

Title Integrated control of gray mould on apple using *Bacillus* spp. in combination with sodium bicarbonate

Author Mohammad Jamalizadeh, Hasan Reza Etebarian, Heshmatolah Aminian and Ali Alizadeh

Citation Annals of Microbiology, 59, Number 4, 745-747, 2009

Keywords biocontrol efficacy; *Bacillus* antagonist; sodium bicarbonate

Abstract

Bacillus subtilis isolates B2, B6 and *Bacillus brevis* isolate EN63-1 were evaluated for control of apple gray mould caused by *Botrytis mail* isolate 20JR. These isolates were evaluated alone, or in combination with sodium bicarbonate on artificially inoculated Golden Delicious apple cultivar. Treated fruit were stored at 4 and 20 °C for 30 and 14 days respectively. When applied alone, all isolates performed significantly better than the control in checking lesion diameter of gray mould. Isolate B6 was more effective than B2 and EN63-1 in this respect. A significant increase in biocontrol activity of all isolates was observed when isolates were combined with sodium bicarbonate

<http://www.springerlink.com/content/51712710u32x0n86/fulltext.pdf>