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Characterization of antifungal compounds of pseudomonas aurantiaca KL1326

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An antifungal bacterium, KL1326 was isolated in Chung-Chong area, Korea. KL1326 strain was identified as *pseudomonas aurantiaca* through morphological, physiological, and biochemical analysis. KL1326s antifungal activity has not been reported so far. KL1326 exhibits antifungal(AF) activity on several pathogenic fungi. KL1326 produces two small-molecular-weighted compounds and one protein(23kDa) that have antifungal activity. The R_f values of the two antifungal compounds in TLC are 0.22 and 0.29, respectively. One of the two compounds whose R_f is 0.29 was found as 1-phenazinecarboxylic acid (M.W=224.06) by UV, Fab-Mass, and NMR spectroscopy. It is well known that 1-phenazinecarboxylic acid is active against a variety of fungal root pathogens. Further studies on the other compound whose R_f is 0.22 are also required for the complete characterization of the KL1326s antifungal activity.