

## **Organic fertification as an eco friendly management of rice disease *Magnaporthe grisea***

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### **Abstract**

Rice blast is a belligerent plant disease caused by *Magnoparthe grizae* (*Pyricularia oryzae*) occurs in rice production areas all over the world and is one of the most common diseases in South Asia. Plant health conditions play a vital role in eco friendly disease management of rice blast. A field study was conducted using most popular rice cultivars AT 401 and H4 during 2007 and 2008 at Navally, Jaffna, where rice blast is a serious problem every year. The objective was to determine the effect of fertification by the effluent water from the toddy distillery unit on rice blast severity. Results exhibited that, there was significant difference between effluent water treated and control in paddy fields. Effluent water treated field was produced more than 31% and 25% yield in AT 401 and H4 respectively. Blast incidence was observed AT 401-control (DI=32.2), AT 401-fertification (DI=12.0), H4-control (DI=52.4), and H4-fertification (DI=22.0) and "p" value of organic fertification on blast (0.0002) was highly significant and at 95% confidential level. There was negative correlation between blast (-0.128) and number of tillers. These findings would be useful in developing an integrated rice blast management, as part of a holistic organic rice production approach.