

## A revised checklist of corticioid and hydroid fungi in China for 2010

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**Abstract** Corticioid fungi are one of the major groups of wood-inhabiting fungi, and they are mainly confined to the orders Corticiales, Trechisporales and Atheliales among Basidiomycetes. Hydroid fungi are aphyllorphoid fungi with spine- or tooth-like hymenophore, and most species of them are in the orders of Russulales and Thelephorales. Many hydroid fungi are wood-inhabiting, but some of them are mycorrhizas. Corticioid fungi and many hydroid fungi have a similar ecology in forest ecosystems. The current knowledge of corticioid and hydroid fungi in China is summarized, and totally 506 species are listed alphabetically. A new species, *Stereum lithocarpi*, is described and illustrated. Two species, *Dichostereum boreale* and *Thanatephorus fusisporus*, are new to Chinese fungal flora, and a condensed description of these species is given.

**Keywords** Taxonomy · Wood-decaying fungi

### Introduction

Corticioid and hydroid fungi are major groups of wood-inhabiting fungi, although some of them are mycorrhizas. They can decompose cellulose, hemicellulose and lignin in

the plant cell walls, and therefore play an important role in nutrient recycling in mostly forest ecosystems.

Corticioid fungi are not taxonomically a natural taxon, but have a similar ecology in nature. Based on the modern taxonomy, most species in the orders of Corticiales, Trechisporales and Atheliales can be categorized as corticioid fungi; however, some corticioid species are treated in the orders of Polyporales, Hymenochaetales, Gloeophyllales, Thelephorales, Cantharellales, Russulales, Agaricales and Auriculariales (Hjortstam et al. 1988; Ginns and Lefebvre 1993; Hjortstam 1997; Ginns 1998; Larsson et al. 2006; Kirk et al. 2008). Around 1,100 corticioid fungal species have been recorded in some main reports (Maekawa 1993; Hjortstam 1997; Hansen and Knudsen 1997; Ginns 1998; Wu 2000; Kotiranta et al. 2009), and 8,663 names of corticioid fungi were included in Cortbase Version 2.1 (December 2009, <http://andromeda.botinst.gu.se/cortbase.html>). However, only 1,974 were here accepted as “good species,” including some hundreds of non-corticioid species (Erast Parmasto personal communications).

Similarly, hydroid fungi are not taxonomically a natural taxon either, but they have a similar morphology in that their fruit bodies produce tooth-like spines. Based on the modern taxonomy (Kirk et al. 2008), most hydroid fungi are found in the orders Russulales and Thelephorales, but some species are treated in other orders, e.g., Polyporales, Hymenochaetales and Auriculariales. Two important monographic studies on hydroid fungi were made by Maas Geesteranus (1971) and Stalpers (1996), and some nice reports dealing with this group of fungi were published in North America (Baird 1986) and Europe (Hrouda 1999; Niemelä 1997). The concept of hydroid fungi in the present paper follows Niemelä (1997).

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Many hydroid fungi are wood-inhabiting species, but some of them are definitely mycorrhizas, e.g., species of *Hydnellum* P. Karst. Wood-inhabiting hydroid fungi have a similar ecology as corticioid fungi. In fact species in some genera, e.g., *Irpex* Fr. and *Steccherinum* Gray, etc., are treated either as hydroid fungi or corticioid fungi. Consequently, corticioid and hydroid fungi are treated together in the present catalogue.

Some species in the aphylloroid genera *Podoscypha* Pat., *Sparassis* Fr., *Stereopsis* D.A. Reid and *Thelephora* Ehrh. ex Willd. are included in the present list, even though they are neither corticioid fungi nor hydroid fungi, but they have a more or less similar ecology as corticioid fungi, and they were included in the previous paper as non-poroid aphylloroid fungi.

Altogether 401 non-poroid aphylloroid fungi (mostly corticioid and hydroid fungi) were previously recorded from China (Dai et al. 2004). As more inventories and studies on these fungi have been carried out, more than 100 species, including several new species, were found during the last 6 years, and they were published in different papers. The catalogue presented here aims to give an updated list of corticioid and hydroid fungi found so far in China. The references for the recently published species are listed after these names, while references for the remaining species are referred to the previously published list (Dai et al. 2004). The checklist is arranged alphabetically by genus and species within genera. The abbreviations of authors of scientific names follow the second edition of Authors of Fungal Names (available in internet <http://www.indexfungorum.org/AuthorsOfFungalINames.htm>).

Two species marked with an asterisk (\*) are new to China, and condensed descriptions of these species are included, following the checklist. A new species marked with two asterisk (\*\*), *Stereum lithocarpi*, is described and illustrated. The microscopic routine used in the description is as presented by Cui and Dai (2006). In the text the following abbreviations were used: *L* = mean spore length (arithmetical average of all spores); *W* = mean spore width (arithmetical average of all spores); *Q* = variation in the *L/W* ratios between the specimens studied (quotient of the mean spore length and the mean spore width of each specimen); *n* = number of spores measured from given number of specimens. IKI = Melzer's reagent, IKI+ = amyloid, IKI− = both inamyloid and indextrinoid, KOH = 5% potassium hydroxide and CB = Cotton Blue. CB+ = cyanophilous and CB− = acyanophilous. In presenting the variation in the size of the spores, 5% of the measurements were excluded from each end of the range and are given in parentheses.

