fibulifera* Thind& Rattan Mycologia 65: 1253. 1973.

**Distribution:** Shimla- Mahasu, Khadrala.

**Substratum:** On wood of *Cedrus deodara*.

*Peniophora quercina* (Pers. ex Fr.) Cooke, Grev. 8: 20. 1879.

**Distribution:** Kullu- Pulga.

**Substratum:** On bark under a mixed forest.

*Peniophora pithya* (Pers.) J. Erikss. Symb. Bot. Ups. 10 : 45, 1950.=*Thelephora pithya* Pers., Mycol. Eur. 1: 146, 1822.

**Distribution:** H.P.: Chamba; Shimla, Manali.

**Substratum:** On decaying stump of *C. deodara*.

#### Family-Russlaceae

*Boidinia* Stalpers & Hjortstam, Mycotaxon 14: 76, 1982.

*Boidinia furfuraceum* (Bres.) Donk, Fungus 26: 9, 1956.= *Hypochnus furfuraceus* Bres., fungi trid. 2: 97, 1900.

**Distribution:** Sundernagar, Mandi, Bilaspur.

**Substratum:** On decaying angiospermous wood.

**Boidinia lacticolor** (Bres.) Hjortstam & Ryvarden, in Hjortstam, *Mycotaxon* 28(1) : 19, 1987. = *Gloeocystidium lacticolor* Bres., *Hedwigia* 56 (4,5): 303, 1915.

**Distribution:** Manali, reserve forests, Hadimba.  
**Substratum:** Bark & cut stump of *C. deodara*.

#### Family-Stereaceae

**Acanthofungus** Sheng H. Wu, Boidin & C.Y. Chien, *Mycotaxon*, 76:154, 2000.

**Acanthofungus ahmadii** (Boidin) Sheng H. Wu, Boidin & C.Y. Chien, *Mycotaxon* 76: 159 (2000) =*Xylobolus ahmadii*(Boidin) Boidin.

**Distribution:** H.P.: Shimla-Narkanda; Kullu, Manali.  
**Substratum:** On log of *Cedrus deodara*.

**Aleurodiscus** Rabenh. ex Schroet. In Cohn, Krypt.-F1. 3: 429. 1888.

**Aleurodiscus amorphous** (Pers.) Schröt., *Kryptogamenflora der Schweiz* 3 (1) : 429, 1888.-*Peziza amorpha* Pers., *Syn. Meth. Fung.* 2: 657, 1801.

**Distribution:** Manali, Shimla, Kinnaur.  
**Substratum:** On decaying stump of *Cedrus deodara*, decaying wood.

**Aleurodiscus lapponicus** Litsch., *Annls mycol.* 42:11, 1944.

**Distribution:** H.P.: Kinnaur-Sangla, Kuppa.  
**Substratum:** On decaying wood of *Cedrus deodara*.

**Aleurodiscus lividocoeruleus** (P.Karst) P.A. Lemke, *Can. J. Bot.* 42: 253, 1964=*Corticium lividocoeruleum* P. Karst., *Not. Sallsk. Fauna Fl. Fenn. Forh.* 5: 370, 1868.

**Distribution:** H.P.: Manali, Keylong, Shimla.  
**Substratum:** decaying stump, twigs of *Cedrus deodara*.

**Aleurodiscus oakesii** (Berk. & Curt.) Hoehn. & Litsch., *Sitz. Kais. Akad. Wiss. Wien. Math.-Nat. Klasse* 116: 802. 1907.

**Distribution:** Nahan, Manikaran.  
**Substratum:** On twigs under *Quercus incana*.

**Aleurodiscus taxicola** Thind & Rattan *Mycologia* 65: 1255. 1973.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda.  
**Substratum:** On bark of *Taxus baccata*.

**Amylosporomyces** S.S. Rattan *Biblthca Mycol.* 60: 245 (1977). 1977.

**Amylosporomyces echinosporus** S.S. Rattan [as 'echinosporum'], *Biblthca Mycol.* 60: 245 (1977).

**Distribution:** H.P.: Chamba-Dalhousie.  
**Substratum:** On stump under conifers.

**Chaetoderma** Parm., *Consp. Syst. Cort.* p. 86. 1968.

**Chaetoderma luna** (Rom.) Parm., *Consp. Syst. Cort.* p. 86. 1968.= *Peniophora luna* Rom. ex Rog. & Jack., *Farlowia* 1: 320. 1943.

