

Inoculation time of different antagonists to biocontrol red rot in sisal seedlings / Efeito do tempo de inoculação de diferentes antagonistas no biocontrole da podridão vermelha em mudas de sisal. J. S. Lima¹; L. O. Barbosa¹; R. B. Mendes²; I. L. A. Santos³; J. T. Souza¹; A. C. F. Soares¹; C. A. T. Gava³. Centre for Agricultural, Environmental and Biological Sciences, Federal University of Recôncavo da Bahia/UFRB, University Campus, Cruz das Almas 44380-000, Bahia, Brazil. ²IF SERTÃO-PE, Petrolina, PE. ³Embrapa Semiárido, Petrolina, PE.

One of the requirements for effective performance of biological control agents (BCA) is its application for a interval of time to ensure them an advantage of adaptation, sufficient time to colonization of host, as well as infection sites. This study aimed to determine the best time of application of BCA and its effect on the control of sisal red rot by *Aspergillus niger*. Sisal seedling were injured in the stem region and inoculated with the bacterias (A600= 0.5) *Brevibacterium* sp. (90), *Bacillus pumilus* (105) and the fungus *Pencillium citrinum* (107 conidia.mL⁻¹) at times 0, 6, 12 e 24 hours before and after inoculation of *A. niger* (10⁷ conidia mL⁻¹). After 30 days were assessed the incidence, severity of disease, the control efficiency, and analysis the data by ANOVA and Tukey test ($p < 0.05$). The results show that all preventive inoculations antagonists in the range of 24 hours before application of pathogen were effective in reducing disease. However, was not observed curative effect of the BCAs, because even with the concomitant inoculation there was no control treatment difference for the pathogen inoculation exclusive.

Palavras-chave: *Agave sisalana*; *Aspergillus niger*; biological control