## The checklist

1. *Acanthophysellum lividocoeruleum* (P. Karst.) Parmasto
2. *Aleurobotrys botryosus* (Burt) Boidin, Lanq. & Gilles
3. *Aleurocystidiellum disciforme* (DC.) Tellería
4. *Aleurocystidiellum subcruentatum* (Berk. & M.A. Curtis) P.A. Lemke
5. *Aleurodiscus aberrans* G. Cunn.
6. *Aleurodiscus amorphus* Rabenh.
7. *Aleurodiscus aurantius* (Pers.) J. Schröt.
8. *Aleurodiscus berggrenii* (Cooke) G. Cunn.
9. *Aleurodiscus canadensis* Skolko
10. *Aleurodiscus diffissus* (Sacc.) Burt
11. *Aleurodiscus gigasporus* Ginns & Bandoni
12. *Aleurodiscus grantii* Lloyd
13. *Aleurodiscus microcarpus* Núñez & Ryvarden
14. *Aleurodiscus mirabilis* (Berk. & M.A. Curtis) Höhn.
15. *Aleurodiscus monilifer* Malençon
16. *Aleurodiscus oakesii* (Berk. & M.A. Curtis) Pat.
17. *Aleurodiscus parvisporus* Núñez & Ryvarden
18. *Aleurodiscus spiniger* D.P. Rogers & P.A. Lemke
19. *Aleurodiscus tsugae* Yasuda (Wu 2008)
20. *Aleurodiscus weirii* Burt
21. *Amethicium luteoincrustatum* Hjortstam & Ryvarden (Wu 2008)
22. *Amphinema arachispora* Burds. & Nakasone
23. *Amphinema byssoides* (Pers.) J. Erikss.
24. *Amphinema diadema* K.H. Larss. & Hjortstam
25. *Amylocorticium canadense* (Burt) J. Erikss. & Weresub
26. *Amylocorticium cebennense* (Bourdot) Pouzar
27. *Amylocorticium laceratum* (Litsch.) Hjortstam & Ryvarden
28. *Amylocorticium subincarnatum* (Peck) Pouzar
29. *Amylocorticium subsulphureum* (P. Karst.) Pouzar
30. *Amylosporomyces subasperisporus* (Litsch.) Hjortstam & Ryvarden
31. *Amylostereum chailletii* (Pers.) Boidin
32. *Amylostereum laevigatum* (Fr.) Boidin
33. *Aphanobasidium bisterigmaticum* Boidin & Gilles
34. *Aphanobasidium pseudotsugae* (Burt) Boidin & Gilles
35. *Asterodon ferruginosus* Pat.
36. *Asterostroma cervicolor* (Berk. & M.A. Curtis) Masee
37. *Athelia decipiens* (Höhn. & Litsch.) J. Erikss.
38. *Athelia fibulata* M.P. Christ.
39. *Athelia laxa* (Burt) Jülich
40. *Athelia pyriformis* (M.P. Christ.) Jülich
41. *Athelia scutellaris* (Berk. & M.A. Curtis) Gilb.
42. *Athelopsis glaucina* (Bourdot & Galzin) Parmasto

43. *Auriculariopsis ampla* (Lév.) Maire
44. *Auriscalpium vulgare* Gray
45. *Basidioradulum radula* (Fr.) Nobles
46. *Boidinia furfuracea* (Bres.) Stalpers & Hjortstam
47. *Boidinia aculeata* (Sheng H. Wu)  
E. Larss. & K.H. Larss. (Wu 1996)
48. *Boidinia granulata* Sheng H. Wu
49. *Boidinia lacticolor* (Bres.) Hjortstam & Ryvardeen
50. *Boidinia peroxydata* (Rick) Hjortstam & Ryvardeen
51. *Boidinia propinqua* (H.S. Jacks. & Dearden)  
Hjortstam & Ryvardeen
52. *Boreostereum radiatum* (Peck) Parmasto
53. *Boreostereum vibrans* (Berk. & M.A. Curtis)  
Davydkina & Bondartseva
54. *Botryobasidium angustisporum* (Boidin)  
P.H.B. Talbot (Xiong and Dai 2007b)
55. *Botryobasidium candicans* J. Erikss.
56. *Botryobasidium conspersum* J. Erikss.
57. *Botryobasidium obtusisporum* J. Erikss.  
(Xiong and Dai 2007b)
58. *Botryobasidium pruinaum* (Bres.) J. Erikss.
59. *Botryobasidium subbotryosum* S.S. Rattan
60. *Botryobasidium subcoronatum* (Höhn. & Litsch.)  
Donk
61. *Botryobasidium vagum* (Berk. & M.A. Curtis)  
D.P. Rogers
62. *Botryohyphochnus bondarcevii* Parmasto  
(Xiong et al. 2007a)
63. *Botryohyphochnus isabellinus* (Fr.) J. Erikss.
64. *Brevicellicium olivascens* (Bres.)  
K.H. Larss. & Hjortstam
65. *Byssocorticium atrovirens* (Fr.) Bondartsev & Singer
66. *Byssomerulius albostramineus* (Torrend) Hjortstam
67. *Byssomerulius ambiguus* (Berk.) Gilb. & Budington
68. *Byssomerulius corium* (Fr.) Parmasto
69. *Calyptella capula* (Holmsk.) Quél. (Wei and Li 2009)
70. *Candelabrochaete verruculosa* Hjortstam
71. *Ceraceomyces borealis* (Romell) J. Erikss. &  
Ryvardeen (Xiong and Dai 2007a)
72. *Ceraceomyces cerebrosus* (G. Cunn.) Stalpers &  
P.K. Buchanan (Dai and Xiong 2010)
73. *Ceraceomyces serpens* (Tode) Ginns
74. *Ceraceomyces sublaevis* (Bres.) Jülich
75. *Ceraceomyces sulphurinus* (P. Karst.) J. Erikss. &  
Ryvardeen
76. *Ceraceomyces tessulatus* (Cooke) Jülich
77. *Ceratobasidium gramineum* (Ikata & T. Matsuura)  
Oniki, Ogoshi & T. Araki
78. *Cerinomyces pallidus* G.W. Martin (Qin et al. 2009)
79. *Chondrostereum purpureum* (Pers.) Pouzar
80. *Clavulicium macounii* (Burt) J. Erikss. & Boidin
81. *Clavulicium spurium* (Bourdot)  
J. Erikss. & Hjortstam
82. *Climacodon pulcherrimus* (Berk. & M.A. Curtis)  
Nikol.
83. *Climacodon septentrionalis* (Fr.) P. Karst.
84. *Conferticium ochraceum* (Fr.) Hallenb.
85. *Coniophora arida* (Fr.) P. Karst.
86. *Coniophora olivacea* (Fr.) P. Karst.
87. *Coniophora puteana* (Schumach.) P. Karst.
88. *Coronicium proximum* (H.S. Jacks.) Jülich
89. *Corticium calceum* (Pers.) Fr.
90. *Cotylidia aurantiaca* (Pers.) A.L. Welden
91. *Cotylidia diaphana* (Schwein.) Lentz
92. *Cotylidia harmandii* (Lloyd) D.A. Reid  
(Shang et al. 2006)
93. *Cotylidia komabensis* (Henn.) D.A. Reid
94. *Cotylidia pallida* (Pers.) Boidin
95. *Cotylidia undulata* (Fr.) P. Karst.
96. *Creolophus cirrhatus* (Pers.) P. Karst.
97. *Cristinia helvetica* (Pers.) Parmasto
98. *Crustoderma dryinum* (Berk. & M.A. Curtis)  
Parmasto
99. *Crustomyces expallens* (Bres.) Hjortstam
100. *Cylindrobasidium laeve* (Pers.) Chamuris
101. *Cylindrobasidium torrendii* (Bres.) Hjortstam
102. *Cymatoderma dendriticum* (Pers.) D.A. Reid
103. *Cymatoderma elegans* Jungh.
104. *Cymatoderma hainanense* Z.T. Guo
105. *Cymatoderma infundibuliforme* (Klotzsch) Boidin
106. *Cymatoderma venezuelae* D.A. Reid
107. *Cyphellostereum laeve* (Fr.) D.A. Reid
108. *Cystiodontia laminiifera* (Berk. & M.A. Curtis)  
Hjortstam
109. *Cystostereum murrayi* (Berk. & M.A. Curtis) Pouzar
110. *Cytidia salicina* (Fr.) Burt
111. *Dacryobolus karstenii* (Bres.) Oberw. ex Parmasto
112. *Dacryobolus sudans* (Alb. & Schwein.) Fr.
113. *Dendrocorticium roseocarneum* (Schwein.)  
M.J. Larsen & Gilb.
114. *Dendrophora albobadia* (Schwein.) Chamuris
115. *Dendrothele acerina* (Pers.) P.A. Lemke
116. *Dendrothele alliacea* (Quél.) P.A. Lemke (Wu 2008)
117. *Dendrothele candida* (Schwein.) P.A. Lemke
118. *Dendrothele corniculata* (G. Cunn.) Stalpers
119. *Dendrothele nivosa* (Berk. & M.A. Curtis ex Höhn.  
& Litsch.) P.A. Lemke
120. *Dendrophora versiformis* (Berk. & M.A. Curtis)  
Chamuris
121. *Dentipellis acystidia* H.X. Xiong & Sheng H. Wu  
(Dai et al. 2009)
122. *Dentipellis fragilis* (Pers.) Donk
123. *Dentipellis leptodon* (Mont.) Maas Geest.  
(Wei et al. 2005)
124. *Dentipellis microspora* Y.C. Dai
125. *Dentipellis taiwaniana* Sheng H. Wu (Dai et al. 2009)

