

**EFFECT OF COMPOST TEA AND PLANT  
EXTRACTS ON SHEATH BLIGHT AND  
BLAST DISEASES OF RICE (*Oryza sativa*)**

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## ABSTRACT

Blast caused by *Magnaporthe oryzae* and sheath blight caused by *Rhizoctonia solani* is destructive rice (*Oryza sativa*) diseases worldwide. Due to lack of highly resistant cultivars both diseases are widely controlled using fungicides. In this study compost tea (Brewed Compost Extract), extracts of Kappetiya (*Croton laccifer*), Gliricidia (*Gliricidia sepium*), Pawatta (*Ardathoda vasica*) leaves, neem (*Azadirachta indica*) seed extract and Tebuconazole fungicide were screened in vitro in PDA media and in the green house for their ability to suppress the mycelia growth of *Magnaporthe oryzae* and *Rhizoctonia solani*. Distilled water was used as the control. It was found that the treatment with Tebuconazole Fungicide highly inhibited the mycelia growth of the both fungi *Magnaporthe oryzae* (49.67cm<sup>2</sup>) and *Rhizoctonia solani* (54cm<sup>2</sup>). Second highest inhibition was recorded by compost tea for both fungi (29.33cm<sup>2</sup> and 31.67cm<sup>2</sup> respectively) and all the other treatments significantly reduced the mycelia growth of the causal organisms. In the pot experiment four weeks after inoculation the lowest relative lesion heights were obtained from Tebuconazole Fungicide (26.096%) followed by Pawatta (*A. vasica*) leaves (30.678%) and compost tea (32.289%) respectively. Compared to the control plants, application of plant extracts and compost tea significantly reduced the blast and sheath blight diseases. Therefore it is suggested to treat the rice plants with above to enhance the level of protection against sheath blight and blast diseases.

Key words: mycelia, PDA, compost tea, Tebuconazole, in vitro, in vivo