**Distribution:** H.P.: Kullu- Khanag, Naggar, Jaggat sukh, Manali; Chamba- Khijiar,Dalhousie, Kalatope; Shimla-Mahasu, Narkanda, Bagi; Solan.

**Substratum:** On stump under conifers, on stump of *Abies pindrow*.

**Conferticum** Hallenb., *Mycotaxon* 11 (2): 447, 1980.

**Conferticum ochraceum** (Fr.) Hallenb., *Mycotaxon* 11 (2): 448, 1980.= *Thelephora ochracea* Fr., *Observ. Mycol.* 1: 151, 1815.

**Distribution:** H.P.: Solan; Shimla, Manali.  
**Substratum:** On decaying gymnospermous wood.

**Stereum** Hill ex. Pers., *Neues Mag. Bot.* 1:110, 1794.

**Stereum acanthophysatum** Rehill & Bakshi, Ind. For. Bull. 242: 6. 1966.= *Stereum papollatosporum* Rehill & Bakshi, Ind. For. Bull. 242: 11. 1966.

**Distribution:** H.P.: Shimla-Narkanda.  
**Substratum:** On dead stump of *Cedrus deodara*.

**Stereum gausapatum** (Fr.) Fr., *Hym. Eur. P.* 638. 1874.= *Thelephora gauspata* Fr. Elench 1: 171. 1828.

**Distribution:** H.P.: Shimla- The Glen, Jakhu, Chadwick falls, Summer hill, Taradevi; Kullu-Jalori; Chamba- Thali,Dalhousie, Jandrighat, Panjpulla, Lover's walk, Banikhet; Kangra-Dharamsala, Mcleod Ganj; Mandi.  
**Substratum:** On dead stump of *Quercus incana*.

**Stereum hirsutum** (Willd.)Pers., *Observ. Mycol.* 2: 90, 1800.

**Distribution:** H.P.: Shimla-Mahasu, Bagi, Khadrala, Narkanda; Kullu- Bahu, Jalori, Rohtang, Gojra; Chamba-Dalhousie, Jandrighat, Lover's walk, Banikhet,Khijiar.

**Substratum:** twigs, stump of *Quercus incana*, *Cedrus deodara*.

**Stereum ostrea** (Blume & Nees ex Fr.) Fr. Epicr. P. 547. 1838. = *Thelephora ostrea* Blume & Nees ex Fr., Elench 1: 175. 1828. = *Stereum fasciatum* (Schw.) Fr. Epicr. 546. 1838.= *Stereum lobatum* (Kuntz.) Fr., Epicr. 547. 1838.

**Distribution:** H.P.: Chamba-Dalhousie; Shimla-Narkanda, Khadrala.

**Substratum:** On dead stump of *Quercus incana*.

**Stereum rugosum** Pers. ex Fr. Roemer Neus Mag. Bot. 1: 110. 1794. Fries, Epicr. Syst. Mycol. P. 552. 1838.

**Distribution:** H.P.: Shimla-Narkanda.  
**Substratum:** On stump of Oak.

*Stereum sanguinolentum* (Alb. & Schw.) Fr. Epicr. P. 549. 1838.= *Thelephora sanguinolenta* alb. & Schw., Consp. Fung. P. 274-75. 1805.

**Distribution:** H.P.: Chamba-Dalhousie, Krenulu falls, Kalatope, Khijjiar, Sara; Kangara-Dharamsala, Mcleod Ganj; Shimla- Kufri, The Glen.

**Substratum:** dead stump, twigs of *Cedrus deodara*.

*Stereum subtomentosum* Pouzar, Česká Mykol. 18:147, 1964.

**Distribution:** H.P.: Shimla.

**Substratum:** On dead wood of *Cedrus deodar*.

#### Family- Thelephoraceae

*Amaurodon* J. Schröt. Krypt. -Fl. Schlesien 3-1(4):4611888.

