

Rise up, *Rhizoctonia*: moving to one fungus, one name in the Cejpomycetaceae (Agaricomycetes; Cantharellales).

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Cejpomycetaceae is a family of cryptic basidiomycetous fungi, most notable for the plant pathogens known under generic names such as Rhizoctonia, Ceratobasidium, Thanatephorus and Ceratorhiza. While responsible for billions of dollars in crop losses annually, members of these genera also serve important ecological functions as orchid mycorrhizal symbionts and saprotrophs. While teleomorph-typified (*Thanatephorus* and *Ceratobasidium*) and anamorph-typified (Rhizoctonia and Ceratorhiza) names have been utilised, molecular studies have repeatedly demonstrated these genera to be paraphyletic. In addition, the type of *Ceratobasidium* is not con-generic with the many other species introduced in the genus. Despite previous attempts to synonymise various names under a broadly-defined Rhizoctonia, authors have continued to describe new species using outdated generic names. Using publicly-available ex-type sequences, we recovered a phylogeny of the Cejpomycetaceae that reiterates the paraphyly of various genera within a well-supported clade to which we apply the name *Rhizotonia*. We review the validity of a number of epithets in Ceratobasidium, Thanatephorus, and Ceratorhiza, and formalise their transfer to *Rhizoctonia*. Using *Rhizoctonia* as a case study, we argue that continued use of dual nomenclature is out of step with contemporary fungal taxonomic practice and precludes a holistic understanding of the classification and biology of this group.

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