Biological Control of green mold in citrus fruite by pseudomonas species

Farzad Pouremam Alah Bakhshmahale*,

Green mould caused P.digitatum is an important and devastating storage disease of citrus fruits. Control of the pathogen is based on primarily fungicide application. In present times biological controlling method of storage disease is getting more preference to the hazardous effect of fungicide residues on fruits. In this study six bacterial isolate were obtained healthy orange and soil. All of isolates were indentificated by commercially biochemical tests. Antagonistic effects were studied by agar well diffusion assay, production of antifungal extracellular volatile substances, direct inhibition test and antagonistic isolate inoculation to orange surface. All of gram negative isolates prevented the fungal pathogen growth and lesion development on fruit surface. the total six isolate one Pseudomonas specie was the best antagonist. This isolate can be used as new biocontrol agents in postharvest decay of citrus fruits caused by Penicillium digitataum.

Keywords : Biological control, Antagonistic, Pseudomonas, Penicillium digitataum, citrus fruits

<u>Islamic Azad University, Rasht Branch - Thesis Database</u> دانشگاه آزاد اسلامی واحد رشت - سامانه بانک اطلاعات پایان نامه ها