*Amaurodon viridis* (Alb. & Schwein.) J. Schröt., in Cohn, Krypt.-Fl. Schlesien (Breslau) 3.1(25-32): 461 (1888) [1889]=*Tomentella chlorina* (Mass.) Cunn. Proc. Linn. Soc. NSW 77: 279. 1953.

**Distribution:** H.P.: Mahasu- Narkanda; Kullu- Soja, Gojra, Jagat sukh, Rohtang; Chamba-Khijjiar, Dalhousie, Kalatope, Manali.

**Substratum:** Wood, stumps and logs of conifers, logs of *Picea smithiana* and *Abies pindrow*, bark and slash of *Abies pindrow*.

*Pseudotomentella* Svrcek Ceska' Mykol. 12(2):67 1958

*Pseudotomentella atrofusca* Larsen, Bull. Torrey Bot. Club 98: 39, 1971.

**Distribution:** Chamba-Banikhet.

**Substratum:** On decaying *Lyonia ovalifolia*.

*Pseudotomentella tristis* (Karst.) Larsen.

**Distribution:** Chamba-Dalhousie, Bilaspur.

**Substratum:** angiospermic stick.

*Pseudotomentella mucidula* (Karst.) Svrček Ceska Mykol. 12: 68. 1958.= *Hypochnus mucidulus* Karst., Bidr. Kann. Finl. Nat. Folk 37:163. 1882.

**Distribution:** H.P.: Shimla-Khadrala.

**Substratum:** On coniferous slash.

*Thelephora* Ehrh. ex Willd. Willdenow C.L. Von Fl. Berol. Prod.:397. 1787.

*Thelephora atra* Weinm., Hym. à Gast. Imp. Ross. Obs. (Petropoli): 636 (1836)=*Tomentella atramentaria* Rostr., Bot. Tidsskr. 19: 41, 1894.

**Distribution:** H.P.: Chamba-Kalatope.

**Substratum:** Decaying gymnospermic stump.

*Tomentella* Pers. ex. Pat. (nom. Cons.) , Hym. Eur. P. 154. 1887.

*Tomentella albomarginata* ( Bourdot & Galzin) M.P. Christ., Mycologia 62: 134, 1960.= *Tomentella spongia* f. *Albomarginata* Bourdot & Galzin, Bull. Trimmest. Soc. Mycol. Fe. 40: 154, 1924.

**Distribution:** H.P.: Shimla-Tara Devi, Manali.

**Substratum:** On fallen gymnospermous stick.

*Tomentella atramentaria* Rostr., Bot. Tidsskr. 19: 41, 1894.

**Distribution:** H.P.: Manali, Manikaran.

**Substratum:** Dead wood twigs.

*Tomentella badia* (Link) Stalpers, Revue Mycol., Paris 39(2): 98 (1975)=*Tomentella fimbriata* Christ. Dansk Bot. Ark. 19: 258. 1960.

**Distribution:** H.P.: Shimla- Narkanda; Kullu; Chamba-Dalhaousie.

**Substratum:** On slash of *Pinus excels*.

*Tomentella bicolor* (G.F. Atk. & Burt) Bourdot & Galz., Bull. trimmest. Soc. Mycol. France 40(1): 132, 1924. =*Hypochnus bicolor* Atk. & Burt., Ann. Missouri, Bot. Gard. 3: 229, 1916.

**Distribution:** H.P.: Chamba- Dalhousie; Keylong.

**Substratum:** On decaying twigs and wood.

*Tomentella botryoides* (Schw.) Bourd. & Galz. Bull. Soc. Mycol. Fr. 40: 159. 1924.

**Distribution:** H.P.: Mahasu- Narkanda, Bagi.

**Substratum:** logs of *Abies pindrow* and bark under conifers.

*Tomentella brevispina* (Bourd. & Galz.) Larsen, Mycologia 62: 136, 1970.= *Tomentella spongiosa*(Schw.: Fr.) Bourd. & Galz. Var. *brevispora* Bourd. & Galz. Soc. Mycol. France 40: 154, 1924.

**Distribution:** H.P.: Ksauli, Shimla- Tara Devi.

**Substratum:** dead twigs.

*Tomentella bryophila* (Pers.) Larsen Mycologia Mem. 4: 51. 1974=*Tomentella pallidofulva* (Peck) Litsch. Ost. Bot. Zeitschr. 88: 131. 1939.