126. *Dentocorticium ussuricum* (Parmasto)  
M.J. Larsen & Gilb.
127. *Dextrinocystidium sacratum* (G. Cunn.)  
Sheng H. Wu
128. *Dichopleuropus spathulatus* D.A. Reid  
(Qin et al. 2009)
129. \**Dichostereum boreale* (Pouzar) Ginns &  
M.N.L. Lefebvre
130. *Dichostereum pallescens* (Schwein.) Boidin &  
Lanq.
131. *Duportella trigonosperma* (Boidin et al.)  
Hjortstam
132. *Epithele malaiensis* Boidin & Lanq.
133. *Erythromyces crocicreas* (Berk. & Broome)  
Hjortstam & Ryvarde (Qin et al. 2009)
134. *Fibricium rude* (P. Karst.) Jülich
135. *Flavodon flavus* (Klozsch) Ryvarde
136. *Globulicium hiemale* (Laurila) Hjortstam
137. *Gloeocystidiellum aspellum* Hjortstam
138. *Gloeocystidiellum clavuligerum* (Höhn. & Litsch.)  
Nakasone
139. *Gloeocystidiellum porosum* (Berk. & M.A. Curtis)  
Donk
140. *Gloeopeniophorella convolvens* (P. Karst.)  
Boidin et al.
141. *Gloeostereum incarnatum* S. Ito & S. Imai  
(Dai and Tolgor 2007)
142. *Gloiodon strigosus* (Sw.) P. Karst.
143. *Gloiothele citrina* (Pers.) Ginns & G.W. Freeman
144. *Gloiothele lactescens* (Berk.) Hjortstam
145. *Grammothele fuligo* (Berk. & Broome) Ryvarde
146. *Grammothele lineata* Berk. & M.A. Curtis  
(Zhou et al. 2009b)
147. *Grammothele mappa* Berk. & M.A. Curtis
148. *Gyrodontium sacchari* (Spreng.) Hjortstam  
(Bao et al. 2006)
149. *Hericium coralloides* (Scop.) Pers.
150. *Hericium erinaceus* (Bull.) Pers.
151. *Hydnellum aurantiacum* (Batsch) P. Karst.
152. *Hydnellum ferrugineum* (Fr.) P. Karst.
153. *Hydnellum suaveolens* (Scop.) P. Karst.
154. *Hydnochaete duportii* Pat. (Dai and Niemelä 2006)
155. *Hydnochaete japonica* Lloyd
156. *Hydnochaete olivacea* (Schwein.) Banker
157. *Hydnochaete paucisetigera* Parmasto &  
Sheng H. Wu (Parmasto and Wu 2005;  
Dai and Li 2010)
158. *Hydnochaete tabacina* (Berk. & M.A. Curtis ex Fr.)  
Ryvarde (Yuan et al. 2006)
159. *Hydnochaete tabacinoides* (Yasuda) Imazeki
160. *Hydnum fimbriatoincisum* Teng
161. *Hydnum repandum* L.
162. *Hydnum rufescens* Pers.
163. *Hydnum velutinum* Fr.
164. *Hymenochaete adusta* (Lév.) Har. & Pat.
165. *Hymenochaete anomala* Burt (He 2010)
166. *Hymenochaete attenuata* (Lév.) Lév. (He 2010)
167. *Hymenochaete cacao* (Berk.) Berk. & M.A. Curtis
168. *Hymenochaete cinnamomea* (Pers.) Bres.
169. *Hymenochaete corrugata* (Fr.) Lév.
170. *Hymenochaete cruenta* (Pers.) Donk
171. *Hymenochaete dissimilis* G. Cunn.
172. *Hymenochaete epichlora* (Berk. & M.A. Curtis)  
Cooke
173. *Hymenochaete episphaeria* (Schwein.) Cooke
174. *Hymenochaete floridea* Berk. & Broome  
(Zhang and Dai 2005)
175. *Hymenochaete fuliginosa* (Pers.) Lév.
176. *Hymenochaete innexa* G. Cunn. (He 2010)
177. *Hymenochaete intricata* (Lloyd) S. Ito
178. *Hymenochaete leonina* Berk. & M.A. Curtis
179. *Hymenochaete luteobadia* (Fr.) Höhn. & Litsch.
180. *Hymenochaete macrospora* Y.C. Dai
181. *Hymenochaete magnahypha* G. Cunn.  
(Parmasto 2005)
182. *Hymenochaete minuscula* G. Cunn. (He 2010)
183. *Hymenochaete murashkinskyi* Pilát
184. *Hymenochaete murina* Bres. (He 2010)
185. *Hymenochaete muroiana* I. Hino & Katum.  
(He 2010)
186. *Hymenochaete nothofagicola* Parmasto  
(= *H. attenuata*, Zhang and Dai 2005)
187. *Hymenochaete ochromarginata* P.H.B. Talbot  
(Dai and Wu 2010)
188. *Hymenochaete pinnatifida* Burt
189. *Hymenochaete pseudoadusta* J.C. Léger & Lanq.  
(Zhang and Dai 2005)
190. *Hymenochaete rhabarbarina* (Berk.) Cooke
191. *Hymenochaete rheicolor* (Mont.) Lév.
192. *Hymenochaete rigidula* Berk. & M.A. Curtis
193. *Hymenochaete rubiginosa* (Dicks.) Lév.
194. *Hymenochaete semistupposa* Petch
195. *Hymenochaete separabilis* J.C. Léger (He 2010)
196. *Hymenochaete sphaericola* Lloyd
197. *Hymenochaete subferruginea* Bres. & Syd.  
(Zhang and Dai 2005)
198. *Hymenochaete tabacina* (Sowerby) Lév.
199. *Hymenochaete tongbiguanensis* T. X. Zhou &  
L.Z. Zhao (Zhang and Dai 2005)
200. *Hymenochaete unicolor* Berk. & M.A. Curtis
201. *Hymenochaete villosa* (Lév.) Bres.
202. *Hymenochaete yasudae* Imazeki
203. *Hyphoderma acystidiatum* Sheng H. Wu (Wu 1997)
204. *Hyphoderma allantosporum* Sheng H. Wu (Wu 1990)
205. *Hyphoderma amoenum* (Burt) Donk
206. *Hyphoderma argillaceum* (Bres.) Donk



