

P46

Biological control of gray mold rot of tomato with *Bacillus licheniformis* N1

Ji Hee Son, Jae Pil Lee, Su Hee Lee, Chul Seung Kim, Jae Sung Nam,
Sun Jae Jung and Byung Ju Moon

College of Natural Resource and Life Science, Dong-A University, 840 Hadan dong,
Pusan, Korea 604-714

Even though *Bacillus licheniformis* N1 previously showed successful biocontrol effect for *Botrytis cinerea* LVF12 on perilla, bacterial suspension alone just moderately controlled gray mold rot on the tomato. To enhance biocontrol effect of *B. licheniformis* N1 for gray mold rot on the tomato, several formulations in the form of wettable powder were generated and their effect on gray mold rot on tomato was investigated. Specially, our formulation C and E significantly suppressed gray mold rot on the tomato. Their biocontrol values were 88.3% and 90.5% in the greenhouse condition respectively. These results showed that our formulation C and E have as effective fungicide activity as iprodion W. P. used commonly for controlling gray mold rot on the tomato. In addition treatment of formulation C and E significantly increased quantity and weight of fruit than untreated control.