



## Pathogenicity of *Rhizoctonia* Species from the Brazilian Cerrado

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Fungi of the genus *Rhizoctonia* constitute a complex taxonomic group of phytopathogens, comprising multi-nucleated species like *Thanatephorus cucumeris* (*Rhizoctonia solani*), *Waitea circinata* var. *oryzae* (*Rhizoctonia oryzae*), *Waitea circinata* var. *zeae* (*Rhizoctonia zeae*), *Waitea circinata* var. *circinata* (anamorph not defined), in addition to bi-nucleate species (*Ceratobasidium*). These organisms are associated with many diseases in economically important plants, including species like beans, rice, corn and wheat. *R. solani* species is the most important and most studied within the genus and its hosts include hundreds of different domesticated, forest and ornamental species of plants. In this study, eighty one isolates, belonging to fourteen different taxa of *Rhizoctonia* fungi, from different agricultural regions of the Brazilian Cerrado and previously identified, were submitted to pathogenesis tests on corn and bean plants. The observed results revealed that a significant part of the 81 isolates studied is pathogenic to maize and beans. Approximately 53% of the isolates infected bean plants and 45.7% infected the corn. Twenty two isolates (27.1% of the total) attacked roots of both cultures. The virulence of the isolates in maize and beans varied more depending on the genetic variability than on the specificities of anastomosis groups/Varieties identified in the sampled areas.