207. *Hyphoderma clavatum* Sheng H. Wu  
 208. *Hyphoderma cremeoalbum* (Höhn. & Litsch.) Jülich  
 209. *Hyphoderma cylindrocystidiatum* Boidin & Gilles  
 210. *Hyphoderma griseoflavescens* (Litsch.) Jülich  
 211. *Hyphoderma litschaueri* (Burt) J. Erikss. & Å. Strid (Wu 1990)  
 212. *Hyphoderma medioburiense* (Burt) Donk  
 213. *Hyphoderma microcystidium* Sheng H. Wu (Wu 1990)  
 214. *Hyphoderma mirabile* (Parmasto) Jülich  
 215. *Hyphoderma mutatum* (Peck) Donk  
 216. *Hyphoderma obtusifforme* J. Erikss. & Å. Strid  
 217. *Hyphoderma pallidum* (Bres.) Donk  
 218. *Hyphoderma praetermissum* (P. Karst) J. Erikss. & Å. Strid  
 219. *Hyphoderma puberum* (Fr.) Wallr.  
 220. *Hyphoderma rude* (Bres.) Hjortstam & Ryvarden  
 221. *Hyphoderma setigerum* (Fr.) Donk  
 222. *Hyphoderma sibiricum* (Parmasto) J. Erikss. & Å. Strid  
 223. *Hyphoderma subdefinitum* J. Erikss. & Å. Strid  
 224. *Hyphoderma subpraetermissum* Sheng H. Wu  
 225. *Hyphoderma transiens* (Bres.) Parmasto  
 226. *Hyphoderma variolosum* Boidin et al. (Wu 2008)  
 227. *Hyphodermella corrugata* (Fr.) J. Erikss. & Ryvarden  
 228. *Hyphodontia abieticola* (Bourdot & Galzin) J. Erikss. (Xiong and Dai 2008c)  
 229. *Hyphodontia alba* Sheng H. Wu  
 230. *Hyphodontia altaica* Parmasto  
 231. *Hyphodontia alutaria* (Burt) J. Erikss.  
 232. *Hyphodontia arguta* (Fr.) J. Erikss.  
 233. *Hyphodontia aspera* (Fr.) J. Erikss.  
 234. *Hyphodontia barba-jovis* (Bull.) J. Erikss.  
 235. *Hyphodontia boninense* (S. Ito & S. Imai) N. Maek.  
 236. *Hyphodontia breviseta* (P. Karst.) J. Erikss.  
 237. *Hyphodontia capitatocystidiata* H.X. Xiong, Y.C. Dai & Sheng H. Wu (Xiong et al. 2009)  
 238. *Hyphodontia crassa* Sang H. Lin & Z.C. Chen  
 239. *Hyphodontia crustosa* (Pers.) J. Erikss.  
 240. *Hyphodontia curvispora* J. Erikss. & Hjortstam (Xiong et al. 2007b)  
 241. *Hyphodontia fimbriata* Sheng H. Wu  
 242. *Hyphodontia flavipora* (Berk. & M.A. Curtis ex Cooke) Sheng H. Wu (Xiong et al. 2007b)  
 243. *Hyphodontia floccosa* (Bourdot & Galzin) J. Erikss.  
 244. *Hyphodontia formosana* Sheng H. Wu & Burds. (Wu 1990)  
 245. *Hyphodontia granulosa* (Pers.) Ginns & M.N.L. Lefebvre  
 246. *Hyphodontia hastata* (Litsch.) J. Erikss.  
 247. *Hyphodontia heterocystidiata* H.X. Xiong et al. (Xiong et al. 2009)  
 248. *Hyphodontia lanata* Burds. & Nakasone (Dai and Xiong 2010)  
 249. *Hyphodontia latitans* (Bourdot & Galzin) Ginns & M.N.L. Lefebvre (Dai and Xiong 2010)  
 250. *Hyphodontia nespori* (Bres.) J. Erikss. & Hjortstam  
 251. *Hyphodontia niemelaei* Sheng H. Wu  
 252. *Hyphodontia nongravis* (Lloyd) Sheng H. Wu  
 253. *Hyphodontia ovispora* (Corner) T. Hatt. (Wu 2008)  
 254. *Hyphodontia pallidula* (Bres.) J. Erikss.  
 255. *Hyphodontia paradoxa* (Schrad.) Langer & Vesterh. (Dai and Xiong 2010)  
 256. *Hyphodontia pelliculae* (H. Furuk.) N. Maek.  
 257. *Hyphodontia poroideoefibulata* Sheng H. Wu (Wu 2001)  
 258. *Hyphodontia pruni* (Lasch) Svrček  
 259. *Hyphodontia radula* (Pers.) Langer & Vesterh. (Xiong et al. 2007b)  
 260. *Hyphodontia rimosissima* (Peck) Gilb.  
 261. *Hyphodontia sambuci* (Pers.) J. Erikss.  
 262. *Hyphodontia septocystidiata* H.X. Xiong, Y.C. Dai & Sheng H. Wu (Xiong et al. 2010)  
 263. *Hyphodontia sinensis* H.X. Xiong, Y.C. Dai & Sheng H. Wu (Xiong et al. 2010)  
 264. *Hyphodontia spathulata* (Schrad.) Parmasto  
 265. *Hyphodontia subalutacea* (P. Karst.) J. Erikss.  
 266. *Hyphodontia subglobosa* Sheng H. Wu (Wu 1990; Dai and Xiong 2010)  
 267. *Hyphodontia subpallidula* H.X. Xiong, Y.C. Dai & Sheng H. Wu (Xiong et al. 2009)  
 268. *Hyphodontia syringae* Langer  
 269. *Hyphodontia taiwaniana* Sheng H. Wu (Dai and Wu 2010)  
 270. *Hyphodontia tropica* Sheng H. Wu (Xiong et al. 2007b)  
 271. *Hyphodontia tubuliformis* Sheng H. Wu (Wu 2006; Dai and Xiong 2010)  
 272. *Hypochnicium cremeoisabellinum* (Litsch.) Hjortstam (Xiong and Dai 2008a)  
 273. *Hypochnicium analogum* (Bourdot & Galzin) J. Erikss.  
 274. *Hypochnicium caucasicum* Parmasto (Xiong and Dai 2009a)  
 275. *Hypochnicium erikssonii* Hallenb. & Hjortstam (Wu 2008)  
 276. *Hypochnicium geogenium* (Bres.) J. Erikss.  
 277. *Hypochnicium globosum* Sheng H. Wu  
 278. *Hypochnicium polonense* (Bres.) Å. Strid  
 279. *Hypochnicium punctulatum* (Cooke) J. Erikss.  
 280. *Intextomyces contiguus* (P. Karst.) J. Erikss. & Ryvarden  
 281. *Irpex hydnoides* Y.W. Lim & H.S. Jung (Dai and Xiong 2008)  
 282. *Irpex lacteus* (Fr.) Fr. (Dai and Xiong 2008)

