Four new records of Polypores to India

BRIJ BALA



J. Mycopathol. Res. 60(2): 251-256 2022; ISSN 0971-3719
© Indian Mycological Society, Department of Botany, University of Calcutta, Kolkata 700 019, India

This article is protected by copyright and all other rights under the jurisdiction of the Indian Mycological Society. The copy is provided to the author(s) for internal non-commercial research and educational purposes.

Four new records of Polypores to India

BRIJ BALA

Department of Botany, Punjabi University Patiala- 147002, Punjab

Received: 11.02.2022 Accepted: 27.04.2022 Published: 27.06.2022

The present paper deals with the taxonomic study of polyporoid fungi in the Jammu division of Union Territory of Jammu and Kashmir. During the fungal forays some fascinating polypore specimens were collected in some districts of Jammu Division. The morphotaxonomic details and comparison with the published literature results into the identification of four polypore species i.e. *Dichomitus affixus*, *Donkiopora expansa*, *Sistotrema alboluteum* and *Trichaptum perrottetii*. All the four polypore species are described and illustrated as new records for India.

Key words: Basidiomycota, brown rot, North Western Himalaya, Poroid fungi, white rot

INTRODUCTION

Polyporoid fungi are an important group of wooddecaying fungi classified into various orders under phylum Basidiomycota. These fungi are characteristic in having annual to perennial macroscopic basidiocarps that range from resupinate to effused- reflexed to pileate to stipitate. These basidiocarps are unique in having poroid hymenophore with circular to angular to daedaleoid to lamellate to irregular pores. The colour of hymenial and abhymenial surfaces varies from whitish to some shades of yellow, orange, grey, violet, blue or red. Polyporaceae the major group of fungi involved in the decomposition of lignin and cellulose. However, few of these are also have medicinal properties (Wachtel et al. 2011;Susannaand Narine 2016; Ján et al. 2016). The diverse vegetation and varied climatic conditions of Union Territory of Jammu and Kashmir have attracted the mycologists for exploration of the fungal diversity. The survey of literature revealed only 45 species of the polyporoid fungi so far reported from Jammu and Kashmir. The number of described species of these fungi from Jammu Division falls to 34 only.

Looking at the unique topography, climate and vegetation the present studies were taken up. During the exhaustive surveys carried out during the rainy season of 2014-2017 some interesting polyporoid specimens were collected from different districts of Jammu division. Presently, four polypore

species i.e. *Dichomitus affixus* (Corner) T. Hatt., *Donkioporia expansa* (Desm.) Kotl. & Pouzar, *Sistotrema alboluteum* (Bourdot & Galzin), Bondartsev & Singer and *Trichaptum perrottetii* (Lév.) Ryvarden, are described as new to India.

MATERIAL AND METHODS

The polypores' basidiocarps were collected during the field surveys conducted in various localities of district Doda, Ramban, Kishtwar and Kathua of Jammu Division of Union Territory of Jammu and Kashmir in the rainy months (July-September) of years 2014-2017. These specimens were separated carefully from the substratum and details related to nature of the basidiocarp, mode of attachment, colour and nature of hymenial and abhymenial surface and marginswere recorded. The microscopic features with reference to hyphal system, cystidia/cystidioles, basidia and basidiospores were studied by making crush mounts and cross section cutting of basidiocarp portions. These preparations were prepared in water, 3%/5%/10% KOH, 1% phloxine, 1% Congo red and 1% cotton blue (in distilled water/lactophenol). The cyanophilous and amyloid reaction of structures like hyphae, cystidia/cystidiolesand basidiospores, were studied in 1% cotton blue (in distilled water/ lactophenol) and Melzer's reagent (lodine-0.5g, Potassium Iodide-1.5g, Chloral hydrate-20.0g and distilled water-20.0ml) respectively. The outline of the microscopic structures was drawn with the help of a camera lucida mounted on a compound microscope at 100X, 400X, and 1000X magnification. The specimens were identified on the

Correspondence: balabrij366@gmail.com

basis of comparison of the description with the literature and online repositories like Mycobank. The identified specimens were submitted to the Herbarium Department of Botany, Punjabi University, Patiala. The colourstandards used are as per Kornerup and Wanscher (1978).

RESULTS AND DISCUSSION

Four polypore species spread over four genera, four families and three orders of *Agaricomyectes* (*Basidiomycota*) are described from Jammu division of Jammu and Kashmir.

1.Dichomitus affixus (Corner) T. Hatt., Mycoscience 43 (4): 307 (2002). a"*Tyromyces affixus* Corner, Beiheftezur Nova Hedwigia 96: 157 (1989).

Basidiocarp annual, resupinate, up to 3mm in thickness; hymenial surface poroid, white when fresh, changing to pale yellowish on drying; margins adnate, entire, concolorus, sterile up to 2mm; subiculum homogenous, pale yellowish, up to 2mm in thickness; pores round to angular, 2-4per mm; dessipmentsentire, up to 50 µm thick; tube layer concolorus to the subiculum, up to 1 mm deep.

Hyphal System dimitic.Generative hyphae thin-walled, clamped, branched, up to 4.7 μ m in width. Skeletal hyphae thick-walled, unbranched up to 7 μ m in width. Basidia clavate, thin-walled, basally clamped, tetrasterigmate,14-17.5 × 4.5-5.5 μ m; sterigmata up to 2.5 μ m long. Basidiospores hyaline, broadly ellipsoid, thin-walled, smooth,no reaction in cotton blue and Melzer's reagent,6.1 -8×5-6.5 μ m(Fig.1).

Material examined:Jammu and Kashmir, Kathua, Dyalachak, on angiospermous wood, Brij Bala, 11154 (PUN), September 10, 2015; Jammu, Talab-Tillo, on angiospermous wood, Brij Bala, 11153 (PUN), August 28, 2016.

Remarks: *Dichomitus affixus* is characterized by clamped generative hyphae and broadly ellipsoid basidiospores. It is being described first time from India. Earlier it is reported only from New Guinea (Mycobank, 2021).

2. **Donkioporia expansa** (Desm.) Kotl. & Pouzar, Persoonia 7: 214 (1973).

Change to = *Boletus expanses* Desm., Catalogue des Plantes Ommises dans la Botanographie

Belgique et dans les Flores du Nord de la France: 19 (1823).

Basidiome annual, resupinate, up to 4mm in thickness; hymenial surface poroid, white when fresh, changing to grayish brown on drying;margins concolorus, adnate, sterile up to 2mm; subiculum homogenous, white to pale yellowish, up to 2mm in thickness;pores round to angular, 2-3 per mm; dissepiments entire, up to 45µm; tube layer concolorus to subiculum, up to 2mm deep.

