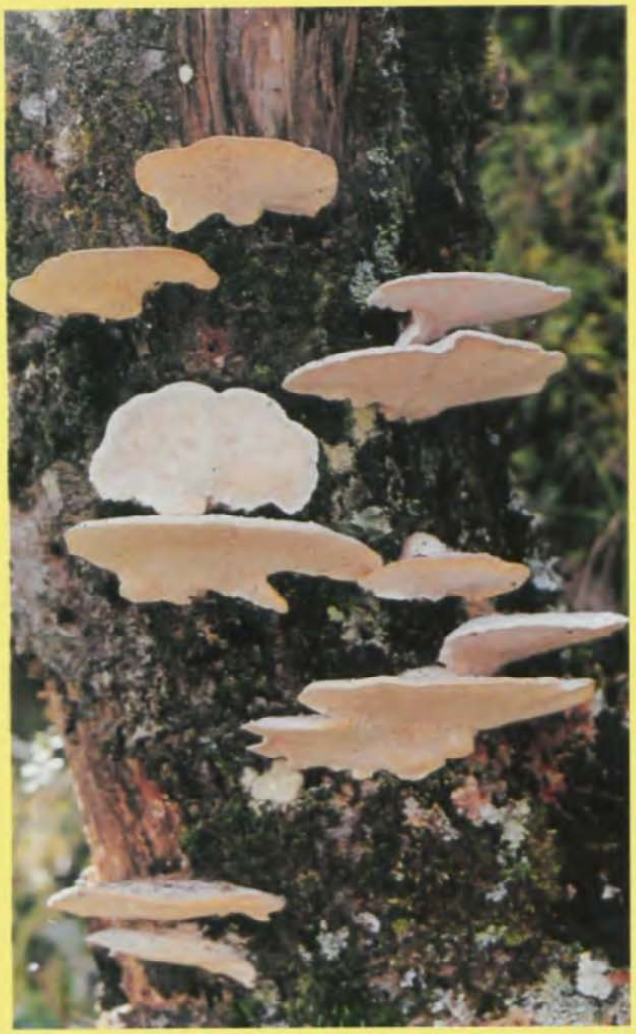
GENERA OF INDIAN POLYPORES



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GENERA OF INDIAN POLYPORES

J.R. SHARMA

भारतीय वनस्पति सर्वेक्षण
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Foreword

After the recent ratification of international agreements and formulations of several national strategies on biodiversity conservation, India has intensified efforts for inventorisation and monitoring of all components of its biological wealth. The Botanical Survey of India being the premier organisation on plants for this purpose, has contributed immensely towards the survey and documentation of Indian flora at local, regional and national levels.

During these studies, lower groups of plants the Cryptogams in general have received less attention. In the recent years, however, efforts have been underway to streamline the studies on various groups, viz. Algae, Bryophytes, Fungi and Lichens. Among the Cryptogams, the fungi with about 14,500 species, constitute a dominant group after the flowering plants. The poroid fungi represent a larger and diverse complex of fungi playing an immensely beneficial role by disposing off the forest slash and litter and recycling the basic elements.

Dr. J.R. Sharma, a scientist of our department has been engaged in studies on this specialised group of plants. In the present publication, he has marshalled hundreds of old and new records of Indian poroid fungi in order, according to the latest taxonomical concepts and as suited to Indian taxa. Taxonomical delimitation of each taxon, as necessitated by world-wide research on poroid fungi, bears a stamp on the sound knowledge of Dr. Sharma attained both in herbaria and extensive field surveys during the past 20 years. I congratulate him for accomplishing such an arduous task.

I hope that the authoritative list will serve as an invaluable work of reference, provide nomenclaturally accurate information and will be welcomed by students, mycologists, agriculturists and foresters alike.

Calcutta

N.P. SINGH
Director

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The present contribution is an outcome of extensive mycological excursions conducted by the author since 1982, to different parts of the country and the taxonomical studies carried on the specimens thus collected as well as those represented in various Indian and foreign herbaria. These studies were initiated in the cryptogamic unit of the Botanical Survey of India at Howrah and were later carried out at the Northern Circle of the Department at Dehra Dun.

The studies have been largely facilitated by the cooperation, I received in various ways from the Mycologists from both within and outside India. I am grateful to Prof. Leif Ryvarden, University of Oslo, Norway; Prof. J.E. Wright and M. Rachenberg, University of Buenos Aires, Buenos Aires, Argentina for their help in the identification of many critical specimens, comments on some of my collections, supply of valuable literature and their authoritative views on the modern concepts of many genera and species, which of course became instrumental in the completion of this work; to Dr. R.L. Gilbertson, University of Arizona, Tucson and Dr. M.J. Larsen, Forest Products Laboratory, Madison for their valuable gifts of authentic specimens and some important publications especially on the genera *Inonotus* and *Phellinus* and to the authorities of the herbaria HCIO, DD, AMH, PAN for facilitating the consultation of specimens and library there. My grateful thanks are also due to all those friends who have been collecting and sending Polyporaceous specimens to me from different parts of the country.

I express my sincere thanks to Dr. N.P. Singh, Director, Botanical Survey of India, the former Directors : Dr. S.K. Jain, F.N.A.; Dr. M.P. Nayar, Dr. B.D. Sharma and Dr. P.K. Hajra for the facilities and the keen interest, they envinced throughout the progress of this work; and to Dr. D.K. Singh, Joint Director, Botanical Survey of India, Northern Circle, Dehra Dun for the encouragement and helpful suggestions.

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Lastly, my most sincere and warmest thanks to my wife for her patience, sacrifices and help in many ways during the course of this work.

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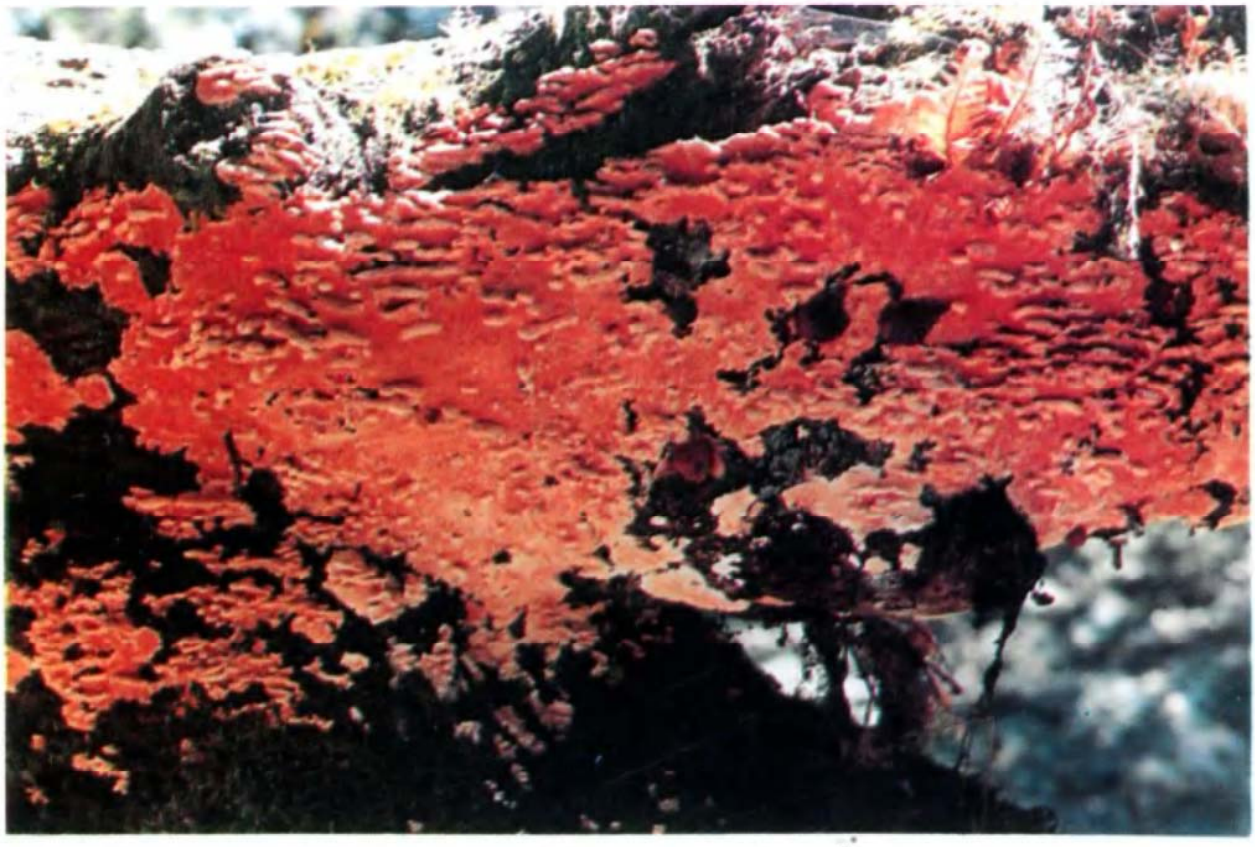

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INTRODUCTION

The Vedas (1,200BC) may contain the earlier records of fungi particularly the diseases and their control but Linnaeus was probably the first to name a mushroom from India in the 18th century. *Hexagonia sinensis* Fr. and *Polyporus wightii* Kl. were probably the earliest records of Polypore fungi by Klotzsch (1832) and Berkeley (1839) respectively from among the collections of Wight. These fungi continued being collected mostly by Naturalists and plant taxonomists studying the Flora and Fauna and were regularly sent to foreign herbaria and experts for identification. An invaluable service was rendered by Klotzsch (1832-33); Berkeley (1839); Montagne (1842, 46); Leveille (1846), Cooke (1881, 1884, 1891); Berkeley (1850-1856); Currey (1874) and Henning (1900, 1901) by identifying a number of Indian Polypores which reached them. Similarly, several more accounts were published by Massee (1901-1910); Sydow *et al.* (1906-29); Lloyd (1910-1925) and Theissen (1911). The number of polyporoid fungi increased further by the studies of Banerjee (1946-47); Bose (1919-1937); Bagchee *et al* (1953-61); Bakshi *et al* (1955-70); Puri (1956); Thind *et al* (1957-1980); Bakshi (1971), Sharma *et al* (1985-1997); Sharma (1995) and several regional reports from different parts of the country. As a result, the polypore fungi (excluding Boletaceae) were recorded under about 800 species from India.

The vast number of species reported from India did not reflect the correct and exact specific composition because some species were reported several times due to either nonavailability of the fresh material or misidentification, while many common ones remained unrecorded. The author's main objective to bring out this publication is to marshall the known/newly recorded species in order as per the latest taxonomical concepts and present more or less the exact specific composition of these fungi in India.

A brief history of classification of pore fungi is followed by a key to the accepted Indian genera for all the fungi reported under polyporaceae

(excepting Boletaceae) from India. The genera with meruloid or folded hymenium (*Merulius, Byssomerulius, Sistotrema* and *Serpula*) have also been keyed out because these genera have invariably been reported under polypores from India by all earlier workers. Each genus is given a short description and is delimited following latest concepts (Ryvarden & Johansen 1980; Ryvarden 1976-78; Gilbertson & Ryvarden 1986-87; Eriksson & Ryvarden 1973, 1975, 1976; Eriksson *et al* 1984; Ryvarden 1991 and Ryvarden & Gilbertson 1993-94 with only slight modification so as to accomodate the Indian material studied in the herbaria and during the extensive field surveys for the past 20 years.

For each genus, a short description of its identifying features is followed by the type species and all accepted species mentioned alphabetically for easy consultation. The correct and accepted name of each species with its date and place of publication is given in **Bold** followed by the basionym. Then all the different names under which the accepted species was reported from India by different workers in the past has/have been given. If there is no report in the past, the author himself has recorded the species from India. The numbers in the brackets after the names correspond to the reference of the work in which the name has appeared.

At the end is given a list of about 40 species which though reported under polypores from India but could not justify their inclusion under the group due to various reasons.

CLASSIFICATION HISTORY

Linnaeus in his "Systema Plantarum" 1753 (presently the starting point for Nomenclature of fungi) listed only one genus i.e. *Boletus* and put all 12 species bearing pores or tubes (Boletaceae and Polyporaceae) under it. Though we refer occasionally to the articles of Bulliard (Herbier de la France, 1780, 1793), Schaeffer (Fung. Bav., 1780) and Sowerby (Eng. Fung. 1797-1809) but Persoon was first who made an attempt worthy of consideration in a series of papers "Observations Mycologicae" (1795-99) leading to his monumental work "Synopsis Methodica Fungorum" in 1801. All the 96 species of poroid fungi in three genera were treated under the class *Gymnocarpii* and order *Hymenothecii.* His work remained the only manual which all mycologists utilized for more than a quarter of century until Fries published his principal works. The work of Albertini and Schweinitz (Conspectus Fungorum, 1805) did not make much change and contributed very little towards the systematic arrangements of polyporaceae. But the beginning of nineteenth century witnessed a growing inclination on the part of mycological systematists towards the need of permanent herbaria, keeping records of all the species described.

The most prominent among the vast array of mycologists in the nineteenth century was Elias Fries. In his monumental work "Systema Mycologicum" in 1821, which also remained as a starting point for the nomenclature of Hymenomycetes until recently, he recognised two of the polypore genera i.e. *Daedalea* and *Polyporus* in addition to *Merulius,Boletus* and *Fistulina.* Genera *Daedalea* and *Polyporus* were divided as :

A. *Daedalea* (Poroid to daedaleoid or lamellate hymenophore)
   - Tribe 1. Stipitatae (with definite stem)
   - Tribe 2. Dimidiatae (laterally or broadly attached)
   - Tribe 3. Resupinatae (resupinate hymenophore)

B. *Polyporus* (Poroid hymenophore)

Subgenus 1. Favolus (large, 4-6 sided pores)

Subgenus 2. Microporus (orbicular and minute pores)

Tribe 1. Mesopus (central stem)

Tribe 2. Pleuropus (lateral stem)

Tribe 3. Merisma (much branched stem)

Tribe 4. Apus (no stem)

Tribe 5. Resupinatus (resupinati)

Subgenus 3. Polysticta (shallow pores)

The total number of species under the family Polyporaceae (except Boletaceae) rose to about 164 and two third of these species were under the single genus *Polyporus*.

The same arrangement was continued in his "Epicrisis Systema Mycologicum" (1836-1838) and genera like *Trametes, Cyclomyces, Hexagonia, Favolus* were carved out from the old genus *Polyporus*. Over 361 species were described under Polyporaceae (excluding *Boletus*), of these 280 were under *Polyporus* alone. Fries in his subsequent works added genera and accepted genera of others and in his last publication "Hymenomycetes Europei" (1874), he recognised eight genera of Polypores *Lenzites, Polyporus, Trametes, Daedalea, Cyclomyces, Hexagonia, Favolus* and *Merulius* and seven more genera in which the hymenium though produced in pore-like structure but were not considered as true Polypores. His system continued to be based on the configuration of hymenophore and the Hymenomycetes were divided as under :

A. Hymeno effugrato

1.	Lamellato (Agaricini)	20 genera
2.	Poroso (Polypori)	10 genera
3.	Aculeato (Hydnei)	11 genera

B. Hymeno laevigato

4.	Horizontali infero (Thelephori)	5 genera
5.	Verticali amphigeneo (Clavariei)	6 genera
6.	Supero gelattinosi (Tremellinei)	8 genera

The whole group which later was recognised as Aphyllophorales contained only 32 genera, while the poroid species were placed under 10 genera only.

The system of Fries was either followed in its entirety or served as a foundation for all other systems of polypore classification that were proposed by others from time to time. But due to piling up of described species and the less usefulness of Friesian system to tropical species, these genera became unwieldy. So there developed a tendency towards breaking up of larger and heterogenous genera into smaller units consisting of closely related individuals and found its best expression in Gillet (1878), Quelet (1886), Karsten (1889) and Murrill (1907).

Quelet (1886) made some superficial changes and it may be pointed out here that some of the genera like *Phellinus* and *Coriolus* established by him because of the close relationships of the species involved, are acknowledged by taxonomists to this day. Peter Karsten was also remarkable and beside the hymenial configuration, such characters as colour and texture of the context, colour of spores, presence or absence of setae, depth and shape of pores were also used for introducing such genera as *Bjerkendera, Antrodia, Ganoderma, Inonotus, Fomitopsis, Pycnoporus* and *Gloeophyllum.* These genera carved out mainly from *Polyporus* and *Fomes* were established so successfully by him that they are still accepted by almost all systematicians in Mycology. Murrill (1907) mainly followed the principles of Karsten and established additional generic units by further fractionation and like Karsten he also attached no significance to histology of the pileus and tubes. Out of 78 genera he recognised, half of them were erected by him.

Patouillard was the earliest of authors who arranged polypores in what may be considered as modern treatment. Publication of his "Essai Taxonomique" in 1901 revolutionized the taxonomy of Hymenomycetes. He based his system on keen observation of microscopical characters and discarded the configuration of hymenophore as the basis of classification of Hymenomycetes, thus breaking with the traditions of the Friesian system. He laid great emphasis on the consistency of fruitbody and microscopic details of hymenophore with special reference to the sterile parts to delimit the taxa. He divided the Basidiomycetes into *Heterobasidies* with secondary spores and the *Homobasidies* without secondary spores and placed the Hymenomycetes under the latter which was further divided as :

A. Tribu des *Clavaries* (with amphigenous hymenium)
   1. Serie des Thelephores 4 genera
   2. Serie des Clavaires 7 genera
   3. Serie des Physalacries 2 genera

B. Tribu des *Porohydnae* (with lateral hymenium)
   a. Sous tribu Cyphelles (hymenophore cupulate)
   b. Sous tribu Odonties (hymenophore even to warted)
   c. Sous tribu Pores (hymenophore poroid)

      1. Groupe les Polypores vrais
         Serie des Polypores 2 genera
         Serie des Leucopores 4 genera
         Serie des Leptopores 4 genera

      2. Groupe les Fomes
         Serie des Trametes 6 genera
         Serie des Igniaires 5 genera
         - Serie des Placodes 3 genera

      3. Groupe les *Merules* 6 genera

4.	Groupe les Fistullines	1 genera
	Serie des Mucronelles	1 genera
	Serie des Hydnes	4 genera
	Serie des Echinodonties	1 genus
	Serie des Phylacteries	5 genera
	Serie des Asterostromes	2 genera

He recognised about 31 genera for the polypores and tried to place many genera into natural groups. His grouping was based on the keen microscopical observations beside hymenial configuration. For example his serie "Trametes" included genera like. *Trametes, Coriolus, Funalia, Hexagonia, Daedalea* with trimitic hyphal system a concept which still is accepted as such (Corner 1989, Ryvarden 1991 and Hibbett and Donoghue 1995). Similarly, in his serie "Igniaires", he included genera with poroid and nonporoid hymenophore which itself was a radical step in the time when hymenial configuration was the main basis for separating genera. This serie included both poroid genera (*Phellinus, Inonotus, Cyclomyces, Coltricia* and *Xanthochrous*) and the nonporoid genera (*Asterodon, Hymenochaete* and *Hydnochaete*). This concept is almost identical with the taxonomical concept of Hymenochaetaceae (Donk 1964, 1971).

Among the most prominent of the followers of Patouillard's classification were Bourdot and Galzin in their fundamental work "Hymenomycetes of France" in 1928. They not only adopted the classification but also introduced several essential corrections in Patouillard's system on the basis of microscopical examination of their own material. Of primary importance was the fact that they broke the tradition introduced at the time of Persoon, of referring all resupinate forms of Polyporaceae to the genus *Poria,* and transferred the "fuscous coloured" species to the genera *Phellinus* and *Xanthochrous,* thus fixing for them a natural place in the classification. While many authors like Konrad and Moublanc (1924-1935), Pilat (1936-1942) occasionally introducing certain corrections and improvements, adhered to

the classification of Bourdot & Galzin but a few like Rea (1922) and Ames (1913) adopted only individual elements of the system.

The Patouillard's system could not be challenged even by the detailed studies of microscopic structures by corner (1932a & 1932b) which provided a valuable aid to classification by way of hyphal series and hyphal systems in different species. These findings, though overemphasized by Cunningham (1947, 1954) and Pinto-Lopes (1952) but assisted the future workers to implement delimitation of genera and species by use of microscopic studies and indicate precisely their natural relationships.

In the meantime some authors (Lowe 1957, 1963, 1966, 1975; Overholts 1953) showed not much inclination towards the new systems and followed the simple and inpractice Friesian classification while others (Bondartsev & Singer 1941, 1943; Imazeki 1943; Bondartsev 1953; Kotlaba & Pouzar 1957; Cunningham 1965) felt the necessity of new generic names for their new categories.

In his classification Donk (1933) followed the principles introduced by Karsten and Patouillard and thoroughly revised and supplemented it with details of microscopic examinations. It needs to be emphasized that he successfully established generic units like *Bjerkendera, Piptoporus, Boletopsis, Ischnoderma, Oxyporus*, etc. on really distinct characteristics and comprising of closely related species. Donk made invaluable contributions because of thorough elaboration of diagnosis for each species, the detailed synonymy, and numerous critical annotations of the systems proposed.

Donk further initiated a revision of this troublesome group through a series of taxonomical-nomenclatural studies and proposed a number of new or emended taxa and was the first to introduce the family concept in his definition of Aphyllophorales. In persuit of the modern concepts, he

employed 21 families in his "Conspectus of the families of Aphyllophorales", and placed the poroid genera in the following 10 families (Donk 1964).

Bondarzewiaceae
Coniophoraceae
Corticiaceae
Echinodontiaceae
Fistulinaceae
Ganodermataceae
Hericiaceae
Hymenochaetaceae
Polyporaceae
Thelephoraceae

Though many of them are based on macromorphology but are well supported by chemistry and microstructures. With the addition of some more characters like chemistry and type of rot to the circumscription, his classification has been widely accepted (Ainsworth *et al.* 1973) and followed in all modern polypore floras (Domanski 1972; Domanski *et al.* 1973; Ryvarden 1976-78; Ryvarden & Johansen 1980; Gilbertson & Ryvarden (1986-87); Ryvarden & Gilbertson 1993-94; Corner 1983-1989b; Larsen & Cobb-poulle 1990 and Bernicchia 1991). Kreisel (1969) proposed a different family classification in which he segregated all the genera close to *Polyporus* into a different order polyporales leaving other polypores in the Poriales which corresponds to Aphyllophorales as used by Donk. Julich (1981) has proposed a much more detailed classification with some fundamental changes in raising families to orders and genera to families without new observations being used. The poroid representatives distributed in 10 families by Donk were placed into following orders and families by him.

Order	Total No. of families	Families with Poroid genera
Cantharellales	15	Scutigeraceae

Order	Total No. of families	Families with Poroid genera
Bondarzewiales	3	Bondarzewiaceae
Thelephorales	5	Boletopsidaceae
Polyporales	13	Microporaceae, Polyporaceae, Echinodontiaceae, Mycoboniaceae, Grammothelaceae, Laetiporaceae, Piptoporaceae, Cryptoporaceae, Podoscyphaceae, Dicanthodaceae, Lentinaceae, Pleurotaceae.
Coriales	3	Coriolaceae Incrustoporaceae. Sparsitubaceae.
Fomitopsidales	8	Fomitaceae, Ischnodermataceae, Laricifomitaceae, Heterobasidiaceae, Hapaloporaceae, Daedaleaceae, Fomitopsidaceae, Gloeophyllaceae
Perenniporiales	2	Pachykytosporaceae, Perenniporiaceae
Ganodermatales	2	Ganodermataceae, Haddowiaceae
Hericiales	6	Wrightoporiaceae

His classification has been severely criticised by Redhead & Ginns (1983), David & Rachenberg (1987) and Nuss (1983) for many inconsistencies and guesses. Recently, Hibbett & Vilgalys (1993) & Hibbett & Donoghue (1995) have employed methods for sequencing ribosomal DNA with a hope to understand the evolutionary principles among the polypores and then to construct a more natural classification.

The genera recognised for India are placed and classified into different families as under :

Class :	*Heterobasidiomycetes :*	
	Family *Tremellaceae* Fr. (cruciate basidia)	*Aporpium*
Class :	*Homobasidiomycetes :*	
1.	Family : *Albatrellaceae* Nuss : (inflated generative hyphae: mycorrhizic)	*Albatrellus*
2.	Family : *Bondarzewiaceae* Kotl. & Pouz.: (coarsely ornamented, amyloid spores)	*Bondarzewia*
3.	Family : *Coniophoraceae* Ulbrich : (spores thick walled, yellowish brown, dextrinoid and cyanophilous with a germpore; strong brown rot)	*Serputa*
4.	Family : *Corticiaceae* Herter : (basidiocarps resupinate, soft, pelliculose, ceraceous to membranous, hyphae monomitic & clamped).	*Gloeoporus, Byssomerulius Pseudomerulius, Merulius Schizopora, Sistotrema, Trechispora*
5.	Family : *Fistulinaceae* Maire : (hymenophorae with numerous individual tubes)	*Fistulina*
6.	Family : *Ganodermataceae* (Donk) Donk : (double walled spores with ornamented endospore)	*Ganoderma Amauroderma*
7.	Family : *Hericiaceae* Donk : (gloeocystidia or gloeoplerous hyphae present, amyloid ornamented or smooth spores)	*Amylosporus Wrightoporia*
8.	Family : *Hymenochaetaceae* Donk :	*Aurificaria, Coltricia*

	(Basidiocarps brown reacting black with KOH, generative hyphae septate, white rot)	*Cyclomyces, Inonotus Phellinus, Phylloporia Pyrrhoderma*
9.	Family : *Thelephoraceae* Chevall : (Basidiocarps dark greenish with KOH, spores pigmented, ornamental)	*Boletopsis*
10.	Family : *Polyporaceae* Corda : (Basidiocarps light to bright coloured, not blackening in KOH; hyphae monomitic to trimitic; generative hyphae both clamped and septate; setal elements always absent).	63 genera

This family which represents the true Polypores can be further divided into following clusters of genera :

1. Generative hyphae clamped 2
1. Generative hyphae septate 10

2. Binding hyphae Bovista type .... *Dichomitus, Lignosus, Polyporus, Pseudofavolus*
2. Binding hyphae if present tortuous type 3

3. Causing brown rot ..... *Antrodia, Gloeophyllum, Daedalea, Oligoporus, Fomitopsis, Piptoporus*
3. Causing white rot 4

4. Hyphae monomitic ..... *Abortiporus, Bjerkendera, Ceriporiopsis, Climacocystis, Grifolia, Hapalopilus, Ischnoderma, Microporellus, Spongipellis Tyromyces*
4. Hyphae di-trimitic 5

5. Spores truncate, thick-walled .... *Perenniporia, Pyrofomes, Loweporus*
5. Spores cylindrical, thin-walled 6

6. Skeletal hyphae deeply coloured ..... *Nigrofomes, Nigroporus*
6. Skeletal hyphae not coloured 7

7. Spores less than 5 µm long ..... *Antrodiella, Diplomitoporus, Flavodon, Irpex, Junghunia, Piloporia, Skeletocutis, Incrustoporia, Tinctoporellus*
7. Spores usually more than 6 µm long 8

8. Pilear surface with hard crust ..... *Fomes*
8. Pilear surface not crusty 9

9. Pores angular and shallow, fertile at the bases, dendrohyphidia present ..... *Grammothele, Theleporus, Pachykytospora*
9. Pores not shallow, not fertile at base, dendrohyphidia absent..... .....*Cerrena,Coriolopsis, Daedaleopsis, Datronia, Earliella, Hexagonia, Lenzites, Megasporoporia, Microporus, Trametes, Trichaptum, Pycnoporus, Navisporus, Funalia*

10. Causing brown rot ..... *Laetiporus, Phaeolus, Wolfiporia, Pycnoporellus*
10. Causing white rot ..... *Ceriporia, Heterobasidion, Meripilus, Oxyporus, Rigidoporus, Physisporinus, Favolus*

KEY TO THE INDIAN GENERA

A total of over 350 genera have been assigned to the poroid fungi (Excepting Boletaceae) till date (Murrill 1903; Clements & Shear 1931; Cooke 1940, 1953, 1959; Donk 1974 and Ryvarden 1991). Out of them, one-third are accepted the world over, while the remaining ones are rejected due to various nomenclatural compulsions. In this manual, only 87 genera are accepted for Indian poroid fungi including genera with meruloid hymenophore and are keyed as below :

1. Spores double-walled; endospore verrucose and coloured, exospore smooth, hyaline: hyphal system trimitic 2
1. Spores with simple walls; hyphal system monomitic to trimitic 3

2. Basidiocarps sessile to stipitate; spores truncate ..... **Ganoderma**
2. Basidiocarps stipitate; spores ovoid to globose ..... **Amauroderma**

