

# A checklist of the fungi recorded from Serra da Jibóia, Bahia state, Brazil

## Part 1—quick overview

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**ABSTRACT** — Serra da Jibóia is one of the priority areas for the conservation of biodiversity located in the semiarid Caatinga biome of Northeast Brazil. Two hundred and fifty-nine species of fungi (mitosporic and meiosporic ascomycetes and basidiomycetes) were reported from Serra da Jibóia and are presented here. These species are distributed in 155 genera among which *Dictyochaeta* was the most highly represented genus with nine species. Inventory of the Serra da Jibóia region has thus far contributed to the description of one new genus and seven new species to science; six species are considered rare while 121 are new records of fungi. These data were based on literature records.

**KEY WORDS** — Fungal diversity, inventory, taxonomy

## Introduction

The Kingdom Fungi groups organisms with various morphological forms that play a major role in terrestrial and aquatic ecosystems as saprobes, symbionts and parasites of plants, animals and other fungi (Webster & Weber 2007). Recently, members of the fungal kingdom were restructured through molecular phylogenetic analyses into eight major phyla: Blastocladiomycota, Chytridiomycota, Glomeromycota, Microsporidia, Neocallimastigomycota, Zygomycota, Ascomycota and Basidiomycota (Hibbett et al. 2007). More recently, Gryganskyi et al. (2012) described the new phylum Entomophthoromycota, which includes pathogenic species of invertebrates, algae, reptiles and others.

Fungi comprise the second largest kingdom of life with insects being the most hyperdiverse. Some studies estimate that fungi comprise of 1.5 to 5.1 million species (Hawksworth 1991, 2001, Blackwell 2011) but more recent research has shown that there are, probably, 3 million of species worldwide (Hawksworth 2012). In a recent study, cataloging species data on fungi, Maia & Carvalho-Junior (2010) recorded 3.608 species of fungi in Brazil, with 584 species for Bahia state, a relatively low number compared to the richness of ecosystems in the country and estimates of existing species.

Serra da Jibóia ( $12^{\circ}51' S$ ,  $39^{\circ}28' W$ ) is a remnant of rainforest inserted in the Caatinga Biome and is located in the Bahia state, Northeast Brazil. It is among the 147 areas that were selected as priorities for biodiversity conservation being considered of extreme biological importance (Ministério do Meio Ambiente 2000). By being an enclave of forest, it represents an interesting area to be investigated in view of the great potential for the occurrence of endemism and species still unknown to science (Ministério do Meio Ambiente 2000). Researches involving different biological groups have already been undertaken at this site (Bravo & Chagas 2004, Juncá & Borges 2002, Ramos et al. 2011, Silva 2013). However, only a few studies have provided a list of species found. Existing checklists include phanerogamic (Queiroz et al. 1996, Carvalho-Sobrinho & Queiroz 2005), liverworts (Valente & Porto 2006), mosses (Valente et al. 2009), birds (Freitas & Morais 2009), butterflies (Zacca et al. 2011) and fern and lycophytes (Macedo

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et al. 2011). Until now, there has been no effort to compile a list of all fungal species collected in this region so that it could be made available for future biodiversity and conservation studies.

This study aimed to present a list of fungal species occurring in Serra da Jibóia, based on literature data and field sampling, and contributes to the knowledge of fungi in Bahia state.

### **Materials & methods**

A checklist of fungal species recorded in the Serra da Jibóia, Bahia state was based on a compilation of literature data.

The databases Index Fungorum (<http://www.indexfungorum.org/Names/Names.asp>) and Mycobank (<http://www.mycobank.org/>) were consulted for current nomenclature and correct author names.

Species names are listed alphabetically and data as, substrate, habitat, and reference are provided. The geographical record of each species is provided only when these data were available in the literature consulted. Unidentified fungi to the species level were not considered.

### **Results & discussion**

Based on the compilation of literature data and species collected in field sampling, a total of 259 species of decomposing fungi, belonging to 155 genera were recorded in Serra da Jibóia region. The most representative group consisted of 221 species of mitosporic ascomycetes (coelomycetes and hyphomycetes), followed by 26 species of basidiomycetes and 14 species of meiosporic ascomycetes.

The genus with the highest number of recorded species was *Dictyochaeta* Speg. with nine species followed by *Dactylaria* Sacc. with seven species, *Stachybotrys* Corda and *Thozetella* Kuntze with six species, *Vermiculariopsisella* Bender with five species and *Gyrothrix* (Corda) Corda with four species. Previous studies have shown that these genera are reported in inventory works (Polishook et al. 1996, Silva et al. 2014, Tsui et al. 2000).

Among the catalogued species to the Serra da Jibóia, more than half of species (51,7% or 135 species) represented important discovery: one new genus (*Longicolum*), seven new species to science (*Annulatascus apiculatus* F.R. Barbosa & Gusmão, *Cubasina microspora* M.F.O. Marques, Gusmão & R.F. Castañeda, *Dactylaria saccardoana* F.R. Barbosa & Gusmão, *Deightoniella rugosa* F.R. Barbosa, Gusmão & R.F. Castañeda, *Diplocladiella cornitumida* F.R. Barbosa, Gusmão & R.F. Castañeda, *Quadracaea stauroconidia* F.R. Barbosa & Gusmão and *Thozetella submersa* F.R. Barbosa & Gusmão), six rare species (*Brachydesmiella anthostomelloidea* Goh & K.D. Hyde, *Camposporidium cristatum* Nawawi & Kuthub., *Dactylaria hyalotunicata* K.M. Tsui, Goh & K.D. Hyde, *Lauriomyces sakaeratensis* Somrith., Kosol & E.B.G. Jones, *Pleurophragmium malaysianum* Matsush. and *Pyricularia rabaulensis* Matsush.) and 121 new records. In the latter case, 15 species were new records for the Americas, 22 for the Neotropics, 32 for South America, 25 for Brazil, 26 for Bahia state, and 1 for Serra da Jibóia. The others species did not have any kind of geographical record reported in the examined references.

Regarding the substrate and habitat distribution patterns, it was found that most species were recorded on terrestrial substrates. The first studies involving fungi in the Sierra da Jibóia were published by Góes-Neto et al. (2003) that described basidiomycetes on twigs in terrestrial habitat. A few studies involved fungi occurring mainly on leaves in terrestrial habitats (Marques et al. 2007a, Cruz et al. 2008a, Barbosa et al. 2009a). Only two papers deal specifically with fungi found on lignicolous substrate (twig and bark) (Góes-Neto et al. 2003, Marques et al. 2007b). Research on fungi occurring on submerged substrates in freshwater environments started later, which may explain the low number of listed species from habitat type (Almeida et al. 2012, Barbosa et al. 2008, 2011, 2013b, Barbosa & Gusmão 2011).

**Checklist for the fungi species cataloged in the Serra da Jibóia, Bahia state, Brazil:**

**Meiosporic ascomycetes records**

*Aniptodera chesapeakensis* Shearer & M.A. Mill., Mycologia 69(5): 894 (1977)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa et al. 2013a; Barbosa et al. 2013b

Geographical record: new record for South America

*Annulatascus apiculatus* F.R. Barbosa & Gusmão, Mycotaxon 106: 405 (2008)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa et al. 2008; Barbosa et al. 2013b

Geographical record: new species

*Annulatascus velatispora* K.D. Hyde, Aust. Syst. Bot. 5(1): 118 (1992)

Substrate: submerged twig and petiole

Habitat: fresh water

Reference: Barbosa et al. 2013a; Barbosa et al. 2013b

Geographical record: new record for Brazil

*Anthostomella aquatica* K.D. Hyde & Goh, Nova Hedwigia 67(1-2): 227 (1998)

Substrate: submerged twig, petiole and bark

Habitat: fresh water

Reference: Barbosa et al. 2013a; Barbosa et al. 2013b

Geographical record: new record for America

*Chaetomium homopilatum* Omvik, Mycologia 47(5): 749 (1955)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa et al. 2012; Barbosa et al. 2013b

Geographical record: new record for Bahia

*Chaetomium longicolleum* Krzemien. & Badura, Acta Soc. Bot. Pol. 23: 748 (1954)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa et al. 2012; Barbosa et al. 2013b

Geographical record: new record for Bahia

*Chaetosphaeria lignomollis* F.A. Fernández & Huhndorf, Fungal Diversity 18: 27 (2005)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa et al. 2013a; Barbosa et al. 2013b

Geographical record: new record for South America

*Jahnula seychellensis* K.D. Hyde & S.W. Wong, Nova Hedwigia 68(3-4): 504 (1999)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa et al. 2013a; Barbosa et al. 2013b

Geographical record: new record for South America

*Longicollum biappendiculatum* Zelski, F.R. Barbosa, Raja, A.N. Mill. & Shearer, in Zelski, Raja, Miller, Barbosa, Gusmão & Shearer, Mycosphere 2(5): 540 (2011)

Substrate: submerged bark

Habitat: fresh water

Reference: Zelski et al. 2011

Geographical record: New genus and species

***Ophioceras venezuelense*** Shearer, J.L. Crane & W. Chen, Mycologia 91(1): 151 (1999)  
Substrate: submerged twig and bark  
Habitat: fresh water  
Reference: Barbosa et al. 2013a; Barbosa et al. 2013b  
Geographical record: new record for Brazil

