

Biological control of *Sclerotinia sclerotiorum* on beans in field by *Trichoderma asperellum* and *Clonostachys rosea*

Marcelo A.B. Morandi*, L.B. Costa

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Embrapa Environment, P.O.Box 69, 13820-000-Jaguariúna-SP, Brazil,
mmorandi@cnpma.embrapa.br

White-mold (*Sclerotinia sclerotiorum*) is one of the most destructive diseases of bean crops in winter in Brazil. Biocontrol agents (BCAs) are been tested against the pathogen, including species of *Trichoderma* and *Clonostachys rosea*. The objective of this work was evaluate the effectiveness of one isolate of *T. asperellum* and one of *C. rosea* previously select in controlled conditions against the white-mold in a irrigated field during a winter crop. The experiment was composed by 36 microparcels (1 m² each) severely infested with sclerotia in a previous bean crop. There were six treatments: check (no sclerotia), infested check, fungicide (Fluazinan), *T. asperellum* T409, *C. rosea* I62 and Trichodermil (commercial product). We observed significant reduction on apothecium emergence in all plots treated with BCAs and with fungicide. The incidence and severity of the disease were only marginally reduced in the biocontrol treatments. Although the intensity of the disease was significantly reduced in the fungicide plots, no differences were observed in the yield among treatments. These results are probably due to the high level of ascospores produced in the check and disseminated to the other plots. The observed reduction in apothecium counts on treated plots indicates the potential of the BCAs to reduce the survival and multiplication of the pathogen in field along time. The experiment will be repeated in the same plots to check this hypothesis.