3. Basidiocarps brown to dark coloured: permanently darkening in KOH; hyphae coloured; clamp connections absent; setae present or absent 4
3. Basidiocarps white, light to bright coloured; if brown then not permanently darkening in KOH; hyphae hyaline or coloured; clamp connections present or absent; setae absent 12

4. Gloeocystidia present; causing a brown rot ..... **Phaeolus**
4. Gloeocystidia absent; causing a white rot 5

5. Basidiocarps laterally or centrally stipitate 6
5. Basidiocarps resupinate to pileate, sometimes with a lateral tapering base, if centrally stipitate then hymenophore concentrically lamellate 8

6. Basidiocarps more or less with a central stipe; pilear surface velutinate to adpressed tomentose; normally on ground, rarely on grasses ..... **Coltricia**

6. Basidiocarps with a lateral tapering stipe; pilear surface glabrous with a distinct brown to black crust; on dead/living hardwoods.....7

7. Spores rare, hyaline, globose, up to 10 µm in diameter, unchanging in KOH; a rare temperate genus growing on living Oaks ..... **Pyrrhoderma**

7. Spores abundant, golden brown, subglobose to ellipsoid, up to 7 µm in longest dimensions, olivaceous brown in KOH; a common tropical genus growing on dead/living hardwoods ..... **Aurificaria**

8. Hyphal system dimitic with skeletal hyphae; generative hyphae delicate, thin-walled, narrow, septate, hyaline; basidiocarps mostly woody hard; perennial ..... **Phellinus**

8. Hyphal system monomitic; generative hyphae thin to thick-walled with conspicuous septa, narrow to wide, pale brown; basidiocarps thin, flexible, more brittle and fragile when dry; annual 9

9. Context duplex, a black zone separating the upper loose part from the denser lower part 10

9. Context homogenous, black zone absent 11

10. Basidiocarps applanate, up to 3 mm thick; hymenophore poroid to concentrically lamellate; hymenial setae present or absent; on dead-woods ..... **Cyclomyces**

10. Basidiocarps ungulate to convex, up to 20 mm thick; hymenophore poroid; hymenial setae absent; on thin branches of living trees ..... **Phylloporia**

11. Pilear surface glabrous, with a distinct crust; hymenial setae/setal hyphae absent; spores olivaceous brown in KOH; tropical genus ..... **Aurificaria**
11. Pilear surface glabrous, tomentose to hirsute, normally without a crust; hymenial setae/setal hyphae present or absent; spores rusty brown in KOH; temperate genus ..... **Inonotus**

12. Hymenial tubes separated from each other, arising independently ..... **Fistulina**
12. Hymenial tubes fused all their length, not arising independently 13

13. Basidiocarps stipitate or substipitate 14
13. Basidiocarps resupinate, effused-reflexed, sessile to very rarely with a narrow base 25

14. Spores ornamented 15
14. Spores smooth 17

15. Spores negative in Melzer's, angular; basidiocarps greyish to orange; generative hyphae simple septate ..... **Boletopsis**
15. Spores amyloid or dextrinoid, crested or asperulate; basidiocarps whitish to brownish; generative hyphae septate or clamped or both 16

16. Spores coarsely crested, up to 8 µm in diameter; generative hyphae with simple septa; parasitic on tree roots; temperate genus ..... **Bondarzewia**
16. Spores finely asperulate, up to 5.5 µm in diameter; generative hyphae both with septa and single or multiple clamps; on ground; tropical genus ..... **Amylosporus**

17. Basidiocarps multipileate (many pilei from a common base) 18
17. Basidiocarps unipileate 19

18. Hyphal system monomitic; generative hyphae simple septate ..... **Meripilus**
18. Hyphal system dimitic; generative hyphae with clamps ..... **Grifola**

19. Basidiocarps arising from an underground sclerotium ..... **Lignosus**
19. Basidiocarps mostly on deadwood/living trees 20

20. Hyphal system monomitic 21
20. Hyphal system di-trimitic 22

21. Context fibrous, duplex; generative hyphae thick-walled, gloeocystidia present ..... **Abortiporus**
21. Context fleshy, homogeneous; generative hyphae thin-walled, inflated; gloeocystidia absent ..... **Albatrellus**

22. Basidiocarps sappy, orange to yellow when fresh, paler and cheesy when dry; hyphal system dimitic with binding hyphae; causing brown-rot ..... **Laetiporus**
22. Basidiocarps differently coloured, tough when fresh, hard brittle on drying; hyphal system di-trimitic 23

23. Dendroid binding hyphae present and dominating; spores cylindrical; pilear surface glabrous to squamulose .....**Polyporus**
23. Dendroid binding hyphae absent; spores allantoid to ellipsoid; skeletal hyphae dominating 24

24. Hyphae trimitic; coralloid elements present along the dissepiments; spores allantoid .....**Microporus**
24. Hyphae dimitic with skeletals; coralloid elements absent; spores globose to subglobose .....**Microporellus**

25. Hymenophore hydnoid, lamellate, daedaleoid to sinuous 26
25. Hymenophore poroid 36

26. Generative hyphae simple septate 27
26. Generative hyphae with clamps 28

27. Basidiocarps white to cream, unchanging in KOH; temperate genus ..... **Irpex**
27. Basidiocarps yellow to cinnamon yellow; changing to dark red or reddish brown in KOH; tropical genus ..... **Flavodon**

28. Hyphal system monomitic; spores globose and cyanophilous .... **Spongipellis**
28. Hyphal system di-trimitic; spores ellipsoid to cylindrical, non-cyanophilous 29

29. Context distinctly duplex, distinct black line between upper loose tomentum and lower dense context proper 30
29. Context homogeneous, black line absent 31

30. Basidiocarps greyish to white; pore surface light violet when fresh, fading to pale brown on drying; apically encrusted cystidia present in the hymenium ..... **Trichaptum**
30 Basidiocarps light brown to brown orange or blackish; pore surface white to tan without violet tinge; cystidia absent ..... **Cerrena**

31. Basidiocarps resupinate; skeletal hyphae often ending in swollen and rounded ends; spores broadly ellipsoid ..... **Schizopora**
31. Basidiocarps pileate, ends of skeletal hyphae not capitate; spores cylindrical 32

32. Context rusty to dark umber brown; cystidia with apical crown of crystals often present ..... **Gloeophyllum**

32. Context white, wood coloured to brown; cystidia absent..... 33

33. Basidiocarps woody, single to imbricate and often large, brown to tobacco-coloured or dark reddish brown; context brown 34
33. Basidiocarps tough, coriaceous, mostly imbricate and small, light to woody brown; context white to pale brown 35

34. Pileus semiglossy to smooth, zonate; hymenophore daedaleoid to lamellate; spores up to 13 µm long ..... **Daedaleopsis**
34. Pileus dull, finely velutinate tufted, azonate; hymenophore daedaleoid to sinuous; spores up to 7 µm long ..... **Daedalea**

35. Hymenophore daedaleoid to lamellate; binding hyphae branched with sword-like parallel side branches; dark red to blackish cuticle from base absent ..... **Lenzites**
35. Hymenophore sinuous to daedaleoid; binding hyphae without sword-like side branches; dark red to blackish cuticle spreading from base ..... **Earliella**

36. Spores ornamented 37
36. Spores smooth 41

37. Basidiocarps resupinate 38
37. Basidicarps effused-reflexed to pileate 40

38. Spores ovoid to subglobose, asperulate, less than 6 µm in longest dimensions 39
38. Spores oblong-ellipsoid, longitudinally striate, longer than 12 µm ....**Pachykytospora**

39. Hyphal system dimitic; generative hyphae uniform in diameter; skeletal hyphae dextrinoid; spores amyloid; basidiocarps soft and tough ..... **Wrightoporia**

39. Hyphal system monomitic; generative hyphae mostly ampulliform at septa; hyphae and spores -ve in Melzer's; basidiocarps soft and fragile ..... **Trechispora**

40. Basidiocarps tough, coriaceous, sessile, broadly attached, with a thin cuticle on pilear surface; gloeoplerous hyphae absent; generative hyphae septate; skeletal hyphae dextrinoid; on woods ..... **Heterobasidion**

40. Basidiocarps fleshy when fresh; brittle on drying; centrally stipitate; without a cuticle; gloeoplerous hyphae present; generative hyphae with both septa and clamps; skeletal hyphae-ve in Melzer's; on ground ..... **Amylosporus**

41. Generative hyphae simple septate 42

41. Generative hyphae with clamps 51

42. Basidiocarps sulphur yellow or orange to purplish black 43

42. Basidiocarps white, light or greyish to light yellowish brown 44

43. Basidiocarps soft, ceraceous, bright yellow to avellaceous; cystidia absent ..... **Laetiporus**

43. Basidiocarps woody hard, purplish black; thick-walled ventricose cystidia present ..... **Nigrofomes**

44. Cystidia present 45

44. Cystidia absent 47

45. Basidiocarps pileate, pale orange to rusty brown; context duplex; spores cylindrical to oblong-ellipsoid; causing a brown rot ..... **Pycnoporellus**

45. Basidiocarps resupinate to pileate, whitish to yellowish brown or pinkish brown; context homogeneous; spores subglobose to ellipsoid; causing a white rot 46

46. Pore surface white to yellowish brown; basidiocarps soft and fragile; clavate-mamillate cystidia absent ..... **Oxyporus**
46. Pore surface pinkish orange to pinkish or reddish brown; basidiocarps woody hard; clavate-mamillate cystidia present ..... **Rigidoporus**

47. Basidiocarps resupinate 48
47. Basidiocarps effused-reflexed to pileate 50

48. Hyphal system dimitic; generative hyphae inflated, up to 20 µm wide; spores subglobose to broadly ellipsoid; causing brown rot ..... **Wolfiporia**
48. Hyphal system monomitic; generative hyphae not inflated, up to 6 µm wide; spores subglobose to cylindrical; causing white rot 49

49. Basidiocarps white to cream or pink, changing to reddish black on drying/bruising; spores globose to subglobose ..... **Physisporinus**
49. Basidiocarps white to cream, not changing on drying/bruising; spores broadly ellipsoid to cylindrical-allantoid ..... **Ceriporia**

50. Basidiocarps spathulate to dimidiate with contracted base; pore surface white to pale brown; pores radially elongated; tube layer not gelatinized; spores cylindrical, up to 12 µm long ..... **Favolus**
50. Basidiocarps broadly attached; pore surface pinkish brown; tubes becoming gelatinous hard and brittle; spores allantoid, up to 6 µm long .... **Gloeoporus**

51. Tubes and context cinnabar red, brown, orange, vinaceous brown to violet 52

51. Tubes and context white, pale yellow to light yellowish brown 64

52. Tubes and context orange or brick red to cinnabar red 53
52. Tubes and context vinaceous brown, blackish or violet to purplish black 56

53. Basidiocarps perennial, ungulate; context brick red; spores thick walled, truncate ..... **Pyrofomes**
53. Basidiocarps annual, dimidiate to broadly attached; context cinnabar red to orange brown; spores thin walled, cylindrical to broadly ellipsoid 54

54. Basidiocarps fleshy, sappy; hyphal system monomitic ....**Hapalopilus**
54. Basidiocarps tough to hard; hyphal system di-trimitic 55

55. Spores less than 1 µm wide; basidiocarps reddish brown, adpressed tomentose; hyphal system dimitic; skeletal hyphae finely encrusted ..... **Piloporia**
55. Spores more than 2 µm wide; basidiocarps cinnabar red, glabrous; hyphal system trimitic; skeletal hyphae not encrusted ..... **Pycnoporus**

56. Pore surface and context vinaceous brown to purplish black.... ..... **Nigroporus**
56. Pore surface pinkish white to brown and context brown 57

57. Basidiocarps fleshy and sappy when fresh; hyphal system mono/dimitic 58
57. Basidiocarps tough and hard; hyphal system di-trimitic 59

58. Basidiocarps cinnamon brown; crimson red in KOH; pore surface pinkish brown, unchanging on bruising ..... **Hapalopilus**

58. Basidiocarps brown to black with a resinous, wrinkled crust; pore surface pinkish white, darkening on touching; unchanged in KOH ..... **Ischnoderma**

59. Skeletal hyphae strongly dextrinoid; spores navicular or ellipsoid, thick walled 60

59. Skeletal hyphae non-dextrinoid; spores cylindrical, thin-walled 61

60. Basidiocarps tough and dense; spores globose to ellipsoid to truncate, up to 6 µm long ..... **Loweporus**

60. Basidiocarps soft, flexible; spores navicular or boat shaped, longer than 8 µm ..... **Navisporus**

61. Basidiocarps perennial; applanate to ungulate, hard, glabrous with a thick greyish to brown crust; granular core present at the base of context ..... **Fomes**

61. Basidiocarps annual, effused-reflexed to sessile, applanate, without a crust; granular core absent at the base 62

62. Context dark umber brown or tobacco brown; black line present below the persistent tomentum; basidiocarps effused-reflexed; pores circular to deadaleoid; hyphae dimitic with skeletals ..... **Datronia**

62. Context light or medium brown; black line absent; basidiocarps pileate, broadly attached; pores circular to angular; hyphal system trimitic 63

63. Pileus glabrous, velutinate or with forked strigose hairs; pores larger, usually larger than 1-3 per mm; spores longer than 12 µm ..... **Hexagonia**

63. Pileus velutinate to hirsute; pores usuallly not larger than 2-4 per mm; spores normally shorter than 12 µm ..... **Coriolopsis**

64. Hyphal system monomitic 65
64. Hyphal system di/trimitic 79

65. Hymenophore shallow, reticulate; alveolar-poroid to poroid; hymenium extending over the edge of pores 66
65. Hymenophore poroid with well developed pore layer; hymenium absent over the edge of pores 71

66. Basidia urniform with 4-8 sterigmata; hyphae with numerous oil drops .... **Sistotrema**
66. Basidia clavate with 4-sterigmata; hyphae without oil drops 67

67. Pore surface deep reddish brown; tube layer gelatinized becoming brownish and resinous hard ..... **Gloeoporus**
67. Not as above 68

68. Spore print brown; hymenophore yellow, ferruginous to dark rusty brown; on coniferous woods 69
68. Spore print white; hymenophore white, pinkish brown to dark flesh coloured; on coniferous and hardwoods 70

69. Hymenophore yellowish-orange to cinnamon brown; folds like lamellae; spores pale brown, strongly dextrinoid ..... **Pseudomerulius**
69. Hymenophore yellowish to dark rusty brown; folds not like lamellae; spores brown, nondextrinoid ..... **Serpula**

70. Hyphae with clamps; spores allantoid to cylindrical ..... **Merulius**
70. Hyphae with septa; spores broadly ellipsoid to subcylindrical... ..... **Byssomerulius**

71. Cystidia present 72
71. Cystidia absent 73

72. Basidiocarps large and sappy; upper surface hirsute; cystidia clavate-fusiform, abundant; spores broadly ellipsoid; causing a white rot ..... **Climacocystis**
72. Basidiocarps small, resupinate to pileate, tough to soft; pileus if present velutinate; cystidia ventricose to clavate; spores allantoid to cylindrical; causing a brown rot ..... **Oligoporus**

73. Basidiocarps resupinate 74
73. Basidiocarps effused-reflexed to pileate 75

74. Spores globose to subglobose; causing a white rot ..... **Ceriporiopsis**
74. Spores allantoid, short cylindrical to broadly ellipsoid; causing a brown rot ..... **Oligoporus**

75. Spores drop-shaped to globose, thick-walled and cyanophilous ..... **Spongipellis**
75. Spores differently shaped, thin-walled and noncyanophilous 76

76. Pileus dark brown to black, with a wrinkled resinous hard, crusty surface ..... **Ischnoderma**
76. Pileus white to greyish or light coloured, never wrinkled and crusty surfaced 77

77. Hymenophore dark grey; context white, black line in section ..... **Bjerkendera**
77. Hymenophore and context of same colour; context homo-geneous, without any black zone 78

78. Basidiocarps resupinate to effused-reflexed; hyphae always monomitic with thin walls; causing a brown rot ..... **Oligoporus**
78. Basidiocarps distinctly pileate; hyphae monomitic with some thick-walled hyphae; causing a white rot ..... **Tyromyces**

79. Dendroid binding hyphae present; skeletal hyphae absent 80
79. Dendroid binding hyphae absent; skeletal hyphae present 83

80. Basidiocarps resupinate ..... **Dichomitus**
80. Basidiocarps pileate, stipitate or with a contracted base 81

81. Context less than 1 mm thick; tubes shallow, pilear surface tessulate; dendrohyphidia present; binding hyphae dextrinoid; spores 15-20 µm long ..... **Pseudofavolus**

81. Context 1-10 mm thick; tubes not shallow, pilear surface smooth; dendrohyphidia absent; binding hyphae non-dextrinoid; spores usually shorter than 12 µm 82

82. Basidiocarps centrally or laterally stipitate; context coriaceous tough to dense and hard when dry; surface tomentum not forming a papery pellicle; cosmopolitan genus; on a variety of hosts .... **Polyporus**
82. Basidiocarps dimidiate, with or without a contracted base; context firmer and cheese like; surface tomentum weathers away to produce paper-like pellicle; temperate genus; only on *Betula* ..... **Piptoporus**

83. Cystidia present 84
83. Cystidia absent 85

84. Basidiocarps pileate; pore surface with violet to purplish shades; spores longer than 7 µm; cystidia with apical encrustations ..... **Trichaptum**

84. Basidiocarps resupinate; pore surface pinkish to yellowish or pale straw coloured; spores less than 5 µm; cystidia heavily encrusted ..... **Junghunia**

85. Spores and/or hyphae amyloid or dextrinoid in Melzer's reagent 86
85. Spores and/or hyphae nonamyloid and non dextrinoid in Melzer's reagent 96

86. Spores amyloid 87
86. Spores non-amyloid 89

87. Spores with irregular crests ..... **Bondarzewia**
87. Spores finely asperulate 88

88. Basidiocarps pileate, stipitate; skeletal hyphae non-dextrinoid; on ground; tropical genus ..... **Amylosporus**
88. Basidiocarps resupinate; skeletal hyphae dextrinoid; on woods; temperate genus ..... **Wrightoporia**

89. Spores navicular or boat-shaped ..... **Navisporus**
89. Spores not navicular or boat-shaped 90

90. Pores shallow; dendrohyphidia present along the dissepiments; hymenium lining the bottom of the tube walls 91
90. Pores not shallow; dendrohyphidia absent, hymenium restricted to the tube walls 92

91. Basidiocarps resupinate ..... **Grammothele**
91. Basidiocarps pileate ..... **Pseudofavolus**

92. Spores thick-walled, truncate 93
92. Spores thin-walled, cylindrical 95

93. Basidiocarps reddish or brick-red in colour; skeletal hyphae pale orange to dark red ..... **Pyrofomes**
93. Basidiocarps in shade of brown or white or light coloured; skeletal hyphae hyaline to pale brown 94

94. Skeletal hyphae hyaline; spores hyaline ..... **Perenniporia**
94. Skeletal hyphae and spores pale brown ..... **Loweporus**

95. Spores longer than 12 µm; skeletal hyphae strongly dextrinoid; tropical genus ..... **Megasporoporia**
95. Spores shorter than 10 µm; skeletal hyphae weakly amyloid; temperate-boreal genus 96

96. Skeletal hyphae in the dissepiments finely encrusted; .... **Skeletocutis**
96. Skeletal hyphae in the dissepiments not encrusted 97

97. Basidia cruciate with longitudinal walls; pores hexagonal; about 1 mm wide; spores with oil drops ..... **Aporpium**
97. Basidia clavate and without septa; pores not hexagonal, less than 1 mm wide; spores without oil drops 98

98. Basidiocarps resupinate; pores shallow; hymenium lining the bottom of tubes; pores usually with central papillae; dendrohyphidia present in the dissepiments ..... **Theleporus**
98. Basidiocarps pileate to resupinate; pores not shallow and without hymenium at the bottom; without central papillae and dendrohyphidia 99

99. Pore surface grey; substrate below fruiting bodies with distinct red-zones..... **Tinctoporellus**

99. Pore surface whitish, cream to light brown; substrate never with distinct red zones 100

100. Hyphal system dimitic 101

100. Hyphal system trimitic 106

101. Generative hyphae dominating; skeletal hyphae absent 102

101. Skeletal hyphae dominating 103

102. Basidiocarps pileate; capitate hyphal ends absent; generative hyphae branching at broad angles ..... **Tyromyces**

102. Basidiocarps resupinate; capitate hyphal ends present; generative hyphae branching at acute angles ..... **Schizopora**

103. Causing a brown-rot; spores usually longer than 7 µm ..... **Antrodia**

103. Causing a white-rot; spores usually shorter than 6 µm 104

104. Skeletal and generative hyphae encrusted near the pore mouths ..... **Incrustoporia**

104. Hyphae not incrusted, smooth 105

105. Basidiocarps resupinate to pileate; often semitranslucent when fresh becoming dense and semiresinous on drying, pale straw-colored; spores usually shorter than 5 µm; mostly a tropical genus ..... **Antrodiellla**

105. Basidiocarps resupinate, tough to fragile, white to greysih white; spores longer than 4.5 µm; temperate genus ..... **Diplomitoporus**

106. Basidiocarps annual; dark red to reddish black cuticle spreading from base; pores angular, sinuous to daedaleoid ..... **Earliella**

106. Basidiocarps annual to perennial; red cuticle absent; pores round to angular 107

107. Basidiocarps perennial with a distinct, thick crust spreading from base; glabrous; black line absent; causing a brown rot ..... **Fomitopsis**

107. Basidiocarps annual, crust absent, surface glabrous to hirsute or with strigose hairs; black line below the tomentum present or absent; causing a white rot 108

108. Pilear surface smooth, or tomentose to hirsute, tomentum less than 4 mm thick; fruitbodies white, cream to greyish ..... **Trametes**

108. Pilear surface coarsely hirsute, tomentum up to 10 mm thick; fruitbodies white to pale brown ..... **Funalia**

ENUMERATION OF GENERA AND SPECIES

1. ABORTIPORUS Murr.

Bull. Torrey Bot. Cl. **31**: 421, 1904.

Basidiocarps annual; substipitate to sessile, dimidiate to infundibuliform; context white to pale yellow, duplex, upper layer soft, spongy, lower layer firm, fibrous; pores angular to daedaleoid; hyphal system monomitic, hyphae with clamps; chlamydospores present in the upper context; gloeocystidia present; basidiospores hyaline, smooth, subglobose to ellipsoid; on dead hardwoods; causes white rot; tropical genus with one species in India.

Type species : *Abortiporus distorsus* (Schw.) Murr.

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

Bas. : *Daedalea biennis* Bull. : Fr., Syst. Mycol. **1**: 332, 1821.

– *Polyporus rufescens* Fr., **(54)**; *P. biennis* (Bull. : Fr.) Fr. **(36, 290)**.

2. ALBATRELLUS S.F. Gray

Nat. Arr. Brit. Pl. **1**: 645, 1821.

Basidiocarps annual; centrally or eccentrically stipitate, fleshy, short-lived; context white to pale ochre; pore surface pale yellow to yellowish brown; hyphal system monomitic, hyphae with simple septa or with clamps, oleiferous hyphae often occurring; cystidia absent; basidiospores hyaline, smooth, ellipsoid, inamyloid to weakly amyloid; terrestrial, probably mycorrhizic with trees; temperate genus with three species in India.

Type Species : *Albatrellus ovinus* (Fr.) Kotl. & Pouz.

1. Albatrellus cantharellus (Lloyd) Pouz., Ceska. Mykol. **26**: 196, 1972.

Bas. : *Polyporus cantharellus* Lloyd, Llyod Mycol. Writ. **4**: 54, 1915.

– **(295)**.

2. A. confluens (Alb. & Schw. : Fr.) Kotl. & Pouz., Cesk. Mykol. **11**: 154, 1957.

Bas. : *Polyporus confluens* Alb. & Schw : Fr., Syst. Mycol. **1**: 355, 1821.

– (**295**); *Polyporus confluens* Alb. & Schw. : Fr. (**263, 285**).

3. A. dispansus (Lloyd) Canf. & Gilbn., Mycologia **63**: 965, 1971.

Bas. : *Polyporus dispansus* Llyod, Mycol. Writ. **3**: Stip. Polyp. p. 192, **4**: 498, 1912.

– (**295**).

3. AMAURODERMA Murr.
Bull. Torrey Bot. Cl. **32**: 366, 1905

Basidiocarps annual, centrally to laterally stipitate, coriaceous corky to almost woody; pileus suborbicular, reniform, flabelliform, umbilicate to strongly infundibuliform; upper surface yellowish to blackish to various shades of brown, dull to glossy with a distinct crust, concentrically zoned and radially wrinkled; context firm or punky, whitish to dark brown; pore surface pinkish brown to whitish; hyphal system trimitic, generative hyphae hyaline, with clamps; binding and skeletal hyphae of two types I. Arboriform and II. Aciculiform; basidiospores subglobose to globose, bitunicate, exospore hyaline, endospore yellowish brown, echinulate; tropical genus with six species in India.

Type species : *Amauroderma schomburgkii* Mont. & Berk.

1. Amauroderma camerarium (Berk.) J. Furtado, Rev. Gen. *Amauroderma* (Polyp.) Est. Bas. Microestr. Basid. 140, 1968.

Bas. : *Polyporus camerarius* Berk., J. Bot. & Kew Misc. **8**: 143, 1856.

– *Polyporus camerarius* Berk. (**246**).

2. A. leptopus (Pers.) J. Furtado, Bull. Jard. Bot. Nat. Belg. **37**: 310, 1967.

Bas. : *Polyporus leptopus* Pers., In Gaudichaud, Voy, Aut. Mond. : **169**, 1826.

– *Fomes hypoplastus* Berk. (**121, 48**).

3. A. pudens (Berk.) Ryv., Norw. J. Bot. **24**: 224-225, 1977.

Bas. : *Polyporus pudens* Berk., Hook. J. Bot. **6**: 138, 1854.

– (**306**); *Polyporus pudens* Berk. (**54**); *Fomes pudens* Berk (**32**).

4. A. rude (Berk.) Torrend, Broteria Bot. **18**: 127, 1920.

Bas. : *Polyporus rudis* Berk., Ann. Mag. Nat. Hist. **3**: 323, 1839.

– *Fomes rudis* Berk. (**273**).

5. A. rugosum (Blume et Nees : Fr.) Torrend, Broteria Ser. Bot. **18**: 127, 1920.

Bas. : *Polyporus rugosus* Blume et. Nees. : Fr., Nova Acta Phys. Med. Acad. Caes. Leop. Carol. **13**: 21, 1826.

– (**95, 84, 48, 247, 263**).

6. A. subresinosum (Murr.) Corner, Polyporaceas I *Amauroderma* and *Ganoderma*, p. 93, 1983.

Bas. : *Fomes subresinosus* Murr., Bull. Torrey Bot. Cl. **35**: 410, 1908.

– **(308)**; *F. subresinosus* Murr. **(95, 86)**; *Magoderna subresinosum* (Murr.) Steyaert; **(280)**.

4. AMYLOSPORUS Ryv.

Norw. J. Bot. **20**: 1, 1973

Basidiocarps annual, stipitate; pileus cream to medium brown; context white; pore surface white to pale brown; hyphal system dimitic, generative hyphae hyaline, septate or clamped with single or double clamps; skeletal hyphae thick walled, pale yellow; gleoplerous hyphae present; cystidia absent; basidiospores hyaline, smooth to very finely echinulate moderately amyloid; terrestrial probably parasitic on grass; tropical genus with one species in India.

Type species : *Amylosporus campbellii* (Berk.) Ryv.

1. Amylosporus campbellii (Berk.) Ryv., Norw., J. Bot. **24**: 217, 1977.

Bas. : *Polyporus campbellii* Berk., Hook. J. Bot. **6**: 228, 1854.

– **(265)**; *Polyporus friabilis* Bose **(73, 190, 193, 48, 8)**; *P. campbellii* Berk. **(167, 135, 54)**; *P. anthelminticus* Berk. **(56, 81, 48, 16)**.

5. ANTRODIA Karst.

Medd. Soc. Fauna Fl. Fenn. **5**: 40, 1879.

Basidiocarps annual to rarely perennial; resupinate to effused-reflexed or sessile, pileate, coriaceous to corky, firm to hard when dry; context white; pore surface white to pale yellowish or brown to greyish; hyphal system dimitic, generative hyphae hyaline, with clamps; skeletal hyphae hyaline;

cystidia absent; basidiospores hyaline, smooth, oblong-ellipsoid to cylindrical or allantoid; mostly on dead coniferous woods; causing brown rot; widely distributed temperate genus with 11 species in India.

