

## Lignocellulolytic *Agaricomycetes* from the Brazilian Cerrado biome

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**Abstract** — A checklist of the *Agaricomycetes* from the Brazilian Cerrado region is provided. It presents data on the distribution of 95 species, 23 families and 11 orders (*Agaricales*, *Atheliales*, *Auriculariales*, *Boletales*, *Corticiales*, *Gloeophyllales*, *Hymenochaetales*, *Polyporales*, *Russulales*, *Sebacinales*, and *Thelephorales*). Twenty-six taxa previously recorded from the studied region are excluded from the final list. The full checklist is available at [www.mycotaxon.com/resources/weblists.html](http://www.mycotaxon.com/resources/weblists.html).

**Key words:** *Basidiomycetes*, diversity, macrofungi

### Introduction

*Agaricomycetes* comprises almost 21,000 species spread in 17 orders of *Basidiomycota* (Kirk et al. 2008) and includes wood-decomposing, parasitic, and ectomycorrhizal fungi (Hibbett 2006).

The biome Cerrado is considered as one of the 25 biodiversity hotspots in the world (Myers et al. 2000), with around 55% of it estimated to be lost with deforestation, mostly for agricultural purposes (Machado et al. 2004). It presently covers around 2,000,000 km<sup>2</sup> through eight of the 26 Brazilian States plus the Federal District (Fig. 1); 70% of the Cerrado is covered by savannahs of different densities and the rest mostly by an herbaceous layer composed by grasses (Rodrigues 2005, Franco 2005). The rainy season is from October to April, with short dry periods in January and February; the annual precipitation varies from 1,200 to 2,000 mm, and the mean temperature is around 22°C (Braga-Júnior & Domingues 2008).

Several studies about fungi have been recently carried out in this biome (Inácio & Dianese 2006, Dornelo-Silva et al. 2007, Hernández-Gutiérrez & Dianese 2008, 2009, Jungbluth et al. 2008, Pereira-Carvalho et al. 2009), but few about *Agaricomycetes* (Baseia & Milanez 2001a,b, 2002a,b, 2003, Baseia 2005, Baseia et al. 2007).

During the last Latin-American Mycology Congress (VI CLAM, 2008), a group of Latin-American researchers on the diversity of the aphyllorhaceous fungi was created and was committed to publish checklists of this fungal group for areas or countries in Latin America. Following this commitment, they are now providing new checklists (Baltazar & Gibertoni 2009, Drechsler-Santos et al. 2009, Gomes-Silva & Gibertoni

2009), and also contributing to the knowledge about the diversity of *Agaricomycetes* in endangered biomes in Brazil.



**Figure 1.** Cerrado biome in shadowed area (modified from: [www.colegiosaofrancisco.com.br](http://www.colegiosaofrancisco.com.br))

### **Material and methods**

This study was based on bibliographic research (Sampaio 1916, with data of material collected in the State of Mato Grosso - unfortunately without indication of voucher specimens, Fidalgo et al. 1965, Bononi 1984, Gugliotta 1997, Baseia & Milanez 2001ab, 2002a-b, 2003, Baseia 2005, Baseia et al. 2007, in the State of São Paulo). Nomenclature and classification systems follow those of Kirk et al. (2008), Index Fungorum ([www.indexfungorum.org](http://www.indexfungorum.org)), Centraalbureau voor Schimmelcultures ([www.cbs.knaw.nl](http://www.cbs.knaw.nl)), and CORTBASE (<http://andromeda.botinst.gu.se/cortbase.html>).

