Antifungal activity of Bacillus sp. against pepper anthracnose

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Abstract

Pepper is the most important crop except rice in Korea. It contains vitamin A, C, E, and capsaicin so that it is of utility value. Because of anthracnose, epidemic, and some viruses, however, its production decreases up to 30 - 40%. Pepper anthracnose is caused from the fungus Colletotrichum coccodes. Because of appearance of resistant pathogens against chemical pesticides, another method to control pepper anthracnose is required. We attempted to isolate Bacillus genus, showing an activity against C. coccodes, from Korean salt-fermented fishery product, Shrimp-jeotkal, because Bacillus thuringiensis is used as one of major biopesticides1). Its activity was tested in vivo and in order to identify strain, the partial sequences containing 16S rDNA from the strains were analyzed. In the morphology study of strain , scanning electron microscopy was used.

Reference

1. Tabashnik, B. E., Finson,N., Groeters, F. R., Moar, W. J., Johnson, M. W., Luo, K. and Adang, M. J. Reversal of resistance to Bacillus thuringiensis in Plutella xylostella (1994). Proc. Natl. Acad. Sci. U S A. 91, 4120-4124.