Type species : *Antrodia serpens* (Fr.) Karst.

1. Antrodia albida (Fr.) Donk, Persoonia 4: 339, 1966.

Bas. : *Daedalea albida* Fr., Syst. Mycol. 1: 338, 1821.

– (266); *A. serpens* (Fr.) Karst. (296); *Poria arenaria* (Kl.) Cke. (156, 199); *Trametes sepium* Berk. (42, 26, 263); *T. serpens* Fr. (146, 72, 7, 16, 261).

2. A. carbonica (Overh.) Ryv. & Gilbn., Mycotaxon 19: 139, 1984.

Bas. : *Poria carbonica* Overh., Can. J. Res. 21: 232, 1943.

– *Poria carbonica* Overh. (26, 12).

3. A. crassa (Karst.) Ryv., Norw. J. Bot. 20: 8, 1973.

Bas. : *Physisporus crassus* Karst., Krit. Ofvers. Finl. Basidsv. p. 319, 1889.

– (270); *Amyloporia crassa* var. *subimbricata* Dom. (143).

4. A. gossypina (Speg.) Ryv., Norw. J. Bot. 20: 8, 1973.

Bas. : *Poria gossypina* Speg., Boenos Aires Mus. Arg. Giens. Nat. Anal. 6: 169, 1899.

– (294).

5. A. odora (Peck : Sacc.) Gilbn. & Ryv., Mycotaxon **22**: 363, 1985.

Bas. : *Poria odora* Peck : Sacc., Syll. Fung. **6** : 294, 1888

– **(266)**.

6. A. oleracea (Davids. & Lomb.) Ryv., A Pre. Polyp. Fl. East Afr. p. 252, 1980.

Bas. : *Poria oleracea* Davids. & Lomb., Mycologia **39**: 317, 1947.

– **(270)**.

7. A. rhizomorpha (Bag.) Sharma, Comb. Nov.

Bas. : *Poria rhizomorpha* Bag., Ind. Forest **79**: 17, 1953.

– *Poria rhizomorpha* Bag. **(15)**.

8. A. serialis (Fr.) Donk., Persoonia **4**: 340, 1966.

Bas. : *Polyporus serialis* Fr., Syst. Mycol. **1**: 370, 1821.

– **(265)**; *Poria callosa* (Fr.) Cke. **(230, 31, 26, 263)**; *Trametes serialis* Fr. **(26, 238, 263)**.

9. A. sitchensis (Baxt.) Gilbn. & Ryv., Mycotaxon **22**: 364, 1985.

Bas. : *Poria sitchensis* Baxt., Papers Mich. Acad. Sci. **23**: 293, 1938.

– **(270)**.

10. A. sordida Ryv. & Gilbn., Mycotaxon **19**: 143, 1984.

– **(270).**

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

Bas. : *Polyporus xanthus* Fr., Syst. Mycol. **1**: 379, 1821.

– *Poria xantha* (Fr.) Cke. **(230, 31, 32, 238, 263).**

6. ANTRODIELLA Ryv. & John.

A Pre. Polyp. Fl. E. Afr. p. 256, 1980

Basidiocarps annual to rarely perennial; resupinate to pileate, soft coriaceous when fresh, dense hard and semitransparent on drying; context whitish to pale straw coloured; pore surface yellowish brown, tubes appearing as if soaked in a resinous substance; hyphal system dimitic, generative hyphae with clamps; skeletal hyphae hyaline, thick-walled; cystidia absent to very rarely present only as apical parts of skeletal hyphae; basidiospores globose or ellipsoid to rarely cylindrical; on dead hardwoods; causing white rot; cosmopolitan genus with eight species in India.

Type species : *Polyporus semisupinus* Berk. & Curt.

1. Antrodiella fissiliformis (Pil.) Gilbn. & Ryv., North American Polypores **2**: 809, 1987.

Bas. : *Poria fissiliformis* Pil., Stud. Bot. Chech. **3**: 1, 1940.

– **(270).**

2. A. hunua (Cunn.) Ryv., A Pre.Polyp. Fl. E. Afr. p. 257, 1980.

Bas. : *Poria hunua* Cunn., N.Z. Dept. Sci. Ind. Res. Bull. **72** : 19, 1947.

– (270).

3. A. liebmanii (Fr.) Ryv., A Pre. Polyp. Fl. E. Afr. p. 258, 1980.

Bas. : *Polyporus liebmanii* Fr., Nova Acta Reg. Soc. Sci. Upsal. III, **1**: 59, 1851.

– (264).

4. A. minutispora (Reid, Thind & Chatr.) Ryv., A Pre. Polyp. Fl. E. Afr. p. 259, 1980.

Bas. : *Polyporus minutisporus* Reid, Thind & Chatr., Trans. Brit. Mycol. Soc. **42**: 42, 1959.

– *Polyporus minutisporus* (**243**); *Antrodia minutspora* (Reid, Thind & Chatr.) Dhand, (**296**).

5. A. overholtsii Ryv. & Gilbn., Mycotaxon **18**: 138, 1984.

– (270).

6. A. semisupina (Berk. & Curt.) Ryv., A. Pre. Polyp. Fl. E. Afr. p. 261-62, 1980.

Bas. : *Polyporus semisupinus* Berk. & Curt., Grevillea **1**: 50, 1872.

– (264, 266).

7. **A. straminea** (Bres.) Ryv., A Pre. Polyp. Fl. E. Afr. p. 262, 1980.

Bas. : *Poria straminea* Bres., Hedwigia **51** : 316, 1912.

– **(270).**

8. **A. zonata** (Berk.) Ryv., Bot. Soc. Argent. Bot. **28**: 227-231, 1992.

Bas. : *Irpex zonatus* Berk., Hook. J. Bot. **6**: 168, 1854.

– *Irpex consors* Berk. **(191, 36, 263)**; *Irpex zonatus* Berk. **(54)**; *Polyporus consors* (Berk.) Steven. **(16)**; *Coriolus consors* (Berk.) Imaz. **(9, 95)**; *Daedalea gollanii* Massee **(204, 287)**.

7. APORPIUM Sing. Emend. Teix. & Rogers
Mycologia **36**: 67, 1944; Mycologia **47**: 408, 1955

Basidiocarps annual, pileate; context almost lacking; pore surface light brown when fresh, deep brown on drying, pores about 1 mm wide and deep; hyphal system dimitic, generative hyphae with clamps; skeletal hyphae hyaline; cystidia absent; basidia longitudinally septate, with 4-long sterigmata; basidiospores hyaline, cylindrical, smooth; on dead hardwoods; causes white rot; widely distributed in Eastern Himalaya; tropical genus with one species in India.

Type species : *Aporpium caryae* (Schw.) Teix. & Rogers.

1. **Aporpium hexagonoides** David. & Jacq., Gard. Bull. **29**: 151, 1976.

– **(270).**

8. AURIFICARIA Reid

Kew Bull. **17**: 278, 1963.

Basidiocarps annual to perennial, substipitate to sessile, dimidiate to funnel shaped, single or imbricate; pilear surface yellowish to dark greyish brown or black with a cuticle or crust often covered with a rusty pruina; context golden brown, hard and brittle; pore surface golden brown to pale rusty brown; hyphal system monomitic, hyphae pale golden brown, septate; setal elements absent; cystidia absent; basidiospores globose to subglobose, or rarely ellipsoid, pale to dark golden brown; olivaceous brown in KOH; parasitic on deciduous trees (especially *Shorea, Schleichera, Heritiera*, etc.) rarely on dead hardwood; causes white rot; common tropical genus with five species in India.

Type species : *Aurificaria indica* (Massee) Reid.

1. Aurificaria indica (Massee) Reid, Kew Bull. **17**: 279, 1963.

Bas. : *Polyporus indicus* Massee, Bull. Misc. Inf. Kew 250, 1910.

– **(268, 265)**; *Polyporus turbiformis* Lloyd, **(176)**; *P. indicus* Massee var. *depauperatus* Reid *et al.* **(243)**.

2. A. flammans (Berk.) Ryv., Norw. J. Bot. **24**: 220, 1977.

Bas. : *Polyporus flammans* Berk., Hook. J. Bot. **6**: 139, 1854.

– **(268)**; *Polyporus flammans* Berk. **(54, 182)**.

3. A. luteo-umbrina (Romell) Reid, Kew Bull. **17**: 279, 1963.

Bas. : *Phaeoporus luteo-umbrinus* Romell K. Svens ka Vetensk. Akad. Handl. **26**: 27, 1901.

– (268); *Polyporus luteo-umbrinus* Romell (**205, 89, 176, 81, 32**).

4. **A. shoreae** (Wakf.) Ryv., Mycotaxon **5**: 335, 1977.

Bas. : *Polyporus shoreae* Wakf., Kew Bull. Misc. Inf. p. 72, 1916.

– (268, 265); *P. shoreae* Wakf. (**94, 74, 141, 16, 20, 34, 276, 277, 32**).

5. **A. poncei** (Lloyd) Reid, Kew Bull. **17**: 279, 1963.

Bas. : *Polyporus poncei* Lloyd, Mycol. Writ. **7**: 1911, 1923.

– (268); *P. poncei* Lloyd (**194**).

BJERKENDERA Karst.

Medd. Soc. Fauna Fl. Fenn. **5**: 38, 1879.

Basidiocarps annual; effused-reflexed or sessile, coriaceous and succulent, hard when dry, imbricate, dimidiate, conchate; upper-surface whitish to pale brown or greyish brown, to dark brown; context duplex, upper layer whitish to greyish, corky and friable, lower layer like a black line above the tubes; pore surface pale greyish brown to greyish black; hyphal system monomitic, hyphae with clamps; cystidia absent; basidiospores hyaline, smooth, short cylindrical; mostly on dead hardwoods; causes white rot; cosmopolitan from tropical to subalpine forests with two species in India.

Type species : *Bjerkendera adusta* (Willd. : Fr.) Karst.

1. **Bjerkendera adusta** (Willd. : Fr.) Karst., Medd. Soc. Fauna Fl. Fenn. **5**: 38, 1879.

Bas. : *Polyporus adustus* Willd. : Fr., Syst. Mycol. **1**: 363, 1821.

– **(214, 266, 152)**; *Polyporus adustus* (Willd.) Fr. **(54, 89, 170, 171, 187,189, 182, 206, 7, 263)**; *P. secernibilis* Berk. **(179, 71, 84, 7, 16, 263)**; *P. crispus* (Pers.) Fr. **(53)**; *P. digitilis* Berk. **(182, 54)**; *P. dissitus* Berk. & Br. **(81, 247)**; *Gloeoporus adustus* (Willd. : Fr.) Pil. **(291)**.

2. B. fumosa (Pers. : Fr.) Karst., Medd. Soc. Fauna Fl. Fenn. **5**: 38, 1879.

Bas. : *Polyporus fumosus* Pers. : Fr., Syst. Mycol. **1**: 367, 1821.

– **(265)**; *Polyporus fumosus* Fr. **(41, 263)**; *P. ostereiformis* Berk. **(182, 72, 206, 48,7)**.

10. BOLETOPSIS Fayod

Malpighia **3**: 72, 1889.

Basidiocarps annual; centrally or laterally stipitate, fleshy, soft and brittle when dry, pale to olivaceous brown, darker on bruising; pilear surface finely scaly; context white, sordid brown on exposure/bruising; pore surface greyish white, pores angular, 1-3 per mm; hyphal system monomitic, hyphae with clamps, hyaline; basidiospores angular or irregular in shape, hyaline to pale brownish; terrestrial, probably mycorrhizic in coniferous forests; temperate genus with one species in India.

Type species : *Boletopsis subsquamosa* (Fr.) Kotl. & Pouz.

1. B. subsquamosa (Fr.) Kotl. & Pouz., Ceska. Mykol. **11**: 164, 1957.

Bas. : *Polyporus subsquamosa* Fr., Syst. Mycol. **1**: 346, 1821.

– **(270)**; *Polyporus nodipes* Berk. **(54, 167)**.

11. BONDARZEWIA Sing.

Rev. Mycol. 5: 4, 1940.

Basidiocarps annual; laterally stipitate or sessile, fleshy, soft and brittle when dry, pilei usually densely imbricate, pale ochraceous to purplish brown, finely tomentose or glabrous; context yellowish white, corky, up to 2 cm thick; pore surface yellowish brown, tobacco brown on drying, pores circular to angular, 1-2 per mm; hyphal system dimitic, generative hyphae simple septate; skeletal hyphae hyaline; cystidia absent; basidiospores globose to subgloboe, hyaline, ornamented, amyloid; on roots of living hardwood or coniferous trees; causing white stringy rot of heartwood in roots and butts; a rare, temperate genus with two species in India.

Type species : *Cerioporus montanus* Quel.

1. **Bondarzewia berkeleyi** (Fr.) Bond. & Sing., Ann. Mycol. 39: 47, 1941.

Bas. : *Polyporus berkeleyi* Fr. Nova. Symb. p. 56, 1851.

– (269b).

2. **B. mesenterica** (Schaeff.) Kreisel, Feddes Rep. 95: 699, 1984.

Bas. : *Boletus mesentericus* Schaeff., Fung. Bavar. 4: 91, 1774.

– (270); *Polyporus montanus* (Quel.) Ferry. (179); *Merulius eurocephalus* (Berk. & Br.) Petch (32, 265).

12. BYSSOMERULIUS Parm.

Izv. Akad. Nauk. Estonsk. SSR, Ser. Biol. 16(4): 383, 1967.

Basidiocarps annual; resupinate to pileate, pileus whitish to greyish white; context white, soft; pore surface meruloid, white to light brown with

age; hyphal system monomitic, hyphae septate; cystidia none; basidia narrowly clavate; basidiospores subcylindrical, hyaline, smooth; on dead branches of hardwoods; causing white rot; tropcial genus with one species in India.

Type species : *Byssomerulius corium* (Pers. : Fr.) Parm.

1. Byssomerulius corium (Pers. : Fr.) Parm., Eesti NSV. Tead. Akad. Toimet. Biol. **16**(4): 383, 1967.

Bas. : *Merulius corium* Pers. : Fr., Elench. Fung. **1**: 58, 1828.

– *Merulius corium* Pers. : Fr. **(39)**.

13. CERIPORIA Donk

Med. Bot. Mus. Univ. Utrecht **9**: 170, 1933

Basidiocarps annual; resupinate, soft, fragile when dry; context very thin, white to pale brownish; pore surface white to cinnamon or purple; hyphal system monomitic, hyphae septate, hyaline; cystidia none; basidiospores ellipsoid to short cylindrical or allantoid, hyaline, smooth; mostly on dead hardwoods; rarely on conifers; causing white rot; tropical genus with four species in India.

Type species : *Ceriporia viridans* (Berk. & Br.) Donk

1. Ceriporia mellea (Berk. & Br.) Ryv., Bull. Jard. Bot. Nat. Belg. **48**: 98, 1978.

Bas. : *Polyporus melleus* Berk. & Br., Trans. Linn. Soc. **14**: 53, 1875.

– *Poria auricoma* Lev. : Cke. **(292)**.

2. **C. purpurea** (Fr.) Donk, Konn. Nederl. Akad. Wetensch. Amst. Proc. Ser. C, 74(1): 28, 1971.

Bas. : *Polyporus purpureus* Fr., Syst. Mycol. 1: 379, 1821.

– **(270).**

3. **C. viridans** (Berk. & Br.) Donk., Med. Bot. Mus. Univ. Utercht 9: 171, 1933.

Bas. : *Polyporus viridans* Berk. & Br., Ann. Mag. Nat. Hist. Ser. 3, 7: 379, 1861.

– **(270).**

4. **C. xylostromatoides** (Berk.) Ryv., A Pre. Polyp. Fl. East Afr. p. 276, 1980.

Bas. : *Polyporus xylostromatoides* Berk., Lond. J. Bot. 2: 637, 1843.

– **(266);** *Polyporus interruptus* Berk. & Br. **(301);** *Poria xylostromatoides* (Berk.) Cke. **(36, 244a).**

14. CERIPORIOPSIS Dom.

Acta Soc. Bot. Pol. 32. 731, 1963.

Basidiocarps annual; resupinate, soft, fragile when dry; context very thin, white to pale brown; pore surface pinkish white to pale brownish or yellowish; hyphal system monomitic, hyphae with clamps, hyaline; cystidia none; basidiospores subglobose to oblong-ellipsoid, hyaline, smooth; mostly on dead hard woods, rarely on coniferous woods; causing white rot; cosmopolitan genus with three species in India.

Type species : *Ceriporiopsis gilvescens* (Bres.) Dom.

1. Ceriporiopsis gilvescens (Bres.) Dom., Acta Soc. Bot. Pol. **32**: 731, 1963.

Bas. : *Poria gilvescens* Bres., Ann Mycol. **6**: 40, 1908.

– **(266).**

2. C. mucida (Pers. : Fr.) Gilbn. & Ryv., Mycotaxon **22**: 364, 1985.

Bas. : *Polyporus mucidus* Pers. : Fr., Syst. Mycol. **1**: 382, 1821.

– *Poria mucida* Pers. : Fr. **(26).**

3. C. rivulosa (Berk. & Curt.) Gilbn. & Ryv., N. Amer. Polyp. p. 194-95, 1986.

Bas. : *Polyporus rivulosa* Berk. & Curt., Linn. Soc. Bot. J. **10**: 318, 1898.

– *Poria rivulosa* (Berk. & Curt.) Cke. **(294).**

15. CERRENA S.F. Gray

Nat. Arr. Brit. Pl. **1**: 649, 1821.

Basidiocarps annual, effused-reflexed to pileate, imbricate, coriaceous soft, pilei dimidiate, conchate; upper surface tomentose to hirsute, light brown to brownish orange to blackish-maroon; context duplex, upper part as a black line below the tomentum, lower part creamy, corky and fibrous; pore surface pale yellow to brownish orange, pores circular or elongate, soon daedaleoid to irpicoid; hyphal system trimitic, generative hyphae with clamps;

skeletal and binding hyphae hyaline and thick-walled; basidiospores broadly ellipsoid, hyaline, smooth; on dead hardwoods; causes white rot; cosmopolitan genus with two species in India.

Type species : *Cerrena unicolor* (Bull. : Fr.) Murr.

1. Cerrena meyenii (Kl.) Hansen, Nat. Hist. Rennel Isl. **3**: 129, 1960.

Bas. : *Polyporus meyenii* Kl., Nova Acta Leop Carol. **19**: Suppl. *1:* 239, 1845.

– *Trametes meyenii* Kl. **(84, 48, 16)**; *Polystictus meyenii* Kl. **(95)**.

2. C. unicolor (Bull. : Fr.) Murr., J. Mycol. **9**: 91, 1903.

Bas. : *Daedalea unicolor* Bull.: Fr., Syst. Mycol. **1**: 336, 1821.

– *Daedalea unicolor* Bull. : Fr. **(82, 86, 261)**; *Lenzites unicolor* (Fr.) Cunn. **(95, 118)**.

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

Basidiocarps annual; pileate, sessile or substipitate, soft-fleshy, hard and brittle when dry, pilei dimidiate to flabelliform, conchate, surface hirsute, white to yellowish or greyish orange; context duplex, upper part soft, cottony, lower part thick, tough, fibrous, hard on drying; pore surface yellowish white to greyish orange to light brown, pores 1-2 per mm, angular; hyphal system monomitic, hyphae with clamps; cystidia abundant, clavate-fusiform to ovoid; basidiospores broadly ellipsoid, hyaline, smooth; on living/dead conifers; causes white mottled rot; temperate genus with one species in India.

Type species : *Climacocystis borealis* (Fr.) Kotl. & Pouz.

1. Climacocystis borealis (Fr.) Kotl. & Pouz., Ceska. Mykol. **12**: 103, 1958.

Bas. : *Polyporus borealis* Fr., Syst. Mycol. **1**: 366, 1821.

– *Spongipellis borealis* (Fr.) Pat. **(143)**.

17. COLTRICIA S.F. Gray

Nat. Arrang. Br. Pl. **1**: 644 1821.

Basidiocarps annual; pileate, usually centrally to laterally stipitate, turning black in KOH; pilear surface velutinate tomentose to hirsute with adpressed hairs, pale yellowish, golden brown to dark rusty brown; context dark rusty brown; pore surface yellowish to dark rusty brown, pores circular to elongated; hyphal system monomitic, hyphae golden brown to rusty brown, thick-walled; cystidia absent; setae generally absent or present in a few Indian species; basidiospores subglobose to broadly ellipsoid, golden to rusty brown; mostly on ground, rarely on buried wood/culms of grasses; cosmopolitan genus with eight species in India.

Type species : *Coltricia perennis* (Fr.) Murr.

1. Coltricia bambusicola (Henn.) Reid, Microscopy **32**: 449, 1975.

Bas. : *Polyporus bambusicola* Henn., Hedwigia **40**: 326, 1901.

– **(253, 268)**; *Polyporus bambusicola* Henn. **(146)**.

2. C. cinnamomea (Pers.) Murr., Bull. Torr. Bot. Cl. **31**: 343, 1904.

Bas. : *Polyporus cinnamomeus* Pers., Mycol. Europ. **2**: 41, 1825.

– **(152, 265, 268)**; *Polystictus cinnamomea* Jacq. : Fr. **(284, 176, 196, 95)** (var. *Lahorensis*)); *Polyporus oblectans* **(53, 54, 146, 86, 48)**; *Polyporus cinnamomeus* Jacq. : Fr. **(32, 263)**.

3. C. montagnei (Fr.) Murr., Mycologia **12**: 13, 1920.

Bas. : *Polyporus montagnei* Fr., in Mont. Ann. Sci. Nat. Ser. *2* Vol. **1**: 341, 1836.

– **(293, 268, 266)**.

4. C. perennis (Fr.) Murr., J. Mycol. **9**: 91, 1903.

Bas. : *Polyporus perennis* Fr., Syst. Mycol. **1**: 350, 1821.

– **(214, 268, 266)**; *P. perennis* Fr. **(32, 263)**; *Polystictus perennis* L.: Fr. **(82, 48, 206, 287)**.

5. C. pusilla Sharma et Wright, Bull.Bot. Surv. Ind. **31**(4): 182-183, 1989.

– **(271, 268)**.

6. C. pyrophila (Wakf.) Ryv., Norw. J. Bot. **19**:: 231, 1972.

Bas. : *Polyporus pyrophilus* Wakf., Kew Bull., 71, 1916.

– **(262, 268)**.

7. C. spathulata (Hook.) Murr., N. Am. Fl. **9**: 93, 1908.

Bas. : *Polyporus spathulatus* Hook. in Kunth, C.S. Synopsis Plant **1**: 9, 1822.

– **(268)**; *Polystictus spathulatus* Hook. **(290)**.

8. C. vallata (Berk.) Teng., Fungi of China, p. 759, 1964.

Bas. : *Polyporus vallatus* Berk., Hook. J. Bot. **6**: 138, 1854.

– **(26, 268)**; *Polyporus vallatus* Berk. **(54, 176, 88, 266)**.

18. CORIOLOPSIS Murr.

Bull. Torr. Bot. Cl. **32**: 358, 1905

Basidiocarps annual; pileate, sessile, pileus tomentose to hirsute or glabrous, yellowish to greyish brown or light coffee brown; context pale yellowish to brown; pore surface yellowish to greyish or umber brown; hyphal system trimitic, generative hyphae with clamps; skeletal and binding hyphae thick-walled, light golden yellow to ochraceous brown; cystidia absent; basidiospores oblong ellipsoid to cylindrical, up to 15 µm long; on dead hardwoods; causing white rot; tropical genus with nine species in India.

Type species : *Coriolopsis occidentalis* (Kl.) Murr. (= *C. polyzona*) (Pers.) Ryv.

1. Coriolopsis aspera (Jungh.) Teng, True fungi of China p. 759, 1964.

Bas. : *Polyporus asper* Jungh., Ver. Batavisch. Genootsch. **17**: 60, 1838.

– *Trametes badia* (Berk.) Cke. **(84, 48, 16, 36)**; *T. fuscellus* Lev. **(191, 72, 48)**; *Polystictus asper* Jungh. **(88, 121)**; *Fomes curreyi* Berk. **(103)**; *Polyporus xerophyllaceus* Berk. **(95)**; *Polyporus curreyi* Berk. **(101)**; *Trametes strigata* Berk. **(181)**.

2. C. brunneo-leuca (Berk.) Ryv., Norw. J. Bot. **19**: 230, 1972.

Bas. : *Polyporus brunneo-leuca* Berk., Lond. J. Bot. **5**: 4, 1846.

– *Polyporus beharensis* Berk. **(54)**.

3. C. caperata (Berk.) Murr., N. Am. Fl. **9**: 77, 1908.

Bas. : *Polyporus caperatus* Berk., Ann. Mag. Nat. Hist. Ser. **1**(3): 391, 1839.

– **(265)**; *Polystictus caperatus* Berk. **(54, 88, 72, 16)**; *P. phocinus* Berk. & Br. **(191, 192)**.

4. C. floccosa (Jungh.) Ryv., Norw. J. Bot. **19**: 230, 1972

Bas. : *Polyporus floccosus* Jungh., Verh. Batav. Genootsch. **17**: 49, 1839.

– *Polystictus floccosus* Jungh. **(169, 183, 195, 282)**; *P. acutus* Cke. **(169)**; *P. proteus* Berk. **(190, 191)**; *Polyporus proteus* Berk. **(74, 190, 191)**; *Trametes carteri* Berk. **(179)**.

5. C. gallica (Fr.) Ryv., Norw. J. Bot **19**: 230, 1973.

Bas. : *Polyporus gallicus* Fr., Syst. Mycol. **1**: 345, 1821.

– *Polystictus stupeus* Berk. **(163)**; *Funalia gallica* (Fr.) Bond. & Sing. **(294)**.

6. C. polyzona (Pers.) Ryv., Norw. J. Bot. **19**: 230, 1972.

Bas. : *Polyporus polyzonus* Pers., Gaudichaud Voy. aut. Monde:, Bot.p. 170, 1826

– *Polystictus occidentalis* Kl. (**121, 146, 283, 189, 191, 192, 95, 7**); *P. polyzonus* (Pers.) Lloyd (**183**); *P. suboccidentalis* Sacc. (**189, 190, 72**); *P. lanatus* Fr. (**134**); *Trametes devexa* Berk. (**74**); *T. sycomori* P. Henn. (**192**); *T. occidentalis* Kl. (**71**); *Coriolus occidentalis* (Kl.) Imaz. (**95**).

7. C. sanguinaria (Kl.) Teng, True Fungi of China p. 760, 1964

Bas. : *Polyporus sanguinarius* Kl., Linnaea **8**: 484, 1833.

– *Polyporus anebus* Berk. (**84, 48, 7, 16**); *P. bicolor* Jungh. (**36**); *P. plebeius* Berk. (**55**); *P. bosei* Bres. (**32, 90**); *Trametes plebeia* (Berk.) Lloyd (**181**); *Polyporus rugulosus* Lev. (**282**).

8. C. strumosa (Fr.) Ryv., Kew Bull. **31**: 95, 1976.

Bas. : *Polyporus strumosus* Fr., Epicr. p. 462, 1838.

– *Coltricia acupunctata* (Berk.) Cunn. (**95, 32, 118**); *Trametes acupunctata* Berk. (**96**); *Polyporus fumoso-olivaceous* Lloyd (**190, 226, 74**); *Polystictus luteo-olivaceous* Berk. & Br. (**195, 282**).

9. C. telfarii (Kl.) Ryv., Norw. J. Bot. **19**: 230, 1972.

Bas. : *Polyporus telfarii* Kl., Linnaea **8**: 484, 1833.

– (**265**); *Polystictus zeylanicus* Berk (**282, 283**); *Poluyporus zeylanicus* Berk (**36**).

19. CYCLOMYCES Fr.

Linnaea 5: 512, 1830

Pileus annual; pileate, turning black in KOH, sessile to centrally or laterally stipitate, pileus circular or flabelliform to dimidiate, tomentose to finely pubescent, light rusty brown to reddish brown; context duplex, upper part as a black zone below the pilear tomentum, lower part dense and rusty brown; pore surface dark cinnamon to rusty brown, poroid or concentrically lamellate; hyphal system monomitic, hyphae golden brown, septate; setae present or absent; basidiospores cylindrical to oblong-ellipsoid, hyaline to pale yellow; on ground or on dead hardwood; causing white rot; cosmopolitan genus with 3 spceies in India.

Type species : *Cyclomyces fuscus* Fr.

1. Cyclomyces setiporus (Berk.) Pat., Essai Tax. p. 98, 1900.

Bas. : *Polyporus setiporus* Berk., Lond. J. Bot. 6: 505, 1847.