**Distribution:** H.P.: Chamba-Dalhousie, Banikhet; Shimla- Mahasu, Narkanda.

**Substratum:** On leaves of *Quercus incana* and logs under confers.

*Tomentella calcicola* (Bourd. & Galz. ) M.J. Lars., Taxon 16:511, 1967. = *Caldesiella ferruginosa* var. *Calcicola* Bourd. & Galz., Hym. France p. 471.1928.

**Distribution:** H.P.: Shimla- Bagi

**Substratum:** On coniferous slash

**Tomentella clavigera** Litsch. In Svrce Sydowia 14: 192. 1960.

**Distribution:** H.P.: Solan-Mihani.

**Substratum:** On a decayed angiospermic twigs.

**Tomentella coerulea** (Bres.) Hoehn. & Litsch., Wiesner Festschrift(Wein.):77, 1908.

**Distribution:** H.P.: Kullu- Pulga.

**Substratum:** Bark of *Cedrus deodara*.

**Tomentella crinalis** (Fr.) Larsen, Taxon 16: 511. 1967.

**Distribution:** H.P.: Kullu- Pulga, Gojra: Shimla-Mahasu, Narkanda.

**Substratum:** angiospermic wood, decaying angiospermic stumps and stumps under mixed forest.

**Tomentella cinerascens** (Karst.) Hoehn. & Litsch., Sber Akad. Wiss. Wein., Math- naturw. Klasse Abt. 1,15: 1570. 1906.

**Distribution:** H.P.: Shimla- Mahasu, Khadrala.

**Substratum:** Stump of *Abies pindrow*.

**Tomentella ellisiae** (Sacc.) Jülich & Stalpers, Verh. K. ned. Akad. Wet., 2 Sectie 74: 236 (1980)=  
**Tomentella ochracea** (Sacc.) Larsen *Mycologia Mem.* 4: 73. 1974.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda.

**Substratum:** Coniferous log

**Tomentella ferruginella** Bourd. & Galz. *Bull. Soc. Mycol. France* 40: 157. 1924.

**Distribution:** H.P.: Chamba- Dalhousie, Banikhet; Kullu; Shimla.

**Substratum:** leaves of *Quercus incana*.

**Tomentella ferruginea** (Pers.) Pat., *Hyménomyc. Eur.* (Paris): 154,1887.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda; Chamba- Khijiar; Kullu.

**Substratum:** Bark of *Cedrus deodara*, bark under mixed forest and coniferous trees.

**Tomentella galzinii** Bourd., in Bourd. & Galzin, *Bull. Soc. Mycol. France* 40: 143, 1924.

**Distribution:** H.P.: Chamba-Khajiar; Solan.

**Substratum:** Dead wood.

**Tomentella griseoumbrina** Litsch., apud. Land. & Nannf. Fungi Exs. Suec. Fasc. VII & VIII, no. 357, Uppsala 1936.

**Distribution:** H.P.: Mandi, Sundernagar

**Substratum:** twigs and fallen branches.

**Tomentella griseoviolacea** Litsch., *Annls mycol.* 39: 375, 1941.

**Distribution:** H.P.: Solan-Mihani.

**Substratum:** On decaying angiospermic wood.

**Tomentella himalayana** S.S.Rattan, *Bibliotheca Mycologica* 60:54, 1977.

**Distribution:** H.P.: Shimla-Mahasu, Khadrala, Narkanda.

**Substratum:** slash under conifers and slash of *Abies pindrow*.

**Tomentella indica** S.S.Rattan, *Bibliotheca Mycologica* 60:62, 1977.

**Distribution:** H.P.: Kullu- Naggar, Jaggat sukh; Shimla-Mahasu, Bagi, Chamba-Dalhousie, Banikhet, Kalatope.

**Substratum:** Bark of *Abies pindrow* and *Picea smithiana*, leaves of *Quercus incana*, logs under a mixed forest, stumps of *Cedrus deodara*.

**Tomentella kalatopii** Dhingra & Malka 1994.in (eds.) T.A.Sharma, S.S.Saini, M.L. Trivedi & M.Sharma North-West Himalayan Thelephoraceae (Basidiomycetes) Genus *Tomentella* from Dalhousie Hills *Current Researches in Plant Sciences* 43-56.