***Ostreichnion curtisi*** (Duby) M.E. Barr, Mycotaxon 3(1): 86 (1975)  
Substrate: decaying bark  
Habitat: terrestrial  
Reference: Almeida et al. 2014  
Geographical record: unknown

***Rhytidhysteron rufulum*** (Spreng.) Speg., Anal. Soc. Cient. Argent. 90(1-6): 177 (1921)  
Substrate: decaying twig  
Habitat: terrestrial  
Reference: Almeida et al. 2014  
Geographical record: unknown

***Tamsiniella labiosa*** S.W. Wong, K.D. Hyde, W.H. Ho & S.J. Stanley, Can. J. Bot. 76(2): 334 (1998)  
Substrate: submerged twig  
Habitat: fresh water  
Reference: Barbosa et al. 2013a; Barbosa et al. 2013b  
Geographical record: new record for America

***Torrentispora crassiparietis*** Fryar & K.D. Hyde, Cryptog. Mycol. 25(3): 255 (2004)  
Substrate: submerged bark  
Habitat: fresh water  
Reference: Barbosa et al. 2013a; Barbosa et al. 2013b  
Geographical record: new record for America

#### **Basidiomycota records**

***Amauroderma omphalodes*** (Berk.) Torrend, Brotéria, sér. bot. 18: 131 (1920)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Cymatoderma caperatum*** (Berk. & Mont.) D.A. Reid, Kew Bull. 10: 635 (1956)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Earliella scabrosa*** (Pers.) Gilb. & Ryvarden, Mycotaxon 22(2): 364 (1985)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Favolus tenuiculus*** P. Beauv., Fl. Oware 1(8): 74 (1806)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003 (as *Polyporus tenuiculus* (P. Beauv.) Fr.)  
Geographical record: unknown

***Fomitiporella piptadeniae*** (Teixeira) Teixeira, Revista Brasileira de Botânica 15(2): 126 (1992)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003 (as *Phellinus piptadeniae* Teixeira)

Geographical record: unknown

***Fomitella supina*** (Sw.) Murrill, Bull. Torrey bot. Club 32(7): 365 (1905)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003

Geographical record: unknown

***Fulvifomes melleoporus*** (Murrill) Baltazar & Gibertoni, Mycotaxon 111: 205 (2010)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003 (as *Phellinus melleoporus* (Murrill) Ryvarden)

Geographical record: unknown

***Funalia caperata*** (Berk.) Zmitr. & V. Malysheva, Mikol. Fitopatol. 47(6): 375 (2013)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003 (as *Datronia caperata* (Berk.) Ryvarden)

Geographical record: unknown

***Ganoderma australe*** (Fr.) Pat., Bull. Soc. Mycol. Fr. 5 (2,3): 65 (1889)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003

Geographical record: unknown

***Gloeophyllum trabeum*** (Pers.) Murrill, N. Amer. Fl. (New York) 9(2): 129 (1908)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003

Geographical record: unknown

***Hexagonia hydnoides*** (Sw.) M. Fidalgo, Mem. N. Y. bot. Gdn 17: 64 (1968)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003

Geographical record: unknown

***Inonotus portoricensis*** (Overh.) Baltazar & Gibertoni, Mycotaxon 111: 206 (2010)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003 (as *Phellinus portoricensis* (Overh.) M. Fidalgo)

Geographical record: unknown

***Lentinus crinitus*** (L.) Fr., Syst. orb. veg. (Lundae) 1: 77 (1851)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003

Geographical record: unknown

***Lenzites elegans*** (Spreng.) Pat., Essai Tax. Hyménomyc. (Lons-le-Saunier): 89 (1900)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003 (as *Trametes elegans* (Spreng.) Fr.)  
Geographical record: unknown

***Phellinus gilvus*** (Schwein.) Pat., Essai Tax. Hyménomyc. (Lons-le-Saunier): 82 (1900)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Phellinus rimosus*** (Berk.) Pilát, Annls Mycol. 38(1): 80 (1940)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Polyporus dictyopus*** Mont., Annls Sci. Nat., Bot., sér. 2 3: 349 (1835)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Polyporus grannocephalus*** Berk., London J. Bot. 1: 148 (1842)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Pycnoporus sanguineus*** (L.) Murrill, Bull. Torrey bot. Club 31(8): 421 (1904)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Rigidoporus microporus*** (Sw.) Overeem, Icon. Fung. Malay. 5: 1 (1924)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Schizophyllum commune*** Fr., Observ. Mycol. (Havniae) 1: 103 (1815)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Stereum ostrea*** (Blume & T. Nees) Fr., Epicr. syst. Mycol. (Upsaliae): 547 (1838)  
Substrate: twig  
Habitat: terrestrial  
Reference: Góes-Neto et al. 2003  
Geographical record: unknown

***Trametes versicolor*** (L.) Lloyd, Mycol. Notes (Cincinnati) 65: 1045 (1921)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003

Geographical record: unknown

***Trametes villosa*** (Sw.) Kreisel, Monografias, Ciencias, Univ. Habana, Ser. 4 16: 83 (1971)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003

Geographical record: unknown

***Tyromyces duracinus*** (Pat.) Murrill, N. Amer. Fl. (New York) 9(1): 37 (1907)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003

Geographical record: unknown

***Tyromyces leucomallus*** (Berk. & M.A. Curtis) Murrill, N. Amer. Fl. (New York) 9(1): 36 (1907)

Substrate: twig

Habitat: terrestrial

Reference: Góes-Neto et al. 2003

Geographical record: unknown

### **Coelomycetes records**

***Dinemasporium lanatum*** Nag Raj & R.F. Castañeda, Can. J. Bot. 67(8): 2527 (1989)

Substrate: submerged leaf and petiole

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013

Geographical record: new record for South America

***Satchmopsis brasiliensis*** B. Sutton & Hodges, in Sutton, Nova Hedwigia 26(1): 3 (1975)

Substrate: leaf

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

### **Hyphomycetes records**

***Acrogenospora gigantospora*** S. Hughes, N.Z. Jl Bot. 16(3): 314 (1978)

Substrate: bark

Habitat: terrestrial

Reference: Barbosa et al. 2007b; Marques et al. 2007b; Marques et al. 2008b

Geographical record: new record for Brazil and Neotropic

***Acrogenospora sphaerocephala*** (Berk. & Broome) M.B. Ellis, Dematiaceous Hyphomycetes (Kew): 114 (1971)

Substrate: decaying bark and submerged leaf, twig and bark

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Actinocladium rhodosporum*** Ehrenb., Jb. Gewächsk. 1(2): 52 (1819)

Substrate: decaying bark and submerged twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

***Actinocladium verruculosum*** W.P. Wu, in Wu & Zhuang, Fungal Diversity Res. Ser. (Hong Kong) 15: 228 (2005)

Substrate: submerged twig

Habitat: fresh water

Reference: Almeida et al. 2012; Barbosa et al. 2013b

Geographical record: new record for America

***Anungitea globosa*** B. Sutton & Hodges, Nova Hedwigia 29(3-4): 594 (1978)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2007b; Barbosa et al. 2009a

Geographical record: new record for neotropic

***Ardhachandra cristaspora*** (Matsush.) Subram. & Sudha [as 'critaspora'], Can. J. Bot. 56(7): 73 (1978)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: unknown

***Ardhachandra selenoides*** (de Hoog) Subram. & Sudha, Can. J. Bot. 56(7): 731 (1978)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Arthrobotrys oligospora*** Fresen., Beitr. Mykol. 1: 18 (1850)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Atrosetaphiale flagelliformis*** Matsush., Matsush. Mycol. Mem. 8: 14 (1995)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b ; Barbosa et al. 2009a

Geographical record: unknown

***Bactrodesmium longisporum*** M.B. Ellis, More Dematiaceous Hyphomycetes (Kew): 68 (1976)

Substrate: submerged twig and bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for South America

***Beltrania africana*** S. Hughes, Mycol. Pap. 47: 4 (1951)

Substrate: petiole

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Beltrania querna*** Harkn., Bull. Calif. Acad. Sci. 1(1): 39 (1884)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2009b

Geographical record: new record for Bahia

***Beltrania rhombica*** Penz., Michelia 2(no. 8): 474 (1882)

Substrate: decaying and submerged leaf and petiole

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Beltraniella amoena*** R.F. Castañeda, Cano & Guarro, Mycotaxon 58: 244 (1996)

Substrate: leaf

Habitat: terrestrial

Reference: Marques et al. 2007a; Barbosa et al. 2009a

Geographical record: new record for South America

***Beltraniella portoricensis*** (F. Stevens) Piroz. & S.D. Patil, Can. J. Bot. 48(3): 575 (1970)

Substrate: decaying leaf and petiole and submerged leaf

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Beltraniopsis esenbeckiae*** Bat. & J.L. Bezerra, Publicações Inst. Micol. Recife 296: 7 (1960)

Substrate: leaf

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Beltraniopsis ramosa*** R.F. Castañeda, in Castañeda Ruiz & Arnold, Rev. Jard. bot. nac., Univ.

