

Scavenging for Bacterial Protein Against Plant Pathogenic Fungi
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Abstract:

Among microorganisms, fungi are the causative agents of most of the plant diseases. Some plants possess defense mechanisms against these pathogenic fungi. These defense mechanisms involve in production of low molecular weight secondary metabolites and proteins which are termed as Pathogenesis-related (PR) proteins. However, most of the agricultural crops do not possess defense mechanism against pathogenic fungi. A protein having anti-mycotic property is required to make them resistant against fungal diseases. Some bacteria can produce anti-mycotic substances. In the present study, protein lysate were obtained from *Bacillus pumilus*, *B. lentus*, *E. coli* and *Pseudomonas aeruginosa*. To isolate protein, lysis of bacterial cells was done by homogenization method. Crude protein lysate of *B. pumilus* and *P. aeruginosa* showed antifungal activity against various fungi. Proteins of lysate of *B. pumilus* were fractionated by ion-exchange column chromatography. Antifungal activity was not found in any of the fraction.