



Ceriporia amazonica (Phanerochaetaceae, Basidiomycota), a new species from the Brazilian Amazonia, and *C. albobrunnea*, a new record to Brazil

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Abstract

Ceriporia amazonica sp. nov. is described and illustrated from a basidioma collected in northern Brazilian Amazonia. It is characterized by a salmon pore surface when fresh and by basidiospores that are among the smallest in the genus. In addition, *C. albobrunnea* is reported as new to Brazil and a key to the species of *Ceriporia* recorded in the Neotropics is updated.

Key words: Agaricomycetes, diversity, Polyporales, taxonomy

Introduction

Ceriporia was described by Donk (1933) to accommodate white-rot species with resupinate basidiomata, poroid hymenial surface, inamyloid basidiospores, and a monomitic hyphal system with hyaline, simple-septate or sometimes clamped generative hyphae. The latter character separates it from *Ceriporiopsis*, where clamps are present on the generative hyphae as a rule (Ryvarden 1991, Ryvarden & Gilbertson 1993).

Microscopical examinations are the basis of most taxonomical *Ceriporia* studies (Gilbertson & Ryvarden 1986, Ryvarden & Iturriaga 2003). Only a few phylogenetic studies based on molecular markers have been performed as a supplement to classical taxonomical studies. The genus was at first considered monophyletic (Kim & Jung 1999), but it was recently shown that it is polyphyletic and that the presence or absence of cystidia is not considered a phylogenetic character in delimiting its species (Jia *et al.* 2014).

The genus is cosmopolitan and its species have been recorded worldwide. It currently includes almost 40 species (Jia *et al.* 2014), out of which 18 have been recorded from the Neotropics (Ryvarden & Iturriaga 2003, Coelho *et al.* 2005, Aime *et al.* 2007, Mata & Ryvarden 2010, Gomes-Silva *et al.* 2012). Only seven have been recorded from Brazil, two of which were from the Brazilian Amazonia (Gugliotta *et al.* 2013). In this study, we describe and illustrate *Ceriporia amazonica* sp. nov. In addition, *C. albobrunnea* is reported as new to Brazil and a key to neotropical species of *Ceriporia* is updated.

Material and methods

Collecting was undertaken in the Floresta Nacional do Amapá (00° 57' 49.8" N and 51° 36' 31.3" W), located in the northern Brazilian Amazonia, in the state of Amapá, in the municipalities of Porto Grande, Ferreira Gomes, and Pracuúba. The reserve is an area of 412.000 ha covered by ombrophilous dense rain forest (Pereira *et al.* 2007).

The basidiomata were analyzed according to standard methods (see Ryvarden 1991), while microscopic observations were made by examining free-hand sections of hymenia mounted in either 5% (w/v) KOH solution plus 1% (w/v) phloxine solution or Melzer's reagent (Ryvarden 1991). Color designation followed Watling (1969). Specimens were deposited in the João Murça Pires (MG) of Museu Paraense Emílio Goeldi, and the herbarium of Oslo (O).

- Pores 1–5 per mm, basidiospores longer than 4 μm 20
- 19. Basal hyphae strongly encrusted, basidiospores 3–3.5 \times 1.8–2 μm *C. incrustata*
- Basal hyphae more or less smooth, basidiospores 3–3.5 \times 1.5–2 μm *C. microspora*
- 20. Basidiospores 4–4.5 \times 1.7–2.2 μm , hyphae encrusted in the margin, pores 2–3 per mm
..... *C. angulata* Gomes-Silva, Ryvarden & Gibertoni
- Basidiospores 2.5–3 μm wide, non-encrusted hyphae, pores 1–3 per mm21
- 21. Basidiospores 4.5–5.5 \times 2.5–2.8 μm , pore surface straw-colored, pores angular to irregular, 1–3 per mm, up to 3 mm deep
..... *C. straminea* Ryvarden
- Basidiospores 5–6 \times 2.6–3 μm , pore surface cream-colored, pores angular to hexagonal, 1–2 per mm, up to 0.5 mm deep,
..... *C. dentipora* Ryvarden

Conclusion

Up to now, seven species of *Ceriporia* Donk have been recorded from Brazil: *C. angulata*, *C. mellea* (Berk. & Broome) Ryvarden, *C. purpurea*, *C. spissa*, *C. tarda*, *C. viridans*, *C. xylostomatoides* (Rajchenberg 1987, Loguercio-Leite & Wright 1991, Silveira & Guerreiro 1991, Nietiedt & Guerrero 2000, Coelho *et al.* 2005, Meijer 2006, Gomes-Silva *et al.* 2012), two of which (*C. angulata* and *C. spissa*) are from the Brazilian Amazonia. However, the presence of *C. mellea* is doubtful, since it is a species of paleotropical distribution (Núñez & Ryvarden 2001, Jia *et al.* 2014). During recent field trips in the region, one new species (*C. amazonica*) and a new record from Brazil (*C. albobrunnea*) were discovered. Thus, eight species of *Ceriporia* are currently confirmed from Brazil, four of which occur in the Brazilian Amazonia, indicating the importance of frequent inventories in the area.

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