

#### ABSTRACT.

A deep purple pigmented isolate of *Bacillus subtilis* obtained from paddy soil inhibited the growth of *Rhizoctonia solani*, the causative agent of sheath blight of rice. The rod shaped bacterium hydrolysed starch and gelatin, reduced nitrate, was aerobic, formed acetyl methylcarbinol, catalase positive and spore forming. The inhibitory action was due to the secretion of three inhibitory compounds by the bacterium. The inhibitory compounds were aromatic organic compounds. The compounds show a high degree of temperature stability.