**Distribution:** H.P.: Chamba- Kalatope, Shimla.

**Substratum:** Decaying gymnospermic stump/twigs.

**Tomentella lapida** (Pers.) Stalpers, [as 'lapidum'], Stud. Mycol. 24: 65 (1984)=*Tomentella ramosissima* (Berk. & Curt.) Wakef., *Mycologia* 52: 927, 1960= *Zygodesmus ramosissimus* Berk. & Curt., *Grevillea* 3: 145, 1875=*Tomentella fuliginea* (Burt) Bourd. & Galz. *Bull. Soc. Mycol. Fr.* 40: 153.1924.

**Distribution:** H.P.: Kullu- Naggar, Jaggat sukh; Shimla-Mahasu, Bagi; Chamba-Dalhousie, Banikhet.

**Substratum:** On bark and logs under mixed forest, On bark of *Abies pindrow* and *Picea smithiana*, On leaves of *Quercus incana*.

**Tomentella lateritia** Pat., Cat. Rais. Pl. Cellul. Tunisie (Paris): 63 (1897).

**Distribution:** H.P.: Chamba, Solan, Shimla

**Substratum:** Gymnospermic twigs.

**Tomentella microspora** (Karst.) Hoehn. & Litsch. Sitzung. Kais. Akad. Wiss. Wein. Math.- Naturw. Klasse 115: 1571. 1906.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda, Tara Devi..

**Substratum:** On bark of conifers.

**Tomentella muricata** (Ell. & Ev.) Wakef., *Mycologia* 52: 924, 1962. = *Zygodesmus muricatus* Ell. & Ev., *Bull. Torrey Bot. Club* 11: 17, 1884.

**Distribution:** H.P.: Manali, Kinnaur.

**Substratum:** Decaying angiospermic log.

**Tomentella olivascens** (Berk. & M.A. Curtis) Bourdot & Galzin, Hyménomyc. de France (Sceaux): 477 (1928)= *Zygodesmus olivascens* Berk. & Curt., Grevillea

**Distribution:** H.P.: Dalhousie-P.U. near Guest House.

**Substratum:** Decaying gymnospermic stump.

**Tomentella pilosa** (Burt) Bourd. & Galz. Bull. Soc. Mycol. Fr. 40: (2): 160 1924.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda, Khadrala; Chamba-Dalhousie, Kalatope; Solan.

**Substratum:** On bark under coniferous forest and bark of *Abies pindrow*.

**Tomentella puberula** Bourd. & Galz., Bull. Soc. Mycol. France 40(2) 150, 1924.

**Distribution:** H.P.: Chamba, Kullu, Manali.

**Substratum:** Decaying gymnospermic stump.

**Tomentella punicea** (Alb. & Schwein.) J. Schröt., in Cohn, Krypt.-Fl. Schlesien (Breslau) 3.1(25-32): 420 (1888).

**Distribution:** H.P.: Dalhousie, Panjpulla.

**Substratum:** stumps/twigs under mixed forest.

**Tomentella pyrolae** (Ellis & Halst.) M. J. Larsen, Tech. Publ. N. Y. St. Univ. Coll. For. 93: 105, 1968.= *Zygodesmus pyrolae* Ellis & Halst., J. Mycol. 6(1); 34, 1890.

**Distribution:** H.P.: Shimla, Manali, Keylong.

**Substratum:** On decaying gymnospermic wood.

**Tomentella radiosa** (P. Karst.) Rick, Brotéria, sér. 3 2: 79 (1934)=*Tomentella cladii* Wakef., Trans. Brit. Mycol. Soc. 53: 179, 1969.

**Distribution:** H.P.: Shimla-Tara Devi.

**Substratum:** Decaying gymnospermic stump.

**Tomentella scobinella** Cunn., Trans. Roy. Soc. New. Zeal. 84: 485, 1957.

**Distribution:** H.P.: Manali, Keylong.

**Substratum:** On angiospermic wood.

**Tomentella stuposa** (Link) Stalpers, Stud. Mycol. 24: 86 (1984)=*Tomentella ruttneri* Litsch. Bull. Soc. Mycol. Fr. 49: 67. 1933. *Tomentella bresadolae* (Brinkm. Bresadola) Bourd. & Galz., Bull. Soc. Mycol. France 40, 155, 1924= *Hypochnus bresadola* Brinkm. In Bresadola, Ann. Mycol. 1, 10, 1903.