283. *Irpex vellereus* Berk. & Broome  
(Dai and Xiong 2008)
284. *Irpicodon pendulus* (Alb. & Schwein.) Pouzar
285. *Jaapia ochroleuca* (Bres.) Nannf. & J. Erikss.
286. *Jacksonomyces furfurellus* (Bres.) Sheng H. Wu & Z.C. Chen (Xiong and Dai 2009a)
287. *Kavinia alboviridis* (Morgan) Gilb. & Budington
288. *Laurilia sulcata* (Burt) Pouzar
289. *Laxitextum bicolor* (Pers.) Lentz
290. *Leptosporomyces fuscostratus* (Burt) Hjortstam
291. *Leptosporomyces galzinii* (Bourdot) Jülich
292. *Leptosporomyces mutabilis* (Bres.) Krieglst.
293. *Leptosporomyces ovoideus* Jülich
294. *Leptosporomyces raunkiaeri* (M.P. Christ.) Jülich
295. *Leptosporomyces roseus* Jülich
296. *Leucogyrophana mollusca* (Fr.) Pouzar  
(= *L. pseudomollusca* (Parmasto) Parmasto, Zhou et al. 2007)
297. *Licrostroma subgiganteum* (Berk.) P.A. Lemke  
(Wu 2008)
298. *Lindtneria chordulata* (D. P. Rogers) Hjortstam
299. *Litschauerella gladiola* (G. Cunn.) Stalpers & P.K. Buchanan
300. *Lobulicium occultum* K.H. Larss. & Hjortstam
301. *Lopharia ayresii* (Berk. ex Cooke) Hjortstam  
(Wu 2008)
302. *Lopharia cinerascens* (Schwein.) G. Cunn.
303. *Lopharia mirabilis* (Berk. & Broome) Pat.
304. *Lopharia papyracea* (Jungh.) D.A. Reid
305. *Megalocystidium luridum* (Bres.) Jülich
306. *Melzericium udicola* (Bourdot) Hauerslev
307. *Meruliopsis corium* (Pers.) Ginns
308. *Mucronella bresadolae* (Quél.) Corner  
(Xiong and Dai 2008a)
309. *Mucronella calva* (Alb. & Schwein.)  
Fr. (Yuan et al. 2009)
310. *Mycoacia subconspersa* (Rick) Hjortstam & Ryvarde (Xiong and Dai 2008b)
311. *Mycoleptonoides aitchisonii* (Berk.) Maas Geest.
312. *Mycoleptonoides tropicalis* H.S. Yuan & Y.C. Dai (Yuan and Dai 2009b)
313. *Mycoleptonoides vassiljevae* Nikol.
314. *Mycorrhaphium adustum* (Schwein.) Maas Geest.  
(Dai and Xiong 2010)
315. *Mycorrhaphium sessile* H.S. Yuan & Y.C. Dai (Yuan and Dai 2009a)
316. *Peniophora cinerea* (Pers.) Cooke
317. *Peniophora incarnata* (Pers.) P. Karst.
318. *Peniophora isabellina* Burt
319. *Peniophora manshurica* Parmasto
320. *Peniophora nuda* (Fr.) Bres.
321. *Peniophora pithya* (Pers.) J. Erikss.
322. *Peniophora polygonia* (Pers.) Bourdot & Galzin
323. *Peniophora rufa* (Per.) Boidin
324. *Peniophora violaceolivida* (Sommerf.) Massee
325. *Phanerochaete aculeata* Hallenb. (Wu 1990)
326. *Phanerochaete affinis* (Burt) Parmasto
327. *Phanerochaete australis* Jülich  
(Xiong and Dai 2009b)
328. *Phanerochaete burtii* (Romell ex Burt) Parmasto
329. *Phanerochaete calotricha* (P. Karst.) J. Erikss. & Ryvarde (Xiong and Dai 2009b)
330. *Phanerochaete capitata* Sheng H. Wu (Wu 1998)
331. *Phanerochaete carnososa* (Burt) Parmasto (Xiong and Dai 2009b)
332. *Phanerochaete chrysorhiza* (Torr.) Budington & Gilb.
333. *Phanerochaete crassa* (Lév.) Burds.
334. *Phanerochaete deflectens* (P. Karst.) Hjortstam
335. *Phanerochaete filamentosa* (Berk. & M.A. Curtis.)  
Burds.
336. *Phanerochaete flavidoalba* (Cooke) S.S. Rattan
337. *Phanerochaete galactites* (Bourdot & Galzin)  
J. Erikss. & Ryvarde
338. *Phanerochaete laevis* (Fr.) J. Erikss. & Ryvarde
339. *Phanerochaete leptoderma* Sheng H. Wu  
(Xiong and Dai 2009b)
340. *Phanerochaete martelliana* (Bres.) J. Erikss. & Ryvarde
341. *Phanerochaete ravenelii* (Cooke) Burds.
342. *Phanerochaete rubescens* Sheng H. Wu (Xiong and Dai 2009b)
343. *Phanerochaete sanguinea* (Fr.) Pouzar
344. *Phanerochaete sordida* (P. Karst.) J. Erikss. & Ryvarde
345. *Phanerochaete stereoides* Sheng H. Wu (Xiong and Dai 2009b)
346. *Phanerochaete tropica* (Sheng H. Wu)  
Hjortstam (Xiong and Dai 2009b)
347. *Phanerochaete velutina* (DC.) Parmasto
348. *Phanerochaete viticola* (Schwein.) Parmasto
349. *Phellodon confluens* (Pers.) Pouzar
350. *Phellodon niger* (Fr.) P. Karst.
351. *Phellodon tomentosus* (L.) Banker
352. *Phlebia acerina* Peck
353. *Phlebia albida* Fr.
354. *Phlebia aurea* (Fr.) Nakasone
355. *Phlebia centrifuga* P. Karst. (Xiong and Dai 2008b)
356. *Phlebia chrysocreas* (Berk. & M.A. Curtis) Burds.
357. *Phlebia fuscoatra* (Fr.) Nakasone
358. *Phlebia gigantea* (Fr.) Donk
359. *Phlebia heterocystidia* Sheng H. Wu
360. *Phlebia lilascens* (Bourdot) J. Erikss. & Hjortstam
361. *Phlebia livida* (Pers.) Bres.
362. *Phlebia pellucida* Hjortstam & Ryvarde
363. *Phlebia radiata* Fr.

