

Wood-inhabiting aphylophoroid fungi of the Southern Preurals (Russia)

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SUMMARY: One hundred fifty-three species of 70 genera, 23 families, and 14 orders of aphylophoroid Hymenomycetes are listed in the paper. The substrata and distribution of each species in the study area are given.

Key words: Basidiomycetes, Orenburg region, Steppe Zone, Urals

The Ural mountains are situated in the centre of Russia, dividing it into the western, European part and eastern, Asian part. The name Preurals is accepted for the area adjoining the mountains. Southern Preurals are situated in the southeastern corner of the European part of Russia at the junction of several large geographical areas: Precaspian lowland, East European plain, West Siberian plain, Ural mountains, and Ural-Tobol plateau (Fig. 1). It may explain the presence of species with different range types — European, Asian, Siberian etc.



Fig. 1. Geographical situation of the study region.

The origin of the biota is also determined by its location in two natural zones — Forest-Steppe and Steppe. Within a rather small area it is possible to observe precise replacement of meadow steppes with broadleaf woods into typical steppes. Moreover, there are also dry steppe ecosystems with even more extreme climatical conditions in the study area.

Southern Preurals are characterised by low woodland percentages: 8–15 in the northern low mountain part and 1.5–4 in the southern areas. The deciduous forests can be grouped as follows: the oak, *Quercus robur* L., dominated forests with *Acer platanoides* L., *Tilia cordata* Mill., *Ulmus glabra* Huds., and *U. laevis* Pall., the birch, *Betula pendula* Roth., dominated forests intermixed with aspen trees, *Populus tremula* L., and river side woods with *Alnus glutinosa* (L) Gaerth., *A. incana* (L) Moench, *Populus nigra* L., *P. alba* L., and *Lonicera tatarica* L., etc. Coniferous (pine) forests occupy only 10% of the total woodland area. They are considered to be holocene relicts in the Southern Preurals. The study area is crossed by several tree species which have their border of distribution area here, e.g., *Alnus incana*, *Acer platanoides*, *Quercus robur*, *Tilia cordata*, and *Ulmus glabra*.

The original regional biota is also reflected in its fungal component, in particular, wood decay fungi. Xylotrophic macromycetes including mainly aphylloroid and partly agaricoid taxa are an important functional part of forest ecosystems. They are able to carry out complete wood destruction and thus take part in the return of substances back to the ecosystem (Chastukhin, Nikolaevskaya, 1969; Stepanova, Mukhin, 1979).

Regular studies of aphylloroid fungi of the Southern Preurals were not carried out earlier. Our research was preceded only by the studies of S.I. Vanin (Vanin, 1929, 1931), who reported six species.

Material and methods

Wood-inhabiting aphylloroid fungi of the Southern Preurals were studied during expeditions in 1993–2003 by collecting basidiomata. In the identification the keys of following books were used: Bondartsev (1953), Christiansen (1960), Davydkina (1980), Bondarceva, Parmasto (1986), Ryvarden, Gilbertson (1993), Hansen, Knudsen (1997).

The nomenclature and taxonomic arrangement follows "Nordic Macromycetes" (Hansen, Knudsen, 1992, 1997).

The research covered all main forest types of the Southern Preurals in different parts of the region. More than 700 ha of forests were surveyed and over 6000 samples were collected.

Results

One hundred and fifty three species belonging to 70 genera, 23 families, and 14 orders of Hymenomycetes were identified.

The most species-rich orders were Coriolales, Hymenochaetales, and Hyphodermatales. The largest families were Chaetoporellaceae, Coriolaceae, and Phanerochaetaceae, which constitute the main body of the mycota (Tab. 1).

The checklist below includes the following data separated by a slant: species / host / substratum (see below) / geobotanical zone(s) / collecting month(s) (exact date if only a single find).

Substratum types are abbreviated as follows: LT — living trees, DT — dead standing trees, FT — fallen trees, DB — dead branches, S — stumps.

The species were allocated according to the natural zones and geobotanical divisions of the region and abbreviated as follows: BF — Boreal Forests (pine forests), NF — Nemoral Forests, FS — Forest-Steppe, MS — Meadow Steppe, TS — Typical Steppe, DS — Dry Steppe (Fig. 2).