### **Results and discussion**

The 95 species of *Agaricomycetes* reported from the Brazilian Cerrado represent 23 families and 11 orders (*Agaricales*, *Atheliales*, *Auriculariales*,

*Boletales*, *Corticiales*, *Gloeophyllales*, *Hymenochaetales*, *Polyporales*, *Russulales*, *Sebacinales*, and *Thelephorales*). *Polyporales* is represented by 53(57.7%) species and six families. The higher diversity of *Polyporales* agrees with results of other basidiomycete inventories in different Brazilian regions and biomes (Baltazar & Gibertoni 2009, Drechsler-Santos et al. 2009, Gomes-Silva & Gibertoni 2009), which was expected for one of the largest groups in *Agaricomycetes*. In this study *Polyporaceae* Fr. ex Corda has the highest number of species (34, Or 35.7% of the total), followed by *Hymenochaetaceae* Imazeki & Toki (14). Twenty-six species were excluded due to their temperate to boreal or restricted distribution or undefined nomenclature (Index Fungorum, Centraalbureau voor Schimmelcultures, and Cortbase), and their exsiccata should be revised. Up to now, the 95 species of this checklist represent our current knowledge about the diversity of *Agaricomycetes* in the Brazilian Cerrado biome. Further investigations, however, will certainly increase the number of fungal records and expand the reported species ranges throughout this endangered area.

**Checklist for the *Agaricomycetes* species from Brazilian Cerrado region:**

**AGARICALES**

***Agaricaceae*** Chevall.

*Crucibulum laeve* (Huds.) Kambly

Ref.: Baseia & Milanez (2001a): SP307295, SP307296, SP307297.

*Nidularia pulvinata* (Schwein.) Fr.

Ref.: Baseia & Milanez (2001b): SP307301, SP307302.

*Tulostoma exasperatum* Mont.

Ref.: Baseia & Milanez (2002b): SP307521, SP307522, SP307592.

***Cyphellaceae*** Lotsy

*Chondrostereum coprosmae* (G. Cunn.) Stalpers

Ref.: Bononi (1984), as *Corticium coprosmae* Cunn.: SP142153.

***Fistulinaceae*** Lotsy

*Porodisculus pendulus* (Schwein. ex Fries) Murrill

Ref.: Sampaio (1916) as *Polyporus pocula* (Schwein.) B. et C..

***Mycenaceae*** Roze

*Panellus pusillus* (Pers. ex. Lév.) Burds. & O.K. Mill.

Ref.: Bononi et al. (1984), as *Favolus rhipidium* (Berk.) Sacc.: SP156847.

### **Schizophyllaceae** Quéf.

*Schizophyllum commune* Fr.

Ref.: Sampaio (1916), as *S. alneum* L., Fidalgo et al. (1965): SP61101, SP90936; Bononi (1984): SP60936, SP102417, SP112702, SP112685, SP142129, SP142130, SP142160, SP142199, SP156807, SP142122, SP156978, SP157033.

## **ATHELIALES**

### **Atheliaceae** Jülich

*Amphinema byssoides* (Pers.) J. Erikss.

Ref.: Bononi (1984), as *Coniophora byssoidea* (Pers.) Fr.: SP142158.

*Byssoporia terrestris* (DC.) M.J. Larsen & Zak

Ref.: Bononi (1984), as *Poria terrestris* (DC. ex Fr.) Sacc.: SP156782.

## **AURICULARIALES**

### **Auriculariaceae** Fr.

*Auricularia auricula-judae* (Bull.) Quéf.

Ref.: Sampaio (1916), as *A. auricula-judae* (L.) Schröt.

*Auricularia fuscosuccinea* (Mont.) Henn.

Ref.: Bononi (1984), as *A. fuscosuccinea* (Mont.) Farl.: SP142158.

*Auricularia polytricha* (Mont.) Sacc.

Ref.: Bononi (1984): SP142174.

## **BOLETALES**

### **Coniophoraceae** Ulbr.

*Coniophora arida* (Fr.) P. Karst.

Ref.: Bononi (1984): SP156810.

*Coniophora olivacea* (Fr.) P. Karst.

Ref.: Bononi (1984), as *C. atrocinerea* Karst.: SP156771.

## **CORTICIALES**

### **Corticaceae** Herter

*Hyphoderma amoenum* (Burt) Donk

Ref.: Bononi (1984), as *Corticium pilosum* Burt: SP142120.