– (268); *Polystictus setiporus* Berk. **(54, 283)**; *P. cichoriaceous* Berk. **(189, 163, 48, 86)**; *Favolus setiporus* Berk. **(54)**; *Polyporus intybaceus* Berk. **(53)**.

2. C. tabacinus (Mont.) Pat., Essai Tax. p. 98, 1900.

Bas. : *Polyporus tabacinus* Mont., Ann. Sci. Nat. Ser. 3: 349, 1835.

– **(265, 36)**; *Polystictus tabacinus* (Mont.) Fr. **(284, 192, 187, 70, 48, 7, 282, 16)**.

3. C. turbinatus Berk., Hook. J. Bot. 6: 445, 1854.

– **(54, 263, 266)**; *Cycloporus turbinatus* (Berk.) Bond. & Sing. **(67)**; *Cycloporus greenei* (Berk.) Murr. **(293)**.

20. DAEDALEA Fr.

Syst. Mycol. 1: 331, 1821

Basidiocarps perennial; pileate, sessile, pileus finely velutinate to strigose or glabrous with a black crust; context light to deep brown; pore surface light ochraceous to tabacco brown, poroid, labyrinthine to daedaleoid or distinctly lamellate; hyphal system trimitic, generative hyphae hyaline, clamps at septa; binding and skeletal hyphae light yellow to light ochraceous brown forming a catahymenium; basidiospores oblong-ellipsoid to cylindrical, hyaline, smooth; mostly on dead hardwood/rarely on coniferous woods; causing brown rot; cosmopolitan genus with five species in India.

Type species : *Daedalea quercina* L.:Fr.

1. **Daedalea andamani** Berk., Grevillea **19**: 93, 1891.

   – **(105, 263).**

2. **D. incana** (Lev.) Ryv., Mycotaxon **31**: 49, 1988.

   Bas. : *Trametes incana* Lev., Ann. Sci. Nat. Ser. 3 vol. **2**: 196, 1844.

   – (266); *Trametes dickinsii* Berk. **(84, 7, 33, 258).**

3. **D. quercina** L. : Fr., Syst. Mycol. **1**: 333. 1821.

   – **(69, 48, 296).**

4. **D. sprucei** Berk., Hook. J. Bot. **8**: 236, 1856.

   – *Trametes incerta* (Curr.) Cke. **(206, 7, 21).**

5. **D. sulcata** (Berk.) Ryv., Norw. J. Bot. **24**: 216, 1977.

Bas. : *Hexagonia sulcata* Berk., Lond. J. Bot. **6**: 510, 1847.

– *Hexagonia sulcata* Berk. (**78**); *Hexagonia laevis* Berk. : Cke. (**105**).

21. DAEDALEOPSIS Schroet.

Krypt. Fl. Schles. **3**: 492, 1888.

Basidiocarps annual; effused-reflexed to sessile, usually imbricate, corky, tough or firm, pileus dimidiate, applanate, glabrous, pale brown to yellowish brown or reddish brown; context yellowish or pinkish brown; pore surface yellowish to pinkish brown, poroid to lamellate; hyphal system trimitic, generative hyphae with clamps at septa; binding and skeletal hyphae subsolid, pale brown; dendrohyphidia present; basidiospores hyaline, cylindrical, up to 12 µm long; on dead hardwoods; causing white rot; temperate genus with three species in India.

Type species : *Daedaleopsis confragosa* (Bolt.:Fr.) Schroet.

1. Deadaleopsis confragosa (Bolt.: Fr.) Schroet., Krypt. Fl. Schles. **3**: 492, 1888.

Bas. : *Daedalea confragosa* Bolt : Fr., Syst. Mycol. **1**: 336, 1821.

– (**152, 266, 294**); var. *tricolor* (Bull. : Fr.) Bond. (**11**); *Lenzites tricolor* (Bull.) Fr. (**83, 48**).

2. D. pergamenea (Berk. & Br.) Ryv., Mycotaxon **20**: 350, 1984.

Bas. : *Hexagonia pergamenea* Berk. & Br., J. Linn. Soc. Bot. **14**: 57, 1873.

– *Polystictus berkeleyi* Bres. (**190, 74**).

3. D. purpurea (Cke.) Imaz. & Aoshima, Fl. Eastern Himalayas vol **1**: 619, 1966.

Bas. : *Trametes purpurea* Cke., Grev. **10**: 121, 1881.

– **(152, 269a, 269b, 266).**

22. DATRONIA Donk

Persoonia **4**: 337, 1966

Basidiocarps annual; resupinate to usually effused-reflexed; pilear surface dark brown to greyish black, strigose to glabrous, concentrically zoned, sulcate; context duplex, upper part as a thin black layer below the tomentum, lower part pale brown, tough, fibrous; pore surface whitish grey to umber brown, pores angular to daedaleoid, 1-2 per mm; hyphal system dimitic, hyaline to pale brown, darker in KOH; basidiospores hyaline, cylindrical, smooth; on dead hardwoods; causing white rot; cosmopolitan genus with one species in India.

Type species : *Datronia mollis* (Sommerf. : Fr.) Donk

1. Datronia mollis (Sommerf. : Fr.) Donk, Persoonia **4**: 338, 1966.

Bas. : *Daedalea mollis* Sommerf. : Fr., Elench. Fung. P. 71, 1828.

– *Trametes mollis* Fr. **(86, 7, 263).**

23. DICHOMITUS Reid

Rev. Biol. **5**: 149, 1965

Basidiocarps annual; resupinate; context white to yellowish; pore surface cream to pale greyish; hyphal system dimitic, generative hyphae hyaline,

clamps at septa; binding hyphae sparingly and dichotomously branched, hyaline, thick-walled; basidiospores cylindric to oblong-ellipsoid; on dead hardwoods/coniferous woods; causing white rot; temperate genus with one species in India.

Type species : *Dichomitus squalens* (Karst.) Reid.

1. Dichomitus leucoplacus (Berk.) Ryv., Norw. J. Bot. **24**: 222, 1977.

Bas. : *Polyporus leucoplacus* Berk., Fl. N. Zealand **2**: 180, 1855.

– *Poria leucoplaca* (Berk.) Cke. **(290, 238)**.

24. DIPLOMITOPORUS Dom.

Acta Soc. Bot. Pol. **39**: 191, 1970.

Basidiocarps annual; resupinate, soft to tough, hard and brittle when dry; context white to pale, thin; pore surface white to light-coloured, pores round, small; hyphal system dimitic, generative hyphae with clamps at septa, hyaline; cystidia absent; basidiospores ellipsoid to allantoid, hyaline, smooth; on dead coniferous/hardwoods; causing white rot; temperate genus with three species in India.

Type species : *Trametes flavescens* Bres.

1. Diplomitoporus lenis (Karst.) Gilbn. & Ryv., Mycotaxon **22**: 364, 1985.

Bas. : *Physisporus lenis* Karst. In Rabenth. Wint. Fungi Europe et Exeur. Excs. no. 3527, 1886.

– *Poria lenis* (Karst.) Sacc. **(274, 238, 36)**; *Antrodia lenis* (Karst.) Ryv. **(266)**.

2. D. lindbladii (Berk.) Gilbn. & Ryv., Mycotaxon **22**: 364, 1985.

Bas. : *Polyporus lindbladii* Berk., Grevillea **1**: 54, 1872.

– *Poria cinerascens* (Bres.) Sacc. et Syd. (**274, 238, 263**).

3. D. rimosus (Murr.) Gilbn. & Ryv., Mycotaxon **22**: 364, 1985.

Bas. : *Poria rimosa* Murr., Mycologia **12**: 91, 1920.

– *Poria rimosa* Murr. (**294**).

25. EARLIELLA Murr.
Bull. Torr. Bot. Cl. **32**: 478, 1905.

Basidiocarps annual to perennial; effused-reflexed to pileate; pilear surface yellowish white to reddish black at base, glabrous; context yellowish white to wood coloured; pore surface whitish to light yellowish brown, pores round to sinous; hyphal system trimitic, generative hyphae with clamps at septa; binding and skeletal hyphae hyaline; cystidia absent; basidiospores hyaline, cylindrical to oblong ellipsoid; on dead hardwoods; causing white rot; tropical genus with one species in India.

Type species : *Earliella cubensis* (Pers.) Murr. (=*E. scabrosa* (Pers.) Gilbn & Ryv.).

1. E. scabrosa (Pers.) Gilbn. & Ryv., Mycotaxon **22**: 364, 1985.

Bas. : *Polyporus scabrosus* Pers. In Gaudich., Voy. aut. Monde p. 172, 1827.

– *Trametes corrugata* (Pers.) Bres. (**16, 285, 36, 233**); *T. hookeri* Berk. (**54**); *T. scabrosa* (Pers.) Cunn. (**265, 266**); *T. persoonii* Fr. (**84,**

48, 206 7); *T. versiformis* Berk. & Br. (192); *Polyporus persoonii* Fr. (302); *P. venulosus* Jungh. (36); *Polystictus venulosus* Jungh. (7); *P. persoonii* Fr. (54, 121, 283, 71, 84, 7, 166, 184, 186, 192); *Daedalea emodensis* Berk. (54); *Coriolus emodensis* (Berk.) Imaz. et. Aosh. (152); *Polystictus parishii* Cke. (103, 194)

26. FAVOLUS Fr.

Elench. Fung. 1: 44, 1828.

Basidiocarps annual; thin, soft, brittle on drying, dimidiate, flabelliform to spathulate, laterally stipitate; pilear surface glabrous to finely tomentose, tessulate to with radially elongated lines towards the margin; context straw-coloured; pore surface whitish to pale yellowish, brownish when dry, pores hexagonal, radially elongated to semilamellate near the stipe; hyphal system dimitic, generative hyphae simple septate, hyaline; skeletal hyphae thick walled, hyaline; cystidia absent; basidiospores cylindrical to broadly ellipsoid, hyaline, smooth; on dead hardwoods; causing white rot; tropical genus with two species in India.

Type Species : *Favolus brasilensis* (Fr.) Fr.

1. Favolus brasilensis (Fr.) Fr., Elench. Fung. 1: 44, 1828.

Bas. : *Daedalea brasilensis* Fr., Syst. Mycol. 1: 332, 1821.

– (86); *F. tesselatus* Mont. (95, 146); *F. scaber* Berk. & Br. (206, 69); *Hexagonia scabra* (Berk. & Br.) Petch (225, 48).

2. F. spathulatus (Jungh.) Lev., Ann. Sci. Nat. Ser. 3. Vol. 2: 203, 1844.

Bas. : *Laschia spathulata* Jungh., Verhand. Batav. Genootsch. 17: 75, 1838.

– *Favolus multiplex* Lev. (95, 84, 29, 211).

27. FISTULINA (Bull.) Fr.

Syst. Mycol. 1: 396, 1821.

Basidiocarps annual; sessile to laterally stipitate, dimidiate to reniform, fleshy and exuding a reddish blood like juice when broken; pilear surface pinkish to reddish brown,tomentose to hispid or scrufy; context reddish, fleshy, juicy; pore surface white at first, darker on bruising, dull brown when dry, tubes separate and closely packed; hyphae monomitic, clamps at septa; cystidia absent; basidiospores ovoid, hyaline; on dead/living hardwoods; causing brown rot; A rare temperate genus with one species in India.

Type species : *Fistulina hepatica* Schaeff. : Fr.

Fistulina hepatica Schaeff. : Fr., Syst. Mycol. 1: 396, 1821.

– (54).

28. FLAVODON Ryv.

Norw. J. Bot. 20: 3, 1973.

Basidiocarps annual; resupinate to pileate, tough and flexible, pileus dimidiate to spathulate; pilear surface adpressed tomentose to hispid in concentric zones, yellowish white to light brown, reddish brown to dark red in KOH; context and pore surface bright yellow; pores angular, becoming irpicoid to hydnoid with irregular and flattened teeth; hyphal system dimitic, generative hyphae with simple septa; skeletal hyphae hyaline, thick-walled; cystidia present, encrusted in the upper part; basidiospores broadly ellipsoid to oblong ellipsoid, hyaline, smooth; on dead branch of hardwoods; causing white rot; tropical genus with one species in India.

Type species : *Flavodon flavus* (Kl.) Ryv.

1. Flavodon flavus (Kl.) Ryv., Norw. J. Bot. 20: 3, 1973.

Bas. : *Irpex flavus* Kl., Linnaea **8**: 488, 1833.

– *Irpex flavus* Kl. **(54, 121, 146, 283, 95, 48, 258, 259, 265, 36)**; *I. flavus* Var. *orbicularia* Jungh. **(54, 48, 7)**; *Polystictus flavus* Jungh. **(166, 177, 196)**.

29. FOMES (Fr.) Fr.

Summa Veg. Scand. **2**: 319, 1847.

Basidiocarps perennial; hard, woody, sessile, dimidiate, ungulate; pilear surface pale to greyish brown or greyish black with a distinct crust, zonate; context pinkish brown, darkening in KOH, thick; pore surface pale to pinkish brown, darker on bruising, tubes stratified; hyphal system trimitic,generative hyphae with clamps at septa; skeletal hypahe pale yellow, yellowish brown in KOH; basidiospores cylindrical, smooth, up to 19 µm long; on dead/ living hardwoods; causing white rot; widely distributed temperate genus with two species in India.

Type species : *Fomes fomentarius* (L. : Fr.) Kickx.

1. Fomes fomentarius (L.: Fr.) Kickx., Flore Crypt. Flandres **2**: 237, 1867.

Bas. : *Polyporus fomentarius* L. : Fr., Syst. Mycol. **1**: 374, 1821.

– **(54, 179, 196, 181, 7, 291, 36, 263, 266)**; *F. fomentarius* (L.) Fr. Var. *inzengae* Fr. **(7)**.

2. F. fasciatus (Sw. : Fr.) Cke., Grevillea **14**: 21, 1885.

Bas. : *Polyporus fasciatus* Sw. : Fr., Syst. Mycol. **1**: 337, 1821.

– *Fomes marmoratus* (Berk. & Curt.) Cke. **(32)**; *F. sclerodermus* (Lev.) Cke. **(32)**.

30. FOMITOPSIS Karst.

Medd. Soc. F. Fl. Fenn. 6: 9, 1881.

Basidiocarps perennial; effused-reflexed to sessile, woody hard, dimidiate, ungulate; pilear surface glabrous, light brown or pinkish brown to dark brown or greyish black with a crust from base; context white, yellow ochraceous or pink, thick; pore surface white to pinkish brown, pores regular; tubes stratified; hyphal system di/trimitic, generative hyphae with clamps at septa; skeletal and binding hyphae hyaline to pale brown; basidiospores cylindrical, smooth, hyaline; on dead/living conifers and hardwoods; causing brown rot; widely distributed cosmopolitan genus with ten species in India.

Type species : *Fomitopsis pinicola* (Swartz. : Fr.) Karst.

1. **Fomitopsis dochmius** (Berk. & Br.) Ryv., Norw. J. Bot. **19**: 231, 1972.

Bas. : *Polyporus dochmius* Berk. & Br., Linn. Soc. Bot. J. **14**: 50, 1857.

– *Fomes dochmius* Berk. & Br.; **(84, 86, 16)**.

2. **F. feei** (Fr.) Kreisel, Univ. Habana Ser. 4 Cienc. Biol. **16** : 83, 1971.

Bas. : *Polyporus feei* Fr., Linnaea **5** : 518, 1830.

– *Polyporus rubidus* Berk. **(121, 189, 176, 16, 36)**.

3. **F. hemitephra** (Berk.) Cunn., N.Z.D.S.I.R. Pl. Dis. Bull. **76**: 2, 1948.

Bas. : *Polyporus hemitephrus* Berk., Fl. N.Z. **2**: 179, 1855.

– *Fomes hemitephrus* (Berk.) Cke. **(32)**.

4. **F. officinalis** (Vill. : Fr.) Bond. et Sing., Ann. Mycol. **39**: 55, 1941.

Bas. : *Polyporus officinalis* Vill. : Fr., Syst. Mycol. I : 365, 1821.

– **(266)**; *Fomes officinalis* (Vill. : Fr.) Faulp. **(273)**.

5. **F. palustris** (Berk. & Curt.) Gilbn. & Ryv., Mycotaxon **22**: 364, 1985.

Bas. : *Polyporus palustris* Berk. & Curt., Grevillea **1**: 51, 1871.

– *Polyporus palustris* Berk. & Curt. (**95, 40, 36, 18, 19**).

6. F. pinicola (Swartz. : Fr.) Karst., Krit. Finl. Basidsv. p. 306, 1889.

Bas. : *Boletus pinicola* Swartz. : Fr., Svenska Vetensk. Akad. Handl. 1910, p. 88, 1910.

– (**266**); *Fomes pinicola* Fr. (**181, 83, 7, 25, 229, 152, 258, 263**); *F. marginatus* Fr. (**121**); *F. thomsonii* Berk. (**54, 181**); *F. ungulatus* (Schaeff.) Sacc. (**214**); *F. rufolaccatus* Bose (**84, 191, 193, 36, 263**); *Fomitopsis rufolaccatus* (Bose) Dhand. (**296**); *Polyporus marginatus* Fr. (**54**); *Ungulina marginata* (Fr.) Pat. (**83**).

7. F. rhodophaeus (Lev.) Imaz., Bull. Tok. Sci. Mus. **6**: 92, 1943.

Bas. : *Polyporus rhodophaeus* Lev., Ann. Sci. Nat. Ser. 3, Vol. **2**: 190, 1844.

– *Polyporus rhodophaeus* Lev. (**195, 196, 282**); *Polyporus semilaccatus* Berk. (**81, 247, 282, 192**); *P. cinereofuscus* (**121**); *Fomes (Polyporus) luzonensis* Murr., (**191, 48, 84**).

8. F. rosea (Alb. et Schw. : Fr.) Karst., Krit. Finl. Basidsv. p. 306, 1889.

Bas. : *Polyporus roseus* Alb. et Schw. : Fr., Syst. Mycol. **1**: 372, 1821.

– (**266**); *Fomes roseus* (Alb. & Schw.) Fr. (**7, 16, 28, 36, 263, 289**).

9. F. scutellata (Schw.) Bond. & Sing., Ann. Mycol. **39**: 55, 1941.

Bas. : *Polyporus scutellatus* Schw., Trans. Am. Phil. Soc. **11**: 157, 1832.

– *Fomes scutellatus* (Schw.) Cke. (**32, 263**).

10. F. semitostus (Berk.) Ryv., Now. J. Bot. **19**: 231, 1972.

Bas. : *Polyporus semitostus* Berk., Hook. J. Bot. **6**: 143, 1854.

– *Polyporus semitostus* Berk. **(54)**; *P. phlebeis* Berk. **(55)**; *Fomes semitostus* Berk. **(242, 181)**; *Trametes semitosta* Berk. **(192)**.

31. FUNALIA Pat.

Essai Tax. p. 95, 1900.

Basidiocarps annual; single, pileate, sessile, broadly attached, semicircular; pilear surface pure white, yellowish to greyish brown on drying; context dense and white in lower part, looser in the upper part; hymenophore poroid to dentate; pore surface concolorous with pileus, pores 1-2 per mm; hyphal system trimitic; generative hyphae with clamps; skeletal hyphae and binding hyphae hyaline, solid to thick-walled; cystidia none; basidiospores cylindrical, smooth, hyaline, up to 15 µm long; on dead hardwoods; causing white rot; common tropical genus with one species in India.

Type species : *Funalia leonina* (Kl.) Pat.

1. F. leonina (Kl.) Pat., Ess. Tax. p. 95; 1900.

Bas. : *Polyporus leoninus* Kl., Linnaea **8**: 486, 1833.

– *Polystictus leoninus* Kl. **(54, 192, 70, 95, 283, 7, 16)**; *Polyporus leoninus* Kl. **(258, 36)**; *P. satpoorensis* Beck. **(50)**; *Polystictus funalis* Fr. **(121, 146, 48, 172)**.

32. GANODERMA Karst.

Rev. Mycol. **3**: 17, 1881.

Basidiocarps annual or perennial; sessile to laterally or centrally stipitate;

pilear surface dark to reddish brown or greyish yellow to greyish black with a dull crust or laccate shiny with a thin hymenoderm; context soft, spongy, pale yellow to dark purplish brown; pore surface pinkish to yellowish brown, darker on bruising, tubes single or stratified, purplish brown; hyphae trimitic, generative hyphae with clamps at septa; skeletal hyphae brownish, branched with long tapering branches; cystidia absent; basidiospores broadly ellipsoid, truncate, bitunicate, exosporium hyaline, endosporium brown, echinulate; mostly on living/dead hardwoods; causing white mottled rot; cosmopolitan genus with 11 species in India.

Type species : *Ganoderma lucidum* (Curt. : Fr.) Karst.

1. Ganoderma ahmadii Steyaert, Persoonia 7(1): 91, 1972.

– **(280, 308).**

2. G. amboinense (Lam. : Fr.) Pat., Bull. Soc. Mycol. Fr. 3(3): 171, 1888.

Bas. : *Polyporus amboinensis* Lam. : Fr., Syst. Mycol. 1: 354, 1821.

– *Polyporus nigrocrustosus* Lloyd **(174, 182).**

3. G. applanatum (Pers.) Pat., Bull. Soc. Mycol. Fr. 5: 67, 1889.

Bas. : *Boletus applanatus* Pers., Obs. Myc. 2:, 1799.

– **(48, 23, 7, 285, 261, 280, 36, 263, 265)**; -Var. *laevisporum* Humphrey **(25, 285)**; *G. leucophaeum* (Mont.) Pat. **(84)**; *Fomes applanatus* Pers. **(181, 71, 146, 283, 300)**; *F. leucophaeus* Mont. **(181, 190, 191, 195, 48,**

74, 25, 60, 263); *Polyporus leucophaeus* Mont. (Lloyd 1927); *Elvingia applanata* (Pers.) Karst. (**152**); *Polyporus applanatus* Fr. (**121**).

4. G. australe (Fr.) Pat., Bull. Soc. Mycol. Fr. **5**: 67, 1889.

Bas. : *Polyporus australe* Fr., Elench. Fung. **1**: 108, 1828.

– (**146, 95**); *G. adspermum* (Schulz.) Donk. (**97, 265**); *G. annulare* Lloyd (**64, 95**); *G. tornatum* (Pers.) Bres. (**280, 281**).

5. G. colossum (Fr.) Baker, V. Cent. Fungi Malay. No. 425, 1918.

Bas. : *Polyporus colossus* Fr., Nova Acta Soc. Upsal. III, **1**: 56, 1861.

– (**72, 84**); *Polyporus colossus* Fr. (**174, 182**).

6. G. curtisii (Berk.) Murr., North. Am. Fl. **9**: 120, 1908.

Bas. : *Polyporus curtisii* Berk., Hook. J. Bot. **1**: 101-102, 1849.

– *Polyporus curtisii* Berk. (**176**).

7. G. flexipes Pat., Bull. Soc. Mycol. Fr. **23**: 75, 1907.

– (**280**); *G. lucidum* (Curt. : Fr.) Karst. Var. *naiae* (**99**).

8. G. lucidum (Curt. : Fr.) Karst., Rev. Myco. **3**: 17, 1881.

Bas. : *Polyporus lucidus* Curt. : Fr., Syst. Mycol. **1**: 353, 1821.

– (**70, 145, 146, 242, 95, 302, 48, 283, 225, 7, 60, 237, 287, 96,**

258, 305, 297, 241, 265, 263, 266); *G. subtornatum* Murr. (**72, 181**); *Polyporus lucidus* (Curt.) Fr. (**163, 167, 196, 168, 175, 183, 176, 165, 53, 54**).

9. G. philippii (Bres. et Henn.) Bres., Iconogr. Mycol. **21**: p. 1014, 1932.

Bas. : *Fomes philippii* Bres. et Henn., In Saccardo Syll. Fung. **9**: 180, 1891.

– (**280, 308**); *G. pseudoferreum* (Wkf.) V. Overeem., (**26**); *Polyporus philippii* Bres. et Henn. (**182**).

10. G. resinaceum Bourd., Bull. Soc. Mycol. Fr. **5**: 72, 1889.

– (**121, 283, 293**).

11. G. weberianum (Bres. & Henn.) Steyaert, Persoonia **7**: 79, 1972.

Bas. : *Fomes weberianus* Bres. & Henn., In Litt. apud Sacc., Syll. Fung. **9**: 174, 1891.

– (**266**).

33. GLOEOPHYLLUM Karst.

Bidr. Kanned. Finl. Natur. Folk **37**: 79, 1882.

Basidiocarps annual to very rarely perennial, darkening in KOH; effused-reflexed or sessile dimidiate to applanate, single or imbricate, corky, tough or firm; pilear surface yellowish to rusty brown or reddish brown tomentose to villose; context dark rusty to umber brown; pore surface deep to dark rusty brown, pores irregular to daedaleiod or lamellate; hyphal system dimitic or trimitic, generative hyphae hyaline with clamps at septa,;skeletal hyphae yellowish brown, olivaceous in KOH; binding hyphae poorly developed; cystidia mostly present with an apical crown of crystals; basidiospores cylindrical, smooth, hyaline; mostly on coniferous woods, very rarely on

angiosperms; causing brown rot; cosmopolitan genus with six specis in India.

Type species : *Gloeophyllum sepiarium* (Fr.) Karst.

1. Gloephyllum abietinum (Bull. : Fr.) Karst., Bidr. Kanned. Finl. Natur. Folk **37**: 80, 1882.

Bas. : *Daedalea abietina* Bull. : Fr., Syst. Mycol. **1**: 334, 1821.

– (**296**); *Lenzites abietina* (Bull.) Fr. (**7, 26**).

2. G. carbonarium (Berk. & Curt.) Ryv., Mycotaxon **20**: 334, 1984.

Bas. : *Hexagonia carbonaria* Berk. & Curt., Grevillea **1**: 68, 1872.

– (**266**); *Trametes carbonaria* (Berk. & Curt.) Overh. (**26, 288, 263**).

3. G. sepiarium (Fr.) Karst., Finl. Hattsv. **2**: 80, 1879.

Bas. : *Daedalea sepiaria* Fr., Syst. Mycol. **1**: 333, 1821.

– *Lenzites sepiaria* Wulf.: Fr. (**82, 48, 7, 229, 287, 263**).

4. G. striatum (Swartz : Fr.) Murr., Torrey Bot. Cl. Bull. **32**: 370, 1905.

Bas. : *Daedalea striata* Swartz : Fr., Syst. Mycol. **1**: 334, 1831.

– *Lenzites striata* (Swartz : Fr.) Fr. (**48, 196, 7, 261, 36, 263**).

5. G. subferrugineum (Berk.) Bond. & Sing., Ann. Mycol. **39**: 64, 1941.

Bas. : *Lenzites subferruginea* Berk., Hook J. Bot. **6**: 134, 1854.

– (**95, 266**); *Daedalea subferruginea* (Berk.) Cunn. (**118, 7, 16**); *Lenzites subferruginea* Berk. (**54, 36, 263**).

6. G. trabeum (Pers. : Fr.) Murr., N. Am. Fl. **9**: 129, 1908.

Bas. : *Daedalea trabea* Pers. : Fr., Syst. Mycol. **1**: 335, 1821.

– **(270)**; *Lenzites trabea* (Pers.) Fr. **(206)**.

34. GLOEOPORUS Mont

Ann. Sci. Nat. Bot. Ser. 2, **17**: 126, 1842.

Basidiocarps annual; resupinate to effused-reflexed or sessile; pilear surface white to greyish brown, tomentose to hirsute; context white, cottony to loose; pore surface pinkish white, orange to deep reddish brown, pores small, continuous over the dissepiments, shallow and angular, tube layer gelatinous when fresh, resinous and dense when dry, darker and denser than the context; hyphal system monomitic, generative hyphae with clamps at septa; cystidia absent or present; basidiospores allantoid to cylindrical, smooth, hyaline; on dead hard/coniferous woods; causing white rot; cosmopolitan genus with two species in India.

Type species : *Gloeoporus thelephoroides* (Hook.) A.H. Cunn.

1. Gloeoporus dichrous (Fr.) Bres., Ann. Mycol. **14**: 230, 1916.

Bas. : *Polyporus dichrous* Fr., Syst. Mycol. **1**: 364, 1821.

– *P. dichrous* Fr. **(83, 7, 16)**.

2. G. thelephoroides (Hook.) Cunn., Polyp. New Zealand p. 111, 1965.

Bas. : *Boletus thelephoroides* Hook., In Kunth., Syn. pl. **1**: 10, 1822.

– *Polyporus conchoides* (Mont.) Lloyd **(84)**.