Table 1

Taxonomic structure of aphylloporoid fungi in the Southern Preurals

Order	Family	Number of species	% of total species number
ATHELIALES	Atheliaceae	5	3.2
SCHIZOPHYLLALES	Schizophyllaceae	7	4.5
PHANEROCHAETALES	Phanerochaetaceae	12	7.8
STEREALES	Peniophoraceae	10	6.5
HYPHODERMATALES	Hyphodermataceae	7	4.5
	Cystostereaceae	1	0.6
	Chaetoporellaceae	12	7.8
	Steccherinaceae	10	6.5
	Bjerkanderaceae	10	6.5
POLYPORALES	Polyporaceae	8	5.2
CORIOLALES	Coriolaceae	16	10.4
	Fomitaceae	1	0.6
FOMITOPSIDALES	Phaeolaceae	11	7.1
	Fomitopsidaceae	11	7.1
PERENNIPORIALES	Perenniporiaceae	1	0.6
GANODERMATALES	Ganodermataceae	1	0.6
HERICIALES	Gloeocystidiellaceae	3	1.9
	Hericiaceae	1	0.6
FISTULINALES	Fistulinaceae	1	0.6
THELEPHORALES	Thelephoraceae	5	3.2
HYMENOCHAETALES	Hymenochaetaceae	5	3.2
	Inotaceae	4	2.6
	Phellinaceae	11	7.1
In all		153	100

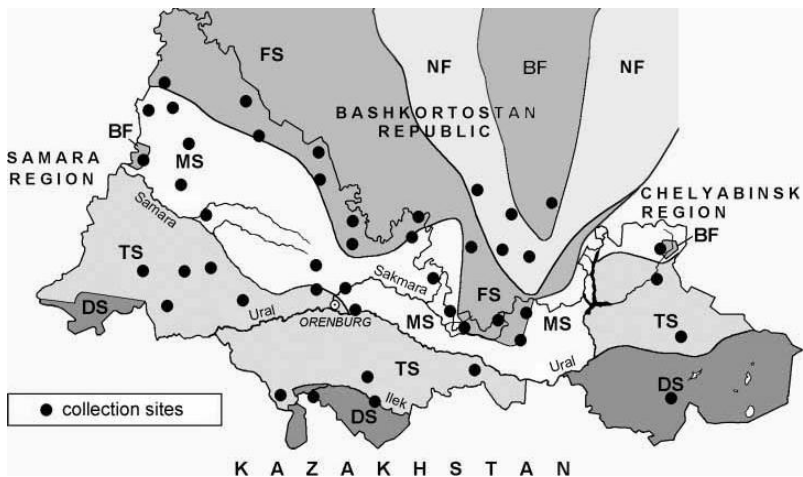


Fig. 2. Geobotanical division of the South Urals and Southern Preurals and the collection sites.

