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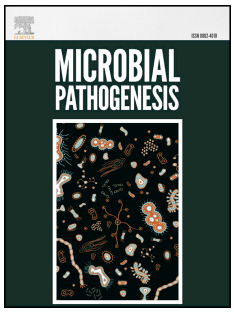

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Biocontrol of *Botrytis cinerea* and *Calonectria gracilis* by eucalypts growth promoters *Bacillus* spp.

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Running title: Biocontrol of fungal pathogens by endophytic Bacillus.

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Abstract

The clonal *Eucalyptus* plants are commonly obtained by vegetative propagation under a protected environment. This system improves the *Botrytis cinerea* and *Calonectria* spp infection on the young eucalypts plantings, resulting gray mold and cutting rot respectively. Currently, the unique available control method is based on chemicals. As alternative, novel methods to manage plant diseases, endophytic microorganisms could be an interesting alternative. Thus, we aimed to evaluate endophytic *Bacillus* isolated from eucalypts as a biocontrol agent against *Botrytis cinerea* and *Calonectria gracilis*, important fungal pathogens in the greenhouse, using clonal plantlets of *E. urograndis.* Eight endophytic strains of *Bacillus*, previously described as eucalyptus growth