35. GRAMMOTHELE Berk. & Curt.
J. Linn. Soc. Bot. **10**: 327, 1868.

Basidiocarps annual; resupinate, up to 2 mm thick; context light yellowish; pore surface cream, bluish grey to pale umber brown, pores regular, to irregularly irpicoid to labyrinthine, hymenium restricted to the bases of pores only; hyphal system dimitic, generative hyphae with clamps; skeletal hyphae thick-walled, moderately dextrinoid, hyaline to coloured; dendrohyphidia present; cystidia absent; basidiospores ellipsoid to oblong-ellipsoid, hyaline, smooth; on dead deciduous/monocotyledonous woods; causing white rot; tropical genus with three species in India.

Type species : *Grammothele lineata* Berk. & Curt.

1. Grammothele delicatula (Henn.) Ryv., A Pre. Polyp. Fl. E. Afr., p. 37, 1980.

Bas. : *Poria delicatula* Henn., Engl. Bot. Jahrb. **34**: 44, 1904.

– **(264)**.

2. G. fuligo (Berk. & Br.) Ryv., Trans. Br. Mycol. Soc. **73**: 15, 1979.

Bas. : *Polyporus fuligo* Berk. & Br., J. Linn. Soc. Bot. **14**: 53, 1875.

– **(265)**; *Grammothele cineracea* Bres. **(46, 48)**; *Poria ravenalae* (Berk. & Br.) Cke. **(72)**.

3. G. pulchella (Bres.) Ryv., Mycotaxon **33**: 318, 1988.

Bas. : *Trametes pulchella* Bres., Stut. Trent. **2**: 58, 1926.

– **(270)**.

36. GRIFOLA S.F. Gray Emed. Kotl. & Pouz.

Nat. Arr. Br. Plants 1: 643, 1821 Ceska Mykol. 11: 155, 1957.

Basidiocarps annual; stipitate, stipe simple or branched with many imbricate, petaloid or flabelliform pilei; pilear surface grey to dull dark brown, finely tomentose to glabrous, usually radially rugose; context light yellowish brown; pore surface white to light yellowish or greyish, pores angular, 2-4 per mm, lacerate with age; hyphal system dimitic, generative hyphae with clamps at septa; skeletal hyphae hyaline, thick-walled; cystidia none; basidiospores ovoid to ellipsoid, smooth, hyaline; on roots of living hardwoods/ conifers; causing white rot; temperate genus with one species in India.

Type species : *Grifola frondosa* (Dicks. : Fr.) S.F. Gray.

1. Grifola frondosa (Fr.) S.F. Gray, Nat. Arr. Br. Pl. 1: 643, 1821.

Bas. : *Polyporus frondosus* Fr., Syst. Mycol. 1: 355, 1821.

– (270).

37. HAPALOPILUS Karst.

Rev. Mycol. 3: 18, 1881.

Basidiocarps annual; resupinate to effused-reflexed to pileate, sessile, dimidiate, soft, brittle hard on drying, reddish brown to orange red, dark reddish brown with KOH; context light cinnamon to pale cinnamon reddish, lighter towards the upper surface; pore surface reddish brown, pores round to angular; hyphal system monomitic, hyphae with clamps, thin to thick -walled, cherry red when mounted in KOH; cystidia none; basidiospores broadly ellipsoid to cylindrical, hyaline, smooth; on dead hardwoods; causing white rot; tropical genus with two species in India.

Type species : *Hapalopilus nidulans* (Fr.) Karst.

1. Hapalopilus albo-citrinus (Petch) Ryv., A Pre. Polp. Fl. East Afr. p. 359, 1980.

– **(270).**

2. H. nidulans (Fr.) Karst., Rev. Mycol. **3**: 18, 1881.

Bas. : *Polyporus nidulans* Fr., Syst. Mycol. **1**: 362, 1821.

– *Polyporus rutilans* (Pers.) Fr. **(194).**

38. HETEROBASIDION Bref.

Unters. Gesamtg. Mykol. **8**: 154, 1888.

Basidiocarps annual to perennial; resupinate to pileate, coriaceous tough, pilear surface light brown to dark reddish brown with a thin black cuticle, tomentose to glabrous; context yellowish to greyish brown; pore surface light cream, pores regular; hyphal system dimitic, generative hyphae simple septate; skeletal hyphae dextrinoid; cystidia absent; basidiospores ellipsoid to globose, hyaline, finely asperulate; on dead/ living coniferous or rarely hardwood trees; causing white rot; temperate genus with two species in India.

Type species : *Heterobasidion annosum* (Fr.) Bref.

1. Heterobasidion annosum (Fr.) Bref., Unters. Gesamtg. Mykol. **8**: 154, 1888.

Bas. : *Polyporus annosus* Fr., Syst. Mycol. **1**: 373, 1821.

– Var. *indicus* (Wakf. & Hole) Dhanda **(296)**; *Fomes annosus* (Fr.) Cke. **(91, 92, 149, 150, 82, 7, 95, 25, 36, 263, 229)**; *F. annosus* (Fr.) Cke. Var. *indicus* Wakf. **(150, 95, 289).**

2. H. insulare (Murr.) Ryv., Norw. J. Bot. **19**: 237, 1972.

Bas. : *Trametes insularis* Murr., Bull. Torr. Bot. Cl. **35**: 405, 1908.

– **(266)**; *Trametes insularis* Murr. **(36, 263)**.

39. HEXAGONIA Fr.

Flora Scan. p. 339, 1835.

Basidiocarps annual; pileate, sessile, dimidiate, flabelliform to semicircular, coriaceous to corky, woody hard on drying; pilear surface glabrous, tomentose to hirsute or strigose with long, dark branched hairs, dark cinnamon to umber to almost black with age; context thin, dark brown, blackening in KOH; pore surface yellowish to greyish brown, pores entire, usually hexagonal, large; hyphal system trimitic, generative hyphae hyaline; binding and skeletal hyphae golden brown; cystidia absent; basidiospores cylindrical, hyaline, longer than 12 μm; on dead hardwoods; causing white rot; tropical genus with four species in India.

Type spcies : *Hexagonia crinigera* Fr.

1. Hexagonia apiaria (Pers.) Fr., Epicr. P. 497, 1838.

Bas. : *Polyporus apiarius* Pers., In Gaud. Bot. Voyage Uranie Frey. p. 69, 1826.

– **(72, 48, 7, 192, 282, 261, 258, 265)**.

2. H. hirta (Fr.) Fr., Epicr. Syst. Mycol. p. 497, 1838.

Bas. : *Polyporus hirtus* Fr., Syst. Mycol. **1**: 345, 1821.

– *Polyporus wightii* Kl., **(155)**; *Hexagonia wightii* (Kl.) Fr. **(54, 164)**; *Polyporus sinensis* Fr. **(51)**; *Hexogonia sinensis* (Fr.) Fr. **(155)**; *Trametes sinensis* (Fr.) Fr. **(134)**.

3. H. papyracea Berk., Ann. Mag. Nat. Hist. **10** (Suppl.) : 379, 1843.

– *H. scutigera* (Fr.) Fr. (**284**); *H. variegata* Berk. (**279**).

4. H. tenuis (Hook.) Fr., Epicr. Syst. Mycol. p. 498, 1838.

Bas. : *Boletus tenuis* Hook., In Kunth, Syn. Pl. **1**: 10, 1822.

– (**183, 263, 266**); forma *discopoda* Pat. & Hari. (**259**); *H. thwaitesii* Berk. (**7, 8, 26**); *H. umbrenella* Fr. (**179**); *H. pulchella* Lev. (**247**); *H. polygramma* Mont. (**259**); *H. kurzii* Currey (**121, 81**); *H. subtenuis* Berk. & Cke. (**164, 173, 70**); *H. burchelli* Lloyd (**78, 184, 191, 225**); *H. aculeata* Mont. (**161**); *Daedaleopsis tenuis* (Hook. : Fr.) Imaz. (**95**); *H. tricolor* Fr. (**166**).

40. INCRUSTOPORIA Dom.

Acta Soc. Bot. Polon. **32**: 737, 1963.

Basidiocarps annual; resupinate to effused-reflexed, imbricate or fused laterally, coriaceous, brittle and fragile when dry; pileus when present yellowish white to light brown, velutinate to glabrous; context yellowish white; pore surface yellow to straw coloured or pale brown, darker on bruising; pores angular to round; hyphal system di/trimitic, generative hyphae hyaline with clamps; skeletal hyphae thick-walled to solid, both generative and skeletal hyphae strongly encrusted in the dissepiments; binding hyphae sinuous; cystidia none; basidiospores allantoid to ellipsoid, hyaline, smooth; on dead woods; causing white rot; cosmopolitan genus with two species in India.

Type species : *Incrustoporia stellae* (Pilat) Dom.

1. Incrustoporia carneola (Bres.) Ryv., Norw. J. Bot. **19**: 232, 1972.

Bas. : *Poria carneola* Bres., Hedwigia **35**: 282, 1896.

– (270).

2. I. nivea (Jungh.) Ryv., Norw. J. Bot. **19**: 232, 1972.

Bas. : *Polyporus niveus* Jungh., Verhand. Batav. Genootch. **17**: 48, 1838.

– *P. semipileatus* Peck. (41).

41. INONOTUS Karst.

Medd. Soc. Fauna Fl. Fenn. **5**: 39, 1880.

Basidiocarps annual; sessile to rarely stipitate, permanently black in KOH, effused reflexed to pileate, solitary to imbricate, corky-fleshy to woody hard and brittle on drying; pileus applanate, dimidiate, conchate, small to medium sized, glabrous, tomentose to hispid, yellowish to dark reddish brown, usually without crust; context rusty to cinnamon brown, with or without a mycelial core; hymenophore poroid, pore surface dark reddish brown to yellowish brown; hyphal system monomitic, generative hyphae light yellowish to pale brown, simple septate, thin to thick-walled, hymenial or tramal setae and setal hyphae present or absent; cystidia none; basidiospores mostly globose to ellipsoid, rarely cylindrical, smooth, hyaline to yellowish brown; dead/living hard/coniferous woods; cosmopolitan genus with seventeen species in India.

Type species : *Inonotus cuticularis* (Bull. : Fr.) Karst.

1. Inonotus brevisporus (Thind & Chatrath) Sharma, Hymenochaetaceae of India : 76, 1995.

Bas. : *Polyporus dryadeus* Pers. : Fr. var. *brevisporus* Thind & Chatrath, Indian Phytopath. **13**: 82, 1960.

– *P. dryadeus* Pers. : Fr. var. *brevisporus* Thind & Chat. **(263, 285)**; *Inonotus dryadeus* var. *brevisporus* (Thind. & Chat.) Dhanda; **(296)**.

2. I. circinatus (Fr.) Gilbn., Fungi that decay Ponderosa Pine, p. 107, 1974.

Bas. : *Trametes circinatus* Fr., Svenska Velensk. Akad. Handl. For. 1848, P. 128, 1849.

– **(266, 268)**; *Polyporus circinatus* Fr. **(86, 7, 229)**; *P. tomentosus* Fr. var. *circinatus* (Fr.) Sartory & Maire **(289, 36)**.

3. I. cuticularis (Bull. : Fr.) Karst., Medd. Soc. Fauna Fl. Fenn. **5**: 39, 1879.

Bas. : *Polyporus cuticularis* Bull. : Fr., Syst. Mycol. **1**: 363, 1821.

– **(266, 268)**; *Polyporus cuticularis* (Bull.) Fr. **(206, 207, 7, 84, 83, 263, 286)**; *Polystictus cuticularis* Wahl. **(208)**.

4. I. diverticuloseta Pegler, Kew Bull. **21**: 43: 1966.

– **(233, 222, 266, 268)**; *I. nothofagi* Cunn. **(25, 263)**.

The material which was identified by Cunn. and reported by (Bagchee *et al* 1954) as *I. nothofagi* from India was not in fact *I. nothofagi* but belonged to *I. diverticuloseta* Pegler. The presence of *I. nothofagi* in India is doubtful.

5. I. dryadeus (Pers : Fr.) Murr., N. Am. Fl. **9**: 86, 1908.

Bas. : *Polyporus dryadeus* Pers. : Fr., Syst. Mycol. **1**: 374, 1821.

– **(266, 268)**; *Polyporus dryadeus* Pers. : Fr. **(36, 263)**.

6. I. dryophilus (Berk.) Murr., Bull. Torrey Bot. Cl. **31**: 597, 1904.

Bas. : *Polyporus dryophilus* Berk., Lon. J. Bot. **6**: 321, 1847.

– **(266, 268)**.

7. I. glomeratus (Pk.) Murr., Mycologia **12**: 18, 1920.

Bas. : *Polyporus glomeratus* Pk., N.Y. State Mus. Ann. Rept. **24**: 78, 1872.

– **(266, 268)**; *Polyporus glomeratus* Pk. **(208, 60, 36, 258, 217, 259, 263)**.

8. I. hamusetulus Ryv., Mycotaxon **20**: 145, 1984.

– **(266, 268)**.

9. I. hispidus (Bull. : Fr.) Karst., Krit. Finl. Basidsv. p. 330, 1889.

Bas. : *Polyporus hispidus* Bull. : Fr., Syst. Mycol. **1**: 362, 1821.

– **(266, 268)**; *Polyporus hispidus* Bull. : Fr., **(146, 95, 36, 263, 94)**.

10. I. Patouillardii (Rick) Imaz., Bull. Tok. Sci. Mus. **6**: 105, 1943.

Bas. : *Polystictus patouillardii* Rick, Broteria **6**: 89, 1907.

– (266); *Polyporus patouillardii* Rick (**194, 195**).

11. I. radiatus (Sow. : Fr.) Karst., Krit. Finl. Basidsv. p. 331, 1889.

Bas. : *Polyporus radiatus* Sow. : Fr., Syst. Mycol. **1**: 369, 1821.

– (**266, 268**); *Polyporus radiatus* Sow. : Fr. (**86, 32, 263**).

12. I. rheades (Pers.) Bond. et Sing., Ann. Mycol. **39**: 56, 1941.

Bas. : *Polyporus rheades* Pers., Mycol. Europe **2**: 69, 1825.

– (266); *P. vulpinus* Fr. (**32**).

13. I. rickii (Pat.) Reid, Kew Bull. **12**: 141, 1957.

Bas. : *Xanthochrous rickii* Pat., Bull. Soc. Mycol. Fr. **24**: 6, 1908.

– (**222, 223, 268**); *Polyporus calcuttensis* Bose (**80, 48, 7, 208**).

14. I. sciurinus Imaz., Bull. Tok. Sci. Mus. **6**: 106, 1943.

– (**222, 268**); *Inonotus flavus* (Berk.) Murr. (**266**).

15. I. subhispidus Peg. & Reid, Trans. Brit. Mycol. Soc. **47**(2): 170-71, 1964.

Bas. : *Polyporus subhispidus* Lloyd, Mycol. Writ. **7**: 1330, 1924.

– *P. subhispidus* Lloyd. (**196**).

16. I. tenuicarnis Peg. & Reid, Trans. Brit. Mycol. Soc. **47**: 172-173, 1964.

– **(221, 222, 268, 266).**

17. I. tomentosus (Fr.) Teng, Fungi of China p. 763, 1964.

Bas. : *Polyporus tomentosus* Fr., Syst. Mycol. **1**: 351, 1821.

– **(268, 266)**; *Polyporus tomentosus* Fr. **(28, 26, 259, 263).**

42. IRPEX Fr.

Elench. Fung. **1**: 142, 1828.

Basidiocarps annual; resupinate to effused-reflexed, pilei small, narrow, imbricate, coriaceous; upper surface tomentose to hirsute, concentrically sulcate, white to yellowish or greyish white; context white, thin; hymenophore poroid to irpicoid, white to grey yellowish; hyphal system dimitic, generative hyphae hyaline, thin-walled, septate; skeletal hyphae hyaline, thick-walled; cystidia elongate-fusiform to clavate, apically encrusted or smooth; basidiospores hyaline, oblong ellipsoid, smooth; on dead hardwoods; causing white rot; a tropical genus with one species in India.

Type species : *Irpex lacteus* (Fr. : Fr.) Fr.

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

Bas. : *Sistotrema lacteum* Fr., Obs. Mycol. **2**: 226, 1818.

– **(266)**; *Polyporus tulipiferae* (Schw.) Overh. **(31, 38, 263)**; *Irpex canescens* Fr. **(283)**, [Wrongly published as new record for India by Mitra *et al.* 1985].

43. ISCHNODERMA Karst. Emend. Dom. & Drl.

Med. Soc. Fauna Fl. Fenn. **3**: 38, 1879-Fungi p. 118, 1973.

Basidiocarps annual, pileate, sessile; pileus dimidiate, semicircular to

circular; upper surface tomentose to glabrous, concentrically zonate, glossy with a black resinous crust, shrinking when dried; context ochraceous to light brown, separated from tomentum by a distinct black zone; hymenophore poroid; pore surface whitish grey, darkening on bruising; tubes concolorous with pore surface; hyphal system dimitic, generative hyphae with clamps; skeletal hyphae hyaline to yellowish; cystidia none; basidiospores cylindrical, smooth, hyaline; on dead hard/coniferous woods; causing a white rot; a rare temperate genus with one species in India.

Type species : *Ischnoderma resinosum* (Fr.) Karst.

1. Ischnoderma resinosum (Fr.) Karst., Soc. F. Fl. Fenn. **5**: 38, 1879.

Bas. : *Polyporus resinosus* (Schrad.) Fr., Syst. Mycol. **1**: 361, 1821.

– *Polyporus resinosus* (Schrad.) Fr. (**146, 182, 95**).

44. JUNGHUNIA Corda Emend. Ryv.

Anl. Stud. Mycol. p. 195, 1842 Persoonia 7: 18, 1972.

Basidiocarps annual; resupinate, brittle and light in weight on drying; context tough, fibrous, pinkish white; pore surface cream to pinkish white or cinnamon to orange or vinaceous cinnamon; pores small, dissepiments lacerate; hyphal system dimitic, generative hyphae with clamps; skeletal hyphae thick-walled, hyaline; cystidia frequent to rare, partially to completely encrusted, embedded or projecting; hyphal pegs usually present; basidiospores ovoid to cylindric, curved in certain species; on dead hardwoods/ conifers; causing white rot; widely spread cosmopolitan genus with four species in India.

Type species : *Junghunia crustacea* (Jungh.) Ryv.

1. Junghunia collabens (Fr.) Ryv., Persoonia 7: 18, 1972.

Bas. : *Polyporus collabens* Fr., Hymeno. Europ. p. 572, 1874.

– *Poria rixosa* Karst. (229, 28, 263).

2. J. crustacea (Jungh.) Ryv., Persoonia 7: 18, 1972.

Bas. : *Laschia crustacea* Jungh., In Verh. Batav. Genootsch 17: 75, 1838.

– (279).

3. J. luteo-alba (Karst.) Ryv., Persoonia 7: 18, 1972.

Bas. : *Physisporus luteo-alba* Karst., Rev. Mycol. 9: 10, 1887.

– *Poria luteo-alba* (Karst.) Sacc. (274).

4. J. nitida (Fr.) Ryv., Persoonia 7: 18, 1972.

Bas. : *Polyporus nitidus* Fr., Syst Mycol. 1: 379, 1821.

– *Poria eupora* (Karst.) Cke. (7, 26, 274, 263, 291).

45. LAETIPORUS Murr.

Bull. Torr. Bot. Cl. 31: 607, 1904.

Basidiocarps annual; sessile or substipitate, single or imbricate, fleshy, brittle, caseous when dry; pilei large, dimidiate, applanate; upper surface yellowish white to sulphur yellow or orange yellow, radiate rugose, glabrous, uneven; context yellowish cream, thick; pore surface tubular, yellowish cream to yellowish orange, pores medium sized; hyphal system dimitic, generative

hyphae hyaline, thin-walled, septate; binding hyphae hyaline, thick-walled, tortuous; cystidia absent; basidiospores hyaline, smooth ovoid to broadly ellipsoid; on dead/living deciduous trees; causing brown cuboidal rot; temperate genus with two species in India.

Type species : *Laetiporus sulphureus* (Fr.) Murr.

1. Laetiporus sulphureus (Fr.) Murr., Mycologia **12**: 11, 1920.

Bas. : *Polyporus sulphureus* Fr., Syst. Mycol. **1**: 357, 1821.

– **(152)**; *Polyporus sulphureus* Bull. : Fr. **(54, 86, 7, 229, 261, 36, 263)**; *P. miniatus* Jungh. **(54, 89)**; *P. rubricus* Berk. **(53, 176)**; *Lenzites imbricata* Fr. **(54)**

2. L. percicinus (Berk. & Curt.) Ryv., Norw. J. Bot. **19**: 232, 1972.

Bas. : *Polyporus percicinus* Berk. & Curt., Grevillea **1**: 37, 1872.

– *Polyporus mesotalpe* Lloyd **(301)**.

46. LENZITES Fr.

Fl. Scan. p. 339, 1835.

Basidiocarps annual; pileate, corky and coriaceous; pileus smooth to hirsute, zonate, white greyish to light yellowish brown, usually dimidiate with a contracted base; context yellowish to greyish white, tough; pore surface white to pale yellowish; deadaleoid to lamellate; hyphal system trimitic, generative hyphae thin-walled, hyaline, clamped; skeletal hyphae thick-walled, hyaline; binding hyphae hyaline, strongly branched, tortuous with long sword-like side branches; cystidia none; basidiospores hyaline, cylindrical, smooth; on dead hardwoods, rarely on conifers; causing white rot; cosmopolitan genus with five species in India.

Type species : *Lenzites betulina* (Fr.) Fr.

1. Lenzites acuta Berk., Hook. Lond. J. Bot. 1: 146, 1842.

– **(95, 265, 266)**; *L. malaccensis* **(82)**; *L. ochrophylla* Berk. **(54)**; *L. beckleri* Berk. **(95)**; *L. tenuis* (Berk.) Cunn. **(118)**; *L. ochroleuca* Lev. **(168, 179, 95, 302)**; *L. eximia* Berk. & Curt. **(64, 263)**; *L. adustus* Massee **(205, 191, 82, 48, 7, 36)**; *Daedalea boseii* Lloyd **(78, 191, 192)***D. flavida* Lev. **(190, 191, 74, 78, 49, 48, 7, 261, 25, 60, 258, 259)**; *D. flavida* f. *microzona* Lev. **(78)**; *D. schomburgkii* Berk. **(54)**; *D. suberosa* Massee **(203)**; *D. subsulcata* Berk. & Br. **(247)**; *D. pruinosa* Lev. *D. tenuis* Berk. **(95)**; *D. hobsoni* Berk. **(58, 71, 259)**; *Trametes lobata* Berk. **(53)**; *T. flavida* Lev. **(191, 183)**; *T. acuta* (Berk.) Imaz. **(9)**; *T. colliculosaus* Berk. **(54)**; *Hexagonia glabra* Lev. **(161)**; *Sistotrema ochroleucum* Lev. **(161)**.

2. L. betulina (Fr.) Fr., Epicr. p. 405, 1838.

Bas. : *Daedalea betulina* Fr., Syst. Mycol. 1: 333. 1821.

– **(188, 146, 70, 53, 7, 96, 261, 60, 25, 152, 263, 266)**; *L. flaccida* (Bull.) Fr. **(7, 263)**; *L. japonica* Berk. & Curt. **(26)**.

3. Lenzites elegans(Fr.) Pat., Essai Tax. p. 89, 1900.

Bas. : *Daedalea elegans* Fr., Syst. Mycol. 1: 335, 1821.

– *Lenzites repanda* (Mont.) Fr. **(53, 54, 71, 48, 283, 101, 191, 171, 167, 7, 95, 262)**; *Lenzites pallida* Berk. **(54)**; *Lenzites palisoti* Fr. **(121)**; *Daedalea repanda* Mont. **(192)**; *Lenzites rugulosa* Berk. **(53)**; *Daedalea palisoti* Fr. **(258, 25, 287)**; *Daedalea ambigua* (Fr.) Pat. **(62)**; *Coriolus sinulosus* (Kl.) Cunn. **(118)**; *Daedalea sinulosa* Kl. **(95)**; *Daedalea latissima* Fr. **(51, 156)**.

4. L. stereoides (Fr.) Ryv., Norw. J. Bot. **19**: 232, 1972.

Bas. : *Daedalea stereoides* Fr., Nova Acta Reg. Soc. Sci. Upps. Ser. III, **1**: 99, 1851.

– *Daedalea stereoides* Fr. **(86, 263)**.

5. L. vespacea (Pers.) Ryv., Norw. J. Bot. **19**: 232, 1972.

Bas. : *Polyporus vespaceus* Pers., In Gaudichaud Voy. Au. Monde, P. 170, 1827.

– **(270)**; *Lenzites platyphylla* Lev. **(98)**; *L. alutacea* Cke. **(70, 190, 48, 259)**; *Hexagonia albida* Berk. **(166)**; *H. macrotrema* Jungh. **(134)**; *Elmerina vespacea* (Pers.) Bres. **(95)**.

LIGNOSUS Lloyd : Torrend
Broteria (Ser. Bot.) **18**: 121, 1920- Lloyd Synopsis Sect. Ovius Polyporus p. 122, 1911.

Basidiocarps annual, centrally stipitate; pileus snuff-brown to sepia brown, smooth or tomentose, narrowly zoned, radially wrinkled when dry, margin thin and sharp; stipe velutinate to glabrous, light to dark brown, solid, hollow with age; sclerotium irregular, up to 5 cm in longest dimensions, white, smooth to folded when fresh, wrinkled and bony hard when dry; context white; pore surface white to yellowish cream, pores angular, radially elongated to splitting, 1-3 per mm; hyphal system trimitic, generative hyphae with clamps; binding and skeletal hyphae hyaline; cystidia none; basidiospores smooth, ellipsoid, hyaline; on ground; tropical genus with one species in India.

Type species : *Lignosus sacer* (Fr.) Ryv.

1. Lignosus sacer (Fr.) Ryv., Norw. J. Bot. **19**: 232, 1972.

Bas. : *Polyporus sacer* Fr., Epicr. Syst. Mycol. p. 436, 1938.

– *Polystictus sacer* Fr. (**94, 82**).

48. LOWEPORUS Wright

Mem. N. Y. Bot. Gard. **28**: 225, 1975.

Basidiocarps annual to perennial; resupinate to pileate; pileus when present grey brown to dark brown or blackish, glabrous; context dark olivaceous brown; pore surface coffee brown to greyish brown, pores round to angular; tubes concolorous with pore surface; hyphal system di-trimitic, generative hyphae with clamps; skeletal hyphae ochraceous to pale brown, becoming olivaceous brown in KOH, strongly dextrinoid; binding hyphae rare, pale yellowish; cystidia none; basidiospores broadly ellipsoid to truncate, partially collapsed usually dextrinoid; on dead hardwoods; causing a white rot; widely distributed tropical genus with two species in India.

Type species : *Loweporus tephroporus* (Mont.) Ryv.

1. Loweporus fusco-purpureus (Pers.) Ryv., A. Pre. Polyp. Fl. E. Afr. p. 411, 1980.

Bas. : *Polyporus fusco-purpureus* Pers., In Gaudichaud, Voy. aut. Monde, Bot. p. 172, 1827.

– *Fomes caliginosus* Berk. (**32**).

2. L. tephroporus (Mont.) Ryv., A. Pre. Polyp. Fl. E. Afr. p. 417, 1980.

Bas. : *Polyporus tephroporus* Mont. Ann. Sci. Nat. Ser. 3, **4**: 358, 1845.

– (265); *Fomes lividus* Kalchbr. (**83, 48, 7, 262, 36**); *Perenniporia tephropora* (Mont.) Ryv. (**293**); *Fomes pallidus* Petch (**32**).

49. MEGASPOROPORIA Ryv. & Wright

Mycotaxon **16**: 173, 1982.

Basidiocarps annual; resupinate, adnate, coriaceous hard on drying; context white to pale yellowish brown; pore surface whitish to pale or grey yellow brown, sometimes purplish brown in the centre, pores angular and shallow, lacerate with age; hyphal system trimitic, generative hyphae with clamps; skeletal hyphae and binding hyphae thick-walled and dextrinoid; cystidia absent, dendrohyphidia present near the pore mouths; basidiospores longer than 12 μm, cylindrical; on dead hardwoods; causing white rot; tropical genus with one species in India.

Type species : *Megasporoporia setulosa* (Henn.) Rajch.

1. Megasporoporia cavernulosa (Berk.) Ryv., Mycotaxon **16**: 174, 1982.

Bas. : *Polyporus cavernulosa* Berk., Hook. J. Bot. **8**: 235, 1856.

– (**270**).

50. MERIPILUS Karst.

Bidr. Kann. Finl. Nat. Folk. **37**: 33, 1832.