The checklist

1. **Abortiporus biennis** (Bull. : Fr.) Singer — *Betula pendula*, *Malus sylvestris*, *Populus tremula*, *Ulmus laevis* / LT, DT, FT / BF, FS, TS / VI–IX.
2. **Amphinema byssoides** (Pers. : Fr.) J. Erikss. — *Betula pendula*, *Pinus sylvestris* / DB / BF, NF / VI–XI.
3. **Antrodia macra** (Sommerf.) Niemelä — *Populus tremula* / FT / FS / 7 VII 1997.
4. **Antrodia malicola** (Berk. & M.A. Curtis) Donk — *Ulmus laevis* / FT / MS / 18 VI 2004.
5. **Antrodia serialis** (Fr.) Donk — *Pinus sylvestris* / FT / FS, MS, TS / III–VIII.
6. **Antrodia sinuosa** (Fr.) P. Karst. — *Pinus sylvestris*, *Populus tremula* / FT, DB / BF, FS / VI–VIII.
7. **Antrodia xantha** (Fr. : Fr.) Ryvardeen — *Pinus sylvestris* / FT / BF / 24 VI 1995.
8. **Antrodiella parasitica** Vampola — on old fruitbody of *Fomitoporia punctata* / DT / FS / 4 X 2003.
9. **Antrodiella romellii** (Donk) Niemelä — *Betula pendula*, *Ulmus laevis* / DB / NF, FS / VI–VIII.
10. **Athelia bombacina** (Pers.) Jülich — *Pinus sylvestris* / DB / NF / 23 VII 2004.
11. **Athelia fibulata** M.P. Christ. — *Populus tremula* / DB / FS / 7 VII 1997.
12. **Bjerkandera adusta** (Willd. : Fr.) P. Karst. — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Malus sylvestris*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, DB, S / BF, NF, FS, MS, TS, DS / V–XI.
13. **Ceraceomyces microsporus** K.H. Larss. in K.H. Larss & E. Larss. — *Salix alba* / DB / TS / 15 III 1993.
14. **Ceraceomyces tessulatus** (Cooke) Jülich — *Ulmus laevis* / DB / MS / 18 VI 2004.
15. **Ceriporia purpurea** (Fr.) Donk — *Malus sylvestris*, *Pinus sylvestris* / DB / BF, FS / VII.
16. **Ceriporia reticulata** (Hoffm. : Fr.) Domański — *Alnus glutinosa*, *Pinus sylvestris* / DB / FS, DS / VII.
17. **Ceriporia viridans** (Berk. & Broome) Donk ss. lat. — *Betula pendula*, *Quercus robur* / DB / FS / VIII–X.
18. **Ceriporiopsis gilvescens** (Bres.) Domański — *Quercus robur*, *Ulmus laevis* / FT, DB / NF, FS / VII–X.
19. **Ceriporiopsis subvermispora** (Pilát) Gilbn. & Ryvardeen — *Betula pendula* / DB / NF / 22 VII 2004.
20. **Cerrena unicolor** (Bull. : Fr.) Murrill — *Acer platanoides*, *A. negundo*, *Alnus glutinosa*, *A. incana*, *Betula pendula*, *Pinus sylvestris*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, DB, S / BF, NF, FS, MS, TS, DS / V–XI.
21. **Chondrostereum purpureum** (Pers. : Fr.) Pouzar — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Padus avium*, *Populus tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / FT, DT, DB / BF, NF, FS, MS, TS, DS / VI–XI.
22. **Climacodon septenterrionalis** (Fr.) P. Karst. — *Betula pendula* / FT / FS / 16 VI 2001.
23. **Crustomyces subabruptus** (Bourd. & Galz.) Jülich — *Betula pendula* / DB / TS / 16 VI 2004.
24. **Daedalea quercina** (L. : Fr.) Pers. — *Quercus robur* / DT, FT, S / FS, MS, TS / V–X.
25. **Daedaleopsis confragosa** (Bolton : Fr.) Schröt. — *Acer platanoides*, *Alnus glutinosa*, *A. incana*, *Betula pendula*, *Padus avium*, *Populus tremula*, *Salix alba*, *Ulmus laevis* / LT, DT, FT, DB / BF, NF, FS, DS / V–IX.
26. **Daedaleopsis septentrionalis** (P. Karst.) Niemelä — *Acer platanoides*, *Betula pendula*, *Padus avium* / FT, DB / FS / VII–IX.
27. **Daedaleopsis tricolor** (Pers.) Bondartsev & Singer — *Alnus incana*, *Betula pendula*, *Padus avium*, *Populus tremula*, *Tilia cordata* / DT, FT, DB / NF, FS, TS, DS / VII–IX.

28. *Datronia mollis* (Sommerf. : Fr.) Donk — *Acer platanoides*, *Alnus glutinosa*, *Padus avium*, *Populus tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / DT, FT, DB, S / BF, FS, MS, TS, DS / V–X.

29. *Datronia stereoides* (Fr. : Fr.) Ryvarden — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Populus tremula*, *Quercus robur*, *Salix alba*, *Tilia cordata*, *Ulmus laevis* / FT, DB / NF, FS, MS, TS, DS / VI–X.

30. *Dichomitopus squalens* (P. Karst.) D.A. Reid — *Pinus sylvestris* / DT, FT / BF, MS / VI–IX.

31. *Diplomitoporus flavescens* (Bres.) Ryvarden — *Pinus sylvestris* / FT / BF, MS / VI–IX.

32. *Fibulomyces mutabilis* (Bres.) Jülich — *Pinus sylvestris* / FT / MS / 19 VI 2004.

33. *Fistulina hepatica* (Schaeff. : Fr.) Fr. — *Quercus robur* / LT, DT, S / FS, MS, TS / VII–X.

34. *Fomes fomentarius* (L. : Fr.) Fr. — *Acer platanoides*, *A. negundo*, *Alnus glutinosa*, *A. incana*, *Betula pendula*, *Fraxinus americana*, *Padus avium*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Salix alba*, *Tilia cordata*, *Ulmus laevis* / LT, FT, DT, DB, S / BF, NF, FS, MS, TS, DS / V–XI.

35. *Fomitoporia punctata* (P. Karst.) Pilát — *Acer platanoides*, *Alnus glutinosa*, *Padus avium*, *Populus tremula*, *Quercus robur*, *Salix alba*, *Ulmus laevis* / LT, DT, FT / BF, NF, FS, MS, TS, DS / VII–X.