Hyphal System trimitic. Generative hyphae thin- to thick-walled hyaline to pale-yellowish, clamped, branched up to 4.6 μ m. Binding hyphae thick-walled branched up to 4.6 μ m. Skeletal hyphae thick-walled, unbranched, up to 7 μ m in width. Basidia thin-walled, sub- clavate, tetrasterigmate, 16-20×5-6 μ m; sterigmata up to 3 μ m long. Basidiosporeshyaline,ellipsoid to broadly ellipsoid, thin-walled, smooth, no reaction in cotton blue and Melzer's reagent, 5-6.5×3.4-4 μ m (Fig.2).

Material examined: Jammu and Kashmir, Jammu, Bhaderwah, Shunushir, on *Cedrus deodara* stump, Brij Bala, 11155 (PUN), September 17, 2017; Kishtwar, Sinthon, on *Cedrus deodara*, Brij Bala, 11116 (PUN), August 23, 2017.

Notes: It is peculiar in having resupinate basidome with trimtic hyphal systemand ellipsoid to broadly ellipsoid basidiospores. Earlier it is reported from England, CzechRepublic and North America (Ryvarden, 2014).

3. **Sistotrema alboluteum** (Bourdot & Galzin) Bondartsev& Singer, Annales Mycologici 39 (1): 47 (1941). a" *Poriaalbolutea* Bourdot & Galzin, Bulletin de la Société Mycologique de France 41: 217 (1925).

Basidiocarp annual, resupinate, effused, upto 3mm in thickness; hymenial surface poroid, white when fresh, changing to pale yellowish on drying; margins concolorus, adnate, sterile up to 1mm; subiculum homogenous, up to 1mm in thickness; pores round to angular to lacerate, 1-3 per mm; dissepiments entire, up to 65 µm in thickness; tube layer concolorus to the subiculum, up to 2 mm deep.

Hyphal System monomitic Generative hyphae hyaline, thin-walled, clamped, branched, up to 5μm in width. Basidia subclavate, thin-walled, basally clamped, tetrasterigmate, 18.2-24×9-12 μm;sterig-

Table 1: Taxa reported from the Jammu and Kashmir

Name of the species	Host	Order and family	Locality & Altitude (m)
Antrodia lenis	Log of Abies	Polyporales,	Gulmarg,
(as <i>Poria lenis</i>)	9	Fomitopsidaceae	3747
À. serailis	Gymnospermic log	Polyporales,	Pahalgam,
	, ,	Fomitopsidaceae	2740
Bjerkandera adusta	On stump under mixed	Polyporales, Meruliaceae	Batote,
	forest		1555
Coltricia cinnamomea	Log of Cedrus deodara	Hymenocahetale,	Patnitop,
		Hymenochaetaceae	2024 m
C. perrenis	Log of Cedrus deodara	Hymenocahetale, Hymenochaetaceae	Sonmarg, 2800
Dadalea quercina	On stump of Quercus	Polyporales,	Patnitop,
Dadalea quelcilla	On stump of Quercus	Fomitopsidaceae	2024
Dichomitus affixus	Angiospermous wood	Polyporales,	Kathua,
Dictioniilus attixus	Angiospernious wood	Polyporaceae	308
Donkiporia expansa	On stump of	Polyporales,	Shunushir
Болкіропа ехрапза	Cedrus deodara	Polyporaceae	2400
Fomes fomentarius	On coniferous log	Polyporales,	Bhaderwah,
Fornes iomentarius	On conherous log	Polyporaceae	1613
Fomitopsis rosea	On coniferous log	Polyporales,	Bhaderwah,
	On conherous log	Polyporaceae	1613
F. rufolaccata	On log of Abies	Polyporales,	Gulmarg, 374
	pindrow.	Polyporaceae	Ouimary, 57 4
Ganoderma applanatum	On angiospermous	Polyporales,	Pahalgam,
	wood.	Ganodermataceae	2740
G. lucidum	Base of <i>Pinus excels</i>	Polyporales,	Batote,1555
	Badd dir mad excele	Ganodermataceae	<i>Batoto</i> , 1000
G. resinaceum	Base of <i>Platanus</i>	Polyporales,	Srinagar, 1585
S. Toomidoodiii	orientalis	Ganodermataceae	omagar, root
G. ungulatum	Base of <i>Quercus</i> ,	Polyporales,	Bhaderwah,
	2000 01 Queroue,	Ganodermataceae	1613
G. tornatum	Unknown stump	Polyporales,	Pahalgam,27
	-	Ganodermataceae	40
Gloeophyllum separium	Log of Cedrus deodara	Gloeophyllales,	Pahalgam,27
	3	Gloeophyllaceae	40
G. subferruginum	Log of Cedrus deodara	Gloeophyllales,	Gulmarg,3 747
3	G	Gloeophyllaceae	9,
G.odoratum	Log of Cedrus deodara	Gloeophyllales,	Jai, 2400.
	· ·	Gloeophyllaceae	
Heterobasidion abetinum	On log of <i>Abies</i>	Russulales,	Shunushir,
		Bondarzewiaceae	1613.
Heterobasidion insularis	On stump of Pinus	Russulales,	Batote, 1555
	excels	Bondarzewiaceae	
Incrustoporia nivea	Dead log of Quercus	Polyporales,	Bhaderwah,
		Polyporaceae	1613.
Inonotus dryadeus	Stump of Abies	Hymenocahetale,	Bhaderwah,
		Hymenochaetaceae	1613
Irpex lacteus	On log of Cedrus	Polyporales,	Seoj, 2400.
	deodara	Phanerochaetaceae	
I. zonatus	On log of <i>Cedrus</i>	Polyporales,	Patnitop, 2024
	deodara	Phanerochaetaceae	
Junghuhnia collabens	Unknown Stump	Polyporales,	Batote, 1555.
		Phanerochaetaceae	