364. *Phlebia rufa* (Pers.) M.P. Christ.  
 365. *Phlebia tremellosa* (Schrad.) Nakasone & Burds.  
 366. *Phlebia vassilkovii* Parmasto  
 367. *Phlebiella allantospora* (Oberw.) K.H. Larss. & Hjortstam  
 368. *Phlebiella grisella* (Bourdot) K.H. Larss. & Hjortstam  
 369. *Phlebiella insperata* (H.S. Jacks.) Ginns & M.N.L. Lefebvre  
 370. *Phlebiella sulphurea* (Pers.) Ginns & M.N.L. Lefebvre  
 371. *Phlebiella tulasnelloidea* (Höhn. & Litsch.) Ginns & M.N.L. Lefebvre  
 372. *Phlebiopsis afibulata* (G. Cunn.) Stalpers  
 373. *Piloderma byssinum* (P. Karst.) Jülich  
 374. *Piloderma fallax* (Lib.) Stalpers  
 375. *Piloderma lanatum* (Jülich) J. Erikss. & Hjortstam  
 376. *Plicatura crispa* (Pers.) Rea  
 377. *Plicatura nivea* (Sommerf.) P. Karst.  
 378. *Podoscypha caespitosa* (Burt) Boidin  
 379. *Podoscypha elegans* (G. Mey.) Pat.  
 380. *Podoscypha glabrescens* (Berk. & M.A. Curtis) Boidin  
 381. *Podoscypha involuta* (Klotzsch) Imazeki  
 382. *Podoscypha mellissii* (Berk. ex Sacc.) Bres.  
 383. *Podoscypha nitidula* (Berk.) Pat.  
 384. *Podoscypha philippinensis* D.A. Reid  
 385. *Podoscypha venustula* (Speg.) D.A. Reid  
 386. *Porostereum papyrinum* (Mont.) Hjortstam & Ryvarde  
 387. *Porostereum spadiceum* (Pers.) Hjortstam & Ryvarde  
 388. *Pseudohydnum gelatinosum* (Scop.) P. Karst.  
 389. *Pseudolagarobasidium calcareum* (Cooke & Masee) Sheng H. Wu (Zhou et al. 2009a)  
 390. *Pseudomerulius aureus* (Fr.) Jülich  
 391. *Pseudotomentella flavovirens* (Höhn. & Litsch.) Svrček (Xiong et al. 2007a)  
 392. *Pulcherricium caeruleum* (Lam.) Parmasto  
 393. *Punctularia strigosozonata* (Schwein.) P.H.B. Talbot  
 394. *Radulodon licentii* (Pilát) Ryvarde  
 395. *Radulomyces confluens* (Fr.) M. P. Christ.  
 396. *Radulomyces copelandii* (Pat.) Hjortstam & Spooner  
 397. *Rectipilus fasciculatus* (Pers.) Agerer (Wei and Dai 2004)  
 398. *Repetobasidium erikssonii* Oberw.  
 399. *Resinicium bicolor* (Alb. & Schwein.) Parmasto  
 400. *Resinicium furfuraceum* (Bres.) Parmasto  
 401. *Resinicium granulare* (Burt) Sheng H. Wu (Wu 1990; Dai and Xiong 2010)  
 402. *Resinicium pinicola* (J. Erikss.) J. Erikss. & Hjortstam (Dai and Xiong 2010)  
 403. *Sarcodon amarescens* (Quél.) Quél.  
 404. *Sarcodon atroviridis* (Morgan) Banker  
 405. *Sarcodon fuligineoviolaceus* (Kalchbr.) Pat.  
 406. *Sarcodon imbricatus* (L.) P. Karst.  
 407. *Sarcodon thwaitesii* (Berk. & Broome) Maas Geest.  
 408. *Scopuloides hydnoides* (Cooke & Masee) Hjortstam & Ryvarde  
 409. *Scytinostroma duriusculum* (Berk. & Broome) Donk  
 410. *Scytinostroma galactinum* (Fr.) Donk  
 411. *Scytinostroma ochroleucum* (Bres. & Torrend) Donk  
 412. *Scytinostroma odoratum* (Fr.) Donk (Wu 2008)  
 413. *Scytinostroma portentosum* (Berk. & M.A. Curtis) Donk  
 414. *Serpula himantioides* (Fr.) P. Karst.  
 415. *Serpula lacrymans* (Wulfen) J. Schröt.  
 416. *Serpula similis* (Berk. & Broome) Ginns  
 417. *Sistotrema athelioides* Hallenb.  
 418. *Sistotrema brinkmannii* (Bres.) J. Erikss.  
 419. *Sistotrema confluens* Pers.  
 420. *Sistotrema coronilla* (Höhn.& Litsch,) Donk ex D.P. Rogers  
 421. *Sistotrema estonicum* Parmasto  
 422. *Sistotrema microsporum* N. Maek.  
 423. *Sistotrema oblongisporum* M.P. Christ. & Hauerslev  
 424. *Sistotremastrum niveocreum* (Höhn. & Litsch.) J. Erikss.  
 425. *Sistotremastrum suecicum* Litsch. ex J. Erikss.  
 426. *Sistotremella perpusilla* Hjortstam  
 427. *Sparassis crispa* (Wulfen) Fr.  
 428. *Sparassis latifolia* Y.C. Dai & Zheng Wang (Dai et al. 2006)  
 429. *Sphaerobasidium minutum* (J. Erikss.) Oberw. ex Jülich  
 430. *Stecchericium seriatum* (Lloyd) Maas Geest. (Yuan and Dai 2008)  
 431. *Steccherinum aggregatum* Hjortstam & Spooner (Yuan and Dai 2005b)  
 432. *Steccherinum fimbriatum* (Pers.) J. Erikss.  
 433. *Steccherinum helvolum* (Zipp. ex Lév.) S. Ito  
 434. *Steccherinum hydneum* Rick ex Maas Geest. (Yuan and Dai 2005b)  
 435. *Steccherinum laeticolor* (Berk. & M.A. Curtis.) Banker  
 436. *Steccherinum mukhinii* Kortir. & Y.C. Dai  
 437. *Steccherinum murashkinskyi* (Burt) Maas Geest.  
 438. *Steccherinum ochraceum* (Pers.) Gray  
 439. *Steccherinum queletii* (Bourdot & Galzin) Hallenb. & Hjortstam  
 440. *Steccherinum rawakense* (Pers.) Banker  
 441. *Steccherinum subglobosum* H.S. Yuan & Y.C. Dai (Yuan and Dai 2005a)  
 442. *Steccherinum subulatum* H.S. Yuan & Y.C. Dai (Yuan and Dai 2005a)