36. *Fomitoporia robusta* (P. Karst.) Fiasson & Niemelä — *Quercus robur* / LT, DT, FT, S / BF, NF, FS, MS, TS / VI–IX.

37. *Fomitopsis pinicola* (Sw. : Fr.) P. Karst. — *Acer platanoides*, *Alnus glutinosa*, *A. incana*, *Betula pendula*, *Padus avium*, *Pinus sylvestris*, *Populus tremula*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, S / BF, NF, FS, MS, TS / VI–X.

38. *Ganoderma lipsiense* (Batsch.) G.F. Atk. — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, S / BF, NF, FS, MS, TS / VI–X.

39. *Gloeocystidiellum convolvens* (P. Karst.) Donk — *Quercus robur* / DB / MS / 16 VI 2004.

40. *Gloeocystidiellum porosum* (Berk. & M.A. Curtis) Donk — *Ulmus laevis* / FT / NF / 23 VII 2004.

41. *Gloeophyllum sepiarium* (Wulfen : Fr.) P. Karst. — *Pinus sylvestris*, *Populus nigra* / FT / BF, TS / V–VII.

42. *Gloeoporus dichrous* (Fr. : Fr.) Bres. — *Acer platanoides*, *Alnus glutinosa*, *A. incana*, *Frangula alnus*, *Populus tremula*, *Quercus robur*, *Ulmus laevis* / FT, DB / BF, NF, FS, MS, TS, DS / V–X.

43. *Gloeoporus taxicola* (Pers. : Fr.) Gilb. & Ryvarden — *Pinus sylvestris* / FT, DB / BF / VI–IX.

44. *Hapalopilus rutilans* (Pers. : Fr.) P. Karst. — *Acer platanoides*, *Betula pendula*, *Quercus robur* / LT, DT, FT, DB / BF, NF, FS, MS, TS, DS / V–IX.

45. *Hericium coralloides* (Scop. : Fr.) Pers. — *Populus nigra*, *Ulmus laevis* / FT / BF, FS / VI–IX.

46. *Heterobasidion annosum* (Fr.) Bref. — *Pinus sylvestris* / LT / BF / V–X.

47. *Hymenochaete cinnamomea* (Fr.) Bres. — *Quercus robur* / DB / MS / 18 VI 2004.

48. *Hymenochaete corrugata* (Fr. : Fr.) Lév. — *Ulmus laevis* / DB / MS / 18 VI 2004.

49. *Hymenochaete fuliginosa* (Pers.) Bres. — *Quercus robur* / FT / FS / 4 X 2003.

50. *Hymenochaete rubiginosa* (Fr.) Lév. — *Acer platanoides*, *Pinus sylvestris*, *Quercus robur* / FT, S / BF, FS, MS / VI–XI.

51. *Hymenochaete tabacina* (Fr.) Lév. — *Alnus glutinosa*, *Quercus robur* / FT, S / BF, NF, FS, MS, TS / V–X.

52. *Hyphoderma deviatum* (Lundell) Parmasto — *Ulmus laevis* / DB / FS / 28 VI 2004.

53. *Hyphoderma guttuliferum* (P. Karst.) Donk — *Populus tremula* / DT / MS / 30 VII 1995.

54. *Hyphoderma mutatum* (Peck.) Donk — *Betula pendula* / DB / FS / 4 X 2003.