## **GLOEOPHYLLALES**

### **Gloeophyllaceae** Jülich

*Gloeophyllum striatum* (Sw.) Murrill

Ref.: Sampaio (1916), as *Lenzites striata* Sw., Fidalgo et al. (1965):  
SP61097, SP61107, SP61110.

## **HYMENOCHAETALES**

### **Hymenochaetaceae** Imazeki & Tori

*Coltricia hamata* (Romell) Ryvarden

Ref.: Sampaio (1916), as *Pelloporus hamatus* Romell

*Cyclomyces iodinus* (Mont.) Pat.

Ref.: Sampaio (1916), as *Chaetoporus iodinus* Mont.

*Hymenochaete berkeleyana* (Mont.) Cooke

Ref.: Bononi (1984): SP156802.

*Hymenochaete cacao* (Berk.) Berk. & M.A. Curtis

Ref.: Bononi (1984): SP142193.

*Hymenochaete damicornis* (Link) Lév.

Ref.: Fidalgo et al. (1965), as *H. damaecornis* (Link ex. Fr.) Lév.:  
SP61152, SP61158, SP61162.

*Hymenochaete tenuis* Peck

Ref.: Fidalgo et al. (1965), as *H. multisetae* Burt: SP61170, SP61141.

*Hymenochaete unicolor* Berk. & M.A. Curtis

Ref.: Bononi (1984): SP142094, SP156781.

*Inonotus luteoumbrius* (Romell) Ryvarden

Ref.: Sampaio (1916), as *Phaeoporus luteoumbrius* Romell

*Phellinus gilvus* (Schwein.) Pat.

Ref.: Sampaio (1916), as *Chaetoporus gilvus* Schwein., as *C. licnoides*  
Mont., as *C. scruposus* Fr., as *Polyporus aggreddiens* Berk., as *P. gilvus*  
Schwein., and as *Polystictus licnoides* Mont., Fidalgo et al. (1965):  
SP61098, SP61149, SP61091, SP61140, SP60934, SP61142; Bononi

(1984): SP142135, SP142139, SP142147, SP142178, SP142180, SP142151, SP156806, SP156779, SP142204, SP156811, SP141218, SP156752, SP156931-SP156037, SP156979.

*Phellinus punctatus* (Fr.) Pilát

Ref.: Bononi (1984): SP142134, SP142142, SP142149, SP156775, SP156786, SP142113, SP156809.

*Phellinus robustus* (P. Karst.) Bourdot & Galzin

Ref.: Bononi (1984), as *P. robustus* f. *resupinatus* Bourd. & Galz.: SP142170.

*Phylloporia pectinata* (Klotzsch) Ryvarden

Ref.: Sampaio (1916), as *Fomes pectinatus* Klotzsch, and as *Phaeoporus ferrugineus* Romell

*Phylloporia ribis* (Schumach.) Ryvarden

Ref.: Fidalgo et al. (1965), as *Phellinus ribis* (Schum. ex. Fr.) Quél.: SP61088, SP61159.

*Phylloporia spathulata* (Hook.) Ryvarden

Ref.: Fidalgo et al. (1965), as *Coltricia spathulata* (Hook. in Kunth) Murr.: SP61160.

**Schizoporaceae** Jülich

*Hyphodontia crustosa* (Pers.) J. Erikss.

Ref.: Bononi (1984), as *Odontia crustosa* (Pers. ex. Fr.) Quél.: SP142172.

*Hyphodontia sambuci* (Pers.) J. Erikss.

Ref.: Bononi (1984), as *Peniophora irregularis* Burt: SP156784.

*Hyphodontia spathulata* (Schrad.) Parmasto

Ref.: Bononi (1984): SP142232.

**POLYPORALES**

**Fomitopsidaceae** Jülich

*Fomitella supina* (Sw.) Murrill

Ref.: Fidalgo et al. (1965), as *Fomes subolivaceus* (Berk. & Curt.) Cke.: SP61174.

*Fomitopsis cupreorosea* (Berk.) J. Carranza & Gilb.

