Studies on *Wrightoporia* (Basidiomycota) from southern Brazil

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Abstract

In recent surveys of polyporoid fungi from Rio Grande do Sul State, southern Brazil, some interesting resupinate specimens belonging to the genus *Wrightoporia* were found. *Wrightoporia araucariae* is described as new, based on the fragile, whitish basidiomes which grow exclusively on *Araucaria angustifolia*; and *W. bracei* is recorded for the first time from Rio Grande do Sul State. In addition, *W. efibulata* is synonymized to *Wrightoporia bracei* based on collected specimens and herbarium material. The species are described, illustrated and discussed, and an identification key to the neotropical species of *Wrightoporia* is provided.

Key words: Wrightoporiaceae, xylophilous fungi, Russulales, taxonomy

Introduction

The genus *Wrightoporia* Pouzar belongs to the family Wrightoporiaceae Jülich (Larsson 2007) and, according to Mycobank databases (Robert et al. 2005), about 40 species are currently accepted in the genus. It is characterized by basidiomes with a tubular hymenophore and finely ornamented, amyloid basidiospores. The hyphal system is usually dimitic with clamped generative hyphae, but hyphae with simple septa can also occur. Also, the skeletal hyphae are often dextrinoid. *Wrightoporia* belongs to the order Russulales, which is distinct among the Agaricomycetes due to the ornamented amyloid basidiospores and the presence of a gloeopleurous hyphal system (Miller et al. 2006).


During recent surveys in Rio Grande do Sul State, a resupinate species of *Wrightoporia* was found growing exclusively on dead logs of *Araucaria angustifolia* (Beltol.) Kuntze and herein is described as new. *Wrightoporia bracei*, previously known only from Santa Catarina State in Brazil, is recorded for the first time from Rio Grande do Sul State. In addition, a new synonymy is proposed for *Wrightoporia efibulata* I. Lindblad & Ryvarden, based on type studies.

Material and Methods

Specimens were collected in areas of Atlantic rainforest (Dense Ombrophilous Forests) and Araucaria forest (Mixed Ombrophilous Forests) in Rio Grande do Sul State, southern Brazil, between 2007 and 2010, dried and deposited at the ICN Herbarium of the Federal University of Rio Grande do Sul. Specimens from the Botanical Museum of the University of Oslo (O) and the U.S. National Fungus Collection (BPI) were used for comparison. The specimens were examined according to Núñez & Ryvarden (2001). For microscopic analysis, hand-cut sections of the basidiomes were mounted on microscope slides with a drop of 3% KOH solution and 1% aqueous...
4. Pores large, 1–3 per mm, often lacerate .......................................................... 5
5. Pores small, 4–8 per mm, round to angular .................................................. 6
6. Basidiomes white to cream, basidiospores globose to subglobose, 5–6 × 4–5 \( \mu \)m .................................................. \( W. \) lenta
7. Basidiomes cream to pale brown, usually with darker patches, basidiospores subglobose to broadly ellipsoid, 3.5–4.5 × 2.5–3.5(4) \( \mu \)m .................................................. \( W. \) avellanea
8. Basidiomes soft and fragile, margin mycelioid, pores 4–6 per mm, basidiospores globose to subglobose 3–4 × 3–3.5 \( \mu \)m, on gymnosperms (gen. \( \text{Araucaria} \)) .......................................................... \( W. \) araucariae
9. Basidiomes tough, margin rounded, pores 6–8 per mm, basidiospores ellipsoid 3–3.5(4) × 2.5–2.8 \( \mu \)m, on angiosperms .......................................................... \( W. \) neotropica
10. Basidiomes fleshy when fresh, pores 1–3 per mm, hyphal system monomitic .................................................. \( W. \) porilacerata
11. Basidiomes corky to soft when fresh, pores 3–5 per mm, hyphal system di-trimitic .......................................................... 8
12. Pileus surface reddish brown, pores irregular, sometimes elongated, basidiospores ellipsoid (3–3.5 × 2 \( \mu \)m) .......................................................... \( W. \) bruno-ochracea
13. Pileus surface cream to pale ochraceous, pores regular, round to angular, basidiospores subglobose (3.5–4 × 3 \( \mu \)m) .......................................................... \( W. \) crema

Acknowledgments

The authors would like to thank the staff of the Botanical Museum of the University of Oslo (O) and the U.S. National Fungus Collection (BPI) herbaria for the loan of specimens and Larissa Trierveiler-Pereira for assistance in the scanning electron microscopy technique. CAPES and CNPq (Brazil) are acknowledged for financial support.

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