55. *Hyphoderma praetermissum* (P. Karst.) J. Erikss. & Å. Strid — *Populus tremula* / DT / MS / 30 VII 1995.
56. *Hyphoderma puberum* (Fr.) Wallr. — *Tilia cordata* / DB / FS / 20 IX 2003.
57. *Hyphoderma setigerum* (Fr.) Donk — *Betula pendula* / DB / FS / 27 VI 2004.
58. *Hyphodontia arguta* (Fr.) J. Erikss. — *Quercus robur*, *Ulmus laevis* / DB / FS / VII–X.
59. *Hyphodontia aspera* (Fr.) J. Erikss. — *Pinus sylvestris* / FT / MS / 23 VIII 2004.
60. *Hyphodontia paradoxa* (Schrad. : Fr.) E. Langer & Vesterholt — *Betula pendula*, *Ulmus laevis* / DB / NF, FS / VIII–X.
61. *Hyphodontia radula* (Pers. : Fr.) E. Langer & Vesterholt — *Acer platanoides*, *Populus tremula*, *Quercus robur* / FT, DB / FS, MS / VI–X.
62. *Hyphodontia rimosissima* (Peck.) Gilb. — *Ulmus laevis* / DB / FS / 6 VII 1997.
63. *Hypochicium vellereum* (Ellis & Cragin) Parmasto — *Acer negundo* / DB / TS / VII–IX.
64. *Inocutis dryophila* (Berk.) Fiasson & Niemelä — *Quercus robur* / LT, DT / NF, FS, MS, TS / VI–IX.
65. *Inocutis rheades* (Pers.) Fiasson & Niemelä — *Betula pendula*, *Populus tremula* / DT, FT / BF, NF, FS, MS, TS, DS / VI–IX.
66. *Inonotus obliquus* (Pers. : Fr.) Pilát — *Betula pendula* / LT, DT, FT / FS, DS / V–IX.
67. *Inonotus radiatus* (Sowerby : Fr.) P. Karst. — *Alnus glutinosa*, *Tilia cordata*, *Ulmus laevis* / DT, FT, S / BF, NF, FS, MS / VI–X.
68. *Irpex lacteus* (Fr. : Fr.) Fr. — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Cerasus vulgaris*, *Malus sylvestris*, *Padus avium*, *Populus tremula*, *Quercus robur*, *Robinia pseudoacacia*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, DB, S / BF, NF, FS, MS, TS, DS / V–XI.
69. *Ischnoderma resinoseum* (Schrad. : Fr.) P. Karst. — *Tilia cordata*, *Ulmus laevis* / DB / FS / VII–VIII.
70. *Laetiporus sulphureus* (Bull. : Fr.) Murrill — *Acer platanoides*, *Populus nigra*, *Quercus robur*, *Salix alba*, *Ulmus laevis* / LT, DT, FT / BF, NF, FS, MS, TS, DS / V–IX.
71. *Laxitextum bicolor* (Pers. : Fr.) Lentz — *Quercus robur* / DB / BF / 24 IX 1994.
72. *Lenzites betulina* (L. : Fr.) Fr. — *Betula pendula* / FT / FS / VI–VII.
73. *Lenzites warnieri* Durieu & Mont. — *Populus nigra*, *P. tremula*, *Tilia cordata*, *Ulmus laevis* / FT / FS, MS, TS, DS / VI–X.
74. *Mycoacia fuscoatra* (Fr. : Fr.) Donk — *Populus tremula*, *Ulmus laevis* / DB / FS, DS / VIII–X.
75. *Oxyporus corticola* (Fr.) Ryvarden — *Alnus glutinosa*, *A. incana*, *Betula pendula*, *Padus avium*, *Populus tremula*, *Quercus robur*, *Ulmus laevis* / FT, DB / BF, NF, FS, MS, TS, DS / V–IX.
76. *Oxyporus obducens* (Pers.) Donk — *Acer platanoides*, *Betula pendula*, *Padus avium*, *Populus tremula*, *Quercus robur* / DB / BF, FS, MS, TS / VI–X.
77. *Oxyporus populinus* (Schumach. : Fr.) Donk — *Acer platanoides*, *Populus tremula* / LT, DT / FS / VI–IX.
78. *Peniophora cinerea* (Pers. : Fr.) Cooke — *Acer platanoides*, *Ulmus laevis* / FT, DB / MS, TS / VI–IX.
79. *Peniophora quercina* (Pers. : Fr.) Cooke — *Acer platanoides*, *Quercus robur*, *Ulmus laevis* / DB / FS / VI–X.
80. *Peniophora rufomarginata* (Pers.) Bourdot & Galzin — *Tilia cordata* / FT, DB / NF, FS / VI–X.
81. *Phaeolus schweinitzii* (Fr.) Pat. — *Pinus sylvestris* / FT / BF / VII–X.
82. *Phanerochaete laevis* (Pers. : Fr.) J. Erikss. & Ryvarden — *Quercus robur* / DB / TS / 28 IX 1997.
83. *Phanerochaete sanguinea* (Fr.) Pouzar — *Quercus robur* / DB / TS / 28 V 1997.
84. *Phanerochaete sordida* (P. Karst.) J. Erikss. & Ryvarden — *Acer platanoides* / DB / FS / 7 VII 1997.