Basidiocarps annual; pileate, centrally or laterally stipitate, large, up to 50 cm long and broad; composed of numerous pilei from the common short stipe or base; pileus circular in centrally stipitate basidiocarps or otherwise tongue to fan-shaped to spathulate or reniform, mostly concentrically zonate; upper surface velutinate to smooth, brown with radial lines; context soft, spongy, white; pore surface white, darkening on bruising or drying; hyphal system monomitic, generative hyphae hyaline, simple septate; gloeoplerous

hyphae present or absent; cystidia none; basidiospores subglobsoe, smooth, hyaline, IKI-ve; on ground near stumps or roots of trees; a rare temperate genus with one species in India.

Type species : *Meripilus giganteus* (Fr.) Karst.

1. Meripilus giganteus (Fr.) Karst., Bidr. Kann. Finn. Nat. Folk **37**: 33, 1882.

Bas. : *Polyporus giganteus* Fr., Syst. Mycol. **1**: 356, 1821.

– **(270).**

51. MERULIUS Fr.

Syst. Mycol. **1**: 326, 1821.

Basidiocarps annual; resupinate to pileate, sessile, dimidiate, carnose-tremellaceous, ceraceous, shrunken and with a horny hymenium when dry; hymenophore meruloid to almost poroid, dissepiments with fertile edges; trama dimorphous with an upper layer of irregularly, interwoven, rather thick-walled hyphae and next to the hymenium a layer of parallely arranged, thin-walled hyphae, having ceraceous texture, clearly distinguished from the upper part; hyphal system monomitic, hyphae-hyaline, clamped; basidia narrowly clavate in a dense shade; basidiospores allantoid, biguttulate; on decayed hardwoods, rarely on coniferous woods; causing white rot; a temperate genus with one species in India.

Type species : *Merulius tremellosus* Fr.

1. Merulius tremellosus Fr., Syst. Mycol. **1**: 327, 1821.

– **(7, 25, 152, 263, 278).**

52. MICROPORELLUS Murr.

Bull. Torrey Bot. Cl. **32**: 483, 1905.

Basidiocarps annual, laterally stipitate or with a tapering base to more rarely centrally stipitate; pileus reniform, spathulate or flabelliform to trumpet-shaped, usually paper thin near the margin, coriaceous when fresh, hard when dry; upper surface tomentose to glabrous, yellowish brown to grey violet; context white to brownish; pore surface yellowish white to pale violet, pores angular, dissepiments thin-walled; hyphal system dimitic; generative hyphae with clamps; skeletal hyphae thick-walled, dextrinoid to negative in Melzer's; cystidia present or absent; basidiospores globose to subglobose, thin-walled, smooth; on ground or dead hardwoods; causing white rot; a rare tropical genus with three species in India.

Type species : *Microporellus dealbatus* (Berk. & Curt.) Murr.

1. Microporellus chocolatus (Bose) Ryv., Mycotaxon **38**: 85, 1990.

Bas. : *Polyporus chocolatus* Bose, Bull. Soc. Mycol. Fr. **39**: 226, 1923.

– *Polyporus chocolatus* Bose **(194, 77)**.

2. M. obovatus (Jungh.) Ryv., Norw. J. Bot. **19**: 232, 1972.

Bas. : *Polyporus obovatus* Jungh., Verh. Batsv. Genootsch **17**: 65, 1838.

– *Polyporus umbilicatus* Berk. **(53, 283, 296)**.

3. M. violaceocinerascens(Petch) David. & Rajch., Mycotaxon **22**: 303, 1985.

Bas. : *Polyporus violaceocinerascens* Petch, Ann. Roy. Bot. Gard. Perad. 6: 41, 1916.

– *Cystostiptoporus indica* Dhanda & Ryv., Trans. Brit. Mycol. Soc. 65: 413, 1975. (253).

53. MICROPORUS Beauv. : Kunt. Emend. Pat.
Rev. gen. Pl. 3: 494, 1898.- Essai Tax. p. 83, 1900.

Basidiocarps annual, centrally or laterally stipitate, coriaceous when fresh, hard when dry; pileus circular, flabelliform to spathulate, glabrous to hirsute, zonate; stipe round with expanded foot at the base, yellowish white to glossy black, smooth or hirsute; context white to pinkish white; pore surface white to cream or pinkish yellow, pores minute, entire; hyphal system trimitic, generative hyphae with clamps; binding and skeletal hyphae hyaline, thick-walled; cystidia none; coralloid dichohyphidia present along the dissepiments, basidiospores elliptic to allantoid, smooth, thin-walled; on dead hardwoods; causing white rot; tropical genus with four species in India.

Type species : *Microporus xanthopus* (Fr.) Kunt.

1. Microporus affinis (Blume & Nees : Fr.) Kunt., Rev. gen. Pl. 3: 494, 1898.

Bas. : *Polyporus affinis* Blume et Nees : Fr., Elench. Fung. p. 126, 1826.

– *Polystictus flabelliformis* Kl. (**51, 54, 121, 165, 48, 7, 206**); *P. affinis* Nees (**121, 166, 183, 163, 176, 192, 284, 81, 95, 282, 48, 16**); *P. licmophorus* Massee (**163**); *P. luteus* Blume & Nees (**10, 257**); *Polyporus flabelliformis* Kl. (**259**); *P. squamaeformis* Berk. (**54**); *Microporus subaffinis* (Lloyd) Imaz. (**270**); *Microporus luteus* (Blume et Nees) Kunt. (**152**).

2. M. scopulosus (Berk.) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Polyporus scopulosus* Berk., Hook. J. Bot. Kew Misc. **6**: 143, 1854.

– *Polyporus scopulosus* Berk. (**54, 176, 189, 190**); *P. rhizophorae* (Reich.) Lloyd; (**176, 75**); *Amauroderma scopulosum* (Berk.) Imaz. (**95**); *Trametes rhizophorae* Reich. (**242**).

3. Microporus vernicipes (Berk.) Kunt., Rev. gen. Fl. **3**: 494, 1898.

Bas. : *Polyporus vernicipes* Berk., J. Linn. Soc. Bot. **16**: 50, 1878.

– (**264**).

4. M. xanthopus (Fr.) Kunt., Rev. Gen. Pl. **3**: 494, 1898.

Bas. : *Polyporus xanthopus* Fr., Syst. Mycol. **1**: 350, 1821.

– (**152, 218, 266**); *Polystictus xanthopus* Fr. (**206, 7, 48, 84, 262, 54, 209, 53, 242, 165, 168, 179, 183, 163, 189**); *P. pterygodes* Fr. (**82**); *P. crassipes* Currey (**121**); *P. florideus* Berk. (**54, 163**); *P. xanthopus* Fr., (**36**) forma *florideus*; (**259**); forma *xanthopus* (**259**); *Coriolus xanthopus* (Fr.) Cunn. (**95**).

54. NAVISPORUS Ryv.

Pre. Polyp. Fl. East. Afr. p. 443, 1980.

Basidiocarps annual, pileate, sessile to substipitate; pileus dimidiate, applanate; surface finely tomentose to glabrous, greyish to reddish brown; context yellowish brown, coriaceous; pore surface cinnamon to pale reddish brown; hyphal system dimitic, generative hyphae with clamps, hyaline;

skeletal hyphae dextrinoid; cystidia none; basidiospores navicular to oblong fusiform, hyaline, thick-walled; on dead hardwoods; causing white rot; a rare tropical genus with one species in India.

Type species : *Navisporus floccosa* (Bres.) Ryv.

1. Navisporus floccosa (Bres.) Ryv., A Pre. Polyp. Fl. East. Afr. p. 443, 1980.

Bas. : *Trametes floccosa* Bres., Ann. Roy. Inst. Bot. Roma. **6**: 179, 1896.

– *Trametes floccosa* Bres. **(190, 72, 48)**.

55. NIGROFOMES Murr.

Bull. Torr. Bot. Cl. **31**: 425, 1904.

Basidiocarps perennial, pileate; pileus applanate, hard and heavy on drying; surface purplish black, glabrous with a distinct black crust, concentrically zonate; context purplish black, often shiny, resinous hard; pore surface dark violaceous black, pores invisible to naked eye; hyphal system dimitic, generative hyphae simple septate, hyaline to tinted; skeletal hyphae densely agglutinated; cystidia present, ventricose, scattered to rare; basidiospores broadly ellipsoid, hyaline; on living/dead hardwoods; causing white rot; common tropical genus with one species in India.

Type species : *Nigrofomes melanoporus* (Mont.) Murr.

1. Nigrofomes melanoporus (Mont.) Murr., Bull. Torr. Bot. Cl. **31**: 425, 1904.

Bas. : *Polyporus melanoporus* Mont., Ann. Sci. Nat. Ser. 2: **17**: 127, 1842.

– (265); *Fomes melanoporus* Mont. (102, 181, 191, 81, 7); *Fomes endophaeus* Berk. (54); *Polyporus phaeus* Lev (as *Fomes phaeus* Berk). (181); *F. cornu-bovis* Cke. (102).

56. NIGROPORUS Murr.

Bull. Torr. Bot. Cl. 32: 361, 1905.

Basidiocarps annual to perennial, pileate; pileus scrupose to glabrous, azonate to concentrically zonate, greyish blue or vinaceous brown to violet; context vinaceous brown to greyish pink or purplish; pore surface vinaceous brown to greyish blue to violet, pores round, minute; hyphal system dimitic, generative hyphae hyaline, with clamps; skeletal hyphae pale pinkish or fuliginous brown, thick-walled to solid; cystidia none; basidiospores usually less than 5 µm long, braodly ellipsoid to allantoid; on dead hardwoods; causing white rot; a common tropical genus with two species in India.

Type species : *Nigroporus vinosus* (Berk.) Murr.

1. Nigroporus durus (Jungh.) Murr., Bull. Torr. Bot. Cl. 34: 471, 1907.

Bas. : *Polyporus durus* Jungh., Verh. Batav. Genootsch 17: 62, 1838.

– *Fomes durus* (Jungh.) Cunn. (86, 48, 118); *Polyporus rigidus* Lev. (72, 48).

2. N. vinosus (Berk.) Murr., Bull. Torr. Bot. Cl. 32: 361, 1905.

Bas. : *Polyporus vinosus* Berk., Ann. Mag. Nat. Hist. Ser. 2, 11: 195, 1852.

– *Polystictus vinosus* (Berk.) Cke. (83, 84, 7, 8); *Polyporus vinosus* Berk. (36, 263).

57. OLIGOPORUS Bref.

Unersuch. Gesamtgebiet. Mykol. **8**: 114, 1888.

Basidiocarps annual; resupinate to pileate, fleshy when fresh, hard and brittle when dry; pileus if present dimidiate, applanate, white to light yellowish brown, darkening on drying, velutinate; context white to yellowish cream; pore surface white or light coloured, pores round to angular; hyphal system monomitic, generative hyphae hyaline, clamps present at septa; cystidia absent or present; basidiospores hyaline, smooth, allantoid to ellipsoid, mostly on dead coniferous woods; causing brown rot; a common temperate genus with eight species in India.

Type species : *Oligoporus farinosus* Bref.

1. Oligoporus balsameus (Pk.) Gilbn. & Ryv., Mycotaoxn **22**: 364, 1985.

Bas. : *Polyporus balsameus* Pk., N.Y. State Mus., Ann. Rep. **30**: 46, 1878.

– **(270).**

2. O. caesius (Schrad. : Fr.) Gilbn. & Ryv., Mycotaxon **22**: 365, 1985.

Bas. : *Polyporus caesius* Schard. : Fr., Syst. Mycol. **1**: 360, 1821.

– *Tyromyces caesius* (Schrad. : Fr.) Murr. **(143).**

3. O. fragilis (Fr.) Gilbn. & Ryv., Mycotaxon **22**: 365, 1985.

Bas. : *Polyporus fragilis* Fr., Elench. Fung. p. 86, 1828.

– *Polyporus fragilis* Fr. **(41, 263).**

4. O. guttulatus (Peck) Gilbn. & Ryv. Mycotaxon **22**: 365, 1985.

Bas. : *Polyporus guttulatus* Peck in Sacc. Syll. Fung. **6**: 106, 1888.

– *Tyromyces guttulatus* (Peck) Murr. **(294)**.

5. O. leucospongia (Cke. & Harkn.) Gilbn. & Ryv., Mycotaxon **22**: 365, 1985.

Bas. : *Polyporus leucospongia* Cke. & Harkn., Grevillea **11**: 106, 1883.

– *Polyporus leucospongia* Cke. & Harkn. **(44, 263)**.

6. O. placentus (Fr.) Gilbn. & Ryv., Mycotaxon **22**: 365, 1985.

Bas. : *Polyporus placentus* Fr., Ofers. K. Vet. Akad. Forh. p. 30, 1861.

– *Poria monticola* Murr. **(24, 36, 229, 263, 238)**; *P. placenta* (Fr.) Cke. **(288)**; *Physisporus albolilacina* (Karst.) Sacc. **(26)**; *Oxyporus placentus* (Fr.) Gilbn. & Ryv. **(266)**.

7. O. sericeomollis (Rom.) Pouz., Ceska. Mycol. **38**: 203, 1984.

Bas. : *Polyporus sericeomollis* Rom., Arkiv. f. Bot. **11**(3): 22, 1912.

– *Tyromyces sericeomollis* (Rom.) Gilbn. & Ryv. **(294)**.

8. O. tephroleucus (Fr.) Gilbn. & Ryv., Mycotaxon **22**: 365, 1985.

Bas. : *Polyporus tephroleucus* Fr., Syst. Mycol. **1**: 360, 1821.

– *Polyporus lacteus* Fr. (**26, 285, 283**); *P. elatinus* Berk. (**54**); *P. molliculus* Lloyd (**89**).

58. OXYPORUS Donk.

Meddel. Bot. Mus. Univ. Utrecht 9: 212, 1933.

Basidiocarps annual or perennial, resupinate to pileate; pileus if present, broadly attached, woody or fibrous, whitish to yellowish brown; velutinate to coarsely hirsute; context white to yellowish white; pore surface white to yellowish white, pores round to angular, tubes single layered or stratified; hyphal system monomitic, generative hyphae thin to thick-walled, simple septate; cystidia present, apically encrusted; basidiospores hyaline, cylindrical to broadly ellipsoid, slightly thick-walled, smooth, IKI-ve; mostly on dead hardwoods, rarely on coniferous woods and living trees; causing white rot; widely distributed cosmopolitan genus with seven species in India.

Type species : *Oxyporus populinus* (Fr.) Donk.

1. Oxyporus cervino-gilvus (Jungh.) Ryv., Norw. J. Bot. **20**: *3*, 1973.

Bas. : *Polyporus cervino-gilvus* Jungh. Verh. Batav. Genootsch. **17**: 45, 1838.

– (**266**); *Polyporus personatus* Berk. & Br. (**85, 86, 48**); *P. cervino-gilvus* Jungh. (**82**); *Polystictus dermatodes* Lev. (**170**); *P. cervino-gilvus* Jungh. (**89, 48, 16**); *Poria diversiporus* (Berk. & Br.) Cke. (**71, 48**).

2. O. corticola (Fr.) Ryv., Persoonia 7: 19, 1872.

Bas. : *Polyporus corticola* Fr., Syst. Mycol. **1**: 385, 1821.

– *Poria corticola* (Fr.) Cke. (**230, 31, 26, 238**).

3. O. latemarginata (Dur. & Mont.) Donk, Persoonia 4: 342, 1966.

Bas. : *Polyporus latemarginata* Dur. & Mont., Syll. Crypt. 163, 1856.

– **(265)**.

4. O. mollissimus (Pat.) Reid, Microscopy 32: 456-458, 1975.

Bas. : *Polyporus mollissimus* Pat., J. Bot. Paris 1: 340, 1897

– *Trametes straminea* (Pat.) Lloyd **(7, 18, 19, 26)**.

5. O. populinus (Fr.) Donk, Med. Bot. Mus. Univ. Utrecht 9: 204, 1933.

Bas. : *Polyporus populinus* Fr., Syst. Mycol. 1: 367, 1821.

– **(266)**; *Fomes connatus* (Weinm.) Gill. **(275, 263, 259)**.

6. O. ravidus (Fr.) Bond. & Sing., Ann. Mycol. 39: 63, 1941.

Bas. : *Polyporus ravidus* Fr., Epicr. p. 475, 1838.

– **(266)**; *Trametes ravida* (Fr.) Pilat **(272)**.

7. O. spiculifer (Cunn.) Buch. & Ryv., Mycotaxon 31: 28-29, 1988.

Bas. : *Irpex spiculifer* Cunn., N. Zealand Dept. Sci. Ind. Res. Bull. 164: 74, 1965.

– **(266)**.

59. PACHYKYTOSPORA Kotl. & Pouz.

Cesk. Mykol. **17** : 27, 1963.

Basidiocarps annual, resupinate, adnate; context pinkish white; pore surface yellowish white to wood coloured with a pinkish tint, pores angular, 2-3 per mm; hyphal system dimitic, generative hyphae with clamps skeletal hyphae hyaline, weakly dextrinoid; cystidia absent; basidiospores cylindical to oblong-ellipsoid, hyaline, up to 18 µm long, ornamented with elongated echinulae or tubercules arranged in longitudinal rows; on dead branches of hardwoods; causing white rot; tropical genus with only one species in India.

Type species : *Pachykytospora tuberculosa* (DC :Fr.) Kotl. & Pouz.

1. Pachykytospora papyracea (Schw.) Ryv., Norw. J. Bot. **19**: 233, 1972.

Bas. : *Boletus papyraceus* Schw., Naturf. Ges. Leipzig Schrift. **1**: 99, 1822.

– **(266)**; *Poria barbaeformis* Berk. & Curt. **(302)**.

60. PERENNIPORIA Murr.

Mycologia **34** : 595, 1942

Basidiocarps perennial to rarely annual, resupinate to pileate; pilear surface greyish brown to black or ochraceous, glabrous; context white to light yellowish brown, fibrous to woody hard; pore surface whitish to light yellowish brown, pores regular; hypal system trimitic, generative hyphae hyaline with clamps; skeletal hyphae non-dextrinoid to strongly dextrinoid; basidiospores thin to thick-walled, ellipsoid to distinctly truncate, hyaline, variably dextrinoid; mostly on dead hardwoods, rarely on coniferous woods; causing white rot; cosmopolitan genus with eight species in India.

Type species : *Perenniporia medulla-panis* (Fr.) Donk

1. Perenniporia ellipsospora Ryv. & Gilbn., Mycotaxon **19**: 140, 1984.

Bas. : *Poria conferta* Overh., Pa. Agri. Exp. Sta. Techn. Bull. **418**: 25, 1942 (illegitimate).

– *Poria conferta* Overh. (**292**).

2. P. fulviseda (Bres.) Dhanda, Ind. Phyto. **33**: 386, 1980.

Bas. : *Poria fulviseda* Bres., Ann. Mycol. **18**: 37, 1920.

– *Poria fulviseda* Bres. (**288, 238**).

3. P. martius (Berk.) Ryv., Norw. J. Bot. **19**: 143, 1972.

Bas. : *Polyporus martius* Berk., Hook. J. Bot. **8**: 198, 1856.

– *Fomes hornodermus* Mont. (**84, 263**).

4. P. medulla-panis (Fr.) Donk, Persoonia **5**: 76, 1967.

Bas. : *Polyporus medulla-panis* Fr., Syst. Mycol. **1**: 280, 1821.

– *Poria medulla-panis* (Fr.) Bres. (**291, 238**).

5. P. ochroleuca (Berk.) Ryv., Norw. J. Bot. **19**: 233, 1972.

Bas. : *Polyporus ochroleucus* Berk., Hook. Lond. J. Bot. **4**: 53, 1845.

– (**265**); *Fomitopsis ochroleuca* (Berk.) Cunn. (**95, 118**); *Polyporus*

ochroleucus Berk. (72); *P. ungulatus* Berk. Var. *hobsoni* Sacc. (58); *Truncospora ochroleuca* (Berk.) Pilat (234).

6. P. robiniophila (Murr.) Ryv., Mycotaxon 17: 517, 1983.

Bas. : *Trametes robiniophila* Murr., N. Am. Fl. 9: 42, 1907.

– (249); *Perenniporia mesoleucus* (Petch) Ryv. (293).

7. P. subacida (Peck) Donk, Persoonia 5: 76, 1967.

Bas. : *Polyporus subacidus* Peck, Rep. N.Y. State Mus. 38: 92, 1885.

– (270).

8. P. tenuis (Schw.) Ryv., Norw. J. Bot. 20: 9, 1973.

– var. *pulchella* (Schw.) Ryv., North Ameri. Polyp 2: 535, 1987.

Bas. : *Polyporus tenuis* Schw., Am. Phil. Soc. Trans. II; 4: 159, 1832.

– (269a, 269b).

61. PHAEOLUS Pat.

Essai Tax. Hym. P. 86, 1900

Basidiocarps annual, sessile to stipitate, solitary to imbricate; pilear surface orange to dark reddish brown, tomentose to hirsute; context yellowish brown to dark rusty brown, soft, fibrous; pore surface orange to dark greenish brown or dark rusty brown, pores angular, 1-2 per mm; hyphal system

monomitic, hyphae dark brown to yellowish brown, simple septate, gloeoplerous hyphae present; cystidia absent; basidiospores ellipsoid to ovoid, smooth, hyaline; on living conifers; causing brown cuboidal rot of heartwood; temperate genus with one species in India.

Type species : *Phaeolus schweinitzii* (Fr.) Pat.

1. Phaeolus schweinitzii (Fr.) Pat., Essai Tax. Hym. P. 86, 1900.

Bas. : *Polyporus schweinitzii* Fr., Syst. Mycol. 1: 351, 1821.

– *Polyporus schweinitzii* Fr. **(289, 263, 36)**; *P. saharanpurensis* Henn. **(146, 176)**; *Polyporus tabulaeformis* Berk. **(54)**; *Coltricia schweinitzii* (Fr.) Cunn. **(95, 118, 28)**.

62. PHELLINUS Quel.

Ench. Fung. P. 172, 1886

Basidiocarps usually perennial, black in KOH, resupinate to pileate; single or imbricate, sessile to substipitate, corky soft to woody; pilear surface pubescent to tomentose or becoming glabrous often with a thin, black cuticle, frequently sulcate to radially cracked, yellowish brown or blackish brown to greyish black or black; context dark reddish brown to yellowish brown, usually woody; pore surface ferruginous brown to dull brown, pores isodiametric or rarely irregular, tubes stratified; hyphal system dimitic, generative hyphae hyaline, simple septate; skeletal hyphae golden to reddish brown, thick-walled; tramal setae present or absent, setal hyphae present or absent; hymenial setae present or absent; cystidia absent; basidiospores globose, subglobose, broadly ellipsoid to rarely cylindrical, hyaline, yellow to brown, sometimes dextrinoid and cyanophilous in cotton blue; on dead or living woods; causing white rot; cosmopolitan genus with 52 species in India.

Type species : *Phellinus torulosus* Pers : Fr.

1. Phellinus adamantinus (Berk.) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Polyporus adamantinus* Berk., Hook. J. Bot. **6**: 141, 1854.

– **(265, 268)**; *Polyporus adamantinus* Berk. **(54)**; *Fomes adamantinus* (Berk.) Sacc. **(54, 181, 78)**; *Pyrrhoderma adamantinum* (Berk.) Imaz. **(152)**.

2. P. allardii (Bres.) Ahmad., Monogs. Biol. Soc. Pakistan **6**: 57, 1972.

Bas. : *Fomes allardii* Bres., Bull. Jard. Bot. Bruxelles **4**: 19, 1910.

– **(265, 266, 268)**; *Fomes allardii* Bres. **(32, 263)**.

3. P. badius (Berk : Cke.) Cunn., N. Zealand Dept. Sci. Ind. Res. Bull. **164**: 233, 1965.

Bas. : *Fomes badius* Cke., Grevillea **14**: 18, 1885.

Epithet *badius* was validated by Cooke on transferring Berk. sp. to *Fomes*. Cunningham made a bibliographic error by attributing the epithet to Berk. because the *Polyporus badius* Berk. (Ann. Nat. Hist. 7: 453, 1841) is Nomen Illegit.

– *Fomes badius* Berk. **(92, 93, 181, 183, 7, 16, 258, 36)**.

4. P. carteri (Berk. : Cke.) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Polyporus carteri* Berk : Cke., Grevillea **15**: 25, 1886.

– **(268)**; *Poria carteri* Berk. **(103)**.

5. P. caryophyllii (Rac.) Ryv., A Pre. Polyp. Fl. East Afr. P. 149, 1980.

Bas. : *Trametes caryophyllii* Rac., Parasit. Algen Pilze Javas P. 17, 1900.

– **(268, 265)**; *Fomes caryophyllii* (Rac.) Bres. **(85, 7, 14, 22, 16, 36, 291)**.

6. P. cereus (Berk.) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Polyporus cereus* Berk., Hook. J.Kew Misc. **6**: 163, 1854.

– **(238, 293)**; *Poria cerea* (Berk.) Cke. **(54)**.

7. P. cinchonensis (Murr.) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Pyropolyporus cinchonensis* Murr., Mycologia **2**: 195, 1910.

– (268); *Fomes cinchonensis* (Murr.) Sacc. & Trott. **(273, 36, 263)**.

8. P. conchatus (Fr.) Quel., Flore Mycol. P. 395, 1888.

Bas. : *Polyporus conchatus* Fr., Syst. Mycol. **1**: 376, 1821.

– **(266, 267, 268)**; *Fomes conchatus* (Pers.) Fr. **(83, 48, 7, 60)**.

9. P. contiguus (Fr.) Pat., Essai Tax. p. 97, 1900.

Bas. : *Polyporus contiguus* Fr., Syst. Mycol. **1**: 378, 1821.

– **(290, 238, 265, 266, 267, 268)**; *Poria contigua* (Pers. : Fr.) Karst. **(199, 263)**.

10. P. dependens (Murr.) Imaz., Bull. Govt. Forest Exp. Sta. **57**: 117, 1952.

Bas. : *Pyropolyporus dependens* Murr., N. Am. Fl. **9**: 106, 1908.

– **(268)**; *Fomes dependens* (Murr.) Sacc. & Trott. **(31, 60)**.

11. P. discipes (Berk.) Ryv., Kew Bull. **31**: 88, 1976.

Bas. : *Polyporus discipes* Berk., Hook. Lond. J. Bot. **6**: 499, 1847.

– **(268)**; *P. discipes* Berk. **(32)**; *Polystictus malaiensis* Cke. **(192)**.

12. P. durissimus (Lloyd) Roy, Mycologia **71**: 1005, 1979.

Bas. : *Fomes durissimus* Lloyd, Mycol. Writ **6** : 943, 1920.

– **(244B, 265)**; *Fomes durissimus* Lloyd **(191, 84, 48, 7, 16)**.

13. P. extensus (Lev.) Pat., Essai Tax. p. 97, 1900.

Bas. : *Polyporus extensus* Lev., Ann. Sci. Nat. Bot. III, **5** : 129, 1846.

– **(266, 268)**.

14. P. fastuosus (Lev.) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Polyporus fastuosus* Lev., Ann. Sci, Nat. Bot. **2**: 190, 1844.

– **(265, 268)**; *Fomes fastuosus* Lev. **(191, 78, 95, 48, 7, 261, 265, 277, 258, 36)**.

15. P. ferreus (Pers.) Bourd. & Galz., Bull. Soc. Mycol. France **41**: 247, 1925.

Bas. : *Polyporus ferreus* Pers., Mycol. Europ. **2**: 89, 1825.

– **(268, 265).**

16. P. ferrugineo-velutinus (Henn.) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Poria ferrugineo-velutina* Henn., Hedwigia **44**: 59, 1905.

– **(268, 265).**

17. P. ferruginosus (Schrad. : Fr.) Pat., Essai Tax. P. 97, 1900.

Bas. : *Polyporus ferruginosus* Schrad. : Fr., Syst. Mycol. **1**: 378, 1821.

– **(238, 267, 268)**; *Poria ferruginosa* (Schrad. : Fr.) Karst. **(35, 39, 263).**

18. P. gilvoides (Petch) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Poria gilvoides* Petch, Ann. Roy. Bot. Gard. Perradeniya **6**: 138, 1916.

– **(268).**

19. P. gilvus (Schw. : Fr.) Pat., Essai Tax. P. 97, 1900.

Bas. : *Boletus gilvus* Schw. : Fr., Fungi Carol. Super. II : 70, 1822.

