Effect of media on growth and antagonistic activity of selected Trichoderma strains against Ganoderma

ABSTRACT

This study was conducted to determine the effect of culture media on the growth rate and antagonistic activity of Trichoderma harzianum strain 1132 and Trichoderma virens strain 128 in Ganoderma sp. The two growth media evaluated were potato sucrose agar (PSA) and potato dextrose agar (PDA). Growth rate was determined by the rate of spore density production. Significantly higher spore production was observed on PSA for T. virens strain 128 (9.12 × 10^{10}) and T. harzianum strain 1132 (8.58 × 10^{11}) compared to PDA with values of 6.82 × 10^{10} and 5.62 × 10^9 spores, respectively. Both strains showed the antagonistic activity against the wood decay fungus Ganoderma. However, the antagonistic activity higher in Trichoderma cultured on PSA media with antagonistic activity of 66% in T. virens strain 128 and 62% in T. harzianum 1132, respectively. These results suggest the significant potential for the use of PSA media as a growth and activity enhancer of Trichoderma strains used in biocontrol programs.