Habana 6(1): 53 (1985)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Berkleasmium corticola*** (P. Karst.) R.T. Moore, Mycologia 51(5): 735 (1961)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Brachiosphaera tropicalis*** Nawawi, in Descals, Newawi & Webster, Trans. Br. Mycol. Soc. 67(2): 213

(1976)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Brachydesmiella anthostomelloidea*** Goh & K.D. Hyde, Mycol. Res. 100(11): 1365 (1996)

Substrate: submerged petiole and bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: rare species

***Brachydesmiella caudata*** V. Rao & de Hoog, Stud. Mycol. 28: 5 (1986)

Substrate: submerged petiole

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for America

***Brachysporiella gayana*** Bat., in Batista & Vital, Boln Agric. Pernambuco 19(1-2): 109 (1952)

Substrate: decaying and submerged twig and bark

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Brachysporiella pulchra*** (Subram.) S. Hughes, N.Z. Jl Bot. 17(2): 184 (1979)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Cacumisporium pleuroconidiophorum*** (Davydkina & Melnik) R.F. Castañeda, Heredia &

Iturr., Mycotaxon 100: 332 (2007)

Substrate: submerged twig and bark

Habitat: fresh water

Reference: Almeida et al. 2012; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Cacumisporium sigmoideum*** Mercado & R.F. Castañeda, Acta Bot. Cubana 50: 1 (1987)

Substrate: decaying bark and submerged twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

***Camposporidium cristatum*** Nawawi & Kuthub., Mycotaxon 32(1): 161 (1988)

Substrate: submerged leaf and petiole

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: rare species

***Canalisporium caribense*** (Hol.-Jech. & Mercado) Nawawi & Kuthub., Mycotaxon 34(2): 479 (1989)

Substrate: bark

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

***Canalisporium exiguum*** Goh & K.D. Hyde, in Goh, Ho, Hyde, Whitton & Umali, Can. J. Bot. 76(1): 145

(1998)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for America

***Cancellidium applanatum*** Tubaki, Trans. Mycol. Soc. Japan 16(4): 358 (1975)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for America

***Candelabrum brocchiatum*** Tubaki, Trans. Mycol. Soc. Japan 16(2): 134 (1975)

Substrate: submerged twig and bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Ceratospora compacta*** R.F. Castañeda, Guarro & Cano, Mycotaxon 60: 276 (1996)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b; Marques et al. 2007a

Geographical record: new record for South America

***Chaetendophragmia triangularis*** Matsush. [as 'triangularia'], Microfungi of the Solomon Islands and

Papua-New Guinea (Osaka): 12 (1971)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Chaetopsina fulva*** Rambelli, Diagn. IV 3: 5 (1956)

Substrate: leaf and petiole

Habitat: fresh water and terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Chaetopsina splendida*** B. Sutton & Hodges, Nova Hedwigia 27(1-2): 346 (1976)

Substrate: submerged petiole

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Chalara alabamensis*** Morgan-Jones & E.G. Ingram, Mycotaxon 4(2): 489 (1976)

Substrate: leaf and petiole

Habitat: fresh water and terrestrial

Reference: Barbosa et al. 2009a; Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

***Chloridium lignicola*** (F. Mangenot) W. Gams & Hol.-Jech., Stud. Mycol. 13: 37 (1976)

Substrate: twig and bark

Habitat: terrestrial

Reference: Marques et al. 2007b; Marques et al. 2008b

Geographical record: new record for Bahia

***Chloridium obclaviforme*** J. Mena & Mercado, Acta Bot., Szeged 33(1-2): 76 (1987)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for South America

***Chloridium virescens*** (Pers.) W. Gams & Hol.-Jech., Stud. Mycol. 13: 17 (1976)

Substrate: submerged leaf and twig

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Circinotrichum falcatisporum*** Piroz., Mycol. Pap. 84: 7 (1962)

Substrate: leaf

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: unknown

***Circinotrichum olivaceum*** (Speg.) Piroz., Mycol. Pap. 84: 6 (1962)

Substrate: leaf

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: unknown

***Circinotrichum papakurae*** S. Hughes & Piroz., N.Z. Jl Bot. 9(1): 40 (1971)

Substrate: leaf

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Cladosporium cladosporioides*** (Fresen.) G.A. de Vries, Contrib. Knowledge of the Genus *Cladosporium*

Link ex Fries: 57 (1942)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Cladosporium oxysporum*** Berk. & M.A. Curtis, in Berkeley, J. Linn. Soc., Bot. 10(no. 46): 362 (1868)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Clonostachys compactiuscula*** (Sacc.) D. Hawksworth & W. Gams, in Hawksworth &

Punithalingam, Trans. Br. Mycol. Soc. 64(1): 90 (1975)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a; Barbosa et al. 2009b

Geographical record: new record for Bahia

***Craspedodidymum abigianense*** Lunghini & Onofri, Trans. Br. Mycol. Soc. 74(1): 208 (1980)

Substrate: bark

Habitat: terrestrial

Reference: Marques et al. 2007b

Geographical record: new record for Brazil

***Craspedodidymum cubense*** J. Mena & Mercado, in Mercado Sierra & Mena Portales, Acta bot.

hung. 37(1-4): 65 (1992)

Substrate: bark

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007b; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Craspedodidymum fimbriatum*** Bhat & W.B. Kendr., Mycotaxon 49: 33 (1993)

Substrate: twig

Habitat: terrestrial

Reference: Marques et al. 2007b

Geographical record: unknown

*Craspedodidymum proliferans* V. Rao & de Hoog, Stud. Mycol. 28: 64 (1986)  
Substrate: twig and bark  
Habitat: terrestrial  
Reference: Marques et al. 2007b  
Geographical record: new record for Brazil

*Cryptophiale guadalcanalensis* Matsush. [as 'guadalcanalense'], Microfungi of the Solomon Islands and Papua-New Guinea (Osaka): 15 (1971)  
Substrate: leaf  
Habitat: terrestrial  
Reference: Marques et al. 2008a, Barbosa et al. 2009a; Marques et al. 2008b  
Geographical record: new record for America and Neotropic

*Cryptophiale kakombensis* Piroz., Can. J. Bot. 46: 1124 (1968)  
Substrate: decaying leaf and petiole and submerged leaf  
Habitat: terrestrial and fresh water  
Reference: Marques et al. 2008a, Marques et al. 2008b; Marques et al. 2007b; Barbosa et al. 2009a; Barbosa et al. 2013b  
Geographical record: new record for Bahia

*Cryptophiale udagawae* Piroz. & Ichinoe, in Pirozynski, Can. J. Bot. 46: 1126 (1968)  
Substrate: decaying leaf and submerged leaf and twig  
Habitat: terrestrial and fresh water  
Reference: Marques et al. 2008a, Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b  
Geographical record: unknown

*Cryptophialoidea fasciculata* Kuthub. & Nawawi, Mycol. Res. 98(6): 686 (1994)  
Substrate: decaying leaf and bark and submerged petiole and twig  
Habitat: terrestrial and fresh water  
Reference: Barbosa et al. 2009a; Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b  
Geographical record: new record for Brazil

*Cryptophialoidea ramosa* G. Delgado, J. Mena & Gené, Fungal Diversity 20: 31 (2005)  
Substrate: leaf and bark  
Habitat: terrestrial  
Reference: Marques et al. 2008a  
Geographical record: new record for South America

*Cryptophialoidea secunda* (Kuthub. & B. Sutton) Kuthub. & Nawawi, Trans. Br. Mycol. Soc. 89(4): 583 (1987)  
Substrate: submerged twig  
Habitat: fresh water  
Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b  
Geographical record: new record for South America

*Cubasina albofusca* R.F. Castañeda, Deuteromycotina de Cuba, Hyphomycetes IV (La Habana): 6 (1986)  
Substrate: petiole  
Habitat: terrestrial  
Reference: Marques et al. 2008b  
Geographical record: unknown

*Cubasina microspora* M.F.O. Marques, Gusmão & R.F. Castañeda, Mycotaxon 102: 18 (2007)  
Substrate: petiole  
Habitat: terrestrial  
Reference: Marques et al. 2007a  
Geographical record: new species

***Curvularia senegalensis*** (Speg.) Subram., J. Indian bot. Soc. 35(4): 467 (1956)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Cylindrocladium candelabrum*** Viégas, Bragantia 6: 370 (1946)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Cylindrocladium naviculatum*** Crous & M.J. Wingf., Mycotaxon 50: 443 (1994)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Dactylaria belliana*** B.C. Paulus, Gadek & K.D. Hyde, Fungal Diversity 14: 146 (2003)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2007b; Barbosa et al. 2009a

Geographical record: new record for Neotropic

***Dactylaria botulispora*** R.F. Castañeda & W.B. Kendr., Univ. Waterloo Biol. Ser. 32: 13 (1990)

Substrate: decaying twig and bark and submerged twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