– **(152, 266, 268)**; *Polyporus gilvus* Schw. **(93, 95, 283, 88, 182,**

177, 196, 7, 261, 36, 263); *P. gilvus* var. *gilvoides* (Schw.) Fr. (**207, 208, 48, 86**); *P. gilvus* var. *licnoides* (Mont.) Lloyd (**168, 182, 48, 71, 86**); *P. illicicola* Henn. (**187**); *P. cupreus* Berk. (**53, 182**); *P. hookeri* Lloyd; (**182, 48, 82, 208**); *Fomes gilvus* (Schw.) Lloyd (**95, 206, 16, 60**); *Polyporus isidioides* (**53**).

20. P. glaucescens (Petch) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Poria glaucescens* Petch, Ann. Roy. Bot. Gard. Perradeniya **6**: 139, 1916.

– (**265, 268**).

21. P. grenadensis (Murr.) Ryv. , Norw. J. Bot. **18**: 234, 1972.

Bas. : *Pyropolyporus grenadensis* Murr., N. Am. Fl. **9**: 107, 1908.

– (**293, 268**).

22. P. hohnelii (Bres.) Ryv., A Pre. Polyp. Fl. East Afr. 173, 1980.

Bas. : *Fomes hohnelii* Bres., Ann. Mycol. **10**: 499, 1912.

– (**137a, 267, 268**).

23. P. igniarius (Fr.) Quel., Enrich. Fung. P. 172, 1886.

Bas. : *Polyporus igniarius* Fr., Syst. Mycol. **1**: 375, 1821.

– (**152, 296, 268, 266**); *Fomes igniarius* (Fr.) Quel. (**7**).

24. P. inamaensis (Mont.) Ryv., Norw. J. Bot. **19**: 234, 1972.

Bas. : *Polyporus inamaensis* Mont., Ann. Sci. Nat. Ser. 2: 18, 1842.

– (268); *P. inamaensis* Mont. (209, 182).

25. P. inermis (Ell. et Everh.) Cunn., Bull. N. Zealand Dept. Sci. Ind. Res. 164: 234, 1965.

Bas. : *Poria inermis* Ell. & Everh., Acad. Nat. Sci. Philadelphia Proc. for 1894, p. 322, 1894.

- (293, 268).

26. P. Johnsonianus (Murr.) Ryv., Norw. J. Bot. 19: 234, 1972.

Bas. : *Fomitoporella johnsonianus* Murr., N. Amer. Fl. 9: 13, 1907.

– (266, 268); *Fomes Johnsonianus* (289).

27. P. laevigatus (Fr.) Bourd. & Galz., Hymen. Fr. p. 624, 1928.

Bas. : *Polyporus laevigatus* Fr., Hymen. Europ. p. 571, 1874

- (268, 266, 269a, 269b); *Poria laevigata* Fr. (207).

28. P. lamaensis (Murr.) Heim, Ann. Crypt. Exot. 7: 21-22, 1934.

Bas. : *Pyropolyporus lamaensis* Murr., Bull. Torrey Bot. Cl. 34: 479, 1907.

– (266, 267, 268); *Fomes lamaensis* (Murr.) Sacc. & Trott. (94, 298, 299, 300b, 301, 78, 191, 194, 195, 7, 16, 36).

29. P. linteus (Berk. & Curt.) Teng, Fungi of China P. 467, 1964.

Bas. : *Polyporus linteus* Berk. & Curt., Proc. Am. Acad. (Boston) 4: 122, 1860.

– (268); *Fomes ostricoloris* Lloyd (25, 259, 263); *Fomes linteus* (Berk. & Curt.) Cke. (32).

30. P. melanodermus (Pat.) Fidalgo, Mem. New. York Bot. Gard. 17: 135, 1968.

Bas. : *Xanthochrous melanodermus* Pat., Ann. Jard. Bot. Buitenzorg Suppl. 1: 113, 1897.

– (265, 267, 268).

31. P. melleoporus (Murr.) Ryv., Mycotaxon 23: 177, 1985.

Bas. : *Fomitoporella melleopora* Murr., N. Am. Fl. 9: 13, 1907.

– (268); *Poria melleopora* (Murr.) Sacc. & Trott. (292).

32. P. merrillii (Murr.) Ryv., Norw. J. Bot. 19: 234, 1972.

Bas. : *Pyropolyporus merrillii* Murr., Bull. Torr. Bot. Cl. 34: 479, 1907.

– (266, 268); *Fomes merrillii* (Murr.) Sacc. & Trott. (84, 86).

33. P. nigricans (Fr.) Karst., Finl. Basidsv. P. 134, 1899.

Bas. : *Polyporus nigricans* Fr., Syst. Mycol. 1: 375, 1821.

– (266, 268).

34. P. nilgheriensis (Mont.) Cunn., N. Zealand Dept. Sci. Ind. Res. Bull. **164**: 226, 1965.

Bas. : *Polyporus nilgheriensis* Mont., Ann. Sci. Nat. Ser. **18**: 22, 1842.

– **(268)**; *Polyporus nilgheriensis* Mont. **(209, 74, 53, 54, 190, 182)**; *P. garckeanus* Henn. **(146, 182)**; *Fomes pseudosenex* (Murr.) Sacc. & Trott **(181)**.

35. P. noxius (Corner) Cunn., N. Zealand Dept. Sci. Ind. Res. Bull. **164**: 221, 1965.

Bas. : *Fomes noxius* Corner, Gard. Bull. Straits Settlem **5**: 342, 1932.

– **(267, 268)**; *Fomes noxius* Corner **(7, 304, 260, 273)**.

36. P. pachyphloeus (Pat.) Pat., Essai Tax. Hymeno. P. 97, 1900.

Bas. : *Polyporus pachyphloeus* Pat., J. Bot. (Paris), **3**: 257, 1889.

– **(265, 267, 268)**; *Fomes pachyphloeus* Pat., **(181, 74, 48, 277, 36)**; *Fomes elmeri* (Murrill) Sacc. **(78)**.

37. P. pectinatus (Kl.) Quel., Ench. Fung. p. 173, 1886.

Bas. : *Polyporus pectinatus* Kl., Linnaea **8**: 486, 1833.

– **(265, 268)**; *Fomes pectinatus* Kl. **(156, 51, 181, 74, 48, 6, 7, 286)**; *Polystictus haskarlii* Lev. **(25)**.

38. P. pini (Brot. : Fr.) Ames, Ann. Mycol. **11** : 246, 1913.

Bas. : *Daedalea pini* Brot. : Fr., Syst. Mycol. **1**: 336, 1821.

– **(266, 268)**; *Fomes pini* (Thore) Lloyd **(7, 289, 36, 263)**; *Trametes pini* Thore **(149, 94, 7, 31)**.

39. P. portoricensis (Overh.) Fidalgo, Mem. N. Y. Bot. Gard. **17**: 111, 1968.

Bas. : *Fomes portoricensis* Overh., In Seav. et Chard. Sci. Surv. Puerto. Rico & Is. **8**: 158. 1926.

– **(266, 267, 268)**.

40. P. punctatus (Fr. : Karst.) Pilat, in Kavina et Pilat, Atlas Hub Europskych **3**: 530, 1936-1942.

Bas. : *Poria punctata* Fr. : Karst; Bidrag Kannedom Finlands Natur. Folk **37**: 83, 1882.

– **(266, 268, 137a)**; *Poria punctata* (Fr.) Karst. **(2)**; wrongly recorded as new record by Ganesh *et al* (Curr. Sci **55**: 727, 1986).

41. P. purpureo-gilvus (Petch) Ryv., Norw. J. Bot. **19**: 235, 1972.

Bas. : *Poria purpureo-gilvus* Petch, Ann. Roy. Bot. Gard. Perradeniya **6** : 138, 1916.

– **(265, 268)**.

42. P. rhabarbarinus (Berk.) Cunn., N. Zealand Dept. Sci. Ind. Res. Bull. **164**: 229, 1965.

Bas. : *Polyporus rhabarbarinus* Berk., Ann. Nat. Hist. **3**: 388, 1839.

– (268); *Fomes rhabarbarinus* Berk. (273).

43. P. rimosus (Berk.) Pilat, Ann. Mycol. **38**: 80, 1940.

Bas. : *Polyporus rimosus* Berk., Lond. J. Bot. **4**: 54, 1945.

– (268); *Fomes rimosus* Berk. (192, 145, 282, 74, 48, 7, 25, 16, 258); *Fomes pappianus* Bres. (303); *Fomes robiniae* (Murr.) Sacc. (32).

44. P. robustus (Karst.) Bourd. & Galz., Bull. Soc. Mycol. France **41**: 188, 1925.

Bas. : *Fomes robustus* Karst; Bidrag Kannedom Finlands Natur Folk **48**: 467, 1889.

– (266, 268, 291); *Fomes robustus* Karst. (28, 36, 263).

45. P. sanfordii (Lloyd) Ryv., Norw. J. Bot. **19**: 235, 1972.

Bas. : *Fomes sanfordii* Lloyd, Mycol. Writ. 4, Synop. genus *Fomes* p. 258, 1915.

– (266, 268); *Fomes sanfordii* Lloyd (25, 286).

46. P. scruposus (Fr.) Cunn., N. Zeal. Dept. Sci. Ind. Res. Bull. **164**: 230-31, 1965.

Bas. : *Polyporus scruposus* Fr., Epicr. P. 473, 1838.

– (266, 268); *Fomes scruposus* (Fr.) Cunn. (121, 95, 25, 286); *Polyporus scruposus* Fr. (182).

47. P. senex (Nees & Mont.) Imaz., Bull. Govt. Forest Exp. Sta. **57** : 115, 1952.

Bas. : *Polyporus senex* Nees & Mont., Ann. Sci. Nat. Ser. 5: 70, 1836.

– (265, 268); *Fomes senex* Nees & Mont. (54, 283, 284, 181, 174, 187, 72, 48, 206, 7, 26, 25, 36, 263); *F. velutinosus* Lloyd (181).

48. **P. setulosus** (Lloyd) Imaz., Bull. Tokyo Sci. Mus. 6: 104, 1943.

Bas. : *Fomes setulosus* Lloyd, Mycol. Writ. 4 : 243, 1915.

– (268); *F. setulosus* Lloyd (84, 25).

49. **P. sublinteus** (Murr.) Ryv., Norw. J. Bot. 19: 235, 1972.

Bas. : *Pyropolyporus sublinteus* Murr., N. Am. Fl. 9: 110, 1908.

– (265, 268); *Fomes sublinteus* (Murr.) Sacc. & Trott. (32).

50. **P. torulosus** (Pers.) Bourd. & Galz., Bull. Soc. Mycol. Fr. 41: 191, 1925.

Bas. : *Polyporus torulosus* Pers., Mycol. Europe 2: 29, 1825.

– (268); *Fomes torulosus* (Pers.) Lloyd (289).

51. **P. wahlbergii** (Fr.) Reid, Contr. Bolus Her. 7: 97, 1975.

Bas. : *Trametes wahlbergii* Fr., Kung. Vetensk. Acad. Handl. p. 131, 1843.

– (268); *Fomes zelandicus* Cke. (178); *Phellinus laurencii* (Berk.) Aoshima (152).

52. P. xeranticus (Berk.) Pegler, Kew Bull. 21: 44, 1967.

Bas. : *Polyporus xeranticus* Berk., Hook. J. Bot. 6: 161, 1854.

– (223, 266, 268); *Polyporus xeranticus* Berk. (54, 263, 36); *Polystictus xeranticus* Berk. (86, 48, 7, 8); *Inonotus xeranticus* (Berk.) Imaz. et Aoshima (152).

63. PHYLLOPORIA Murr.

Torreya 4: 141, 1904.

Basidiocarps annual, effused-reflexed to pileate, black in KOH; applanate to nodular, soft when fresh, flexible to woody on drying; pilear surface cinnamon to yellowish brown or dark reddish brown, tomentose and spongy; context light to dark brown, separated from the thick tomentum by a thin black line; pore surface brown to reddish brown, pores angular to round; tubes concolorous with pore surface; hyphal system monomitic, generative hyphae light to golden brown, simple septate; setae absent; basidiospores ellipsoid, light yellowish, slightly thick-walled; on living/dead thin branches of living hardwood trees; cosmopolitan genus with two species in India.

Type species : *Phylloporia parasitica* Murr.

1. Phylloporia ribis (Fr.) Ryv., Polyp. N. Europe Vol. 2, p. 371, 1978.

Bas. : *Polyporus ribis* Fr., Syst. Mycol. 1: 375, 1821.

– (268); *Phellinus ribis* (Schum. : Fr.) Quel. (291); *Fomes ribis* (Schum.) Fr. (16, 263).

2. P. weberiana (Bres. & Henn. : Fr.) Ryv., Norw. J. Bot. 19: 235, 1972.

Bas. : *Fomes weberiana* Bres. & Henn. Fr., Syll. Fung. 9: 174, 1891.

– (266, 268); *Polyporus weberianus* Bres. & Henn. (84, 7, 263, 16, 36).

64. PHYSISPORINUS Karst.

Finl. Basidsv. p. 324, 1889.

Basidiocarps annual, resupinate, soft, fleshy, tough cartilaginous on drying; context pale yellowish, thick and dense on drying; pore surface whitish and translucent when fresh, ochraceous to brown when dry, darker on bruising, pores round or angular; hyphal system monomitic, hyphae hyaline, simple septate; cystidia absent; basidiospores ovoid to globose, hyaline, often with an oil drop; on dead hardwoods; causing white pocket rot; tropical genus with one species in India.

Type species : *Physisporinus vitreus* (Pers. : Fr.) Karst.

1. Physisporinus vitreus (Pers. : Fr.) Karst., Finl. Basidsv. p. 324, 1889.

Bas. : *Polyporus vitreus* Pers. : Fr., Syst. Mycol. 1: 381, 1821.

– *Rigidoporus vitreus* (Fr.) Donk (265).

65. PILOPORIA Niem.

Karstenia 22: 13, 1982.

Basidiocarps annual, pileate to effused-reflexed; single or imbricate, broadly attached, soft, corky when fresh, ceraceous when dry; pilear surface brown to reddish brown, adpressed tomentose to glaberiscent toward margin; context orange brown, more or less homogeneous, somewhat denser towards hymenophore, tough; pore surface white to pale brownish or orange white; pores hexagonal or angular, not extending up to the margin; hyphal system dimitic, generative hyphae; hyaline, thin to thick-walled, clamped; skeletal hyphae orange to brown, darker in KOH, thick-walled with a narrow

lumen, finely encrusted; basidiospores minute, less than 1 μm wide, allantoid; on dead, thin twigs of hardwoods; causing white fibrous rot; rare tropical genus with one species in India.

Type species : *Piloporia sajanensis* (Parm.) Niem.

1. Piloporia indica Ganesh & Ryv., Trans. Br. Mycol. Soc. **91**: 169-171, 1988.

– **(137a, 270).**

66. PIPTOPORUS Karst.

Medd. Soc. Fauna Flora Fenn. **6**: 9, 1881.

Basidiocarps annual, sessile to substipitate; dimidiate to broadly attached, corky; pilear surface covered with a thin cuticle, rimose and detaching from base, whitish to pale brownish; context white, thick; pore surface white to pale buff, pores regular; hyphal system dimitic, generative hyphae hyaline, clamps at septa; skeletal hyphae thick-walled, hyaline; cystidia none; basidiospores hyaline, cylindrical to fusiform ellipsoid, smooth; on living/dead *Betula utilis;* causing brown cuboidal rot; temperate/boreal genus confined to *Betula* forests, one species in India.

Type species : *Piptoporus betulinus* (Fr.) Karst.

1. Piptoporus betulinus (Fr.) Karst., Medd. Soc. Fauna Flora Fenn. **6**: 9, 1881.

Bas. : *Polyporus betulinus* Fr., Syst. Mycol. **1**: 358, 1821.

– **(269a, 269b)**; *Polyporus betulinus* Fr. **(61)**.

67. POLYPORUS Fr.

Syst. Mycol. 1: 341, 1821.

Basidiocarps annual, centrally or laterally stipitate, fleshy, firm to hard when dry; pilei dimidiate, circular or lobed; pilear surface smooth or scaly, light to deep brown to purplish black when old; context white or pale; pore surface white to cream, pores round to angular; stipe glabrous to tomentose, light or deep brown to basally black, smooth to longitudinally wrinkled; hyphal system dimitic, generative hyphae hyaline, thin-walled, clamps at septa; binding hyphae hyaline, much branched with long, mostly dichotomously branched segments ending with thin whip-like tips; cystidia none; basidiospores hyaline, cylindrical, smooth; mostly on dead hardwoods; causing white rot; cosmopolitan genus with 14 species in India.

Type species : *Polyporus squamosus* Fr.

1. Polyporus alveolarius (DC : Fr.) Bond. & Sing., Ann. Mycol. 39: 58, 1941.

Bas. : *Cantharellus alveolarius* DC. : Fr., Syst. Mycol. 1: 322, 1821.

– *Favolus canadensis* Kl. **(258).**

2. P. arcularis Fr., Syst. Mycol. 1: 342, 1821.

– **(286, 219);** *Favolus arcularis* (Batsch : Fr.) Ames **(152).**

3. P. badius (S.F. Gray) Schw., Trans. Ann. Phil. Soc. (New Ser.) 4: 155, 1834.

Bas. : *Grifola badia* S.F. Gray, Nat. Arrang. Br. Pl. 1: 644, 1821.

– *Polyporus versiformis* Berk. (**54, 176**); *P. picipes* Fr. (**121, 174, 214, 48, 287**).

4. P. brumalis Pers. : Fr., Syst. Mycol. **1**: 348, 1821.

– (**82, 47, 263, 266**).

5. P. dictyopus Mont., Ann. Sci. Nat. **11** : 349, 1835.

– (**86, 48, 266**).

6. P. grammocephalus Berk., Hook. Lond. J. Bot. **1** : 148, 1842.

– (**72, 60, 208, 287, 261, 258, 217, 259, 263, 266**); *P. acervatus* Lloyd (**192**); *P. emerici* Cke. (**175, 176, 71**); *Polystictus grammocephalus* (Berk.) Ito & Imaz. (**95, 48, 16, 233**); *Favolus grammocephalus* (Berk.) Imaz. (**95, 9**).

7. P. hemicapnoides Berk. & Br., J. Linn. Soc. **14**: 47, 1873.

– *Polyporus pusillus* Pers. (**3**).

8. P. squamosus Fr., Syst. Mycol. **1**: 343, 1821.

– (**54, 145, 29, 36, 263**).

9. P. tenuiculus (Beauv.) Fr., Syst. Mycol. **1**: 344, 1821.

Bas. : *Favolus tenuiculus* Beauv., Fl. Oware Benin Afriq. **1**: 74, 1806.

– *Polyporus dermoporus* Pers. (**218, 219**).

10. P. tricholoma Mont., Ann. Sci. Nat. Ser. *2* Vol. **8**: 365, 1837.

– (245); *Polyporus similis* Berk. (208).

11. P. umbellatus Fr., Syst. Mycol. 1: 354, 1821.

– *Grifola umbellata* (Fr.) Murr. (214, 95, 9).

12. P. varius Fr., Syst. Mycol. 1: 352, 1821.

– (179, 176).

13. P. virgatus Berk. & Curt., J. Linn. Soc. Bot. 10: 304, 1868.

– *Polyporus subvirgatus* Lloyd (169, 176).

14. P. udus Jungh., Tidschr, V. Nat. Gesch. Phys. 7: 289, 1840.

– *P. maculatus* Berk. (53) *P. platyporus* Berk. (53, 48).

68. PSEUDOFAVOLUS Pat.

Essai Tax. Hymeno. p. 80, 1900.

Basidiocarps annual, sessile or substipitate, solitary or imbricate, flabelliform to spathulate; pilear surface glabrous, tessulated or radially striate; context yellowish to brownish; pore surface cream or light yellowish brown, pores large, angular to hexagonal, 1-2 per mm; hyphal system dimitic, generative hyphae with clamps at septa; binding hyphae arboriform, thick-walled; cystidia absent; dendrohyphidia present, moderately branched; basidiospores cylindrical, smooth; on dead hardwoods; causing white rot, tropical genus with one species in India.

Type species : *Pseudofavolus miquelii* (Mont.) Pat.

1. Pseudofavolus miquelii (Mont.) Pat., Essai Tax. Hymen. p. 81, 1900.

Bas. : *Polyporus miquelii* Mont., Ann. Sci. Nat. III, 4: 357, 1845.

– **(266).**

69. PSEUDOMERULIUS Jul.

Persoonia **10** (3): 330, 1979.

Basidiocarps annual, effused-reflexed, soft and ceraceous; upper surface yellowish brown; hymenophore first smooth, with age changing to meruloid, or longitudinal folds, yellow when young, pale brownish on drying; hyphae monomitic, clamped, hyaline; basidia narrowly clavate; cystidia none; basidiospores pale yellowish to hyaline, strongly dextrinoid; on dead coniferous woods; causing a brown cuboidal rot; temperate genus with one species in India.

Type species : *Pseudomerulius aureus* (Fr.) Jul.

1. Pseudomerulius aureus (Fr.) Jul., Persoonia **10**: 330, 1979.

Bas. : *Merulius aureus* Fr., Elench. Fung. **1**: 62, 1828.

– *Merulius aureus* Fr. **(39, 26, 263).**

70. PYCNOPORELLUS Murr. Emend. Kotl. & Pouz.

Bull. Torrey Bot. Cl. **32**: 489, 1905 - Ceska. Mykol. **17**: 176, 1963.

Basidiocarps annual, effused-reflexed to sessile, solitary or imbricate, broadly attached or dimidiate to narrow and elongated; pilear surface tomentose

to glabrous, pale orange to rusty brown; context light orange, duplex, upper part soft, fibrous, lower part firm and corky; pore surface pale orange, pores circular to angular; hyphal system monomitic, hyphae thick-walled, simple septate; cystidia present, tubular and projecting; basidiospores cylindrical to oblong-ellipsoid, smooth, hyaline; on dead conferous/hardwoods; causing brown rot; temperate genus with one species in India.

Type species : *Pycnoporellus fulgens* (Fr.) Donk

1. Pycnoporellus fulgens (Fr.) Donk, Persoonia 6: 216, 1971.

Bas. : *Hydnum fulgens* Fr., Ofvers. Kung. Vet. Akad. Forh. 9: 130, 1852.

– *Pycnoporellus fibrillosus* (Karst.) Murr. (62).

71. PYCNOPORUS Karst.
Rev. Mycol. 3: 18, 1881

Basidiocarps annual, pileate, sessile; pileus dimidiate, orange red to cinnabar red, pilear surface smooth; context reddish orange; pore surface deep orange red, pores circular, regular; hyphal system trimitic, generative hyphae with clamps at septa; skeletal hyphae thick-walled, dextrinoid; cystidia absent; basidiospores cylindric, hyaline, smooth; mostly on dead hardwoods, rarely on conifers; causing white rot; cosmopolitan genus with two species in India.

Type species : *Pyconoporus cinnabarinus* (Jacq. : Fr.) Karst.

1. Pycnoporus cinnabarinus (Jacq. : Fr.) Karst. Rev, Mycol. 3: 18, 1881.

Bas. : *Polyporus cinnabarinus* Jacq. : Fr., Syst. Mycol. 2: 371, 1821.

– (214); *Polystictus cinnabarinus* Jacq. : Fr. (54, 121, 48); *Polyporus cristula* Kl. (51); *Trametes cinnabarina* (Jacq. : Fr.) Fr. (72).

2. P. sanguineus (Fr.) Murr., Bull. Torrey Bot. Cl. 31: 421, 1904.

Bas. : *Polyporus sanguineus* Fr., Syst. Mycol. 1: 371, 1821.

– (265); *Polyporus sanguineus* Kl. (83, 302, 211, 36, 259); *P. coccineus* Fr. (48); *Polystictus sanguineus* L. : Fr. (70, 165, 287, 13).

72. PYROFOMES Kotl. & Pouz.
Feddes Rep. 69: 140, 1964.

Basidiocarps annual to perennial, pileate, solitary to imbricate, pileus applanate or ungulate; pilear surface smooth to pubescent, pinkish brown to dark reddish brown to brick coloured; context reddish brown, fibrous; pore surface, orange pink or red, pores circular; hyphal system dimitic, generative hyphae with clamps; skeletal hyphae moderately thick-walled, pale brownish; cystidia absent; basidiospores smooth, thick-walled, truncate, moderately dextrinoid; on dead/living hardwoods; causing white rot; tropical genus with one species in India.

Types species : *Pyrofomes demidoffii* (Lev.) Kotl. & Pouz.

1. Pyrofomes albo-marginatus (Lev.) Ryv., Norw. J. Bot. 19: 236, 1972.

Bas. : *Polyporus albo-marginatus* Lev., Ann. Sci. Nat. Ser. 3, vol. 2: 191, 1844.

– *Fomes elegans* Wakf. (307); F. *albo-marginatus* (Lev.) Cke. (83, 16); *F. tricolor* (Murr.) Sacc. et Trott. (83, 48) The dispositions of *Pyropolyporus tricolor* Murr. & *Poria tricolor* Bres. by Ryvarden (1985 and 1988) are confusing.

73. PYRRHODERMA Imaz.

Trans. Mycol. Soc. Japan 7: 4, 1966.

Basidiocarps annual to perennial; laterally substipitate, woody hard when dry; pileus semicircular to spathulate, grey brown to dark yellowish brown, glabrous with a thick crust, often sulcate; stipe encrusted, glabrous, concolorous with pileus; context hard, shiny cinnamon to yellowish brown, white spots or streaks often present; pore surface greyish to yellowish brown, pores invisible to naked eyes, tubes pale brown; hyphal system monomitic, generative hyphae with simple septa, thick-walled, pale to yellowish brown; setal elements absent; basidiospores rare, globose to subglobose, up to 8.5 µm in diameter, thin-walled, hyaline; on living oaks; causing white rot; a rare genus known from Sikkim Himalaya only, one species in India.

Type species : *Pyrrhoderma sendaiense* (Yas.) Imaz.

1. Pyrrhoderma sendaiense (Yas.) Imaz., Trans. Mycol. Soc. Japan 7: 4, 1966.

Bas. : *Polyporus sendaiensis* Yas., Bot. Mag. (Tokyo) 37: 125-134, 1923.

– **(266, 268).**

74. RIGIDOPORUS Murr.

Bull. Torrey Bot. Cl. 32: 478, 1905

Basidiocarps annual to perennial; resupinate to pileate, coriaceous, bony hard on drying; pileus applanate to ungulate, whitish to ochraceous or pinkish brown, tomentose to glabrous, zonate; context pinkish white, dense; pore surface pinkish white to brown, greyish black on drying; hyphal system monomitic, generative hyphae thin to thick-walled or strongly sclerified, simple septate; encrusted cystidia present or absent, mamillate cystidia present;

basidiospores globose to subglobose, hyaline, IKI-ve; mostly on dead/living hardwoods; causing brown rot; cosmopolitan genus with six species in India.

Type species : *Rigidoporus microporus* (Fr.) Overeem.

1. Rigidoposus crocatus (Pat.) Ryv., Occ. Pap. Farlow Herb., **118**: 13, 1983.

Bas. : *Poria crocata* Pat., J. Bot. (Morot.) **8**: 220, 1874.

– *Poria nigricans* Bres. **(230, 238)**.

2. R. fusco-lineatus (Pers.) Ryv., Persoonia 7: 307, 1973.

Bas. : *Polyporus fusco-lineatus* Pers., Syn. Meth. Fung. p. 302, 1801.

– *Polyporus guhae* Lloyd **(189, 190, 193, 48)**.

3. R. lineatus (Pers.) Ryv., Norw. J. Bot. **19**: 236, 1972.

Bas. : *Polyporus lineatus* Pers., In Gaudichaud, Voyage aut. de Monde p. 174, 1827.

– **(265)**; *Polyporus zonalis* Berk. **(53, 145, 182, 191, 71, 48, 206, 45, 36)**; *Fomitopsis zonalis* (Berk.) Imaz., **(95, 9)**.

4. R. microporus (Fr.) Overeem., Icon. Fung. Malayensum **5**: 1, 1924.

Bas. : *Polyporus microporus* Fr., Syst. Mycol. **1**: 376, 1821.

– (265, 266); *Polyporus lignosus* Kl. (54, 65); *Fomes lignosus* (Kl.) Bres. (78, 300, 7, 45, 36).

5. R. ulmarius (Sow. : Fr.) Imaz., Bull. Govt. Forest Exp. Stn. Meguro 57: 119, 1952.

Bas. : *Polyporus ulmarius* Sow. : Fr., Syst. Mycol. 1: 365, 1821.

– (266); *Fomes geotropus* Cke. (194, 7, 25, 268, 263); *Rigidoporus geotropus* (Cke.) Dhanda (296); *Fomes ulmarius* (Sow.: Fr.) Gill. (288).

