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Field evaluation of fungicides against sheath blight disease of Rice

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Sheath blight (ShB) in rice is an important soil-borne fungal disease (*Rhizoctonia solani* Kuhn) causing up to 50% of yield losses. Sheath blight pathogen survives from one crop season to another through sclerotia and mycelia in plant debris and also through weed hosts in tropical environments. Use of resistant variety is always a farmer's and environment friendly method of managing the disease at less cost without any harm to our environment. Breeding for ShB resistance has been difficult, mainly because of the lack of identified resistant donors in cultivated varieties. To date, no rice variety has been found to be immune to *R. solani*, although cultivars with low levels of resistance have been reported. Presently, no strong genetic sources of resistance are reported against rice ShB disease. Hence, management of this disease can be done effectively with the help of available chemicals. The experiment was conducted with an objective to evaluate some new and commercially available fungicides against sheath blight of rice during kharif-2012 and 2013 at Directorate of Rice research (DRR), Hyderabad. Among the six treatments trifloxystrobin 25% + tebuconazole 50 % (Native 75 % WG) @ 0.4 g/l reduced the disease severity (21%) as well as incidence (25%) compared to check (DS - 54.1%). It was followed by azoxystrobin 25 SC (@ 1ml/l is reducing the sheath blight disease severity. Grain yield in the experimental plots were recorded, all the treatments increased the grain yield compared to check (1637 Kg/ha). Highest yield was recorded in the plots received trifloxystrobin 25% + tebuconazole 50% @ 0.4g/l treatment (4868 Kg/ha) followed by azoxystrobin 25 SC (4741 Kg/ha).

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