Mycoleptodonoides aitchisoniii On stump of Cedrus deodara Polyporales, Phanerochaetaceae Phypoprales, Phanerochaetaceae Gulmarg, 3747 deodara Osmoporus mexicanus On log of C.deodara Polyporales, Phanerochaetaceae Bhaderwah, 1613 Onnia circinata Needles and Bark of Pinusexcels Hymenochaetaceae Hymenochaetaceae Gulmarg, 3747 Oxyporus corticola (asPoria corticola) On stump of Abies. Hymenochaetales, Schizoporaceae Gulmarg, 3747 Oxyporus ravidus On log of Cedrus deodara Hymenochaetales, Schizoporaceae Sump under Mymenochaetales, Ymenochaetale, Hymenochaetale, Hymenochaetaceae Patnitop, Patni	Lenzites betulina	On stump of Q. incana	Polyporales,	Batote, 1555
Osmoporus mexicanus On log of C.deodara Polyporales, Phanerochaetaceae Bhaderwah, 1613 Onnia circinata Needles and Bark of Pinusexcels Hymenochaetaceae Batote, 1555 Oxyporus corticola (asPoria corticola) On stump of Abies. Hymenochaetales, Schizoporaceae Gulmarg, 3747 Oxyporus ravidus On log of Cedrus deodara Hymenochaetales, Schizoporaceae Shunushir, Schizoporaceae Phaeolusschwentizii On base of C. deodara Hymenocahetale, Hymenochaetaceae 2440 Phellinus caryophylli Stump under Pinus Hymenochaetaceae 2024 Phellinus contigus Stump under mixed forests. Hymenochaetaceae 1555 Phellinus contigus Stump under mixed forests. Hymenochaetaceae 1613 Phellinus linteus Stump and Base of Hymenochaetaceae Hymenochaetaceae 1613 Phellinus robustus Stump of Abies Hymenochaetaceae 1613 Phellinus sanfordii On angiospermic tree Hymenochaetaceae 1613 Phellinus scropsus Stump of Cedrus Hymenochaetaceae Batote, 1555 Porodaedalea pini Stump of Pinus Hymenocahetale, Hymenochaetaceae	Mycoleptodonoides aitchisonii	On stump of Cedrus	Polyporaceae Polyporales,	Gulmarg, 3747
Onnia circinata Needles and Bark of Pinusexcels Hymenocahetale, Pinusexcels Hymenochaetaceae Oxyporus corticola (asPoria corticola) Oxyporus ravidus On log of Cedrus Hymenochaetales, Schizoporaceae Phaeolusschwentizii On base of C. deodara Phellinus caryophylli Stump under Pinus Hymenocahetale, Patnittop, Pinus excels Phellinus linteus Stump and Base of Hymenocahetale, Pinus excels Hymenocahetale, Pinus excels Hymenochaetaceae Phellinus sanfordii On angiospermic tree Phellinus scropsus Stump of Cedrus Hymenocahetale, Pinus excels Hymenochaetaceae Phellinus robustus Stump of Stump of Pinus Hymenocahetale, Pinus excels Hymenochaetaceae Phellinus sanfordii On angiospermic tree Phellinus scropsus Stump of Pinus Hymenocahetale, Hymenochaetaceae Phellinus scropsus Stump of Pinus Hymenocahetale, Hymenochaetaceae Phymenochaetaceae Phym		5. 5. 5. 5. 5.		
Onnia circinata Needles and Bark of Pinusexce/s Hymenochaetale, Hymenochaetaleaeee Batote, 1555 Oxyporus corticola (asPoria corticola) On stump of Abies. Hymenochaetales, Schizoporaceae Gulmarg, 3747 Oxyporus ravidus On log of Cedrus deodara Hymenochaetales, Schizoporaceae 2400 Phaeolusschwentizii On base of C. deodara Hymenochaetale, Hymenochaetale, Patnitop, Hymenochaetale, Phymenochaetale, Hymenochaetale, Hymenochaetale, Hymenochaetale, Hymenochaetale, Hymenochaetale, Hymenochaetale, Hymenochaetaceae Bhaderwah, 1613 Phellinus contigus Stump under mixed forests. Hymenochaetale, Hymenochaetaceae Bhaderwah, 1613 Phellinus linteus Stump and Base of Pinus excels Hymenochaetaceae 1613 Phellinus robustus Stump of Abies Hymenochaetaceae 1613 Phellinus sanfordii On angiospermic tree Hymenochaetaceae 1613 Phellinus scropsus Stump of Cedrus Hymenochaetaceae 1613 Phellinus scropsus Stump of Pinus Hymenochaetaceae 1613 Ph. torulosus On stump of Pinus Hymenochaetaceae 1613 Porodaedalea pini Stump under Pinus excels Hymenochaetaceae Polyporale	Osmoporus mexicanus	On log of <i>C.deodara</i>	• •	
Oxyporus corticola (asPoria corticola) Oxyporus ravidus On log of Cedrus On base of C. deodara Phellinus caryophylli Phellinus contigus Phellinus linteus Phellinus robustus Phellinus robustus Phellinus scropsus Phellinus scropsus Phellinus robustus Stump and Base of Hymenochaetale, Phinus excels Phellinus scropsus Phellinus robustus Phellinus scropsus Phellinus scropsus Phellinus scropsus Phellinus robustus On angiospermic tree Phymenochaetaceae Ph. torulosus Porodaedalea pini Trametes hirsutus (as Coriolus versicolor) Trametes verscicolor (as Trichaptum abietinus T. venusta (as Trichaptum venustum) T. perttetoi Von log of Cedrus On stump of Abies Phymenochaetaceae Polyporales, Polypo	Ounis sinsingt	No adlanta de Dada ef		
Oxyporus corticola (asPoria corticola) On stump of Abies. Hymenochaetales, Schizoporaceae Gulmarg, 3747 Oxyporus ravidus On log of Cedrus deodara Hymenochaetales, Schizoporaceae Shunushir, 2400 Phaeolusschwentizii On base of C. deodara Hymenochaetaleae Hymenochaetaceae Patnitop, Patnitop, Hymenochaetaceae Phellinus caryophylli Stump under Pinus excels Hymenochaetaleae, Hymenochaetaceae Batote, Bhaderwah, Hymenochaetaceae Phellinus contigus Stump under mixed forests. Hymenochaetaleae Bhaderwah, Hymenochaetaceae Phellinus linteus Stump and Base of Pinus excels Hymenochaetaceae 1613 Phellinus robustus Stump of Abies Hymenochaetaceae Gulmarg, 3747 Phellinus sanfordii On angiospermic tree Hymenochaetale, Hymenochaetaceae Bhaderwah, Hymenochaetaceae Ph. torulosus Stump of Cedrus deodara Hymenochaetale, Hymenochaetaceae Batote, 1555 Porodaedalea pini Stump under Pinus excels Hymenochaetale, Hymenochaetaceae Batote, 1555 Sistotremaalboluteum Stump under Pinus excels Polyporales, Polyporaceae Batote, 1555 Trametes hirsutus (as Coriolus versicolon)	Onnia circinata		•	Batote, 1555
(as Poria corticola)On log of Cedrus deodaraSchizoporaceae Hymenochaetales, SchizoporaceaeShunushir, 2400PhaeolusschwentiziiOn base of C. deodara Hymenocahetale, 	Ovyporus corticola			Gulmara 3747
Oxyporus ravidusOn log of Cedrus deodaraHymenochaetales, SchizoporaceaeShunushir, 2400PhaeolusschwentiziiOn base of C. deodaraHymenocahetale, Hymenocahetale, Hymenocahetale, ExcelsPatinitop, Hymenocahetale, Hymenocahetale, Hymenocahetale, ExcelsBatote, Hymenocahetale, HymenochaetaceaeBhaderwah, Bhaderwah, Homenocahetale, HymenochaetaceaePhellinus linteusStump and Base of Hymenocahetale, Pinus excelsHymenochaetaceaeGulmarg, 3747Phellinus robustusStump of AbiesHymenocahetale, HymenochaetaceaeGulmarg, 3747Phellinus sanfordiiOn angiospermic treeHymenocahetale, Hymenocahetale, HymenochaetaceaeBhaderwah, Hymenocahetale, Batote, 1555Phellinus scropsusStump of Cedrus Hymenocahetale, deodaraHymenocahetale, Batote, 1555Ph. torulosusOn stump of Pinus Hymenocahetale, excelsHymenochaetaceaePh. torulosusOn stump of Pinus HymenochaetaceaeBatote, 1555Porodaedalea piniStump under Pinus Polyporales, Polyporales, PolyporalesKathua, 308SistotremaalboluteumStump under Cedrus deodaraPolyporales, Polyporales, Batote, PolyporaceaeBatote, 1555Trametes hirsutus (as Coriolus versicolor)On stump of Quercus Polyporaceae1555Trametes versicolor)On twing of AbiesPolyporales, Batote, Polyporaceae1555Trichaptum abietinum (as Trichaptum abietinum)On trunk of Berberis Polyporaceae1555T. venusta (as Trichaptum bietinus)Stump of Que		On stump of Ables.		Guilliary, 3747