Ref.: Sampaio (1916), as *Polyporus roseofuscus* Romell

**Ganodermataceae** Donk

*Amauroderma calcigenum* (Berk.) Torrend  
Ref.: Sampaio (1916), as *Leucoporus partitus* Berk.

*Amauroderma omphalodes* (Berk.) Torrend  
Ref.: Sampaio (1916), as *Fomes omphalodes* Berk.

*Ganoderma resinaceum* Boud.  
Ref.: Bononi (1984): SP142173.

**Meripilaceae** Jülich

*Hydnopolyporus fimbriatus* (Fr.) D.A. Reid  
Ref.: Sampaio (1916), as *Polyporus fimbriatus* Fr., Bononi (1984), as  
*Stromatoscypha fimbriata* (Pers. ex Fr.) Donk: SP156846.

*Hydnopolyporus palmatus* (Hook.) O. Fidalgo  
Ref.: Fidalgo et al. (1965): SP60930.

*Rigidoporus microporus* (Sw.) Overeem  
Ref.: Gugliotta (1997), as *R. microporus* (Fr.) Overeem: SP250904,  
SP250887, SP250888, SP250885.

*Rigidoporus vinctus* (Berk.) Ryvarden  
Ref.: Bononi (1984), as *Poria albostygia* (Berk. & Curt.) Lloyd:  
SP142207.

**Meruliaceae** P. Karst.

*Bulbillomyces farinosus* (Bres.) Jülich  
Ref.: Bononi (1984), as *Peniophora candida* (Pers.) Lyman: SP142210.

*Gloeoporus thelephoroides* (Hook.) G. Cunn.  
Ref.: Sampaio (1916), as *G. conchoides* Mont.

*Irpex lacteus* (Fr.) Fr.  
Ref.: Fidalgo et al. (1965), as *Polyporus tulipiferus* (Schw.) Overth.:  
SP60937; Bononi (1984): SP142195, SP156976.

*Junghuhnia undigera* (Berk. & M.A. Curtis) Ryvarden  
Ref.: Gugliotta (1997): SP251099, SP251097.

*Steccherinum hydneum* (Rick) Maas Geest  
Ref.: Bononi (1984): SP142239.

*Steccherinum rawakense* (Pers.) Banker  
Ref.: Sampaio (1916), as *Hydnum rawakense* Pers.

*Steccherinum reniforme* (Berk. & M.A. Curtis) Banker  
Ref.: Bononi (1984): SP156850.

**Phanerochaetaceae** Jülich

*Byssomerulius corium* (Pers.) Parmasto  
Ref.: Fidalgo et al. (1965), as *Merulius confluens* Schw.: SP61104;  
Bononi (1984), as *Merulius sordidus* Berk. & Curt.: SP142128.

*Ceriporia xylostromatoides* (Berk.) Ryvarden  
Ref.: Bononi (1984), as *Poria xylostromatoides* (Berk.) Cooke:  
SP142240.

*Phlebiopsis flavidoalba* (Cooke) Hjortstam  
Ref.: Bononi (1984), as *Peniophora vernicosa* Ellis & Everh.:  
SP142136.

**Polyporaceae** Fr. ex Corda

*Corioloopsis byrsina* (Mont.) Ryvarden  
Ref.: Sampaio (1916), as *Polyporus byrsinus* Mont.

*Corioloopsis caperata* (Berk.) Murrill  
Ref.: Sampaio (1916), as *Polyporus caperatus* Berk., Gugliotta (1997),  
as *Datronia caperata* (Berk.) Ryv.: SP250899, SP250900.

*Corioloopsis floccosa* (Jungh.) Ryvarden  
Ref.: Bononi et al. (1984), as *Trametes rigida* Berk. & Mont.: SP142119;  
Gugliotta (1997), as *C. rigida* (Berk. & Mont.) Murr.: SP250914,  
SP250924, SP250913, SP250922, SP250923, SP251087, SP251088.

*Corioloopsis gallica* (Fr.) Ryvarden  
Ref.: Bononi et al. (1984), as *Trametes hispida* Bagl.: SP156751.

