EFFECT OF POTASH NUTRITION ON INFESTATION BY THE YELLOW BORER TRYPORYZA INCERTULAS

Among the major pests of rice, the stemborers are of major economic significance in Asia. Though immediate control of the rice pests can be achieved by the use of insecticides, an integrated control approach alone can solve the pest problems in rice (Pathak, 1969). Application of additional quantities of Potash to the plant has been resorted to as a means of inducing pest resistance in rice (Vaithilingam 1975). The results reported in this note relate to the effect of graded doses of potash on the incidence of the yellow borer *Tryporyza incertulas* Wlk.

During the Punja crop season (October–February) 1978–79, an experiment was laid out at the Rice Research Station, Moncompu using five levels of potash (Table 1) in a Randomised block design with four replications. Nitrogen and phosphorus were uniformly applied at 90 and 45 kg/ha respectively. The variety used was Jaya. Incidence of stem borer was assessed ten days before harvest by counting the total number of white earheads in each plot and the mean percentage of tillers damaged by the borer is presented in Table 1

Table 1

Mean percentage of white earheads caused by *T. incertulas* in different potash treatments

Dose of Potash (K ₂ O kg/ha)	White earheads (%)
0	7.58
45	6.28
90	6 48
135	5.79
180	5.18
	(C D) = 1.15

It was observed that application of potash to rice plants significantly influenced the yellow borer infestation. Thus the highest two levels of potash gave significantly lower incidence of the pest. These results agree with the findings of 3 Jb/Jamoniam and Balasubramanian (1976) who reported similar trends from the Tamil Nadu State.

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സംഗ്രഹം

വയലുകളിൽ ഹെക്ടറൊന്നിന[െ] 135, 180 കിലോ[ഗാം എന്ന ക്രമത്തിൽ പൊ ട്ടാഷ് വളങ്ങരം ലഭ്യമായിരുന്നപ്പോരം നെല്ലിനെ ബാധിക്കുന്ന തണ്ടു തുരപ്പൻ പുഴുക്കളുടെ ഉപദ്രവം ഗണ്യമായി കുറയുന്നതായി, 1978_79 ൽ മങ്കൊമ്പു നെല്ലു ഗവേഷണ കേ[ന്ദ ത്തിൽ നടത്തിയ പരീക്ഷണങ്ങരം [പകടമാക്കി.

References

- Pathak, M. D. 1969. Integrated control of Rice stemborers, Leafhoppers, and Planthoppers. International Rice Research Conference, April-May 1969. IRRI, Philippines (mimeographed).
- Subramoniam, P. and Balasubramannian, M. 1976. Effect of Potash nutrition on the incidence of certain insect pests of Rice. *Madras agric. J.* 63, 560–64.
- Vaithilingam, C. 1975. Effect of potash nutrition on the incidence and severity of different pests of rice. *Rice Ent. Newsl.*, 3:3.

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