***Dactylaria candidula*** (Höhn.) G.C. Bhatt & W.B. Kendr., in Stolk & Hennebert, Can. J. Bot. 46: 1256 (1968)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Dactylaria ficusicola*** B.C. Paulus, Gadek & K.D. Hyde, Fungal Diversity 14: 149 (2003)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2007b; Barbosa et al. 2009a

Geographical record: new record for Neotropic

***Dactylaria fusiformis*** Shearer & J.L. Crane, Mycologia 63(2): 243 (1971)

Substrate: decaying leaf and submerged leaf and petiole

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Dactylaria hyalotunicata*** K.M. Tsui, Goh & K.D. Hyde, Sydowia 49(2): 182 (1997)

Substrate: submerged twig and bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: rare species

*Dactylaria saccardoana* F.R. Barbosa & Gusmão, Cryptog. Mycol. 34: 245 (2013)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: new species

*Dactylellina ellipsospora* (Preuss) M. Scholler, Hagedorn & A. Rubner, Sydowia 51(1): 110 (1999)

Substrate: twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b (as *Dactylella ellipsospora* (Preuss) Grove)

Geographical record: unknown

*Deightoniella rugosa* F.R. Barbosa, Gusmão & R.F. Castañeda, Mycotaxon 102: 40 (2007)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2007b

Geographical record: new species

*Dendryphiopsis atra* (Corda) S. Hughes, Can. J. Bot. 31: 655 (1953)

Substrate: twig

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2007b; Barbosa et al. 2013b; Marques et al. 2008b

Geographical record: new record for Neotropic

*Dictyochaeta* anam. *Chaetosphaeria pulchriseta* S. Hughes, W.B. Kendr. & Shoemaker, in Hughes & Kendrick, N.Z. Jl Bot. 6: 356 (1968)

Substrate: submerged twig and bark

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

*Dictyochaeta britannica* (M.B. Ellis) Whitton, McKenzie & K.D. Hyde, Fungal Diversity 4: 137 (2000)

Substrate: submerged petiole

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

*Dictyochaeta fertilis* (S. Hughes & W.B. Kendr.) Hol.-Jech., Folia geobot. phytotax. 19(4): 426 (1984)

Substrate: decaying leaf and submerged leaf, petiole, twig and bark

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

*Dictyochaeta heteroderae* (Morgan-Jones) Carris & Glawe, Mycotaxon 33: 23 (1988)

Substrate: twig

Habitat: terrestrial and fresh water

Reference: Cruz et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Neotropic

*Dictyochaeta microcylindrospora* Whitton, McKenzie & K.D. Hyde, Fungal Diversity 4: 141 (2000)

Substrate: decaying leaf and submerged leaf, petiole and twig

Habitat: terrestrial and fresh water

Reference: Cruz et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for America

*Dictyochaeta novae-guineensis* (Matsush.) A.I. Romero, Boln. Soc. argent. Bot. 22(1-4): 76 (1983)

Substrate: twig

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

*Dictyochaeta pluriguttulata* Kuthub. & Nawawi, Mycol. Res. 95(10): 1212 (1991)

Substrate: twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2007b; Barbosa et al. 2013b

Geographical record: new record for Neotropic

*Dictyochaeta setosa* (S. Hughes & W.B. Kendr.) Whitton, McKenzie & K.D. Hyde, Fungal Diversity 4:

148 (2000)

Substrate: leaf

Habitat: terrestrial

Reference: Cruz et al. 2008b

Geographical record: new record for America

*Dictyochaeta simplex* (S. Hughes & W.B. Kendr.) Hol.-Jech., Folia geobot. phytotax. 19(4): 434 (1984)

Substrate: decaying leaf and petiole and submerged leaf, petiole, twig and bark

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

*Dictyochaetopsis gonytrichodes* (Shearer & J.L. Crane) Whitton, McKenzie & K.D. Hyde [as

'gonytrichoides'], Fungal Diversity 4: 156 (2000)

Substrate: submerged leaf and twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Bahia

*Dictyochaetopsis polysetosa* R.F. Castañeda, Gusmão, Guarro & Saikawa, Mycotaxon 103: 2 (2008)

Substrate: submerged leaf and petiole

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Bahia

*Dictyosporium bulbosum* Tzean & J.L. Chen, Mycol. Res. 92(4): 500 (1989)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2007b; Barbosa et al. 2009a

Geographical record: new record for Neotropic

*Dictyosporium digitatum* J.L. Chen, C.H. Hwang & Tzean, Mycol. Res. 95(9): 1145 (1991)

Substrate: decaying leaf and bark and submerged leaf and petiole,

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2007b; Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2009a;

Barbosa et al. 2013b

Geographical record: new record for Neotropic

*Dictyosporium elegans* Corda, Weitenweber's Beitr. Nat.: 87 (1836)

Substrate: decaying leaf and bark and submerged leaf, petiole and twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2009b; Barbosa et al. 2013b

Geographical record: new record for Bahia

**Diplocladiella cornitumida** F.R. Barbosa, Gusmão & R.F. Castañeda, Mycotaxon 102: 43 (2007)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2007b; Barbosa et al. 2009a

Geographical record: new species

**Dischloridium inaequiseptatum** (Matsush.) Hol.-Jech., Česká Mykol. 41(2): 111 (1987)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

**Ellisembia adscendens** (Berk.) Subram., Proc. Indian natn Sci. Acad., Part B. Biol. Sci. 58(4): 183 (1992)

Substrate: decaying and submerged twig and bark

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Brazil

**Ellisembia bambusicola** (M.B. Ellis) J. Mena & G. Delgado, in Mena-Portales, Delgado-Rodríguez &

Heredia-Abarca, Boln Soc. micol. Madrid 25: 266 (2000)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for South America

**Endophragmiella boothii** (M.B. Ellis) S. Hughes, N.Z. Jl Bot. 17(2): 147 (1979)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

**Endophragmiella rigidiuscula** R.F. Castañeda, Fungi Cubenses III (La Habana): 9 (1988)

Substrate: leaf

Habitat: terrestrial

Reference: Leão-Ferreira et al. 2009

Geographical record: new record for South America

**Endophragmiella rostrata** P.M. Kirk, Mycotaxon 23: 325 (1985)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

**Exserticlava triseptata** (Matsush.) S. Hughes, N.Z. Jl Bot. 16(3): 333 (1978)

Substrate: decaying leaf and bark and submerged twig and bark

Habitat: terrestrial and fresh water

Reference: Cruz et al. 2008a; Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Brazil

**Exserticlava vasiformis** (Matsush.) S. Hughes, N.Z. Jl Bot. 16(3): 332 (1978)

Substrate: decaying leaf, petiole, twig and bark and submerged bark

Habitat: terrestrial and fresh water

Reference: Cruz et al. 2008a; Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Flosculomyces floridaensis*** B. Sutton, Mycologia 70(4): 789 (1978)

Substrate: leaf

Habitat: terrestrial

Reference: Marques et al. 2007a; Barbosa et al. 2009a

Geographical record: new record for South America

***Gangliostilbe costaricensis*** Mercado, Gené & Guarro, Nova Hedwigia 64(3-4): 456 (1997)

Substrate: bark

Habitat: terrestrial

Reference: Marques et al. 2007b; Marques et al. 2008b

Geographical record: new record for Brazil

***Gonytrichum chlamydosporium*** G.L. Barron & G.C. Bhatt, Mycopath. Mycol. appl. 32: 126 (1967)

Substrate: submerged leaf, bark and twig

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Gonytrichum macrocladum*** (Sacc.) S. Hughes, Trans. Br. Mycol. Soc. 34(4): 565 (1952)

Substrate: twig and bark

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Gyrothrix circinata*** (Berk. & M.A. Curtis) S. Hughes, Can. J. Bot. 36: 771 (1958)

Substrate: decaying leaf and submerged petiole and twig

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Gyrothrix magica*** Lunghini & Onofri, in Rambelli, Onofri & Lunghini, Trans. Br. Mycol. Soc. 76(1): 53 (1981)

Substrate: leaf

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Gyrothrix podosperma*** (Corda) Rabenh., Deutschl. Krypt.-Fl. (Leipzig) 1: 72 (1844)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Gyrothrix verticiclada*** (Goid.) S. Hughes & Piroz., N.Z. Jl Bot. 9(1): 42 (1971)

Substrate: leaf

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2009b

Geographical record: new record for Bahia

***Guedea novae-zelandiae*** S. Hughes, N.Z. Jl Bot. 18(1): 65 (1980)

Substrate: leaf

Habitat: terrestrial

Reference: Marques et al. 2007a; Barbosa et al. 2009a

Geographical record: new record for South America

***Helicomyces roseus*** Link, Mag. Gesell. naturf. Freunde, Berlin 3(1-2): 21 (1809)

Substrate: submerged leaf and bark

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Heliocephala elegans*** (R.F. Castañeda) R.F. Castañeda & Unter., Mycologia 103(3): 636 (2011)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Henicospora coronata*** B. Sutton & P.M. Kirk, in Kirk & Sutton, Trans. Br. Mycol. Soc. 75(2):

