

Biological control of *Penicillium digitatum* on organic orange fruits in postharvest

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The objective this work was to evaluate the effect of *Bacillus subtilis* AP3, *Paenibacillus lentimorbus* EMB-1, and *Streptomyces* sp. ASBV-1, maintained at Embrapa Meio Ambiente collection, on the control of *Penicillium digitatum* in postharvest of organic orange fruits. The experiment was carried through three wounds on the fruits (0.5 cm of diameter x 0.5 cm of depth) and applying 50 µl of biocontrol agents suspensions (10^8 cel/ml 24h before, simultaneously and 24 h after the inoculation of the *P. digitatum* (50 µl of 1×10^5 conidia/ml). The incidence and the severity of the disease in each point of inoculation were evaluated. The treatments were compared with the control (with and without inoculation of the pathogen) and the fungicide thiabendazole (1500 µg/ml). The fungicide controlled completely the disease when applied 24 h before or after and simultaneously the pathogen. The same control was obtained when *P. lentimorbus* EMB-1 and *B. subtilis* AP-3 applied simultaneously or 24 h after the *P. digitatum*.