Description of the particular of thymenochaetaceae of the particular of the particular of the partic		On log of Cedrus		Shunushir.
PhaeolusschwentiziiOn base of C. deodara Hymenocahetale, excelsHymenocahetale, H				
Phellinus caryophylliStump under Pinus excelsHymenocahetale, Hymenochaetaceae Hymenochaetaceae HymenochaetaceaeBatote, 1555Phellinus contigusStump under mixed forests. HymenochaetaceaeHymenochaetaceae Hymenochaetaceae1613Phellinus linteusStump and Base of Pinus excels Pinus excelsHymenochaetaceae Hymenochaetaceae1613Phellinus robustusStump of AbiesHymenocahetale, HymenochaetaceaeBhaderwah, 1613Phellinus sanfordiiOn angiospermic treeHymenocahetale, Hymenocahetale, HymenochaetaceaeBatote, 1555Phellinus scropsusStump of Cedrus Hymenocahetale, ecodaraHymenochaetaceaeBatote, 1555Ph. torulosusOn stump of Pinus Hymenocahetale, excelsHymenochaetaceaeBatote, 1555Porodaedalea piniStump under Pinus Hymenocahetale, excelsBatote, 1555SistotremaalboluteumStump under Pinus Polyporales, ExcelsBatote, 1555SistotremaalboluteumStump under Cedrus Polyporales, Batote, 1555Batote, 1555Trametes hirsutus (as Coriolus hirsutus)On stump under Cedrus Polyporales, Batote, 1555Batote, 1555Trametes versicicolor (as Coriolus versicolor)On stump of Quercus Polyporales, Batote, 1555Batote, 1555Trichaptum abietinum (as Trichaptum abietinum (as Trichaptum abietinus) T. venusta (as Trichaptum abietinus) (as Trichaptum abietinus)On trunk of Berberis Polyporales, Batote, 1555Batote, 1555Trenusta (as Coriolus versicolor)Stump of Polyporales, Polyporales, Batote, 1555Batote, 1555Trenusta (as Trichaptum venustum)Polyporales, Polypo	Phaeolusschwentizii	On base of C. deodara		Patnitop,
Phellinus contigusStump under mixed forests.Hymenocahetale, HymenochaetaceaeBhaderwah, 1613Phellinus linteusStump and Base of Pinus excelsHymenochaetaceae Hymenochaetaceae1613Phellinus robustusStump of AbiesHymenocahetale, HymenochaetaceaeGulmarg, 3747Phellinus sanfordiiOn angiospermic treeHymenocahetale, HymenochaetaceaeBhaderwah, 1613Phellinus scropsusStump of Cedrus deodaraHymenocahetale, Hymenocahetale, Hymenocahetale, ExcelsBatote, 1555Ph. torulosusOn stump of Pinus excelsHymenochaetaceaeBatote, 1555Porodaedalea piniStump under Pinus excelsHymenocahetale, Hymenocahetale, excelsBatote, 1555SistotremaalboluteumStump under Pinus excelsHymenochaetaceaeSistotremaalboluteumStump under Pinus excelsPolyporales, Polyporales, Polyporales, Polyporales, PolyporaceaeKathua, 308Trametes hirsutus (as Coriolus versicolor)On stump under Cedrus deodaraPolyporales, PolyporaceaeBatote, 1555Trametes verscicolor (as Coriolus zonatus)On stump of QuercusPolyporales, Polyporales, PolyporaceaeBatote, 1555Trichaptum abietinum (as Trichaptum abietinus)On twig of AbiesPolyporales, PolyporaceaeBatote, 1555Trichaptum abietinus T. peritetoiStump of QuercusPolyporales, PolyporaceaeBatote, 1555Stump of CedrusdeodaraPolyporaceae1555Stump of Vightusperiales Polyporaceae <td></td> <td></td> <td>•</td> <td>2024</td>			•	2024
Phellinus contigusStump under mixed forests.Hymenocahetale, Batote, 1555 Hatote, Hymenocahetale,	Phellinus caryophylli	•		
Phellinus linteus		excels	Hymenochaetaceae	1555
Phellinus linteusStump and Base of Pinus excelsHymenocahetale, HymenochaetaceaeBhaderwah, 1613Phellinus robustusStump of AbiesHymenochaetaceaeGulmarg, 3747Phellinus sanfordiiOn angiospermic treeHymenocahetale, HymenochaetaceaeBhaderwah, 1613Phellinus scropsusStump of Cedrus deodaraHymenocahetale, HymenochaetaceaeBatote, 1555Ph. torulosusOn stump of Pinus excelsHymenocahetale, HymenochaetaceaeBatote, 1555Porodaedalea piniStump under Pinus excelsHymenochaetaceaeBatote, 1555SistotremaalboluteumStump under Pinus excelsPolyporales, PolyporaceaeKathua, 308SistotremaalboluteumStump under Pinus excelsPolyporales, PolyporaceaeKathua, 308Trametes hirsutus (as Coriolus hirsutus)On stump under Cedrus deodaraPolyporales, PolyporaceaeBatote, 1555Trametes verscicolor Trametes zonatus (as Coriolus versicolor)On stump of QuercusPolyporales, PolyporaceaeBatote, 1555Trichaptum abietnum (as Trichaptum abietinus)On trunk of Berberis PolyporaceaePolyporales, 1555Batote, 1555T. venusta (as Trichaptum venustum)Stump of PolyporaceaePolyporales, 1555Batote, 1555T. perttetoiStump of PolyporaceaePolyporaceae1555Stump of CedrusdeodaraPolyporales, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales, Polyporales,B	Phellinus contigus	Stump under mixed	Hymenocahetale,	Bhaderwah,
Pinus excels Stump of Abies Hymenochaetaceae Hymenochaetale, Batote, 1555 Ph. torulosus On stump of Pinus excels Hymenochaetale, excels Hymenochaetale, Hymenochaetale, Excels Hymenochaetale, Hymenochaetale, Hymenochaetale, Excels Hymenochaetale, Hymenochaetale, Excels Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Excels Hymenochaetale, Excels Hymenochaetale, Excels Hymenochaetale, Excels Excels Hymenochaetale, Excels Hymenochaetale, Excels Excels Folyporales, Extend 1555 Trametes versciolor(as Coriolus hirsutus) To stump of Quercus Polyporales, Excels Extend 1555 Trametes versciolor(as Coriolus versicolor) Trametes versciolor(as Coriolus persciolor) Trametes versciolor(as Coriolus persciolor) Trametes versciolor(as Coriolus persciolor) Trametes versciolor(as Coriolus persciolor)				
Phellinus robustusStump of AbiesHymenocahetale, Hymenocahetale, Hymenocahetale, HymenochaetaceaeGulmarg, 3747Phellinus sanfordiiOn angiospermic treeHymenochaetaceae1613Phellinus scropsusStump of Cedrus HymenochaetaceaeHymenochaetale, Batote, 1555Ph. torulosusOn stump of Pinus HymenochaetaceaeBatote, 1555Porodaedalea piniStump under Pinus HymenochaetaceaeBatote, 1555Porodaedalea piniStump under Pinus HymenochaetaceaeBatote, 1555SistotremaalboluteumStump under Pinus Polyporales, ExcelsKathua, 308SistotremaalboluteumStump under Cedrus Polyporales, PolyporaceaeKathua, 308Trametes hirsutus (asOn stump of Quercus Polyporales, Polyporales, Batote, Polyporales, PolyporaceaeBatote, Polyporales, Batote, Polyporales, Batote, Polyporales, Batote, Polyporales, Batote, Polyporaceae1555Trametes zonatus (asOn twig of Abies Polyporales, Polyporaceae1555Trichaptum abietnum (as Trichaptum abietnum)On trunk of Berberis Polyporaceae1555T. venusta (as Trichaptum venustum)Stump of Quercus Polyporales, PolyporaceaeBatote, PolyporaceaeT. perttetoiStump of Cedrus Polyporales, PolyporaceaeShunushir, PolyporaceaeWrightoporia lentaOn log of CedrusPolyporales, Bhaderwah,	Phellinus linteus			