249 (1980)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Henicospora minor*** P.M. Kirk & B. Sutton, Trans. Br. Mycol. Soc. 75(2): 249 (1980)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Hermatomyces sphaericus*** (Sacc.) S. Hughes, Mycol. Pap. 50: 100 (1953)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for South America

***Idriella cagnizarii*** R.F. Castañeda & W.B. Kendr., Univ. Waterloo Biol. Ser. 35: 63 (1991)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Idriella ramosa*** Matsush., in Kabayasi et al., Bull. natn. Sci. Mus., Tokyo 14(3): 466 (1971)

Substrate: decaying leaf and submerged leaf and petiole

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Marques et al. 2007a; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: new record for South America

***Idriella setiformis*** R.F. Castañeda & G.R.W. Arnold, Rev. Jard. bot. nac., Univ. Habana 6(1): 50 (1985)

Substrate: leaf

Habitat: terrestrial

Reference: Marques et al. 2007a; Barbosa et al. 2009a

Geographical record: new record for South America

***Inesiosporium longispirale*** (R.F. Castañeda) R.F. Castañeda & W. Gams, Nova Hedwigia 64(3-4): 486 (1997)

Substrate: submerged leaf and bark

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Ingoldiella hamata*** D.E. Shaw, Trans. Br. Mycol. Soc. 59(2): 258 (1972)

Substrate: submerged petiole and bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Ityorhoptrum verruculosum*** (M.B. Ellis) P.M. Kirk, Trans. Br. Mycol. Soc. 86(3): 419 (1986)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Junewangia globulosa*** (Tóth) W.A. Baker & Morgan-Jones, Mycotaxon 81: 308 (2002)

Substrate: bark

Habitat: terrestrial

Reference: Marques et al. 2007b; Marques et al. 2008b

Geographical record: new record for Brazil

***Junewangia martinii*** (J.L. Crane & Dumont) W.A. Baker & Morgan-Jones, Mycotaxon 81: 310 (2002)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for South America

***Kionochaeta nanophora*** Kuthub. & Nawawi, Trans. Br. Mycol. Soc. 90(3): 440 (1988)

Substrate: twig and bark

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2007b

Geographical record: new record for Neotropic

***Kionochaeta pughi*** Kuthub. & Nawawi, Trans. Br. Mycol. Soc. 90(3): 437 (1988)

Substrate: twig and bark

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2007b

Geographical record: new record for Neotropic

***Kionochaeta ramifera*** (Matsush.) P.M. Kirk & B. Sutton, Trans. Br. Mycol. Soc. 85(4): 715 (1986)

Substrate: decaying leaf, twig and bark and submerged leaf

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Kionochaeta spissa*** P.M. Kirk & B. Sutton, Trans. Br. Mycol. Soc. 85(4): 715 (1986)

Substrate: leaf and bark

Habitat: terrestrial

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2007b

Geographical record: new record for Neotropic

***Kylindria pluriseptata*** R.F. Castañeda, Fungi Cubenses II (La Habana): 7 (1987)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2007a; Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: new record for South America

***Lauriomyces heliocephalus*** (V. Rao & de Hoog) R.F. Castañeda & W.B. Kendr., Univ. Waterloo Biol.

Ser. 32: 26 (1990)

Substrate: petiole

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Lauriomyces sakaeratensis*** Somrith., Kosol & E.B.G. Jones, Nova Hedwigia 82(1-2): 210 (2006)

Substrate: submerged leaf, petiole and bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: rare species

***Linkosia ponapensis*** (Matsush.) R.F. Castañeda, Saikawa & Gené, Cryptog. Mycol. 21(4): 219 (2000)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for South America

***Melanocephala australiensis*** (G.W. Beaton & M.B. Ellis) S. Hughes, N.Z. Jl Bot. 17(2): 169 (1979)

Substrate: decaying bark and submerged twig and bark

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

***Menisporopsis novae-zelandiae*** S. Hughes & W.B. Kendr., N.Z. Jl Bot. 6: 369 (1968)

Substrate: submerged leaf, petiole and twig

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Menisporopsis pirozynskii*** Varghese & V.G. Rao, Bot. Notiser 131(2): 215 (1978)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Menisporopsis profusa*** Piroz. & Hodges, Can. J. Bot. 51(1): 164 (1973)

Substrate: twig and bark

Habitat: terrestrial

Reference: Marques et al. 2007b

Geographical record: new record for Brazil

***Menisporopsis theobromae*** S. Hughes, Mycol. Pap. 48: 59 (1952)

Substrate: submerged leaf, petiole and twig

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Mirandina corticola*** G. Arnaud ex Matsush., Icon. microfung. Matsush. lect. (Kobe): 96 (1975)

Substrate: submerged leaf and twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Monodictys putredinis*** (Wallr.) S. Hughes, Can. J. Bot. 36: 785 (1958)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Monotosporella setosa*** (Berk. & M.A. Curtis) S. Hughes, Can. J. Bot. 36: 787 (1958)

Substrate: twig and bark

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Murogenella lampadiformis*** R.F. Castañeda & W.B. Kendr., Univ. Waterloo Biol. Ser. 33: 26 (1990)

Substrate: leaf

Habitat: terrestrial

Reference: Leão-Ferreira et al. 2009

Geographical record: new record for South America

***Musicillium theobromae*** (Turconi) Zare & W. Gams, Nova Hedwigia 85(3-4): 482 (2007)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a (as *Verticillium theobromae* (Turconi) E.W. Mason & S. Hughes)

Geographical record: unknown

***Mycoenterolobium platysporum*** Goos, Mycologia 62(1): 172 (1970)

Substrate: decaying leaf and submerged bark

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2013b; Leão-Ferreira et al. 2009

Geographical record: new record for South America

***Nakataea fusispora*** (Matsush.) Matsush., Icon. microfung. Matsush. lect. (Kobe): 100 (1975)

Substrate: twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

***Oidiodendron cereale*** (Thüm.) G.L. Barron [as 'cerealis'], Can. J. Bot. 40: 594 (1962)

Substrate: twig

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Paliphora intermedia*** Alcorn, Mycotaxon 59: 145 (1996)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2009a

Geographical record: unknown

***Paraceratocladium polysetosum*** R.F. Castañeda, Fungi Cubenses II (La Habana): 9 (1987)

Substrate: leaf, petiole and twig

Habitat: terrestrial

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: unknown

***Paraceratocladium silvestre*** R.F. Castañeda, Fungi Cubenses II (La Habana): 9 (1987)  
Substrate: leaf  
Habitat: terrestrial  
Reference: Marques et al. 2008b; Barbosa et al. 2009a  
Geographical record: unknown

***Parapleurothecopsis inaequiseptata*** (Matsush.) P.M. Kirk, Trans. Br. Mycol. Soc. 78(1): 65 (1982)  
Substrate: leaf and petiole  
Habitat: terrestrial  
Reference: Marques et al. 2008b  
Geographical record: unknown

***Parasypodiella laxa*** (Subram. & Vittal) Ponnappa, Trans. Br. Mycol. Soc. 64(2): 344 (1975)  
Substrate: decaying leaf and petiole and submerged leaf  
Habitat: terrestrial and fresh water  
Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b  
Geographical record: unknown

***Periconia minutissima*** Corda, Icon. fung. (Prague) 1: 19 (1837)  
Substrate: submerged twig  
Habitat: fresh water  
Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b  
Geographical record: new record for Bahia

***Phaeoisaria clematidis*** (Fuckel) S. Hughes, Can. J. Bot. 36: 794 (1958)  
Substrate: twig  
Habitat: terrestrial and fresh water  
Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b  
Geographical record: unknown

***Phaeoisaria infrafertilis*** B. Sutton & Hodges, Nova Hedwigia 27(1-2): 219 (1976)  
Substrate: leaf and petiole  
Habitat: terrestrial  
Reference: Marques et al. 2008b  
Geographical record: unknown

***Phialocephala humicola*** S.C. Jong & E.E. Davis, Mycologia 64(6): 1352 (1973)  
Substrate: twig and bark  
Habitat: terrestrial  
Reference: Marques et al. 2007b; Marques et al. 2008b  
Geographical record: new record for Bahia

***Phragmocephala elegans*** R.F. Castañeda, Deuteromycotina de Cuba, Hyphomycetes (La Habana) 3: 26 (1985)  
Substrate: leaf and petiole  
Habitat: terrestrial  
Reference: Marques et al. 2007a; Marques et al. 2008b  
Geographical record: new record for South America

***Phragmocephala stemphylioides*** (Corda) S. Hughes, Can. J. Bot. 36: 796 (1958)  
Substrate: petiole  
Habitat: terrestrial  
Reference: Barbosa et al. 2007b; Marques et al. 2007a; Marques et al. 2008b  
Geographical record: new record for Neotropic

***Pithomyces elaeidicola*** M.B. Ellis, Mycol. Pap. 76: 10 (1960)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for America

***Pithomyces niger*** Mercado & J. Mena, in Mercado Sierra & Mena Portales, Acta bot., Szeged 32(1-4):

201 (1986)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Pleurophragmium malaysianum*** Matsush., Matsush. Mycol. Mem. 9: 20 (1996)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: rare species

