

Short Communication

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FIELD EVALUATION OF SOME GRANULAR INSECTICIDES FOR THE CONTROL OF RICE STEM BORERS

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The rice crop is attacked by 54 species of insect pests in Pakistan [3]. Of these, the rice stem borers, *Scirpophaga incertulas* (wlk.), *S. innotata* (Wlk.), *Chilo polychrysa* (Meyr.) and *Sesamia inferens* (Wlk.) are the most serious and cause considerable reduction in the yield of this crop. Granular insecticides have shown promise for the control of rice borers [2,4]. These borers have been effectively controlled with carbofuran 3G, azodrin 5G and diazinon 5G [1,5].

The trial was conducted at D.I.Khan to evaluate the effectiveness of six granular insecticides against the rice stem borers during 1984 crop season. Basmati 370 variety of rice was planted in a randomized complete block design and the treatments were replicated four times. All granules were applied twice, at an interval of 25 days, after transplanting. The experimental unit was 8x10 meter. One treatment was kept as untreated check. The observations on borers attack were recorded before harvest of the crop by taking a randomly selected sample of one m² from each treatment. The total and infested number of tillers per sample were recorded to calculate the percentage damage caused by rice borers. The yield kg/hectare was recorded. The data collected were analysed statistically by using Duncan's New Multiple Range Test.

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It is evident from Table 1 that cartap was the most effective in controlling the infestation of rice borers and differed significantly from all the other treatments. The next best results were obtained with carbofuran and diazinon and they differed significantly from the rest of the treatments. The highest yield of paddy was obtained with cartap. It did not reveal any significant difference from carbofuran but differed significantly from all the other treatments. The lowest yield was recorded with chlorpyrifos. However, all the treatments differed significantly in yield when compared with untreated check.

Key words: Evaluation, Insecticides, Stem borers.

TABLE 1. EFFECT OF GRANULAR INSECTICIDES ON RICE BORERS AND YIELD OF PADDY

S.No.	Treatments	Dose/ha. (Kgs.)	Percent tillers infestation	Yield of paddy (Kg./ha.)
1	Cartap 4G	22	4.62 ^a	1945 ^a
2	Carbofuran 3G	22	7.05 ^b	1875 ^a
3	Diazinon 10G	22	7.00 ^b	1618 ^b
4	Thiofanox 5G	22	10.75 ^c	1550 ^b
5	Chlorfenvinphos 10G	22	9.25 ^c	1545 ^b
6	Chlorpyrifos 5G	22	10.50 ^c	1430 ^c
7	Control (untreated)	-	20.75 ^d	920 ^d

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