

EVALUATION OF INSECTICIDES FOR THE CONTROL OF LEAF FOLDER IN RICE

The leaf folders, *Cnaphalocrocis medinalis* and *Marasmia patnalis* become serious at times in Karaikal region of Pondicherry State which is situated at the tail end of Cauvery delta and traditionally a rice growing area under irrigated condition. The insecticides presently recommended are less effective in tackling this pest. Hence two trials were laid out in the first season i.e., September to January in

1989-90 and 1990-91 at the Agricultural College Farm, Madur to evaluate the efficacy of newer insecticides.

IR 20, with locally recommended fertilizer dose, was planted under irrigated condition in 5 x 4 m² plots in randomized block design. The individual plots were separated by bunds and channels to regulate water movement from

Table 1. Effect of insecticides on the control of leaf folder in rice

Sl. No.	Treatments	Dose kg a.i. ha ¹	Increase or decrease of leaf folder damaged leaves, %	Yield t ha ⁻¹
1	Phosalone 35 E.C.	0.05	137.30 ± 47.22 ^b (59.38)	4.73 ± 0.18 a
2	Carbofuran 3 G	0.75	238.51 ± 12.54 ^b (59.63)	4.44 ± 0.13 b
3	Monocrotophos 36 WSC	0.50	-54.31 ± 7.15 ^a (49.73)	4.68 ± 0.17 a
4	Triazophos 40 EC	0.50	-44.02 ± 3.23 ^a	4.70 ± 0.13 a
5	Control	-	259.17 ± 63.98 ^b	4.33 ± 1.68 b
CD (0.05)	-	-	12.88 [*]	0.16 ^{**}

Values in parentheses arc sine transformed values; Values having common letters are statistically equal

one plot to another. The insecticides were applied at 45 days after planting (DAP) when the leaf folder damage was seen uniformly in all plots. The total leaves and the leaf folder damaged leaves on ten randomly selected hills were counted one day before and 15 days after the treatment. The dose for phosalone, monocrotophos and triazophos were 0.5 kg a.i. ha⁻¹ and for carbofuran 0.75 kg a.i. ha⁻¹ with no application of insecticides in the control plots. The percentage increase or decrease of leaf folder damage over the initial level of infestation for both the years was computed and the data were subjected to statistical analysis.

The results showed that triazophos was effective in controlling the incidence of leaf folder and was on par with monocrotophos, since there was a reduction in the leaf folder damage level in both the cases (54.31% and 44.02% respectively). By using triazophos @ 2.1 ha⁻¹, the leaf folder population was effectively controlled in Tamil Nadu (Muthu-

krishnan *et al.*, 1994). In the insecticide evaluation trial conducted as multilocation trial under the All India Coordinated Rice Improvement Project (ICAR), triazophos performed well in reducing the leaf folder damage (Anon., 1996) and it was recommended for the leaf folder control (Anon., 1996). In phosalone treated plots though there was a fall in the damage, it was not statistically equal to that of triazophos or monocrotophos. In carbofuran treated plots there was an increased attack of leaf folder to a tune of 238.51%, whereas in the control plots, 259.17 per cent increase in damage was seen (Table 1). Regarding the yield, the plots which received triazophos, monocrotophos and phosalone recorded higher yield than carbofuran treated and control plots (Table 1).

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