***Pleurophragmium varieseptatum*** Matsush., Icon. microfung. Matsush. lect. (Kobe): 117 (1975)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2007b; Barbosa et al. 2009a

Geographical record: new record for Neotropic

***Pleurothecium recurvatum*** (Morgan) Höhn., Zentbl. Bakt. ParasitKde, Abt. II 60: 26 (1923)

Substrate: twig and bark

Habitat: terrestrial

Reference: Marques et al. 2007b; Marques et al. 2008b

Geographical record: new record for Brazil

***Pseudoacrodictys deightonii*** (M.B. Ellis) W.A. Baker & Morgan-Jones, Mycotaxon 85: 380 (2003)

Substrate: leaf

Habitat: terrestrial

Reference: Marques et al. 2007a; Marques et al. 2008b

Geographical record: new record for South America

***Pseudoacrodictys viridescens*** (B. Sutton & Alcorn) W.A. Baker & Morgan-Jones, Mycotaxon 85: 388 (2003)

Substrate: twig

Habitat: terrestrial

Reference: Leão-Ferreira et al. 2009

Geographical record: new record for Neotropic

***Pseudobotrytis terrestris*** (Timonin) Subram., Proc. Indian natn Sci. Acad., Part B. Biol. Sci. 43: 277 (1956)

Substrate: decaying leaf, petiole and twig and submerged twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2009b;

Barbosa et al. 2013b

Geographical record: new record for Bahia

***Pseudotracylla dentata*** B. Sutton & Hodges, Nova Hedwigia 27(3-4): 699 (1976)

Substrate: submerged leaf, petiole and twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Pyricularia rabaulensis*** Matsush., in Kabayasi et al., Bull. natn. Sci. Mus., Tokyo 14(3): 47 (1971)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: rare species

***Quadraceae stauroconidia*** F.R. Barbosa & Gusmão, Cryptog. Mycol. 34: 251 (2013)

Substrate: submerged leaf and twig

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: new species

***Repetophragma fasciatum*** (R.F. Castañeda) R.F. Castañeda, Gusmão & Saikawa, Mycotaxon 95: 269 (2006)

Substrate: submerged and decaying leaf

Habitat: fresh water and terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2013b (as *Endophragmiella fasciata*)

Geographical record: unknown

***Repetophragma filiferum*** (Piroz.) R.F. Castañeda, Gusmão & Heredia, Mycotaxon 95: 269 (2006)

Substrate: petiole

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Repetophragma quadriloculare*** (Matsush.) R.F. Castañeda, McKenzie & K.D. Hyde, Mycosphere 2(3): 277 (2011)

Substrate: petiole

Habitat: terrestrial

Reference: Marques et al. 2008b (as *Endophragmiella quadrilocularis* Matsush., Matsush.)

Geographical record: unknown

***Rhexoacrodictys erecta*** W.A. Baker & Morgan-Jones, Mycotaxon 82: 99 (2002)

Substrate: submerged petiole, twig and bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Satchmopsis brasiliensis*** B. Sutton & Hodges, in Sutton, Nova Hedwigia 26(1): 3 (1975)

Substrate: leaf

Habitat: terrestrial

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Scutisporus brunneus*** K. Ando & Tubaki, Trans. Mycol. Soc. Japan 26(2): 153 (1985)

Substrate: submerged petiole

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Selenodriella fertilis*** (Piroz. & Hodges) R.F. Castañeda & W.B. Kendr., Univ. Waterloo Biol. Ser. 33: 34 (1990)

Substrate: leaf

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007a; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: new record for South America

***Selenodriella perramosa*** W.B. Kendr. & R.F. Castañeda, Univ. Waterloo Biol. Ser. 33: 36 (1990)

Substrate: decaying leaf and submerged twig

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Selenosporella curvispora*** G. Arnaud ex MacGarvie, Scientific Proc. R. Dublin Soc., Ser. B 2(no. 16):

153 (1969)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: unknown

***Spadicoides stoveri*** M.B. Ellis, Mycol. Pap. 131: 22 (1972)

Substrate: petiole

Habitat: terrestrial

Reference: Marques et al. 2008b (as *Diplococcum stoveri* (M.B. Ellis) R.C. Sinclair, Eicker & Bhat)

Geographical record: unknown

***Spegazzinia deightonii*** (S. Hughes) Subram., J. Indian bot. Soc. 35: 78 (1956)

Substrate: leaf

Habitat: terrestrial

Reference: Leão-Ferreira et al. 2009

Geographical record: new record for South America

***Speiopsis scopiformis*** Kuthub. & Nawawi, Trans. Br. Mycol. Soc. 89(4): 584 (1987)

Substrate: decaying leaf and petiole and submerged leaf

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Sporendocladia bactrospora*** (W.B. Kendr.) M.J. Wingf., Trans. Br. Mycol. Soc. 89(4): 515 (1987)

Substrate: decaying leaf and submerged twig

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2009a; Barbosa et al. 2009b; Barbosa et al. 2013b

Geographical record: unknown

***Sporidesmiella ciliaspore*** W.P. Wu, in Wu & Zhuang, Fungal Diversity Res. Ser. (Hong Kong) 15: 160 (2005)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for America

***Sporidesmiella hyalosperma*** (Corda) P.M. Kirk, Trans. Br. Mycol. Soc. 79(3): 481 (1982)

Substrate: decaying petiole, twig and bark and submerged twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Sporidesmiella parva*** (M.B. Ellis) P.M. Kirk, Trans. Br. Mycol. Soc. 79(3): 486 (1982)

Substrate: twig

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2007b; Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Neotropic

***Sporidesmiella vignalensis*** W.B. Kendr. & R.F. Castañeda, Univ. Waterloo Biol. Ser. 33: 43 (1990)

Substrate: leaf

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007a; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for South America

***Sporidesmium tropicale*** M.B. Ellis, Mycol. Pap. 70: 58 (1958)

Substrate: twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: unknown

***Sporoschisma juvenile*** Boud., Icon. Mycol. (Paris) 1: 12 (1904)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Neotropic

***Sporoschisma saccardoi*** E.W. Mason & S. Hughes, in Hughes, Mycol. Pap. 31: 20 (1949)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Stachybotrys bisbyi*** (Sriniv.) G.L. Barron, Mycologia 56(2): 315 (1964)

Substrate: petiole and twig

Habitat: terrestrial

Reference: Marques et al. 2007b; Marques et al. 2007a; Marques et al. 2008b

Geographical record: new record for South America

***Stachybotrys chartarum*** (Ehrenb.) S. Hughes, Can. J. Bot. 36: 812 (1958)

Substrate: leaf, twig and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Stachybotrys kampalensis*** Hansf., Proc. Linn. Soc. London 155: 45 (1943)

Substrate: leaf

Habitat: terrestrial

Reference: Marques et al. 2007a; Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: new record for South America

***Stachybotrys longispora*** Matsush., Icon. microfung. Matsush. lect. (Kobe): 145 (1975)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: unknown

***Stachybotrys parvispora*** S. Hughes, Mycol. Pap. 48: 74 (1952)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2009b

Geographical record: new record for Bahia

***Stachybotrys sphaerospora*** Morgan-Jones & R.C. Sinclair, Mycotaxon 10(2): 372 (1980)

Substrate: submerged petiole

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for America

***Stylaspergillus laxus*** B. Sutton, Alcorn & P.J. Fisher, Trans. Br. Mycol. Soc. 79(2): 340 (1982)

Substrate: petiole

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Subulispora longirostrata*** Nawawi & Kuthub., Mycotaxon 30: 459 (1987)

Substrate: decaying leaf and submerged petiole

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Subulispora procurvata*** Tubaki, Trans. Mycol. Soc. Japan 12(1): 20 (1971)

Substrate: submerged leaf and twig

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Tetraploa aristata*** Berk. & Broome, Ann. Mag. nat. Hist., Ser. 2 5: 459 (1850)

Substrate: submerged leaf

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Thozetella boonjiensis*** B.C. Paulus, Gadek & K.D. Hyde, Mycologia 96(5): 1076 (2004)

Substrate: leaf and twig

Habitat: terrestrial

Reference: Barbosa et al. 2011

Geographical record: new record for America

***Thozetella cristata*** Piroz. & Hodges, Can. J. Bot. 51(1): 168 (1973)

Substrate: decaying and submerged leaf, petiole and twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2007a; Barbosa et al. 2009a;

Barbosa et al. 2013b

Geographical record: unknown

***Thozetella cubensis*** R.F. Castañeda & G.R.W. Arnold, Rev. Jard. bot. nac., Univ. Habana 6(1): 51 (1985)

Substrate: decaying leaf and submerged leaf, petiole and twig

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Thozetella gigantea*** B.C. Paulus, Gadek & K.D. Hyde, Mycologia 96(5): 1080 (2004)

Substrate: decaying leaf and submerged leaf and twig  
Habitat: terrestrial and fresh water  
Reference: Barbosa et al. 2011; Barbosa et al. 2013b  
Geographical record: new record for America