**Distribution:** H.P.: Chamba-Dalhousie; Shimla-Mahasu, Narkanda; Nahan, Manali.

**Substratum:** On a decayed angiospermic twigs, On Bark of *Abies pindrow*, On bark and slash of conifers.

**Tomentella subclavigera** Litsch., Bull. Soc. Mycol. France 49: 57, 1933.

**Distribution:** H.P.: Sirmour, Manali.

**Substratum:** Decayed angiospermic twigs.

**Tomentella subcorticoides** S.S. Rattan, Bibltha Mycol. 60: 53 (1977).

**Distribution:** H.P.: Shimla-Mahasu, Narkanda.

**Substratum:** On slash of *Abies pindrow*.

**Tomentella terrestris** (Berk. & Broome) M.J. Larsen, Mycol. Mem. 4: 105, 1974.= *Zygodesmus terrestris* Berk. & Broome, Ann. Mag. Nat. Hist., Ser. 7: 130, 1881.

**Distribution:** H.P.: Solan-Mihani.

**Substratum:** On fallen angiospermous bark.

**Tomentella testaceogilva** Bourdot & Galzin, Bull. Trimmest. Soc. mycol. Fr. 40 (2): 149, 1924.

**Distribution:** H.P.: Solan.

**Substratum:** On bark of *R. arboretum*.

**Tomentella umbrinospora** M.J. Larsen, Adapt. Antarct. Ecosys. 93: 61 (1963)

**Distribution:** H.P.: Shimla-Mahasu, Narkanda.

**Substratum:** logs under a coniferous forest.

**Tomentella unicosa** Dhingra & Malka 1994.

**Distribution:** H.P.: Chamba.

**Substratum:** On gymnospermic stump.

**Tomentella variecolor** Malencon G., Bull. Soc. Bot. France 99: 51, 1992.

**Distribution:** H.P.: Chamba-Dalhousie.

**Substratum:** On decaying gymnospermous wood.

**Tomentella viridis** (Berk.) Cunn., New Zealand Dept. Sci. Ind. Res. Bull. 145: 239. 1963.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda, Hattoo peak, Khadrala; Kullu- Soja, Gojra, Jaggat sukh, Rohtang, Chamba- Dalhousie Kalatope.

**Substratum:** Coniferous stumps, logs and wood, logs of *Picea smithiana* and *Abies pindrow*.

## Order-Trechisporales

### Family-Hydnodontaceae

**Brevicellicium** KH.Larss. & Hjortst., Mycotaxon 7: 117, 1978.

**Brevicellicium olivascens**(Bres.) KH.Larss.& Hjortst., Mycotaxon 7:117, 1978. – *Odontia olivascens* Bres., Fungi Trid. 2, p.36, 1892.

**Distribution:** Kullu, Manikaran.

**Substratum:** On a decaying angiospermic log.

**Fibriellum** J. Erikss. & Ryvarden.The Cort. of N. Eu. 3:373, 1975.

**Fibriellum silvae-ryae** Erikss. & Ryv., Cort. N. Europ III: 375, 1975.

**Distribution:** H.P.: Chamba-Khajjar.

**Substratum:** Mixed forest above forest guest house, *Cedrus* needles and gymnospermic sticks.

**Sistotremastrum** J. Erikss., Symb. bot. upsal. 16(no. 1): 62 (1958).

**Sistotremastrum niveocremeum** (Höhn. & Litsch.) J. Erikss., Symb. bot. upsal. 16(1): 62 (1958).

**Distribution:** H.P.: Kullu; Chamba, Manali.

**Substratum:** On a decaying angiospermic stump.

**Subulicystidium** Parmasto, Consp. Syst. Cort. p. 120.1968.

**Subulicystidium longisporum** (Pat.) Parm., Consp. Syst. Cort. p. 121.1968.= *Hypochnus longisporus* Pat., J. Bot. Paris 8: 221. 1894.