85. **Phanerochaete velutina** (DC. : Fr.) P. Karst. — *Populus tremula* / FT / FS / 3 VII 2004.
86. **Phellinus alni** (Bondartsev) Parmasto — *Alnus glutinosa*, *A. incana* / LT, DT, FT, S / NF, FS, TS, DS / VI–X.
87. **Phellinus igniarius** Niemelä — *Acer platanoides*, *Betula pendula*, *Caragana frutex*, *Padus avium*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Salix alba*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, S / BF, NF, FS, MS, TS, DS / III–X.
88. **Phellinus linteus** (Berk. & M.A. Curt.) Teng — *Lonicera tatarica* / LT, DT, FT / BF, FS, MS, TS / VI–X.
89. **Phellinus pseudopunctatus** A. David, Dequatre & Fiasson — *Tilia cordata* / DT / FS / 7 IX 1995.
90. **Phellinus rhamni** (Bondartseva) H. Jahn — *Frangula alnus*, *Lonicera tatarica*, *Padus avium* / DT, FT / BF, FS, MS / V–VII.
91. **Phellinus rimosus** (Berk.) Pilát — *Ulmus laevis* / FT / FS / 30 V 1996.
92. **Phellinus tremulae** (Bondartsev) Bondartsev & Borisov — *Populus tremula* / LT, DT, FT / BF, NF, FS, MS, TS, DS / VI–X.
93. **Phlebia albida** H. Post — *Salix alba* / DB / TS / 15 III 1993.
94. **Phlebia tremellosa** (Schrad. : Fr.) Burds. & Nakasone — *Acer platanoides*, *Alnus incana*, *Betula pendula*, *Pinus sylvestris*, *Quercus robur*, *Ulmus laevis* / FT, DB / BF, NF, FS, DS / VI–X.
95. **Piptoporus betulinus** (Bull. : Fr.) P. Karst. — *Betula pendula* / DT, FT, DB, S / NF, FS, MS, TS / V–XI.
96. **Piptoporus pseudobetulinus** (Murash. ex Pilát) Pilát — *Populus tremula* / FT / BF / 15 VII 1995.
97. **Piptoporus quercinus** (Schrad. : Fr.) Pilát — *Quercus robur* / FT / BF / 2 VI 2001.
98. **Polyporus arcularius** Batsch. : Fr. — *Alnus incana*, *Acer platanoides*, *Betula pendula*, *Populus tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / FT, DB / NF, FS, MS, TS, DS / VI–IX.
99. **Polyporus badius** (Pers.) Schw. — *Alnus glutinosa*, *Populus nigra*, *P. tremula*, *Tilia cordata*, *Ulmus laevis* / FT, DB, S / FS / VI–IX.
100. **Polyporus brumalis** (Pers. : Fr.) Fr. — *Alnus glutinosa*, *Tilia cordata* / FT, DB, S / FS, TS / V–VII.
101. **Polyporus ciliatus** Fr. : Fr. — *Alnus glutinosa*, *A. incana*, *Betula pendula*, *Ulmus laevis* / FT, DB / NF, FS / V–VII.
102. **Polyporus squamosus** Huds. : Fr. — *Acer negundo*, *A. platanoides*, *Alnus glutinosa*, *Malus sylvestris*, *Padus avium*, *Populus nigra*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, DB, S / BF, FS, MS, DS / V–IX.
103. **Polyporus tuberaster** (Pers.) Fr. — *Alnus glutinosa*, *Betula pendula* / FT, DB / FS / VI–VIII.
104. **Polyporus varius** (Pers.) Fr. — *Acer platanoides*, *Betula pendula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / FT, DB, S / NF, FS / VI–X.
105. **Porodaedalea conchata** (Pers. : Fr.) Fiasson & Niemelä f. *fraxini* Bondartsev — *Lonicera tatarica*, *Ulmus laevis* / LT, DT / FS, TS / V–VIII.
106. **Porodaedalea pini** (Brot. : Fr.) Murrill — *Pinus sylvestris* / LT / BF / VI–IX.
107. **Porostereum spadiceum** (Pers. : Fr.) Hjortstam & Ryvarden — *Quercus robur* / DB / BF, FS / VI–X.
108. **Postia fragilis** (Fr.) Jülich — *Pinus sylvestris* / DB / BF / 24 IX 1994.
109. **Postia hibernica** (Berk. & Broome) Jülich — *Acer platanoides*, *Pinus sylvestris* / FT, DB / BF, FS, MS, TS / V–IX.
110. **Postia leucomallella** (Murrill) Jülich — *Pinus sylvestris* / FT, DB / BF, NF, MS, TS / V–VII.

