OVIPOSITION PREFERENCE OF BROWN PLANTHOPPER, NILAPARVATALUGENSE (STAL.) ON RICE GERMPLASM OF CHHATTISGARH AS A SOURCE OF RESISTANCE

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Abstract: The present studies were conducted in the glass house condition at IGKV Raipur during 2018 -19 with an objectiveovipositional preference of brown planthopper on rice germplasm of Chattisgarh as a source of resistance under control condition. The oviposition and unhatched eggs of female of the brown planthopper, *Nilaparvatalugens*(Stal.) average 75-85.25.The lowest egg laying by female BPH was in accession no. A: 145II and highest in susceptible check TN1 (126.75) and unhatched eggs range from 29.50-57.75, which was highest were resistant germplasm and lowest were TN1(10.25). The average egg laying, nymph emergence and percent unhatched eggs of this pest is described.

Keyword: BPH, Rice germplasm, Screening, Antibiosis, Oviposition

REFERENCES

Anonymous (2007). Directorate of Economics and Statistics Survey 2007.Govt.of India.Ministry of Finance, Economic Division, New Delhi.pp.14-15.

Food and Agricultural Organization of the United Nations: Statistics (FAOSTAT) (2006). Production of cereals and share in the world.

Heinrichs, E.A., Medrano, F.G. and Rapusas, H.R. (1985). Genetic Evaluation for Insect Resistance in Rice.Manila, Philippines; International Rice Research Institute, 356.

Lal, O.P. (1996). Recent Advances in Entomology, Apl. Publication, New Delhi.p. 392.

Mishra, B. (2005). More crop per drop, The Hindu Survey of Agriculture, 41-46.

Normile, D. (2008). Reinventing rice to feed the world. Science 321:330–333.

Pathak, M.D. and Khush, G.S. (1979). Studies of varietals resistance in rice to the brown plant hopper at the International Rice Research Institute. Brown plant hopper: Threat to rice production in Asia. Los Banos, Philippines. pp.285-301.

Reddy, K.L., Pasalu, I.C. and Reddy, D.D.R. (2005). Studies on antibiosis mechanism of resistance in rice against brown planthopper, Nilaparvatalugens (Stal.). Indian J. Entomol., 67(2): 140-143.

Sogawa, K. and Cheng, C.H. (1977). Economic thresholds, nature of damage and losses caused by brown planthopper. In: Brown planthopper: Threat to rice production in Asia. Proceedings of the international Conference on Brown planthopper, Los Banos, Laguna, 16–19 November. International Rice Research Institute, Los Banos, Laguna, The Philippines: 125 – 142.