Phellinus sanfordii On angiospermic tree Hymenocahetale, Hymenochaetaceae Hymenocahetale, Hymenochaetaceae 1613 Phellinus scropsus Stump of Cedrus deodara Hymenocahetale, Hymenochaetaceae Ph. torulosus On stump of Pinus excels Hymenocahetale, Excels Hymenochaetaceae Porodaedalea pini Stump under Pinus excels Hymenochaetaceae Forodaedalea pini Stump under Pinus excels Folyporales, Excels Folyporaceae Trametes hirsutus (as On stump under Cedrus Coriolus hirsutus) Forodaedalea pini On twig of Abies Folyporales, Folyporaceae Stomp of Quercus Folyporales, Folyporales, Folyporales, Folyporales, Folyporaceae Folyporaceae Stump of Quercus Folyporales, Folyporales, Folyporaceae Folyporales, Folyporales, Folyporales, Folyporales, Folyporales, Folyporaceae Folyporaceae Stump of Quercus Folyporales, Folyporales, Folyporaceae Folyporaceae Folyporaceae Folyporales, Folyporales, Folyporales, Folyporales, Folyporales, Folyporaceae Shunushir, Cedrusdeodara Folyporales, Folyporales, Folyporaceae				
Phellinus sanfordiiOn angiospermic treeHymenocahetale, Hymenocahetale, deodaraBhaderwah, 1613Phellinus scropsusStump of Cedrus deodaraHymenocahetale, Batote, 1555SistotremaalboluteumStump under Pinus excelsPolyporales, PolyporaceaeKathua, 308 PolyporaceaeSistotremaalboluteumOn stump under Cedrus Hymenocahetale, Hy	Phellinus robustus	Stump of Abies		Gulmarg, 3747
Phellinus scropsus Stump of Cedrus deodara Ph. torulosus On stump of Pinus Excels Porodaedalea pini Stump under Pinus Excels Sistotremaalboluteum Stump under Pinus Excels Folyporales, Foriolus hirsutus (as Coriolus hirsutus) Trametes verscicolor (as Coriolus versicolor) Trametes zonatus (as Coriolus zonatus) Trichaptum abietinus (as Trichaptum venustum) T. perttetoi Wrightoporia lenta Stump of Cedrus Hymenochaetaceae Hymenochaetale, Hymenochaetale, Hymenochaetaceae Hymenochaetaceae Batote, 1555 Batote, Polyporales, Polyporales, Polyporales, Polyporales, Polyporales, Batote, Polyporales, Batote, Polyporaceae 1555 Trichaptum abietinus) T. perttetoi Wrightoporia lenta On log of Cedrus Polyporales, Polyporales, Polyporales, Polyporales, Polyporales, Shunushir, Cedrusdeodara Polyporales, Polyporales, Polyporales, Shunushir, Polyporaceae 24400 Kishtwar, 1900 Bhaderwah,	Phallipus sanfardii	On angicanormia trac	•	Dhadarwah
Phellinus scropsusStump of Cedrus deodaraHymenocahetale, HymenochaetaceaeBatote, 1555Ph. torulosusOn stump of Pinus excelsHymenochaetaceaeBatote, 1555Porodaedalea piniStump under Pinus excelsHymenochaetaceaeBatote, 1555Porodaedalea piniStump under Pinus excelsHymenochaetaceaeBatote, 1555SistotremaalboluteumStump under Pinus excelsPolyporales, Polyporales, PolyporaceaeKathua, 308Trametes hirsutus (asOn stump under Cedrus deodaraPolyporaceaeBatote, Polyporales, Polyporales, PolyporaceaeBatote, PolyporaceaeTrametes verscicolor (asOn stump of Quercus Polyporales, PolyporaceaeBatote, Polyporaceae1555Trametes zonatus (asOn twig of AbiesPolyporaceae1555Trichaptum abietnum (as Trichaptum abietinus)On trunk of Berberis Polyporales, PolyporaceaeBatote, PolyporaceaeT. venusta (as Trichaptum venustum)Stump of Quercus Polyporales, PolyporaceaeBatote, PolyporaceaeT. perttetoiStump of Polyporales, Shunushir, Cedrusdeodara PolyporaceaeShunushir, PolyporaceaeWrightoporia lentaOn log of CedrusPolyporales, Bhaderwah,	Prieilinus saniordii	On angiospermic tree		
Ph. torulosus On stump of Pinus excels Porodaedalea pini Stump under Pinus excels Hymenochaetaceae Polyporales, Coriolus hirsutus) Trametes verscicolor) Trametes zonatus (as Coriolus zonatus) Trichaptum abietinus (as Trichaptum abietinus) T. perttetoi Discording deodara Don stump of Pinus excels Hymenochaetaceae Hymenochaetaceae Hymenochaetaceae Hymenochaetaceae Batote, 1555 Hymenochaetaceae Batote, 1555 Hymenochaetaceae Batote, 1555 Hymenochaetaceae Hymenochaetaceae Batote, 1555 Hymenochaetaceae Batote, 1555 Polyporales, Polyporaceae Polyporaceae Polyporaceae 1555 Trametes verscicolor (as Coriolus versicolor) Trametes zonatus (as Coriolus zonatus) Trenusta (as Trichaptum abietinus) T. venusta (as Trichaptum venustum) T. perttetoi Stump of Cedrusdeodara Polyporales, Polyporaceae	Phellinus scronsus	Stump of Cedrus	•	
Ph. torulosusOn stump of Pinus excelsHymenocahetale, HymenochaetaceaeBatote, 1555Porodaedalea piniStump under Pinus excelsHymenocahetale, HymenochaetaceaeBatote, 1555SistotremaalboluteumStump under Pinus excelsPolyporales, PolyporaceaeKathua, 308Trametes hirsutus (as Coriolus hirsutus)On stump under Cedrus deodaraPolyporales, PolyporaceaeBatote, 1555Trametes verscicolor (as Coriolus versicolor)On stump of Quercus PolyporaceaePolyporales, Polyporales, PolyporaceaeBatote, 1555Trametes zonatus (as Coriolus zonatus)On twig of Abies PolyporaceaePolyporales, PolyporaceaeBatote, 1555Trichaptum abietnum (as Trichaptum abietinus)On trunk of Berberis PolyporaceaePolyporaceae1555T. venusta (as Trichaptum venustum)Stump of Quercus PolyporaceaePolyporales, PolyporaceaeBatote, 1555T. perttetoiStump of CedrusdeodaraPolyporales, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales, Polyporales,Bhaderwah,	Themmas scropsus			Datote, 1000
Porodaedalea pini Stump under Pinus Hymenochaetaceae Sistotremaalboluteum Stump under Pinus Polyporales, Polyporaceae Trametes hirsutus (as On stump under Cedrus Polyporaceae Trametes verscicolor (as On stump of Quercus Polyporaceae Trametes zonatus (as On twig of Abies Polyporaceae Trichaptum abietnum (as Trichaptum abietinus) Tryporaceae Trichaptum venustum) Tremetes verscicolor Trametes verscicolor Trametes zonatus (as On twig of Abies Polyporaceae Trichaptum abietinus) Trichaptum abietinus Trichaptum abietinus Trichaptum venustum) Trichaptum venustum Trich	Ph. torulosus			Batote, 1555