*Corioloopsis polyzona* (Pers.) Ryvarden  
Ref.: Sampaio (1916), as *Polyporus occidentalis* Kl., and as *Polystictus*  
*occidentalis* Klotzsch, Bononi et al. (1984), as *Coriolus occidentalis*  
(Klotz.) Cunn.: SP142124.

*Epithelopsis fulva* (G. Cunn.) Jülich  
Ref.: Bononi et al. (1984), as *Epithele fulva* Cunn.: SP142138.

*Favolus tenuiculus* P. Beauv.  
Ref.: Gugliotta (1997), as *Polyporus tenuiculus* (Beauv.) Fr.: SP250897,  
SP250898.

*Fomes fasciatus* (Sw.) Cooke  
Ref.: Gugliotta (1997): SP250906, SP250907, SP250917.



- Hapalopilus phlebiiformis* (Berk. ex. Cooke) Ryvarden  
Ref.: Fidalgo et al. (1965), as *Poria phlebiaeformis* Berk.: SP61143, SP61168.
- Hexagonia hydnoides* (Sw.) M. Fidalgo  
Ref.: Sampaio (1916), as *Trametes fibrosa* Fr., and as *T. hydnoides* Sw., Fidalgo et al. (1965), as *Pogonomyces hydnoides* (Sw. ex. Fr.) Murr.: SP61093, SP61100, SP61108, SP61109, SP61138; Bononi (1984): SP142171, SP142175, SP156902, SP152939; Gugliotta (1997): SP250901, SP250916, SP251090-SP251093.
- Hexagonia variegata* Berk.  
Ref.: Bononi (1984), as *H. papyracea* Berk.: SP156853; Gugliotta (1997), as *H. papyracea* Berk.: SP251096.
- Hjortstamia papyrina* (Mont.) Boidin  
Ref.: Fidalgo et al. (1965), as *Stereum papyrinum* Mont.: SP61154.
- Lentinus crinitus* (L.) Fr.  
Ref.: Fidalgo et al. (1965): SP61096, SP61164, SP61137, SP46437, SP61178; Bononi (1984): SP46437, SP156938.
- Lenzites elegans* (Spreng.) Pat.  
Ref.: Sampaio (1916), as *L. repanda* (Pers.) Fries, and as *Trametes ambigua* Berk., Fidalgo et al. (1965), as cfr. *Daedalea elegans* Spreng. ex Fr.: SP61105, SP61095.
- Lenzites stereoides* (Fr.) Ryvarden  
Ref.: Sampaio (1916), as *Dadedalea stereoides* Fr.
- Melanoporella carbonacea* (Berk. & M.A. Curtis) Murrill  
Ref.: Bononi (1984), as *Poria carbonacea* (Berk. & Curt.) Cooke: SP142177, SP156772.
- Melanoporia nigra* (Berk.) Murrill  
Ref.: Bononi (1984), as *Poria nigra* (Berk.) Cooke: SP142159, SP142196, 142197, SP142214.
- Microporellus obovatus* (Jungh.) Ryvarden  
Ref.: Fidalgo et al. (1965), as *Polyporus mutabilis* Berk. & Curt.: SP43843.
- Nigrofomes melanoporus* (Mont.) Murrill  
Ref.: Fidalgo et al. (1965), as *Fomes melanoporus* (Mont.) Cke.: SP61169.
- Nigroporus vinosus* (Berk.) Murrill  
Ref.: Sampaio (1916), as *Polyporus vinosus* Berk.