6. R. vinctus (Berk.) Ryv., Norw. J. Bot. 19: 139, 1972.

Bas. : *Poria vincta* Berk., Ann. Mag. Nat. Hist. 2: 196, 1852.

– (266); *Poria hypobrunnea* Petch (225, 300a); *Polyporus vincta* (Berk.) Cke. (274, 36, 238, 241); *P.vincta* Var. *cinerea* (Bres.) Setliff. (232).

75. SCHIZOPORA Vel. Emend. Donk

Ceske Houby p. 638, 1922 - Persoonia 5: 76, 1967.

Basidiocarps annual; resupinate, context pale yellowish; pore surface yellowish white to pinkish yellow, pores angular, becoming deadaleoid to irregularly hydnaceous; hyphal system dimitic, generative hyphae hyaline, branched at short angles, moderately thick-walled, with clamps at septa; skeletal hyphae short, thick-walled, straight or flexuous, often ending in swollen rounded ends; cystidia absent; subulate or bottle-shaped; cystidioles often present in the hymenium; basidiospores broadly ellipsoid, hyaline, smooth, 1K1-ve; on dead hardwoods; causing white rot; widely distributed tropical genus with two species in India.

Type species : *Schizopora paradoxa* (Fr.) Donk

1. Schizopora flavipora (Cke.) Ryv., Mycotaxon **23**: 186, 1985.

Bas. : *Poria flavipora* Cke., Grevillea **15**: 25, 1886.

– **(270)**.

2. S. paradoxa (Fr.) Donk, Persoonia **5**: 76, 1967.

Bas. : *Hydnum paradoxum* Fr., Syst. Mycol. **1**: 424, 1821.

– **(238, 265)**; *Poria versipora* (Pers.) Rom. **(230, 285, 263)**.

76. SERPULA (Pers.) S.F. Gray
Nat. Arrang. Brit. Pl. **1**: 637, 1821.

Type species : *Serpula lacrymans* (Wulf. : Fr.) Schroter

1. Serpula himantioides (Fr. : Fr.) Karst., Medd. Soc. Fauna Fl. Fenn. **11**: 137, 1884.

Bas. : *Merulius himantioides* Fr., Syst. Mycol. **1**: 329, 1821.

– **(238)**; *M. himantioides* Fr. **(43, 36, 243)**.

2. S. lacrymans (Wulf. : Fr.) Schroter, In Cohn. Krypt-Fl. Schlesien **3**: 466, 1888.

Bas. : *Merulius lacrymans* Wulf. : Fr., Syst. Mycol. **1**: 328, 1821.

– **(238)**; *M. lacrymans* Wulf. : Fr. **(16, 229, 263)**; *M. pseudolacrymans* Henn. **(146)**.

3. S. mollusca (Fr.) Donk, Persoonia 3: 209, 1964.

Bas. : *Merulius molluscus* Fr., Syst. Mycol. 1: 329, 1821.

– (288, 238).

4. S. similis Berk. & Br., J. Linn. Soc. Lond. 14: 58, 1873.

– (238); *Merulius similis* Berk. & Br. (72, 206, 48).

77. SISTOTREMA Fr.

Syst. Mycol. 1: 426, 1821

Basidiocarps annual; effused-reflexed to pileate or rarely resupinate, eccentrically or laterally stipitate, arachnoid, pelliculose or ceraceous, pale buff to light brown, glabrous to finely tomentose, spathulate to infundibuliform; hymenophore poroid to hydnaceous; hyphal system monomitic, generative hyphae hyaline, clamps at septa, ampullate, often with oily contents; basidia urniform, 6-8 sterigmate; basidiospores hyaline, cylindrical to broadly ellipsoid, smooth, IKI-ve; on dead hardwoods; causing white rot; tropical genus with only one poroid species in India.

Type species : *Sistotrema confluens* Pers. : Fr.

1. S. confluens Pers : Fr., Syst. Mycol. 1: 426, 1821.

– *Merulius confluens* Schw. (39).

78. SKELETOCUTIS Kotl. & Pouz.

Ceska Mykol. 12: 103, 1958.

Basidiocarps; annual, effused-reflexed, coriaceous, pilei solitary or imbricate, dimidiate to flabelliform, often laterally fused; surface white to

grey yellowish brown, tomentose to adpressed hirsute, sulcate; context yellowish or pinkish white, reddish in KOH, upper layer fibrous, lower layer firm and cartilaginous; pore surface pinkish brown to reddish orange, pores angular; hyphal system dimitic, generative hyphae hyaline, with clamps; skeletal hyphae thick-walled; basidiospores allantoid, hyaline, IKI-ve; on dead conifers/ hardwoods; causing white rot; temperate genus with one species in India.

Type species : *Skeletocutis amorpha* (Fr.) Kotl. & Pouz.

1. Skeletocutis amorpha (Fr.) Kotl. & Pouz., Ceska Mykol. 12: 103, 1958.

Bas. : *Polyporus amorphus* Fr., Syst. Mycol. 1: 364, 1821.

– *Polyporus amorphus* Fr. (41, 263); *Polystictus amorphus* Fr. (7).

79. SPONGIPELLIS Pat.
Hymeno. Europe p. 140, 1887

Basidiocarps annual; pileate, semicircular, broadly attached; pilei solitary or imbricate, dimidiate, applanate to ungulate; upper surface white, pale brownish to light reddish brown in patches, azonate; context yellowish white, mostly duplex, upper part looser and cottony, lower part fibrous and dense; hymenophore poroid to dentate; pore surface white to pale buff or ochraceous; hyphal system monomitic, generative hyphae with clamps; cystidia absent; basidiospores ellipsoid to globose, smooth, hyaline, thick-walled; on living hardwoods; causing white rot; temperate genus with two species in India.

Type species : *Spongipellis spumeus* (Fr.) Pat.

1. Spongipellis delectans (Peck) Murr., N. Am. Fl. 1: 38, 1907.

Bas. : *Polyporus delectans* Peck, Torrey Bot. Cl. Bull. 2: 26, 1884.

– (266): *Polyporus delectans* Peck (288).

2. S. unicolor (Schw.) Murr., N. Am. Fl. 9: 37, 1907.

Bas. : *Boletus unicolor* Schw., Schr. Nat. Ges. Leipzig 1: 97, 1822.

– (266); *Polyporus hobsoni* (Berk.) Cke. (103); *Polyporus obtusus* Berk. (33).

80. THELEPORUS Fr.

Kung. Svenska Vetenskapsad. Ofvers. 4: 106, 1847.

Basidiocarps resupinate, adnate, irregularly poroid, light cream to ochraceous; pores 3-6 per mm, angular to often not completely closed, appearing labyrinthine; hymenium restricted to the bases of the pores, often visible as a whiter and denser layer at the bottom of the pores; hyphal system trimitic, generative hyphae with clamps; skeletal hyphae more or less unbranched and parallel in the tube walls; binding hyphae present, vegetative hyphae hyaline to yellowish, dendrohyphidia present or absent; basidiospores broadly ellipsoid, thin-walled, smooth, nonamyloid; on deciduous woods; causing a white rot; tropical genus with one poroid species in India.

Type species : *Theleporus cretaceus* Fr.

1. Theleporus calcicolor (Sacc. & Syd.) Ryv., Trans. Br. Mycol. Soc. 73: 12, 1979.

– (264).

81. TINCTOPORELLUS Ryv.

Trans. Br. Mycol. Soc. 73: 18, 1979.

Basidiocarps annual to perennial; resupinate, adnate, woody hard, delimited towards the wood which is coloured in red zones; context greyish white; pore surface bluish grey to pale violet, pores minute, 7-9 per mm; hyphal system dimitic; generative hyphae with clamps at septa; skeletal hyphae thick-walled, hyaline, golden yellow in KOH, weakly dextrinoid; cystidia none; basidiospores broadly ellipsoid to subglobose, smooth, hyaline; on dead hardwoods; causing white rot and changing substratum reddish in zones; tropical genus with one species in India.

Type species : *Tinctoporellus epimiltinus* (Berk. & Br.) Ryv.

1. Tinctoporellus epimiltinus (Berk. & Br.) Ryv., Tran. Br. Mycol. Soc. 73: 18, 1979.

Bas. : *Polyporus epimiltinus* Berk. & Br., J. Linn. Soc. 14: 54, 1873.

– **(270).**

82. TRAMETES Fr.

Fl. Scand. p. 339, 1835

Basidiocarps annual or short-lived; pileate to effused-reflexed, sessile, usually imbricate, flexible to hard; pilei dimidiate to fan shaped, conchate or applanate; upper surface hispid to glabrous, often zonate; context white to yellowish white, homogeneous or duplex; pore surface white or pale yellow to grey, pores round to angular, rarely radially elongated; hyphal system trimitic, generative hyphae hyaline, clamped; skeletal hyphae thick-walled to solid, hyaline; binding hyphae tortuous, solid; cystidia none; basidiospores ellipsoid or cylindrical to suballantoid, hyaline, thin-walled; on dead hardwoods;

causing white rot; widely distributed cosmopolitan genus with 20 species in India.

Type species : *Trametes suaveolens* (Fr.) Fr.

1. Trametes cervina (Schw.) Bres., Ann. Mycol. 1: 81, 1903.

Bas. : *Boletus cervinus* Schw., Syn. Fung. Carol. p. 70: 1822.

– **(236).**

2. T. cingulata Berk., Hook. J. Bot. 6: 164, 1854.

– **(54, 121, 70, 177, 192, 7, 48, 36, 261, 206);** *Polystictus cingulatus* Fr. (7); *T. picta* Berk. & Br. (78); *Coriolus cingulatus* (Berk.) Dhanda **(296).**

3. T. cotonea (Pat. & Harr.) Ryv., Norw. J. Bot. 19: 236, 1972.

Bas. : *Polyporus cotoneus* Pat. & Harr., Bull. Soc. Mycol. Fr. 9: 208, 1893.

– *Polyporus cotoneus* Pat. & Harr. **(41, 263);** *Polystictus cotoneus* Pat. & Harr. **(208).**

4. T. cubensis (Mont.) Sacc., Syll. Fung. 9: 198, 1891.

Bas. : *Polyporus cubensis* Mont., Ann. Sci. Nat. Bot. II, 8: 364, 1837.

– **(83, 48, 7, 16, 36);** *Polyporus cubensis* Mont. **(95).**

5. T. gibbosa (Pers.) Fr., Epicr. p. 492, 1838.

Bas. : *Daedalea gibbosa* Pers., Mycol. Europ. **3**: 7, 1828.

– **(16, 25, 263)**; *Trametes crenulata* Berk. **(54, 191, 72, 263)**.

6. T. hirsuta (Wulf. : Fr.) Pilat, Atl. Champ. Europe **3**: 265, 1939.

Bas. : *Polyporus hirsutus* Wulf. : Fr., Syst. Mycol. **1**: 367, 1821.

– *Polyporus hirsutus* Fr. **(261, 36, 259, 263)**; *P. cinerescens* Lev. **(247)**; *Polystictus vellereus* Berk. **(81)**; *P. fibula* Fr. **(88, 81)**; *P. cineraceus* Lev. **(161)**; *P.hirsutus* Fr. **(206, 25, 262, 258)**; *Coriolus hirsutus* (Wulf. : Fr.) Quel. **(152)**; *Polyporus vellereus* Berk. **(283, 259, 263, 81)**.

7. T. lactinea (Berk.) Pat., Essai Tax. p. 92, 1900.

Bas. : *Polyporus lactineus* Berk., Ann. Nat. Hist. **10**: 373; 1942.

– **(178, 189, 183, 71, 83, 48, 7, 36)**; *T. karii* Lloyd **(189, 190, 193)**.

8. T. marianna (Pers.) Ryv., Persoonia **7**: 309, 1973.

Bas. : *Polyporus mariannus* Pers., In Gaudichaud, Voya. aut. Monde p. 173, 1827.

– *Trametes muelleri* Berk. **(165, 7, 72)**.

9. T. maxima (Mont.) David. & Rajch. Mycotaxon **22**: 315, 1985.

Bas. : *Irpex maximus* Mont., Ann. Sci. Nat. Bot. Ser. 2, vol. **8**: 364, 1837.

– *Irpex maximus* Mont. (**247, 263**).

10. T. membranacea (Swartz. : Fr.) Kreisel, Ciencias, Biol. Ser. 4(16): 83, 1971.

Bas. : *Polyporus membranaceus* Swartz. : Fr., Syst. Mycol. **1**: 370. 1821.

– *Polystictus membranaceus* (Swartz.) Berk. (**88**); *Polyporus flabellum* Mont. (**209**); *P. aggrediens* Berk. (Probably wrongly spelt as *P. agaricens* by Bose & Banerjee); (**82, 48**).

11. T. menziezii (Berk.) Ryv., Norw. J. Bot. **19**: 236, 1972.

Bas. : *Polyporus menziezii* Berk., Ann. Nat. Hist. **10**: 378, 1843.

– *Trametes vittatus* Lev. (**191**); *Polystictus vittatus* Berk. (**82**); *P.menziessi* Berk. (**88, 82**); *P. nepalensis* Berk. (**54, 88**); *P. gaudichaudii* Lev. (**95**); *P. meleagris* Berk. (**84**); *P. hutchingsii* Lloyd (**197**); *Polyporus corium* Berk. (**54, 181**); *P. thwaitesii* Berk. & Br. (**82, 95, 84, 48**); *Polystictus gallopavonis* Berk. & Br. (**83, 165, 186**); *Lenzites murina* Lev. (**189**).

12. T. ochracea (Pers.) Gilbn. & Ryv., N. Am. Polpy. p. 752, 1986.

Bas. : *Boletus ochraceus* Pers., Ann. Bot. (usteri) **11**: 29, 1794.

– *Polystictus zonatus* (Nees) Fr. (**283, 86**); *Polyporus zonatus* Nees: Fr. (**32, 263**).

13. T. pubescens (Schum. : Fr.) Pil., Atl. Champ. Europ. **3**: 268, 1939.

Bas. : *Polyporus pubescens* Schum. : Fr., Syst. Mycol. **1**: 367, 1821.

– *Polyporus velutina* Pers. : Fr. (**32, 263**); *Polystictus velutinus* (Pers. : Fr.) Cke. (**82**); *Coriolus velutinus* (Pers. : Fr.) Quel. (**152**).

14. T. radiato-rugosus (Bres.) Ryv., Mycotaxon **33**: 319, 1988.

Bas. : *Polystictus radiato-rugosa* Bres., Ann. Mycol. **18**: 36, 1920.

– *Polyporus manilaensis* Lloyd (**192**); *Trametes varians* Van der Byl. (**270**).

15. T. roseola Pat. & Har., J. de Bot. **14**: 239, 1900.

– (**32**).

16. T. suaveolens (Fr.) Fr., Epicr. p. 492, 1838.

Bas. : *Polyporus suaveolens* Fr., Syst. Mycol. **1**: 366, 182.

– (**206**).

17. T. tephroleuca Berk., Hook. J. Bot. p. 185, 1852.

– *Trametes immutata* Berk. (**54**); *Polyporus tephroleuca* Berk. (**54, 36, 263**); *Coriolus tephroleucus*(Berk.) Bond. (**152**).

18. T. trogii Berk., Trog. Verzeichn. Schweiz. Schw. **2**: 52, 1850.

– (**53**); *Polystictus ozonoides* Berk. (**53, 163, 48**); wrongly published as new record (Mitra *et al* 1985).

19. T. versicolor (L. : Fr.) Pilat, Atl. Champ. Europe **3**: 261, 1939.

Bas. : *Polyporus versicolor* L. : Fr., Syst. Mycol. **1**: 368, 1821.

– (**266**); *P. versicolor* L. : Fr. (**32, 263**); *Polystictus versicolor* (L.) Fr. (**53, 54, 121, 209, 146, 70, 183, 196, 208, 7, 287**); *P. pectunculus*

Lev. (161); *Coriolus azureus* (Fr.) Cunn.; (294); *Coriolus versicolor* (L.: Fr.) Quel. (152).

20. T. villosa (Fr.) Kreisel, Ciencias Biol. Ser. 4(16): 84, 1971.

Bas. : *Polyporus villosus* Fr., Syst. Mycol. 1: 344, 1821

– *Polystictus villosus* Massee (203, 206); *P. hypothejus* Kalchbr. (81, 48); *P. vibecinus* Fr. (189); *Polyporus pinsitus* Fr. (161, 121); *P. setosus* Mont. (209).

83. TRECHISPORA Karst. Emend. Liberta

Hedwigia 29: 147, 1890 Taxon 15: 318, 1966.

Basidiocarps annual; resupinate, arachnoid, byssoid to waxy-membranous, fragile; context soft, fragile; hymenophore even, odontoid, reticulate or poroid; hyphal system monomitic; generative hyphae hyaline, with clamps, often ampullate at septa; cystidia present or absent; basidiospores globose to subglobose, echinulate, Ikl-ve; on dead hardwoods; causing white rot; cosmopolitan genus with one poroid species in India

Type species : *Trechispora onusta* Karst. (= *T. mollusca* (Pers. : Fr.) Liberta).

1. T. mollusca (Pers. : Fr.) Liberta, Can. J. Bot. 51: 1878.

Bas. : *Polyporus mollusca* Pers. : Fr., Syst. Mycol. 1: 384, 1821.

– (238); *Poria candidissima* Schw. & Cke. (292).

84. TRICHAPTUM Murr.

Bull. Torr. Bot. Cl. 31: 608, 1904.

Basidiocarps annual; resupinate, effused-reflexed to pileate, commonly imbricate, coriaceous, stiff when dry; pilei small, dimidiate, conchate; upper

surface tomentose, hirsute to villose, concentrically sulcate, greyish black to dirty white or yellowish white; context distinctly duplex, lower part dense and dark, upper part loose and white; hymenophore irpicoid to poriod, pale brownish or purplish with always a voilet tinge; hyphal system dimitic, generative hyphae hyaline, thin-walled, clamps at septa; skeletal hyphae thick-walled; cystidia present, subulate to clavate, smooth or apically encrusted; basidiospores cylindrical, slightly bent, smooth, hyaline, thin-walled; on dead hardwoods/ conifers; causing white rot; widely distributed and cosmopolitan genus with four species in India.

Type species : *Trichaptum perrottetii* (Lev.) Ryv.

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

Bas. : *Polyporus abietinus* Dicks.: Fr., Syst. Mycol. **1**: 370, 1821

– **(266)**; *Hirchioporus abietinus* (Dicks. Fr.) Donk **(291)**; *Polystictus abietinus* (Dicks.) Fr. **(83, 7, 229)**; *Polyporus abietinum* (Dicks.) Fr. **(261, 36, 263)**.

2. T. biformis (Fr. In Kl.) Ryv.; Norw. J. Bot. **19**: 237, 1972.

Bas. : *Polyporus biformis* Fr. In Kl., Linnaea **8**: 486, 1833.

– **(266)**; *Polyporus biformis* Fr. **(31, 26, 41)**; *P. pargamenus* Fr. **(25, 263)**; *Polystictus elongatus* Berk. **(54, 179, 206, 48, 7)**; *P. pargamenus* Fr. **(170, 25)**; *P. inquinatus* Lev. **(161)**.

3. T. byssogenus (Jungh.) Ryv., Norw. J. Bot. **19**: 237, 1972.

Bas. : *Polyporus byssogenus* Jungh., Verh. Batav. Genootsch **17**: **43, 1838.**

– *Hirchioporus versatilis* (Berk.) Imaz. (**211**); *Polyporus versatilis* (Berk.) Rom. (**36**); *Polystictus versatilis* Berk. (**185**); *Trametes versatilis* Berk. (**84, 48, 258**); *Irpex subvinosus* Berk. & Br. (**301**).

4. T. fusco-violaceum (Fr.) Ryv., Norw. J. Bot. **19**: 237, 1972.

Bas. : *Hydnum fusco-violaceus* Fr., Syst. Mycol. **1**: 421, 1821.

– (**294**).

5. T. sector (Ehrenb. : Fr.) Kreisel., Ciencias Ser. **4**: Ciencias Bol. **16**: 84, 1971.

Bas. : *Polyporus sector* Ehrenb. : Fr., Syst. Mycol. **1**: 505, 1821.

– *Polystictus sector* (Ehrenb.) Fr. (**16**); *P. floridanus* Berk. (**283, 95, 302**).

85. TYROMYCES Karst.
Rev. Mycol. 3: 17, 1881.

Basidiocarps annual; pileate to resupinate, soft, succulent or fleshy, firm and rigid when dry, pilei somewhat medium-sized, dimidiate or narrowed at the base or applanate; upper surface pubescent to glabrous, wrinkled on drying; context white to pale, thick; pore surface white to cream, darker on drying; hyphal system monomitic, generative hyphae with clamps; gloeoplerous hyphae present or absent; cystidia absent; basidiospores hyaline, thin-walled, allantoid to ovoid; on dead hardwoods/conifers; causing white rot; widely spread, cosmopoliton genus with five species in India.

Type species : *Tyromyces chioneus* (Fr.) Karst.

1. Tyromyces chioneus (Fr.) Karst., Rev. Mycol. **3**: 17, 1881.

Bas. : *Polyporus chioneus* Fr., Syst. Mycol. **1**: 359, 1821.

– *Polyporus albellus* Peck **(192, 176)**.

2. T. gratus (Berk.) Ryv., Norw. J. Bot. **24**(3): 221, 1977.

Bas. : *Polystictus gratus* Berk., Hook. J. Bot. **6**: 163, 1854.

– *Polystictus gratus* Berk. **(54, 182)**.

3. T. hypolateritius (Cke.) Ryv., A Pre. Polyp. Fl. East Afr. P. 608, 1980.

Bas. : *Poria hypolateritia* Cke., Grevillea **15**: 24, 1886.

– *Poria hypolateritia* Cke. **(103, 225, 95, 199)**.

4. T. merulinus (Berk.) Cunn., Polyp. N. Zealand **164**: 138, 1965.

Bas. : *Polyporus merulinus* Berk., Fl. Tasm. **2**: 254, 1860.

– *Poria membranacincta* Cke. **(82)**.

5. T. pelliculosus (Berk.) Cunn., Polyp. N. Zealand **164**: 124-125, 1965.

Bas. : *Polyporus pelliculosus* Berk., Lond. J. Bot. **7**: 575, 1848.

– *Polyporus pelliculosus* Berk. **(16, 27)**.

86. WOLFIPORIA Ryv. & Gilbn.
Mycotaxon **19**: 141, 1984.

Basidiocarps annual; resupinate; context white to pale yellow, firm-fibrous; pore surface white to light yellowish brown, pores circular to angular, tubes concolorous with pore surface; hyphal system dimitic; generative

hyphae thin to thick-walled, simple septate, inflated up to 20 µm; skeletal hyphae thick-walled; cystidioles fusoid; basidiospores ellipsoid, hyaline, IKI-ve; on dead hardwoods/conifers; causing brown cuboidal rot; a rare temperate genus with only one species in India.

Type species : *Wolfiporia cocos* (Schw.) Ryv. & Gilbn.

1. Wolfiporia dilatohypha Ryv. & Gilbn., Mycotaxon **19**: 141, 1984.

Bas. : *Poria inflata* Overh., Pa. Acad. Sci. Proc. **13**: 123, 1939 (illegitimate name).

– *Poria inflata* Overh. **(292)**.

87. WRIGHTOPORIA Pouz.

Ceska. Mykol. **20**(3): 173-174, 1966.

Basidiocarps annual; resupinate; widely effused, soft, tough when dry; context very thin, white; pore surface white to cream, margin fimbriate, pores round to angular; hyphal system dimitic, generative hyphae clamped, hyaline, thin-walled; skeletal hyphae thick-walled, strongly dextrinoid; cystidia none; basidiospores globose to subglobose, finely asperulate, hyaline, distinctly amyloid; on dead hardwoods/conifers; causing brown rot; common temperate genus with one species in India.

Type species : *Wrightoporia lenta* (Overh. & Lowe) Pouz.

1. Wrightoporia lenta (Overh. & Lowe) Pouz., Ceska Mykol. **20**: 173, 1966.

Bas. : *Poria lenta* Overh. & Lowe., Mycologia **38**: 210, 1946.

– *Poria lenta* Overh. & Lowe **(292)**.

EXCLUDED SPECIES

The following species are reported in the literature as occurring in India. The author strived hard to procure either the type or any authentic material for many of them but could not do so from any of the Indian/ foreign herbaria. Such names and those which were found nomenclaturally incorrect have been excluded from the list of Indian polypores for reasons mentioned against them.

1. *Favolus bengala* Lloyd (79, 48, 189, 190, 193) - Material sterile.

2. *Favolus boucheanus* Kl. (257) - Nomen ambiguum & Nomen dubium.

3. *Favolus intestinalis* Berk. (53) Not a polypore, probably a *Favolaschia* sp.

4. *Favolus jacobaeus* Sacc. and Berl. (192) - No type or authentic material available.

5. *Favolus tenerrimus* Berk. (54) - Not a polypore, probably a *Favolaschia* sp.

6. *Fomes mutabilis* Bakshi (32) Material sterile, probably a *Fomitopsis* sp.

7. *Gloeoporus corrugatus* Cke. (103) - Material sterile, probably a *Antrodiella* sp.

8. *Irpex destruens* Petch (301) - No. type or authentic material available.

9. *Polyporus clementsii* Murr. (sent by Bose and identified by Lloyd (191) as *P. clementsii* Murr.; probably wrongly mentioned and spelt by Lloyd. No. such species was reported by Murrill. However, *Trametes*

clementsii Murr. was reported from Philippines (1908) for which no material could be procured.

10. *Laschia intestinalis* (Berk.) Bres. **(89, 185, 185a)** - Not a Polypore, probably *Favolaschia* sp.

11. *Laschia lamellosa* Berk. **(54)** Not a Polypore, probably *Favolaschia* sp.

12 *Laschia subvelutina* Berk. **(53)** Not a Polypore, probably *Favolaschia* sp.

13 *Merulius lignosus* Berk. **(54)** - No type or authentic material available.

14. *Polyporus corrivalis* Berk. **(26)** - No type or authentic material available.

15. *Polyporus cremoricolour* Berk. **(53)** Not a polypore, *Favolaschia* species.

16. *Polyporus gleadowii* Massee **(202)** - Type or authentic material not available.

17. *Polyporus haematinus* Berk. **(182)** - No. material available; Berkeley probably never published such an epithet.

18. *Polyporus ikenoi* P. Henn. **(54)** - No type or authentic material available.

19. *Polyporus medullaris* Berk. **(54)** - No type or authentic material available.

20. *Polyporus oerstedii* Fr. **(182, 180)**; material not in good condition, probably a *Ganoderma* sp.

21. *Polyporus pejunanus* Mont. (**182**) - No type or authentic material available.

22. *Polyporus plorans* Massee (**145**) - No type or authentic material available.

23. *Polystictus sarbadhikari* Bose (**73, 79**) probably a *Ganoderma* sp.

24. *Polyporus serpens* Pers. (**54**) invalid name.

25. *Polyporus spadiceus* Berk. (**51, 182**) Nomen illegit., non Jungh. 1838 specimens close to *Phellinus fastuosus* (Lev.) Ryv.

26. *Polyporus steinheilianus* Berk. & Lev. (nomenclatural confusum); reported by (**81, 48**); Material sterile, spores reported by Bose do not belong here. Berk. & Lev. not known to have published such an epithet.

27. *Polystictus aethopes* Cke. (**182, 101**) Type sterile, probably a *Phellinus* sp.

28. *Polystictus aquosus* P. Henn. (**176, 169**) - Type or authentic material not available.

29. *Polystictus coriaceous* Lev. (**161**) - No type or authentic material available.

30. *Polystictus gollani* Henn. (**146**) - No Type or authentic material available.

31. *Polystictus ikenoi* Henn. (**192**) - No type or auhentic material available.

32. *Polystictus russogramme* Berk. (**283**) Type inadequate; probably a *Trametes* sp.

33. *Polystictus sarawacensis* Berk. (63) No type or authentic material available.

34. *Polystictus virgineus* Schwein. (145) No type or authentic material available.

35. *Poria gallogrisea* Cke. (103) - Type sterile, probably a *Antrodia* sp.

36. *Poria metamorphosa* Fuck. (206) No type or authentic material available.

37. *Poria porriginosa* Cke. (103) Material without pores, probably not a polypore.

38. *Trametes cincta* Bose (74, 191) Type sterile and not in good condition to be indentified.

39. *Trametes spongipellis* (L.) Lloyd (7, 258) - authentic material not available; Lloyd not known to have published such an epithet.

40 *Trametes hololeuca* (Kalchbr.) Lloyd (166) - no material available, probably belongs to *Trametes lactinea.*

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