Porodaedalea piniStump under Pinus excelsHymenocahetale, HymenochaetaceaeBatote, 1555SistotremaalboluteumStump under Pinus excelsPolyporales, PolyporaceaeKathua, 308Trametes hirsutus (as Coriolus hirsutus)On stump under Cedrus deodaraPolyporales, PolyporaceaeBatote,Coriolus hirsutus)On stump of QuercusPolyporales, PolyporaceaeBatote,Coriolus versicolor)Polyporales, PolyporaceaeBatote,Trametes zonatus (as Coriolus zonatus)On twig of AbiesPolyporales, PolyporaceaeBatote,Trichaptum abietnum (as Trichaptum abietinus)On trunk of BerberisPolyporales, PolyporaceaeBatote,T. venusta (as Trichaptum venustum)Stump of QuercusPolyporales, PolyporaceaeBatote,T. perttetoiStump of CedrusdeodaraPolyporales, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales, Polyporales,Bhaderwah,		•	-	, , , , , , , , , , , , , , , , , , , ,
Sistotremaalboluteum Stump under Pinus excels Polyporaceae Trametes hirsutus (as Coriolus hirsutus) Coriolus hirsutus) Coriolus hirsutus) Coriolus versicolor (as Coriolus versicolor) Coriolus versicolor) Coriolus versicolor) Coriolus zonatus (as Coriolus zonatus) Coriolus zonatus Coriolus versicolor Coriolus versicolor Coriolus zonatus Coriolus versicolor Coriolus versicolor Coriolus versicolor Coriolus zonatus Coriolus versicolor Coriolus zonatus Coriolus versicolor Coriolus zonatus Coriolus versicolor Coriolus zonatus Co	Porodaedalea pini	Stump under Pinus		Batote, 1555
Trametes hirsutus (as On stump under Cedrus Polyporales, deodara Polyporaceae 1555 Trametes verscicolor (as On stump of Quercus Polyporales, Polyporaceae 1555 Trametes versicolor) Polyporaceae 1555 Trametes zonatus (as On twig of Abies Polyporales, Polyporaceae 1555 Trichaptum abietnum On trunk of Berberis Polyporaceae 1555 T. venusta Stump of Quercus Polyporales, Batote, Polyporaceae 1555 T. venusta Stump of Quercus Polyporales, Batote, Polyporaceae 1555 T. perttetoi Stump of Polyporaceae 1555 T. perttetoi Polyporaceae 1				
Trametes hirsutus (asOn stump under CedrusPolyporales, PolyporaceaeBatote, 1555Coriolus hirsutus)deodaraPolyporaceae1555Trametes verscicolor (asOn stump of QuercusPolyporales, PolyporaceaeBatote,Coriolus versicolor)Polyporaceae1555Trametes zonatus (asOn twig of AbiesPolyporales, PolyporaceaeBatote,Coriolus zonatus)Polyporaceae1555Trichaptum abietnum (as Trichaptum abietinus)On trunk of BerberisPolyporales, PolyporaceaeBatote,T. venusta (as Trichaptum venustum)Stump of Quercus PolyporaceaePolyporales, PolyporaceaeBatote,T. perttetoiStump of Polyporales, CedrusdeodaraShunushir, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales, Polyporales,Bhaderwah,	Sistotremaalboluteum	•		Kathua, 308
Coriolus hirsutus)deodaraPolyporaceae1555Trametes verscicolor (asOn stump of QuercusPolyporales, PolyporaceaeBatote, 1555Coriolus versicolor)Polyporaceae1555Trametes zonatus (asOn twig of AbiesPolyporales, PolyporaceaeBatote, 1555Coriolus zonatus)Polyporaceae1555Trichaptum abietnum (as Trichaptum abietinus)On trunk of BerberisPolyporales, PolyporaceaeBatote, 1555T. venusta (as Trichaptum venustum)Stump of Quercus PolyporaceaePolyporales, PolyporaceaeBatote, 1555T. perttetoiStump of Polyporales, CedrusdeodaraShunushir, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales, Polyporales,Bhaderwah,				5
Trametes verscicolor (as Coriolus versicolor)On stump of Quercus PolyporaceaePolyporales, PolyporaceaeBatote, 1555Trametes zonatus (as Coriolus zonatus)On twig of Abies PolyporaceaePolyporales, PolyporaceaeBatote, 1555Trichaptum abietnum (as Trichaptum abietinus)On trunk of Berberis PolyporaceaePolyporales, PolyporaceaeBatote, 1555T. venusta (as Trichaptum venustum)Stump of Quercus PolyporaceaePolyporales, PolyporaceaeBatote, 1555T. perttetoiStump of Polyporales, CedrusdeodaraShunushir, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales, Polyporales,Bhaderwah,				
Coriolus versicolor) Trametes zonatus (as Coriolus zonatus) Trichaptum abietnum (as Trichaptum abietinus) T. venusta (as Trichaptum venustum) T. perttetoi Wrightoporia lenta On twig of Abies Polyporaceae Polyporales, Polyporaceae Polyporaceae Polyporales, Polyporaceae Polyporaceae Polyporaceae Polyporaceae Polyporaceae Stump of Polyporaceae Polyporaceae Polyporaceae Polyporaceae Batote, Polyporaceae Polyporaceae Stump of Polyporaceae Polyporaceae Polyporaceae Polyporaceae Bhaderwah,				
Trametes zonatus (as Coriolus zonatus)On twig of AbiesPolyporales, PolyporaceaeBatote, 1555Trichaptum abietnum (as Trichaptum abietinus)On trunk of Berberis PolyporaceaePolyporales, PolyporaceaeBatote, 1555T. venusta (as Trichaptum venustum)Stump of Quercus PolyporaceaePolyporales, Polyporales, PolyporaceaeBatote, 1555T. perttetoiStump of Polyporales, CedrusdeodaraShunushir, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales, Polyporales,Bhaderwah,		On stump of Quercus		
Coriolus zonatus) Trichaptum abietnum On trunk of Berberis Polyporaceae Polyporales, Polyporaceae 1555 Batote, Polyporaceae 1555 T. venusta Stump of Quercus Polyporaceae 1555 T. perttetoi Stump of Polyporales, Polyporaceae 1555 T. perttetoi Stump of Polyporaceae Shunushir, Cedrusdeodara Polyporaceae Wrightoporia lenta On log of Cedrus Polyporales, Shunushir, Polyporales, Shunushir, Polyporaceae Shunushir, Polyporaceae Shunushir,	,	On twig of Ahies		
Trichaptum abietnum (as Trichaptum abietinus)On trunk of Berberis PolyporaceaePolyporales, PolyporaceaeBatote, 1555T. venusta (as Trichaptum venustum)Stump of Quercus PolyporaceaePolyporales, PolyporaceaeBatote, 1555T. perttetoiStump of Polyporales, CedrusdeodaraPolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales,Bhaderwah,		On twig or Abics	• •	·
(as Trichaptum abietinus)Polyporaceae1555T. venustaStump of QuercusPolyporales, PolyporaceaeBatote, 1555T. perttetoiStump of CedrusdeodaraPolyporales, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales,Bhaderwah,		On trunk of Berberis		
T. venustaStump of QuercusPolyporales, PolyporaceaeBatote, 1555T. perttetoiStump of CedrusdeodaraPolyporales, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales, Polyporales,Bhaderwah,			• •	
(as Trichaptum venustum)Polyporaceae1555T. perttetoiStump of Cedrus deodaraPolyporales, PolyporaceaeShunushir, 2400 Kishtwar, 1900Wrightoporia lentaOn log of CedrusPolyporales, Bhaderwah,		Stump of Quercus		
Cedrusdeodara Polyporaceae 2400 Kishtwar, 1900 Wrightoporia lenta On log of Cedrus Polyporales, Bhaderwah,	(asTrichaptum venustum)	•		1555
Wrightoporia lenta On log of Cedrus Polyporales, Kishtwar, 1900 Bhaderwah,	T. perttetoi			
Wrightoporia lenta On log of Cedrus Polyporales, Bhaderwah,		Cedrusdeodara	Polyporaceae	
(Poria lenta) deodara Polyporaceae 1613				
	(Poria lenta)	aeodara	Polyporaceae	1613