**Distribution:** H.P.: Chamba; Kullu; Shimla; Kinnaur, Keylong.

**Substratum:** On stump of *Cedrus deodar*, *Shorea robusta*.

**Trechispora** Karst., Hedwigia 29: 147. 1890.

**Trechispora alnicola** (Bourd. & Galz.) Liberta, Taxon 15. 318.1966.= *Grandinia alnicola* Bourd. & Galz., Bull. Soc. Mycol. Fr. 30: 254.1914.

**Distribution:** H.P.: Shimla-Mahasu, Narkanda; Chamba; Mandi, Mandi.

**Substratum:** On stump of *Abies pindrow*, *Cedrus deodara*.

**Trechispora candidissima** (Schwein.) Bondartsev & Singer, Annls mycol. 39(1): 48 (1941)=*Poria candidissima* (Schwein.) Cooke 1886.

**Distribution:** H.P.: Shimla, Kullu- Pulga.

**Substratum:** Semi burnt logs of *Pinus excelsa* and gymnospermic stumps.

**Trechispora confine** (Bourd.& Galzin) Liberta, Taxon 15: 318. 1966.

**Distribution:** H.P.: Shimla- Mahasu, Khadrala.

**Substratum:** stump of *Abies pindrow*.

**Trechispora farinacea** (Pers.) Liberta, Taxon 15:318. 1966. = *Hydnum farinaceum* Pers. ex Fr., Syst. Mycol. 1: 419. 1821.

**Distribution:** H.P.: Chamba -Khajjiar; Kullu; Shimla; Solan.

**Substratum:** On coniferous stump.

**Trechispora fastidiosa** (Pers.) Liberta, Taxon 15: 318, 1966. = *Merisma fastidiosum* Pers., Comm. Fung. Clav.: 97, 1797.

**Distribution:** H.P.: Manali, Shimla.

**Substratum:** On log of *C. deodara*.

**Trechispora microspora** (Karst.) Liberta, Taxon 15: 319, 1966.

**Distribution:** H.P.:Chamba- Khijjiar.

**Substratum:** On decaying angiospermic log.

**Trechispora molluscas** (Pers.: Fr.) Liberta, Can. J. Bot. 51: 1878. 1973.= *Polyporus mollusca* Pers.: Fr., Syst. Mycol. 1: 384. 1821.

**Distribution:** H.P.: Kullu.

**Substratum:** On angiospermic stump.

**Trechispora praefocata** (Bourdot & Galzin) Liberta, Taxon 15(8) : 319, 1966.= *Corticium sphaerosporum* subsp. *Praefocatum* Bourdot & Galzin, Hymenomyc. de France: 233, 1928.

**Distribution:** H.P.: Mandi-Sundernagar

**Substratum:** twigs of angiospermous tree.

## RESULTS AND DISCUSSION

Three hundred fifty five species of wood rotting fungi spreading over one hundred thirty three genera and thirty seven families, distributed in different phytogeographical regions of Himachal Pradesh viz.: Chamba, Kangra, Kinnaur, Kullu, Shimla, Solan, Bilaspur and Mandi are listed. These species of fungi belongs to the following families: Amylocorticiaceae, Pterulaceae, Stephanosporaceae, Cyphellaceae, Atheliaceae, Coniophoraceae, Hygrophoropsidaceae, Serpulaceae, Botrybasidiaceae, Ceratobasidiaceae, Clavulinaceae, Hydnaceae, Corticiaceae, Gloeophyllaceae, Lentariaceae, Hymenochaetaceae, Rickenellaceae, Schizophoraceae, Cystostereaceae, Fomitopsidaceae, Ganodermitaceae, Meripileaceae, Phanerochaetaceae, Polyporaceae, Albatrellaceae, Amylostereaceae, Bondarzewiaceae, Echinodontiaceae, Gloeocystidiellaceae, Hericiaceae, Lachnocladiaceae, Peniophoraceae, Russulaceae, Stereaceae, Thelephoraceae, Hydnodontaceae.

The study reveals that Polyporaceae is the largest and most wide spread family in the state with 21 genera and 44 species, followed by Thelephoraceae (4 genera and 46 species), Meruliaceae (15 genera and 40 species), Hymenochaetaceae (10 genera and 28 species), which are the dominant families. *Tomentella* of Thelephoraceae is the largest genus having 41 species.

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