

STUDYING COMPARATIVE RESISTANCE OF RICE CULTIVARS AGAINST
(Tryporyza spp.) STEM BORERS UNDER D.I.KHAN CONDITION

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ABSTRACT

Six cultivars of rice (3 fine and 3 coarse) were screened out for their resistance against Tryporyza borers infestation. The mean results of 2 consecutive years (1979-80) trial showed wide variations of borers attack on different varieties. Generally the fine (Basmati) varieties were found more susceptible (17 to 35 %) than coarse varieties (6 to 15 %). The lowest number of "dead hearts" and "White heads" were recorded in IRRI-8 (6.22 to 7.5 %) followed by IRRI-6 (8.3 to 9.00%). The maximum infestation was recorded in Basmati-370 (27 to 35.3 %).

INTRODUCTION

Rice, Oryza sativa is a staple food crop of Pakistan which plays an important role in earning foreign exchange. Rice is attacked by several species of borers. The yellow borer, Tryporyza incertulas Walk. and white borer, T. innotata, Walk. are considered to be the most destructive and injurious insects of rice not only in Pakistan but throughout Asia as reported by C.S. Koehler [1]. T. incertulas accounts for 85% of the total loss to paddy in the N.W.F.P. and the incidence of damage ranges from 8-100% in D.I.Khan district as reported by Baloch [2]. Frequent application of pesticides specially chlorinated hydrocarbons have created many problems like adverse effects on biological control agents, toxicity, health hazards and residue problems etc. In such circumstances the use of insect resistant varieties merit especial consideration which can be used as a principal control measure or as an integral part of more effective control programme Pathak and Saxena [3].

A number of workers have studied the behaviour of various