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## Reaction of a number of popular Rice cultivars and some donor lines to Sheath blight (*Rhizoctonia solani* Kühn) disease in Odisha

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Received : 04.09.2017

Accepted : 15.09.2017

Published : 29.01.2018

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A study was conducted at All India Coordinated Rice Improvement Project, RRTTS, Chiplima, Sambalpur, Odisha to find out a few popular cultivars and donor lines resistant to sheath blight pathogen both under field and laboratory conditions. Out of eighteen popular varieties of Odisha screened against sheath blight under field condition, three varieties (Tejaswini, Pratikshya and Mrunalini) were categorized as moderately resistant. Most of the varieties screened were either moderately susceptible (five varieties) or susceptible (six varieties). Four varieties were designated as highly susceptible. None of the entry in the present study was recorded as immune or resistant. The three cultivars (Tejaswini, Pratikshya and Mrunalini) graded as moderately resistant after field screening gave same result under in vitro conditions also confirming them as moderately resistant to sheath blight pathogen, *Rhizoctonia solani*. Thirty four donor entries were simultaneously screened against sheath blight pathogen after artificial inoculation under field condition. Among them, three donor entries DRR- BL-257-2, DRR-BL-295-1 and DRR-BL-295-2 showed good results consecutively for two years of screening and were considered to be moderately resistant to the disease. Five donor lines were graded as moderately susceptible, nine lines exhibited susceptible reactions to the disease while 17 donor lines were graded as highly susceptible to the disease. None of the lines screened was found highly resistant or immune to *Rhizoctonia solani*. The three cultivars which were found moderately resistant to the disease will be beneficial to the farmers in sheath blight endemic areas to reduce the extent of crop damage as well as yield loss. The three donor lines identified as moderately resistant will be helpful in resistant breeding programme.

**Key words:** Cultivars, donors, resistance, sheath blight, rice

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