- Pachykytospora papyraceae* (Schwein.) Ryvarden  
Ref.: Bononi (1984), as *Poria papyracea* (Schwein.) Cooke: SP156794.
- Perenniporia medulla-panis* (Jacq.) Donk  
Ref.: Fidalgo et al. (1965), as *Fomes unitus* (Pers.) Lowe: SP61103.
- Polyporus dictyopus* Mont.  
Ref.: Fidalgo et al. (1965), as *P. infernalis* Berk.: SP61087.
- Polyporus lentinoides* (Henn.) Lloyd  
Ref.: Fidalgo et al. (1965): SP60935.
- Polyporus tricholoma* Mont.  
Ref.: Sampaio (1916).
- Pycnoporus sanguineus* (L.) Murrill  
Ref.: Sampaio (1916), as *Polyporus sanguineus* L., Fidalgo et al. (1965): SP61145, SP61150, SP61163, SP61086, SP61090, SP60931, SP60938, SP45717; Bononi et al. (1984): SP142131, SP142190, SP142181, SP142182, SP142145, SP142148, SP142150, SP156808, SP156800, SP156773, SP142206, SP142121, SP142123, SP142216, SP142220, SP156738, SP156940, SP156973, SP157031, SP157037, SP157038; Gugliotta (1997): SP250903, SP250915, SP251094, SP251095.
- Trametes incerta* (Curr.) Cooke  
Ref.: Sampaio (1916), as *Lenzites distantifolia* Romell, Fidalgo et al. (1965), as *Phaeodaedalea sprucei* (Berk.) K. Fid.: SP58113.
- Trametes modesta* (Kunze ex Fr.) Ryvarden  
Ref.: Sampaio (1916), as *Polyporus modestus* Kze., as *Polystictus albocervinus* Berk.
- Trametes villosa* (Sw.) Kreisel  
Ref.: Fidalgo et al. (1965), as *T. pinsita* (Fr.) O. & K. Fid.: SP61092, SP61165, SP61139, SP61106, SP60929, SP54870; Gugliotta (1997), as *T. villosa* (Fr.) Kreisel: SP250905, SP250902.
- Trichaptum byssogenum* (Jungh.) Ryvarden  
Ref.: Sampaio (1916), as *Polyporus versatilis* Berk., and as *Polystictus versatilis* Berk.
- Trichaptum perrottetii* (Lév.) Ryvarden  
Ref.: Sampaio (1916), as *Polyporus trichomallus* Berk. & Mont., and as *Polystictus trichomallus* Berk. & Mont., Fidalgo et al. (1965), as *Polyporus trichomallus* Berk. & Mont.: SP61176, SP61148; Bononi (1984), as *Trichaptum trichomallum* (Berk. Mont.) Murrill: SP112252, SP156789.
- Trichaptum sector* (Ehrenb.) Kreisel

Ref.: Fidalgo et al. (1965), as *Polyporus sector* Ehrenb. ex Fr.: SP35464; Bononi (1984), as *Polyporus sector* Ehrenb. ex Fr.: SP156851.

*Tyromyces duracinus* (Pat.) Murrill  
Ref.: Gugliotta (1997): SP250918.

*Tyromyces leucomallus* (Berk. & M.A. Curtis) Murrill  
Ref.: Bononi (1984), as *T. leucomallus* (Peck) Murr.: SP156801.

## **RUSSULALES**

### **Lachnocladiaceae** D.A. Reid

*Scytinostroma portentosum* (Berk. & M.A. Curtis) Donk  
Ref.: Bononi (1984): SP142146.

### **Peniophoraceae** Lotsy

*Gloeocystidiopsis salmonea* (Burt) Boidin, Lanq. & Gilles  
Ref.: Bononi et al. (1984), as *Corticium salmoneum* Burt.: SP142137.

### **Stereaceae** Pilát

*Gloeodontia discolor* (Berk. & M.A. Curtis) Boidin  
Ref.: Bononi (1984): SP142144, SP156742.

*Stereum ostrea* (Blume & T. Nees) Fr.  
Ref.: Fidalgo et al. (1965), as *Stereum australe* Lloyd: SP60928, SP61172.

## **SEBACINALES**

### **Sebacinaceae** K. Wells & Oberw.

*Exidiopsis calcea* (Pers.) K. Wells  
Ref.: Bononi (1984), as *Corticium calceum* Fr.: SP142152.