111. **Postia rennyi** (Berk. & Broome) Rajchenb. — *Pinus sylvestris* / DB / BF / 24 IX 1994.
112. **Postia sericeomollis** (Romell) Jülich — *Acer platanoides*, *Pinus sylvestris* / FT, DB / BF, FS, MS, TS / VI–IX.
113. **Postia stiptica** (Pers. : Fr.) Jülich — *Pinus sylvestris* / FT, DB / BF / VIII–IX.
114. **Postia subcaesia** (David) Jülich — *Acer platanoides*, *Tilia cordata*, *Ulmus laevis* / FT, DB, S / FS / VI–VIII.
115. **Postia tephroleuca** (Fr.) Jülich — *Populus tremula*, *Quercus robur* / FT / BF, FS / VIII–X.
116. **Punctularia strigoso-zonata** (Schw.) Talbot — *Populus tremula*, *Salix alba* / DT, FT, DB / FS / VII–X.
117. **Sarcodontia crocea** (Schwein. : Fr.) Kotl. — *Malus sylvestris* / LT, DT / FS / VI–IX.
118. **Schizophyllum commune** Fr. : Fr. — *Acer platanoides*, *Acer negundo*, *Alnus glutinosa*, *A. incana*, *Betula pendula*, *Caragana frutescens*, *Lonicera tatarica*, *Padus avium*, *Populus alba*, *P. nigra*, *P. tremula*, *Prunus spinosa*, *Quercus robur*, *Salix alba*, *Tilia cordata*, *Ulmus laevis* / DT, FT, DB, S / BF, NF, FS, MS, TS, DS / V–X.
119. **Schizopora flavipora** (Cooke) Ryvarden — *Acer platanoides*, *Betula pendula*, *Pinus sylvestris*, *Quercus robur* / FT, DB / BF, FS / VI–VIII.
120. **Scopuloides rimosa** (Cooke) Jülich — *Quercus robur* / DB / FS / 10 VII 1994.
121. **Skeletocutis amorphia** (Fr. : Fr.) Kotl. & Pouzar — *Pinus sylvestris* / FT, DB / BF / VII–X.
122. **Skeletocutis nivea** (Jungh.) Jean Keller — *Padus avium*, *Quercus robur*, *Tilia cordata* / FT, DB / NF, FS / VI–X.
123. **Spongipellis spumeus** (Sowerby : Fr.) Pat. — *Betula pendula*, *Malus sylvestris*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Ulmus laevis* / LT, DT, FT, S / NF, FS / VII–IX.
124. **Steccherinum aridum** Svrček — *Quercus robur* / DB / TS / 28 IX 1997.
125. **Steccherinum fimbriatum** (Pers. : Fr.) J. Erikss. — *Betula pendula*, *Padus avium*, *Populus tremula*, *Quercus robur*, *Ulmus laevis* / FT, DB / NF, FS, MS, TS / V–X.
126. **Steccherinum murashkinskyi** (Burt) Maas Geest. — *Betula pendula* / FT / BF / 16 IX 1995.
127. **Steccherinum nitidum** (Pers. : Fr.) Vesterholt — *Betula pendula*, *Padus avium*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis*, old *Fomes fomentarius* fruitbody / FT, DT, DB / BF, NF, FS, MS, TS / V–XI.
128. **Steccherinum ochraceum** (Fr.) S.F. Gray — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Frangula alnus*, *Larix sibirica*, *Lonicera tatarica*, *Malus sylvestris*, *Padus avium*, *Pinus sylvestris*, *Populus tremula*, *Quercus robur*, *Ulmus laevis* / DT, FT, DB / BF, FS, MS, TS, DS / VI–IX.
129. **Steccherinum oreophilum** Lindsey & Gilb. — *Acer platanoides* / DB / FS / 19 IX 2003.
130. **Steccherinum separabilimum** (Pouz.) Vesterholt — *Betula pendula*, *Tilia cordata* / DB / BF, FS / VI–X.
131. **Stereum hirsutum** (Willd. : Fr.) Gray — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Populus tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, DB, S / BF, NF, FS, MS, TS, DS / V–X.
132. **Stereum rugosum** Pers. : Fr. — *Pinus sylvestris*, *Salix alba*, *Ulmus laevis* / DB / BF, TS / III–X.
133. **Stereum sanguinolentum** (Alb. & Schwein. : Fr.) Fr. — *Pinus sylvestris* / FT / NF / 23 VII 2004.
134. **Stereum subtomentosum** Pouzar — *Acer platanoides*, *Alnus glutinosa*, *A. Incana*, *Betula pendula*, *Lonicera tatarica*, *Malus sylvestris*, *Padus avium*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Salix alba*, *Tilia cordata*, *Ulmus laevis* / DT, FT, DB, S / BF, NF, FS, MS, TS, DS / V–X.