***Thozetella pinicola*** S.Y. Yeung, Jeewon & K.D. Hyde, Can. J. Microbiol. 55(6): 681 (2009)  
Substrate: submerged leaf  
Habitat: fresh water  
Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b  
Geographical record: new record for America

***Thozetella submersa*** F.R. Barbosa & Gusmão, Mycotaxon 115: 328 (2011)  
Substrate: submerged twig  
Habitat: fresh water  
Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b  
Geographical record: new species

***Torula herbarum*** (Pers.) Link, Mag. Gesell. naturf. Freunde, Berlin 3(1-2): 19 (1809)  
Substrate: submerged twig  
Habitat: fresh water  
Reference: Barbosa et al. 2013b  
Geographical record: unknown

***Triposporium elegans*** Corda, Icon. fung. (Prague) 1: 16 (1837)  
Substrate: twig  
Habitat: terrestrial  
Reference: Marques et al. 2008b  
Geographical record: unknown

***Umbellidion radulans*** B. Sutton & Hodges, Nova Hedwigia 26(2-3): 532 (1975)  
Substrate: decaying leaf and petiole and submerged leaf  
Habitat: terrestrial and fresh water  
Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b  
Geographical record: unknown

***Vermiculariopsiella cornuta*** (V. Rao & de Hoog) Nawawi, Kuthub. & B. Sutton, Mycotaxon 37: 181 (1990)  
Substrate: submerged leaf and decaying leaf, petiole and twig  
Habitat: terrestrial and fresh water  
Reference: Marques et al. 2008c; Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b (as *Gyrothrix cornuta*)  
Geographical record: new record for Neotropic

***Vermiculariopsiella cubensis*** (R.F. Castañeda) Nawawi, Kuthub. & B. Sutton, Mycotaxon 37: 180 (1990)  
Substrate: decaying and submerged leaf and petiole  
Habitat: terrestrial and fresh water  
Reference: Marques et al. 2008c; Marques et al. 2008b; Barbosa et al. 2013b  
Geographical record: new record for Bahia

***Vermiculariopsiella falcata*** Nawawi, Kuthub. & B. Sutton, Mycotaxon 37: 175 (1990)  
Substrate: leaf  
Habitat: terrestrial  
Reference: Marques et al. 2008c, Marques et al. 2008b  
Geographical record: new record for South America

***Vermiculariopsiella immersa*** (Desm.) Bender, Mycologia 24(4): 412 (1932)

Substrate: decaying leaf and petiole and submerged leaf

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008c; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Serra da Jiboia

***Vermiculariopsiella microsperma*** (Höhn.) R.F. Castañeda & W.B. Kendr., Univ. Waterloo Biol. Ser. 35: 118 (1991)

Substrate: decaying leaf and submerged leaf, petiole and twig

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b (as *Gyrothrix microsperma* (Höhn.) Piroz.)

Geographical record: unknown

***Virgaria nigra*** (Link) Gray, Nat. Arr. Brit. Pl. (London) 1: 553 (1817)

Substrate: twig

Habitat: terrestrial

Reference: Marques et al. 2007b; Marques et al. 2008b

Geographical record: new record for Brazil

***Virgariella atra*** S. Hughes, Can. J. Bot. 31(5): 654 (1953)

Substrate: submerged twig and bark

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Virgariella globigera*** (Sacc. & Ellis) S. Hughes, Can. J. Bot. 31: 654 (1953)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa et al. 2013b

Geographical record: unknown

***Virgatospora echinofibrosa*** Finley, Mycologia 59(3): 538 (1967)

Substrate: decaying twig and submerged petiole

Habitat: terrestrial and fresh water

Reference: Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Bahia

***Volutella minima*** Höhn., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 118: 1543 [83 repr.] (1909)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: unknown

***Wiesneromyces laurinus*** (Tassi) P.M. Kirk, Trans. Br. Mycol. Soc. 82(4): 748 (1984)

Substrate: decaying leaf and petiole and submerged leaf

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Xylomyces chlamydosporus*** Goos, R.D. Brooks & Lamore Mycologia 69(2): 282 (1977)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Brazil

***Xylomyces elegans*** Goh, W.H. Ho, K.D. Hyde & K.M. Tsui, Mycol. Res. 101(11): 1324 (1997)

Substrate: submerged bark

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Neotropic

***Xylomyces folicola*** W.B. Kendr. & R.F. Castañeda, Univ. Waterloo Biol. Ser. 33: 54 (1990)

Substrate: submerged leaf and petiole

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for South America

***Yinmingella mitriformis*** Goh, K.M. Tsui & K.D. Hyde, Can. J. Bot. 76(10): 1693 (1999)

Substrate: twig and bark

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2007b

Geographical record: new record for Neotropic

***Zanclospora indica*** Subram. & Vittal, Can. J. Bot. 51(6): 1132 (1973)

Substrate: petiole

Habitat: terrestrial

Reference: Marques et al. 2008b

Geographical record: unknown

***Zanclospora novae-zelandiae*** S. Hughes & W.B. Kendr., N.Z. Jl Bot. 3: 152 (1965)

Substrate: bark

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2007b; Marques et al. 2007b; Marques et al. 2008b; Barbosa et al. 2013b

Geographical record: new record for Brazil and Neotropic

***Zygosporium echinosporum*** Bunting & E.W. Mason, in Mason, Mycol. Pap. 5: 135 (1941)

Substrate: decaying and submerged leaf and petiole

Habitat: terrestrial and fresh water

Reference: Marques et al. 2008b; Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Zygosporium gibbum*** (Sacc., M. Rousseau & E. Bommer) S. Hughes, Can. J. Bot. 36: 825 (1958)

Substrate: leaf and petiole

Habitat: terrestrial

Reference: Marques et al. 2008b; Barbosa et al. 2009a

Geographical record: unknown

***Zygosporium masonii*** S. Hughes, Mycol. Pap. 44: 15 (1951)

Substrate: decaying leaf and submerged twig

Habitat: terrestrial and fresh water

Reference: Barbosa et al. 2009a; Barbosa et al. 2013b

Geographical record: unknown

***Zygosporium minus*** S. Hughes, Mycol. Pap. 44: 6 (1951)

Substrate: submerged twig

Habitat: fresh water

Reference: Barbosa & Gusmão 2011; Barbosa et al. 2013b

Geographical record: new record for Brazil

## Conclusion

These data demonstrate that Serra da Jibóia is a reservoir of high fungal diversity and that research should continue in order to explore the full biological potential in this region. To obtain a holistic understanding of the diversity of fungi in Serra da Jibóia, collection efforts should be directed at locations that have not yet been sampled in the region with a focus on other ecological groups of fungi such as freshwater fungi, soil fungi, mycorrhizal fungi, endophytic and epiphytic fungi and fungi occurring on insects, plants, canopies, etc.