## **THELEPHORALES**

### **Thelephoraceae** Chevall

*Thelephora dentosa* Berk. & M.A. Curtis  
Ref.: Bononi (1984): SP142176; as *T. perplexa* Burt: SP142165.

*Tomentella ferruginea* (Pers.) Pat.

Ref.: Bononi (1984): SP142194, SP142201.

*Tomentella galzinii* Bourdot

Ref.: Bononi (1984): SP142212.

*Tomentella subclavigera* Litsch

Ref.: Bononi (1984): SP141263.

**Insertae sedis:**

*Resinicium granulare* (Burt) Sheng H. Wu (*Agaricomycetes*)

Ref.: Bononi (1984), as *Corticium granulare* Burt: SP142198.

*Oxyporus pellicula* (Jungh.) Ryvarden (*Agaricomycetes*)

Ref.: Gugliotta (1997): SP250908.

**Excluded taxa of the checklist of *Agaricomycetes* recorded in Cerrado:**

*Calostoma cinnabarinum* Corda (*Calostomataceae*)

Note: Baseia et al. (2007) referred this taxon as SP307573, which corresponds to *Bovista plumbea* in Baseia (2005). *Calostoma cinnabarinum* was not found in SP (A. Gugliotta, pers. com.)

*Antrodia sinuosa* (Fr.) P. Karst. (*Fomitopsidaceae*)

Ref.: Sampaio (1916), as *Poria sinuosa* Fries.

Notes: this is a temperate to boreal species, usually found on gymnosperms. The exsiccatum should be revised.

*Auricularia tremellosa* (Fr.) P. Henn.

Ref.: Sampaio (1916).

Notes: the taxon was not found in Index Fungorum and Centraalbureau voor Schimmelcultures, and the exsiccatum should be revised.

*Chaetoporus melleofulvus* Romell (*Meruliaceae*)

Ref.: Sampaio (1916).

Notes: the nomenclature is undefined (Index Fungorum and Centraalbureau voor Schimmelcultures), and the exsiccatum should be revised.

*Ganoderma applanatum* (Pers.) Pat. (*Ganodermataceae*)

Ref.: Bononi (1984), as *G. applanatum* (Pers. ex S.F. Gray) Pat.: SP156854, SP157030, SP157032.

Notes: according to Moncalvo & Ryvarden (1997), this species has a northern distribution, and the exsiccata should be revised.

*Ganoderma fulvellum* Bres. (*Ganodermataceae*)

Ref.: Sampaio (1916).

Notes: the nomenclature is undefined (Index Fungorum), and the exsiccatum should be revised.

*Ganoderma lucidum* (Curtis) P. Karst. (*Ganodermataceae*)

Ref.: Sampaio (1916), as *Fomes lucidus* (Leys) Fries.

Notes: according to Moncalvo & Ryvarden (1997) this species might be restricted to Europe, and the exsiccatum should be revised.

*Ganoderma variabile* (Berk.) Pat. (*Ganodermataceae*)

Ref.: Sampaio (1916), as *G. variabile* Berk.

Notes: the nomenclature is undefined (Index Fungorum and Centraalbureau voor Schimmelcultures), and the exsiccatum should be revised. However, Moncalvo & Ryvarden (1997) consider this species as *Amauroderma camerarium* (Berk.) J.S. Furtado.

*Guepinia fissa* Berk. (*Dacrymycetaceae*)

Ref.: Sampaio (1916).

Notes: the nomenclature is undefined (Index Fungorum) and the exsiccatum should be revised.

*Hexagonia scutigera* (Fr.) Sacc. (*Polyporaceae*)

Ref.: Sampaio (1916), as *H. scutigera* Fr., Fidalgo et al. (1965), as *H. scutigera* (Fr.) Fr.: SP61175.

Notes: the nomenclature is undefined (Index Fungorum and Centraalbureau voor Schimmelcultures), and the exsiccatum should be revised.

*Lentinus fasciatus* Berk. (*Polyporaceae*)

Ref.: Sampaio (1916), as *L. fuscopurpureus* Kalchbr.

Notes: this is an Australasian species, and the exsiccatum should be revised.