135. **Thelephora terrestris** Ehrh. : Fr. — *Alnus glutinosa*, *Betula pendula*, *Pinus sylvestris*, *Tilia cordata* / DB / BF, MS, TS / VI–X.
136. **Tomentella bryophila** (Pers.) M.J. Larsen — *Quercus robur* / DB / NF / 22 VII 2004.
137. **Tomentella cinerascens** (P. Karst.) Höhn. & Litsch. — *Acer platanoides* / DB / TS / 19 VIII 1997.
138. **Tomentella crinalis** (Fr.) M.J. Larsen — *Ulmus laevis* / DB / FS / 19 IX 2003.
139. **Tomentella griseoumbrina** Litsch. — *Quercus robur* / DB / MS / 17 VI 2004.
140. **Trametes gibbosa** (Pers. : Fr.) Fr. — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Padus avium*, *Pinus sylvestris*, *Populus tremula*, *Quercus robur*, *Salix alba*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, DB, S / BF, NF, FS, MS / V–X.
141. **Trametes hirsuta** (Wulfen : Fr.) Pilát — *Acer platanoides*, *Alnus glutinosa*, *A. incana*, *Betula pendula*, *Padus avium*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Salix alba*, *Tilia cordata*, *Ulmus laevis* / LT, DT, FT, DB, S / BF, NF, FS, MS, TS, DS / VI–X.
142. **Trametes ljubarskyi** Pilát — *Pinus sylvestris*, *Populus tremula*, *Quercus robur* / DT, FT, DB / BF, MS, TS / VII–X.
143. **Trametes ochracea** (Pers.) Gilb. & Ryvarden — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Malus sylvestris*, *Padus avium*, *Populus alba*, *P. tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / DT, FT, DB, S / BF, NF, FS, MS, TS, DS / VI–IX.
144. **Trametes pubescens** (Schumach. : Fr.) Pilát — *Acer platanoides*, *Alnus glutinosa*, *Betula pendula*, *Padus avium*, *Populus tremula*, *Tilia cordata*, *Ulmus laevis* / DT, FT, DB, S / BF, NF, FS, MS, TS, DS / VI–IX.
145. **Trametes suaveolens** (Fr.) Fr. — *Padus avium*, *Populus nigra*, *Salix alba*, *Ulmus laevis* / DT, FT, DB / NF, FS, MS, TS, DS / VII–X.
146. **Trametes trogii** Berk. — *Alnus incana*, *Betula pendula*, *Malus sylvestris*, *Populus alba*, *P. nigra*, *P. tremula*, *Salix alba*, *Ulmus laevis*, *U. pumila* / LT, DT, FT, DB, S / BF, NF, FS, MS, TS, DS / VI–XI.
147. **Trametes versicolor** (L. : Fr.) Pilát — *Acer platanoides*, *Betula pendula*, *Malus sylvestris*, *Padus avium*, *Populus nigra*, *P. tremula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / DT, FT, DB, S / BF, NF, FS, MS, TS, DS / VI–X.
148. **Trichaptum fuscoviolaceum** (Ehrenb. : Fr.) Ryvarden — *Larix sibirica*, *Pinus sylvestris* / DT, FT, DB / BF, NF, and in planted pine forests in FS, MS, TS / V–IX.
149. **Trichaptum pargamenum** (Fr.) G. Cunn. — *Alnus glutinosa*, *Betula pendula*, *Populus tremula* / DT, FT, DB / BF, NF, FS, MS, TS / V–X.
150. **Tyromyces chioneus** (Fr. : Fr.) P. Karst. — *Acer platanoides*, *Betula pendula*, *Quercus robur*, *Tilia cordata*, *Ulmus laevis* / FT, DB / FS / VII–IX.
151. **Tyromyces fissilis** (Berk. & M.A. Curtis) Donk. — *Ulmus laevis* / FT / NF / 18 IX 2004.
152. **Tyromyces kmetii** (Bres.) Bondartsev & Singer — *Betula pendula* / DB / FS / 23 VIII 2004.
153. **Xylobolus subpileatus** (Berk. & M.A. Curtis) Boidin — *Quercus robur* / FT, DB / NF, FS / VII–XI.

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