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## Literature cited

- Almeida DAC, Barbosa FR, Gusmão LFP. 2012. Alguns fungos conidiais aquáticos-facultativos do bioma Caatinga. *Acta Bot Brasilia* 26(4): 924-932. <http://dx.doi.org/10.1590/S0102-33062012000400021>.
- Almeida DAC, Milller AN, Gusmão LFP. 2014. Brazilian Semi-Arid Ascomycetes I: New and interesting records of hysteriaceous ascomycetes. *Mycosphere* 5(2): 379-391.
- Barbosa FR, Gusmão LFP. 2011. Conidial fungi from semi-arid Caatinga Biome of Brazil. Rare freshwater hyphomycetes and other new records. *Mycosphere* 2(4): 475-485.
- Barbosa FR, Gusmão LFP, Barbosa FF. 2007a. *Thozetella* species (Anamorphic Fungi – Hyphomycetes) from semi-arid of Bahia State, Brazil. *Sitientibus* 7(2): 184-187.
- Barbosa FR, Gusmão LFP, Castañeda-Ruiz RF, Marques MFO, Maia LC. 2007b. Conidial fungi from the semi-arid Caatinga biome of Brazil. New species *Deightoniella rugosa* & *Diplocladiella cornutumida* with new records for the Neotropics. *Mycotaxon* 102: 39-49.
- Barbosa FR, Gusmão LFP, Raja HA, Shearer CA. 2008. *Annulatascus apiculatus* sp. nov., a new freshwater ascomycete from the semi-arid Caatinga biome of Brazil. *Mycotaxon* 106: 403-407.
- Barbosa FR, Gusmão LFP, Raja HA, Shearer CA. 2013a. New species and new records of freshwater ascomycetes from Brazil and Costa Rica. *Mycologia* 105(2): 335-343. <http://dx.doi.org/10.3852/12-054>.
- Barbosa FR, Maia LC, Gusmão LFP. 2009a. Fungos conidiais associados ao folhedo de *Clusia melchiorii* Gleason e *C. nemorosa* G. Mey. (Clusiaceae) em fragmento de Mata Atlântica, BA, Brasil. *Acta Bot Brasilica* 23(1): 79-84. <http://dx.doi.org/10.1590/S0102-3306200900010 0010>.
- Barbosa FR, Maia LC, Gusmão LFP. 2009b. Novos registros de Hyphomycetes decompisidores para o Estado da Bahia, Brasil. *Acta Bot Brasilica* 23(2): 323-329. <http://dx.doi.org/10.1590/S0102-33062009000200004>.
- Barbosa FR, Raja HA, Shearer CA, Gusmão LFP. 2012. Three *Chaetomium* species (Chaetomiaceae, Ascomycota) from the semiarid region of Brazil. *Sitientibus* 12(1): 115-118.
- Barbosa FR, Raja HA, Shearer CA, Gusmão LFP. 2013b. Some freshwater fungi from the Brazilian semi-arid region, including two new species of hyphomycetes. *Cryptogam. Mycol.* 34(3):243-258. <http://dx.doi.org/10.7872/crym.v34.iss2.2013.243>.
- Barbosa FR, Silva SS, Fiúza PO, Gusmão LFP. 2011. Conidial fungi from the semi-arid Caatinga biome of Brazil. New species and records for *Thozetella*. *Mycotaxon* 115: 327-334. <http://dx.doi.org/10.5248/115.327>.
- Blackwell M. 2011. The Fungi: 1, 2, 3 ... 5.1 million species? *Am. J. Bot.* 98: 426-438. <http://dx.doi.org/10.3732/ajb.1000298>.
- Bravo F, Chagas C. 2004. Espécies novas de *Tonnoira* Enderlein (Diptera: Psychodidae) do Nordeste brasileiro. *Neotrop. Entomol.* 33(5): 601-605. <http://dx.doi.org/10.1590/S1519-566X2004000500009>.
- Carvalho-Sobrinho JG, Queiroz LP. 2005. Composição florística de um fragmento de Mata Atlântica na Serra da Jibóia, Santa Terezinha, Bahia, Brasil. *Sitientibus* 5: 20-28.
- Cruz ACR da, Gutiérrez AH, Gusmão LFP. 2008a. O gênero *Exserticlava* (Fungo Anamorfo – Hyphomycetes) no Brasil. *Rev Bras Bot* 31(2): 357-261.
- Cruz ACR da, Leão-Ferreira SM, Barbosa FR, Gusmão LFP. 2008b. Conidial fungi from semi-arid Caatinga biome of Brazil. New and interesting *Dictyochaeta* species. *Mycotaxon* 106: 15-27.
- Freitas MA, Moraes EPF. 2009. Levantamento da avifauna (Serra da Jibóia), município da Fazenda Jequitibá de Elísio Medrado/Bahia. *Atualidades Ornitológicas* 147: 73-76.
- Góes-Neto A, Marques MFO, Andrade JD, Santos DS. 2003. Lignicolous Aphyllophoroid Basidiomycota in an Atlantic Forest Fragment in the semi-arid caatinga region of Brazil. *Mycotaxon* 88: 359-364.
- Gryganskyi AP, Humber RA, Smith ME et al. 2012. Molecular phylogeny of the Entomophthoromycota. *Mol. Phylogen. Evol.* 65: 682-694. <http://dx.doi.org/10.1016/j.ymp.2012.07.026>.

- Hawksworth DL. 1991. The fungal dimension of biodiversity: magnitude, significance and conservation. Mycol. Res. 95: 641-655. [http://dx.doi.org/10.1016/S0953-7562\(09\)80810-1](http://dx.doi.org/10.1016/S0953-7562(09)80810-1).
- Hawksworth DL. 2001. The magnitude of fungal diversity: the 1.5 million species estimate revisited. Mycol. Res. 105: 1422-1432. <http://dx.doi.org/10.1017/S0953-756201004725>.
- Hawksworth DL. 2012. Global species numbers of fungi: are tropical studies and molecular approaches contributing to a more robust estimate? Biodivers. Conserv. 21: 2425-2433. <http://dx.doi.org/10.1007/s10531-012-0335-x>.
- Hibbett D, Binder M, Bischoff JF et al. 2007. A higher-level phylogenetic classification of the fungi. Mycol. Res. 111: 509-547. <http://dx.doi.org/10.1016/j.mycres.2007.03.004>.
- Juncá FA, Borges CLS. 2002. Fauna associada a bromélias terrícolas da Serra da Jibóia, Bahia. Sitientibus 2: 73-81.
- Leão-Ferreira SM, Santa-Izabel T dos S, Gusmão LFP, Marques MFO. 2009. Novas ocorrências de fungos conidiais para América do Sul e Neotrópico. Rev Bras Bot 32(4):775-780.
- Macedo TS, Góes-Neto A, Nonato FR. 2011. Samambaias e Licófitas da Serra da Jibóia. The Field Museum 301(1): 1-6.
- Maia LC, Carvalho-Junior AA. 2010. Lista de espécies: fungos. 90-261, in RC Forzza et al (org), Catálogo de plantas e fungos do Brasil. Rio de Janeiro. Instituto de Pesquisas Jardim Botânico do Rio de Janeiro.
- Marques MFO, Barbosa FR, Gusmão LFP, Castañeda-Ruiz RF, Maia LC. 2007a. Conidial fungi from the semi-arid Caatinga biome of Brazil. *Cubasina microspora* sp. nov., a note on *C. albofusca*, and some new records for South America. Mycotaxon 102: 17-23.
- Marques MFO, Cruz ACR da, Barbosa FF, Gusmão LFP. 2008a. *Cryptophiale* and *Cryptophialoidea* (Conidial fungi) from Brazil and keys to the genera. Rev Bras Bot 31(2): 339-344.
- Marques MFO, Gusmão LFP, Maia LC. 2008b. Riqueza de espécies de fungos conidiais em duas áreas de Mata Atlântica no Morro da Pioneira, Serra da Jibóia, BA, Brasil. Acta Bot Brasilica 22(4): 954-961. <http://dx.doi.org/10.1590/S0102-33062008000400006>.
- Marques MFO, Gusmão LFP, Maia LC. 2008c. Espécies de *Vermiculariopsiella* (Hyphomycetes) associadas a substratos vegetais em fragmento de Mata Atlântica, Serra da Jibóia, Estado da Bahia, Brasil. Rev Bras Bot 31: 659-665.
- Marques MFO, Junior VO de M, Santos SML, Gusmão LFP, Maia LC. 2007b. Fungos conidiais lignícolas em um fragmento de Mata Atlântica, Serra da Jibóia, BA. Rev Bras Biocienc 5(2): 1186-1188.
- Ministério do Meio Ambiente. 2000. Avaliações e ações prioritárias para a conservação da Biodiversidade da Mata Atlântica e Campos Sulinos. Brasília.
- Polishook JD, Bills GF, Lodge DJ. 1996. Microfungi from decaying leaves of two rain forest trees in Puerto Rico. J. Ind. Microbiol. 17: 284-294. <http://dx.doi.org/10.1007/BF01574703>.
- Queiroz LP, Sena TSN, Costa MJSL. 1996. Flora vascular da Serra da Jibóia, Santa Terezinha – Bahia. I: O campo rupestre. Sitientibus 15:27-40.
- Ramos GJP, Oliveira IB, Moura CW do N. 2011. Desmídias de ambiente fitotelmata bromelícola da Serra da Jibóia, Bahia, Brasil. Rev Bras Biocienc 9(1): 103-113.
- Silva BDB da. 2013. Two new species of *Gastrum* (Gastraceae, Basidiomycota) found in Brazil. Nova Hedwigia 96(3-4): 445-456. <http://dx.doi.org/10.1127/0029-5035/2013/0089>.
- Silva SS da, Santa-Izabel TS, Gusmão LFP. 2014. Fungos conidiais associados a substratos vegetais submersos em algumas áreas do bioma Caatinga. Rodriguésia 65(2): 527-538
- Tsui CKM, Hyde KD, Hodgkiss IJ. 2000. Biodiversity of fungi on submerged wood in Hong Kong streams. Aquat Microb Ecol 21: 289-291. <http://dx.doi.org/10.3354/ame021289>
- Valente EB, Pôrto KC. 2006. Hepáticas (Marchantiophyta) de um fragmento de Mata Atlântica na Serra da Jibóia, Município de Santa Teresinha, BA, Brasil. Acta Bot Brasilica 20(2): 433-441. <http://dx.doi.org/10.1590/S0102-33062006000200018>.
- Valente EB, Pôrto KC, Bôas-Bastos SB, Bastos CJP. 2009. Musgos (Bryophyta) de um fragmento de Mata Atlântica na Serra da Jibóia, município de Santa Teresinha, BA, Brasil. Acta Bot Brasilica 23(2): 369-375. <http://dx.doi.org/10.1590/S0102-33062009000200008>.
- Webster J, Weber RWS. 2007. Introduction to Fungi. Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511809026>.
- Zacca T, Bravo F, Araújo MX. 2011. Butterflies (Lepidoptera: Papilionoidea and Hesperioidae) from Serra da Jibóia, Bahia State, Brazil. Entomobrasilis 4(3): 139-143.
- Zelski SE, Raja HA, Miller AN, Barbosa FR, Gusmão LFP, Shearer CA. 2011. *Longicollum biappendiculatum* gen. et sp. nov., a new freshwater ascomycete from the Neotropics. Mycosphere 2(5): 539-545. <http://dx.doi.org/10.5943/mycosphere/2/5/9>.