443. *Stereopsis burtiana* (Peck) D.A. Reid  
 444. *Stereopsis crassipileata* Z.T. Guo (Guo 1987)  
 445. *Stereopsis gracilistipitata* Z.T. Guo (Guo 1987)  
 446. *Stereopsis hiscens* (Berk. & Ravenel) D.A. Reid  
 447. *Stereopsis pseudocupulata* Z.T. Guo (Guo 1987)  
 448. *Stereopsis vitellina* (Plowr.) D.A. Reid  
 449. *Stereum complicatum* (Fr.) Fr.  
 450. *Stereum durum* Lloyd  
 451. *Stereum gausapatum* (Fr.) Fr.  
 452. *Stereum hirsutum* (Willd.) Pers.  
 453. *Stereum insigne* Bres.  
 454. **\*\*Stereum lithocarpi** Y.C. Dai  
 455. *Stereum ostrea* (Blume & T. Nees) Fr.  
 456. *Stereum pekinense* Imazeki  
 457. *Stereum rugosum* Pers.  
 458. *Stereum sanguinolentum* (Alb. & Schwein.) Fr.  
 459. *Stereum subtomentosum* Pouzar  
 460. *Stereum vellereum* Berk.  
 461. *Stromatoscypha fimbriata* (Pers.) Donk (Dai 2000)  
 462. *Subulicystidium longisporum* (Pat.) Parmasto  
 463. *Subulicystidium perlongisporum* Boidin & Gilles  
 464. *Suillosporium cystidiatum* (D.P. Rogers) Pouzar  
 465. **\*Thanatephorus fusisporus** (J. Schröt.) Hauerslev & P. Roberts  
 466. *Thelephora amboinensis* Lév.  
 467. *Thelephora anthocephala* (Bull.) Fr.  
 468. *Thelephora caryophyllea* (Schaeff.) Pers. (Qin and Dai 2009)  
 469. *Thelephora mollissima* Pers.  
 470. *Thelephora multipartita* Schwein.  
 471. *Thelephora penicillata* (Pers.) Fr.  
 472. *Thelephora radiata* Fr.  
 473. *Thelephora soluta* (Ces.) Lloyd  
 474. *Thelephora terrestris* Ehrh.  
 475. *Thelephora vialis* Schwein.  
 476. *Theleporus calcicolor* (Sacc. & P. Syd.) Ryvarden (Dai et al. 2007)  
 477. *Tomentella cinerascens* (P. Karst.) Höhn. & Litsch.  
 478. *Tomentella crinalis* (Fr.) M.J. Larsen  
 479. *Trechispora alnicola* (Bourdot & Galzin) Liberta  
 480. *Trechispora cohaerens* (Schwein.) Jülich & Stalpers  
 481. *Trechispora farinacea* (Pers.) Liberta  
 482. *Trechispora microspora* (P. Karst.) Liberta  
 483. *Trechispora nivea* (Pers.) K.H. Larss. (Yu et al. 2006)  
 484. *Trechispora polygonospora* Ryvarden  
 485. *Trechispora subsphaerospora* (Litsch.) Liberta  
 486. *Tubulicium raphidisporum* (Boidin & Gilles) Oberw.  
 487. *Tubulicium vermiferum* (Bourdot) Oberw. ex Jülich  
 488. *Tubulicrinis calothrix* (Pat.) Donk  
 489. *Tubulicrinis chaetophorus* (Höhn.) Donk  
 490. *Tubulicrinis cinctus* G.Cunn.  
 491. *Tubulicrinis gracillimus* (D.P. Rogers & H.S. Jacks.) G. Cunn.  
 492. *Tubulicrinis sceptrifer* (H.S. Jacks. & Weresub) Donk  
 493. *Tubulicrinis subulatus* (Bourdot & Galzin) Donk  
 494. *Tylospora asterophora* (Bonord.) Donk  
 495. *Vararia investiens* (Schwein.) P. Karst.  
 496. *Vararia racemosa* (Burt) D.P. Rogers & H.S. Jacks.  
 497. *Veluticeps abietina* (Pers.) Hjortstam & Tellería  
 498. *Vuilleminia coryli* Boidin, Lanq. & Gilles  
 499. *Xenasma pruinatum* (Pat.) Donk  
 500. *Xenasma rimicola* (P. Karst.) Donk  
 501. *Xylobolus annosus* (Berk. & Broome) Boidin  
 502. *Xylobolus frustulatus* (Pers.) Boidin  
 503. *Xylobolus illudens* (Berk.) Boidin  
 504. *Xylobolus princeps* (Jungh.) Boidin  
 505. *Xylobolus spectabilis* (Klotzsch) Boidin  
 506. *Xylobolus subpileatus* (Berk. & M.A. Curtis) Boidin

## Description

### *Stereum lithocarpi* Y.C. Dai, sp. nov.

Fig. 1

MycoBank no.: MB 18714

Carpophorum annuum, pileatum, imbricatum. Superficies pilei tomentosa, roseo-bubalina vel mellea. Facies hymenii lutea vel roseo-bubalina. Systema hypharum monomiticum, hyphae septatae sine fibulis, IKI–, CB+, hyphae contextus 3.5–6 µm in diametro. Pseudocystidia frequentia, cylindrica. Sporae ellipsoideae, IKI+, CB–, 5.1–6.7 × 3–4 µm.