mata up to 3µm long. Basidio-spore-shyaline, globose, thin-walled, smooth, no reaction in cotton blue and Melzer's reagent, 4.6- 6.3×4.6 - $5 \mu m$ (Fig.3). Collection examined:Jammu and Kashmir, Jammu, Bhaderwah, Chinta village, on decaying log of *Pinus* sp., Brij Bala11159 (PUN), September 8, 2016; Kathua, Sukrala on decaying log of *Pinus* sp., Brij Bala, 11158 (PUN), September 27, 2017.

Remarks: *Sistotrema alboluteum* is characterized by resupinate, poroidbasidiome with monomitic hyphal system and globose basidiospores. It is being recorded for the first time from India. The earlier reports of *S. alboluteum* are different parts of Europe (Mycobank, 2021).

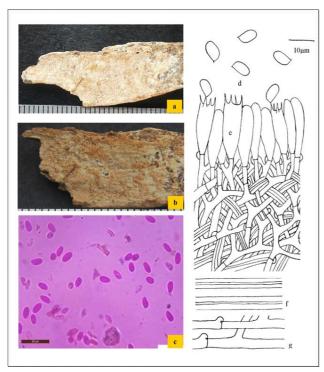


Fig. 1 : (a-g) *Dichomitus*: a-b. Basidiome showing hymenial surface (fresh and dry); c. Photomicrograph showing basidiospores; d. Basidiospores; e. Basidia; f. Skeletal hyphae; g. Generative hyphae.