*Lentinus villosus* Klotzsch (*Polyporaceae*)

Ref.: Sampaio (1916), as *L. villosus* Kl.

Notes: this is an African species, and the exsiccatum should be revised.

*Lenzites applanata* Fr. (*Polyporaceae*)

Ref.: Sampaio (1916).

Notes: the nomenclature is undefined (Index Fungorum and Centraalbureau voor Schimmelcultures), and the exsiccatum should be revised.

*Lycoperdon griseolilacinum* Henn. (*Agaricaceae*)

Ref.: Sampaio (1916), as *L. griseo-lilacinum* P. Henn.

Notes: the nomenclature is undefined (Index Fungorum), and the exsiccatum should be revised.

*Microporus affinis* (Blume & T. Nees) Kuntze

Ref.: Sampaio (1916), as *Polystictus affinis* Nees.

Notes: this is a paleotropical species, and the exsiccatum should be revised.

*Mucronoporus hasskarlii* Lév.

Ref.: Sampaio (1916).

Notes: the taxon was not found in Index Fungorum and Centraalbureau voor Schimmelcultures, and the exsiccatum should be revised.

*Mucronoporus pectinatus* Kl.

Ref.: Sampaio (1916).

Notes: the taxon was not found in Index Fungorum and Centraalbureau voor Schimmelcultures, and the exsiccatum should be revised. It is possibly *Phylloporia pectinata* (Klotzsch) Ryvarden.

*Mucronoporus zealandicus* Cooke

Ref.: Sampaio (1916).

Notes: the taxon was not found in Index Fungorum and Centraalbureau voor Schimmelcultures, and the exsiccatum should be revised. It is possibly *Phellinus wahlbergii* (Fr.) D.A. Reid.

*Pelloporus cunningii* Berk.

Ref.: Sampaio (1916).

Notes: the taxon was not found in Index Fungorum and Centraalbureau voor Schimmelcultures, and the exsiccatum should be revised.

*Peniophora inconspicua* (Berk. & M.A. Curtis) Massee (*Peniophoraceae*)

Ref.: Bononi (1984): SP142223.

Notes: the nomenclature is undefined (Index Fungorum, Centraalbureau voor Schimmelcultures and Cortbase), and the exsiccatum should be revised.

*Perenniporia ohioensis* (Berk.) Ryvarden (*Polyporaceae*)

Ref.: Sampaio (1916), as *Ganoderma ohioensis* Berk.

Notes: this is a North-American species, and the exsiccatum should be revised.

*Phaeoporus sulphuratus* Fr.

Ref.: Sampaio (1916).

Notes: the taxon was not found in Index Fungorum and Centraalbureau voor Schimmelcultures, and the exsiccatum should be revised.

*Phanerochaete hydroides* (Cooke & Mass.) Donk

Ref.: Bononi (1984): SP142247.

Notes: the taxon does not exist (Index Fungorum, Centraalbureau voor Schimmelcultures and Cortbase). It might be *Scopuloides hydnooides* (Cooke & Masee) Hjortstam & Ryvarden, whose basionym is *Peniophora hydnooides* Cooke & Masee (Cortbase), and the exsiccatum should be revised.

*Pleurotus meyeri-herrmannii* Henn. (*Pleurotaceae*)

Ref.: Sampaio (1916), as *P. meyeri-herrmannii* P. Henn.,

Notes: the nomenclature is undefined (Index Fungorum and Centraalbureau voor Schimmelcultures), and the exsiccatum should be revised.

*Pluteus scruposus* Henn. (*Pluteaceae*)

Ref.: Sampaio (1916), as *Pluteus scruposus* P. Henn.,

Notes: the nomenclature is undefined (Index Fungorum), and the exsiccatum should be revised.

*Pycnoporus cinnabarinus* (Jacq.) P. Karst. (*Polyporaceae*)

Ref.: Sampaio (1916), as *Trametes cinnabarina* Jacq.

Notes: this is a temperate species, and the exsiccatum should be revised.

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