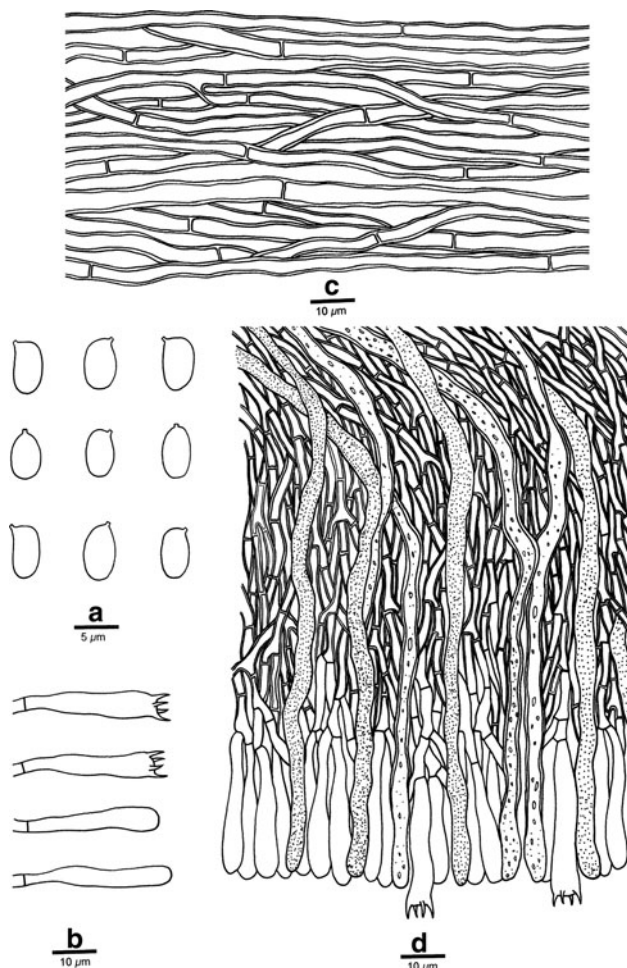
Type: China. Yunnan Prov., Chuxiong County, Zixishan Nat. Res., on fallen trunk of *Lithocarpus*, 4.XI.2006 Dai 8017 (IFP).

Etymology: *Lithocarpi* (Lat.): referring to the host tree of *Lithocarpus*.

Basidiocarps annual, distinctly pileate, fused laterally to adjacent ones, and densely imbricate, leathery tough when fresh, hard corky when dry, pilei dimidiate to fan-shaped, projecting up to 6, 10 cm wide, and 2 mm thick at base; margin sharp, wavy. Upper surface pale pinkish buff, cinnamon-buff to ochraceous when dry, indistinctly concentrically zonate, hirsute to tomentose. Hymenial surface smooth, pale yellowish when fresh, not bleeding when bruised or cut, pinkish buff when dry. Context cream to pinkish buff when dry, duplex, separated from the tomentum by a thin dark brown zone, tomentum up to up to 0.2 mm.

Hyphal system monomitic, generative hyphae without clamp connections, IKI–, CB+, tissue unchanged in KOH. Contextual hyphae of two kinds, hyphae in tomentum hyaline to pale yellowish, distinctly thick-walled with a





**Fig. 1** Microscopic structures of *Stereum lithocarpi* Y.C. Dai (drawn from the holotype). **a** Basidiospores. **b** Basidia and basidioles. **c** Hyphae from context. **d** A section from hymenophore

narrow lumen, unbranched, rarely septate, flexuous, inner wall become swollen in KOH, almost subsolid, 4–6 µm in diameter; hyphae in context pale yellowish, fairly thick-walled to distinctly thick-walled with a wide lumen, rarely branched, frequently septate, more or less straight, 3.5–6 µm in diameter. Hyphae in hymenium hyaline, thin-walled, frequently branched and septate, flexuous, 1.5–3 µm in diameter; Pseudocystidia abundant, cylindrical with obtuse apex, arising from context, hyaline to very pale yellowish, thick-walled except for the apical part, thick-walled part with a wide lumen, not or rarely projecting above the basidia, in the tip part filled with an oily content, more than 100 µm long, 4–8 µm in diameter; basidia clavate, with a basal septum and four sterigmata, 31–38 × 5–7 µm ( $n = 14/1$ ); basidioles mostly clavate, slightly smaller than basidia. Basidiospores ellipsoid, hyaline, thin-walled,

smooth, IKI+, CB–, (5–)5.1–6.7(–7) × (2.9–)3–4(–4.1) µm,  $L = 5.77$  µm,  $W = 3.47$  µm,  $Q = 1.66$  ( $n = 30/1$ ).

*Stereum lithocarpi* is similar to *S. gausapatum* (Fr.) Fr. in macro-morphology, but the latter has acutocystidia, and its hymenium become red when bruised. Most species of *Stereum* Hill ex Pers. have cylindrical spores (Eriksson et al. 1984), and the new species differs from other species in the genus by its ellipsoid spores, a monomitic hyphal structure and abundant pseudocystidia. *Stereum thindii* A.B. De has ellipsoid spores, but its spores are narrower (4.8–5.6 × 2–2.8 µm, De 1998) and its hyphal system is dimitic with skeletocystidia.

***Dichostereum boreale*** (Pouzar) Ginns  
& M.N.L. Lefebvre

Basidiocarps annual, resupinate, inseparable, membranous, very thin. Hymenophore smooth to tuberculate, clay; margin thinning out, fimbriate.

Hyphal system dimitic; generative hyphae with clamp connections; dichohyphidia dextrinoid, CB+; tissue unchanged in KOH. Subicular generative hyphae hyaline, thin-walled, frequently branched, 2–3 µm in diameter; dichohyphidia hyaline, thick-walled, 3–6 µm in diameter, dichohyphidia with short, thick, conical terminal branches, up to 5 µm in diameter. Dichohyphidia and generative hyphae present in the hymenium; cystidia numerous, cylindrical, hyaline, thin-walled, with grainy contents, 15–35(–60) × 4–6 µm; basidia narrowly clavate, with a basal clamp and four sterigmata, 30–40 × 4–6 µm. Basidiospores ellipsoid, hyaline, thin-walled, warted, IKI+, CB–, (4.7–)4.9–5.8(–6) × (3.3–)4.1 µm,  $L = 5.2$  µm,  $W = 3.8$  µm,  $Q = 1.37$  (30/1).

*Specimen examined.* China. Jilin Prov., Antu County, Changbaishan Nature Reserve, on fallen angiosperm trunk, 7.X.2009 Dai 11363.

***Thanatephorus fusisporus*** (J. Schröt.) Hauerlev  
& P. Roberts

Basidiocarps annual, resupinate, very thin, hyphochneid or membranaceous. Hymenophore smooth, greyish white, sometimes with olivaceous tinge; margin indeterminate.

Hyphal system monomitic; generative hyphae without clamp connections, IKI–, CB+; all tissue unchanged in KOH. Subicular hyphae hyaline, thin- to slightly thick-walled, frequently branched, interwoven, 5.5–10.3 µm in diameter. Subhymenial hyphae hyaline, thin-walled, frequently branched and septate, interwoven, 5–9 µm in diameter. Cystidia absent; basidia short cylindrical, with a basal simple septum and four sterigmata, 16–23 × 8–9 µm. Basidiospores citri-form to fusoid, hyaline, thin-walled, smooth, sometimes producing secondary spores by replication, IKI–, CB+,

(10–)10.2–16.2(–17.4) × (5.4–)5.5–7(–8) μm,  $L = 13.43$  μm,  $W = 6.50$  μm,  $Q = 2.27$  ( $n = 30/1$ ).

*Specimen examined.* China. Jilin Prov., Antu County, Changbaishan Nature Reserve, on fallen angiosperm branch, 7.X.2009 *Dai 11366*.

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