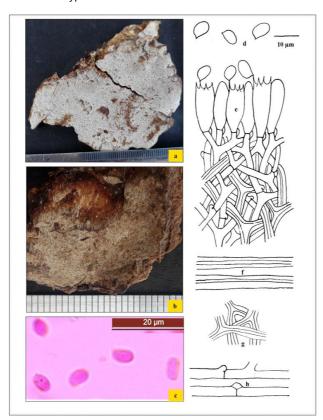


Fig. 2 : (a-h) *Donkioporia expansa*: a-b. Basidiome showing hymenial surface (fresh and dry); c. Photomicrograph showing basidiospores; d. Basidiospores; e. Basidia; f. Skeletal hyphae; g. Binding hyphae; h. Generative hyphae

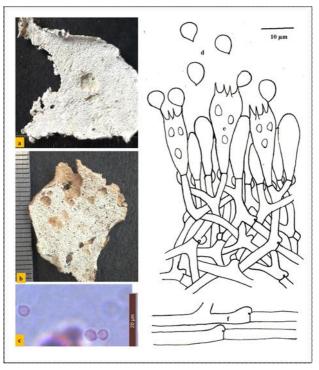


Fig. 3: (a-f) Sistotrema alboluteum: a-b. Basidiomeshowing hymenial surface (fresh and dry); c. Photomicrograph showing basidiospores; d. Basidiospores; e. Basidia; f. Generative hyphae.

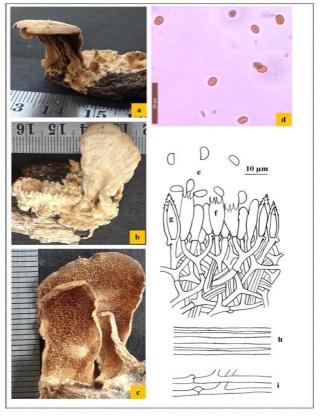


Fig. 4: (a-i) *Trichaptum perrottetii*: a. Basidiome showing mode of attachment; b-c. Basidiome showing abhymenial and hymenial surface; d. Photomicrograph showing basidiospores; e. Basidiospores; f. Basidia; g. Cystidia; h. Skeletal hyphae; i.Generative hyphae

4. *Trichaptum perrottetii* (Lév.) Ryvarden, Norwegian Journal of Botany 19: 237 (1972). a"*Trametes perrottetii* Lév., Annales des Sciences Naturelles Botanique 2: 195 (1844).

Basidiocarp annual, sessile, pileate, with narrow base, applanate, convex, atright angle to substrate; pilei up to $2.2\times0.4\times2.4$ cm; abhymenial surface white when fresh, changing to grayish white, faintly concentrically zonate, hirsute; hymenial surface poroid, purplish brown when fresh, changing to brown on drying; pores round to angular, 2- 3 per mm; dissepiments up to 70 μ m thin; margins concolorus, acute, entire, sterile up to 2mm on hymenial side; context, homogeneous, brownish orange, up to 2 mm in thickness; tube layer grayish red, up to 2mm deep.

Hyphal System dimitic.Generative hyphae hyaline, thin-walled, branched, clamped, up to 4 μ m in width. Skeletal hyphae pale yellowish, thick-walled, aseptate unbranched, up to 5.5 μ m in width. Cystidia subventricose, thin- to thick-walled, apicaly encrusted, originates in hymenium, 20-25×7-5 μ m; projecting up to 10 μ m from the hymenium. Basidia sub-clavate, clamped at the base, tetrasterigmate, 15-23.2×7-8 μ m; sterigmata up to 3 μ m in length. Basidiospores ellipsoid, hyaline, thin- walled, smooth, no reaction in cotton blue and Melzer's reagent, 5-6 ×2 -3 μ m(Fig.4).

Material examined: Jammu and Kashmir, Doda, Shunushir, on *Cedrus deodara* branch, Brij Bala11161 (PUN), August 17, 2017.

Remarks: *Trichaptum perrottetii* is characterized by semicircular to elongated, shelf like pilei with hirsute abhymenial surface, abundant cystidia and ellipsoid basidiospores. Earlier it is reported from USA, Cuba, British Honduras, Guatemala, Costa Rica, Colombia, Brazil, French Guyana and Bolivia (Mycobank, 2021).

Earlier workers(Balaet al., 2020) reported 45 species of polyporoid fungi from Union Territory of Jammu and Kashmir (Table 1). These are

presently classified under 24 genera, 8 families and 4 orders of *Agaricomycetes* (*Basidiomycota*). In the present study one species each of the genera *Dichomitus*, *Donkioporia*, *Sistotrema* and *Trichaptum* has been described. Among these, genus *Donkioporia* is recorded for the first time from India and genus *Dichomitus* is new to Jammu and Kashmir. The present contribution adds four new records of the polyporoid fungi which take the number of polyporoid fungi from Jammu and Kashmir 45 to 49.

ACKNOWLEDGEMENT

The author is grateful to the Head, Department of Botany, Punjabi University Patiala, for providing necessary laboratory facilities and University Grants Commission, New Delhi for financial assistance under UGC DRS DSA-I programme.

REFERENCES

- Bala, B., Singh, A. P., Dhingrae, G. S. 2020. Additions to the list of Polypores to India. Adv. Zool. Bot. 8:29-36.
- Dai, Y.C. 2010. *Hymenochaetaceae* (*Basidiomycota*) in China. Fungal divers. 45, 131–343.
- Ján, G., Svetlana, G., Peter, P., Katerina, N.2016, Medicinal Value and Taxonomy of the Tinder Polypore, Fomesfomentarius (Agaricomycetes): A Review.Inter Jour. of Med. Mush.18:851-859.
- Kornerup, A., Wanscher, J.H. 1978. Metheun's Handbook of colours, IIIrd Ed. Metheun and Co. Ltd. London. 252 pp.
- Mycobank,2021. Fungal Databases. Nomenclature and species banks. [Accessed: 15/01/2022].
- Ryvarden, L., Melo, I. 2014.Poroid Fungi of Europe. Synop. Fung.31: 455pp.
- Susanna, M. B., Narine, G. G. 2016. Diversity of Polypore Bracket Mushrooms, Polyporales (Agaricomycetes), Recorded in Armenia and Their Medicinal Properties. *Inter. J. Med. Mush.* 18:347-54.
- Watchtel, G.S., Yuen, J., Buswell, J.A, and Benzie, I.F.F. 2011, Ganoderma lucidum (Linghi or Reshi): A Medicinal Mushroom. In :Herbal Medicine: Biomolecular and Clinical Aspects. 2nd edition, Chapter 9 (Eds. I.F.F. Benzie and G.S. Watchtel) CRC Press/ Taylor and Francis.