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Identification of new rice accessions as resistant to rice brown planthopper, *Nilaparvata lugens* Stål. in Sri Lanka

Y Ketipearachchi[1*] and D D S S Dissanayaka[2]
[1]*Plant Genetic Resources Center, Department of Agriculture, Gannoruwa, Peradeniya*
[2]*Faculty of Agriculture, University of Ruhuna, Mapalana*

Rice germplasm were screened following the standard bulk seedling test against three BPH cultures reared by the Plant Genetic Resources Center (PGRC) at Peradeniya in 2008. These BPH cultures represented non-virulent natural population collected and reared in planthouse for several decades and two, virulent populations collected from epidemic fields in Kegalle and Hakmana respectively and reared in planthouse by the Department of Agriculture from 2006 and 2007. Tested materials represented rice breeding lines of the Rice Research Centers of the Department of Agriculture at Bombuwela and Ambalanthota and rice germplasm conserved at the PGRC at Peradeniya. Indian cultivar, Ptb 33 and Taichum Native 1 (TN1) were used as resistant and susceptible checks. Results indicated significantly the highest resistance in Bw 05-1337, Bw 04-1945, Bw 06-850 and Bw 06-730 and higher resistance in Bw 06-742, Bw 05-1750, Bw 05-1846 and KDML 105. Those germplasm with the highest resistance were considered as resistant and those with higher resistant were considered as moderately resistant. More than 57 of the tested germplasm were identified as susceptible.

Tel: 081-2388494