

Efficacy of KN 128 (Indoxacarb 15 EC) against Rice Leaf Folder (*Cnaphalocrosis medinalis*) on Paddy

Key words : *Cnaphalocrosis medinalis*, Efficacy, Indoxacarb, Leaf folder.

Rice is mainly a tropical and subtropical crop grown in almost all states in India. The climate which is congenial for rice crop is also congenial for growth and multiplication of insect pests. More than 100 species of insect pests have been reported to attack rice crop. Of these the rice leaf folder (*C. medinalis*) has increased in abundance since last two decades and once considered as a minor pest has now attained a major pest status. Khan *et. al.*, 1985, has reported the outbreak of this pest from various parts of the world. Hence, a study was undertaken to evaluate the efficacy of KN 128 (Indoxacarb 15 EC) against rice leaf folder (*C. medinalis*) on paddy during *Kharif* 2004, and *Rabi* 2005.

Field trial was laid out in a Randomized Block Design with six treatments in *Kharif* 2004 and 7 treatments in *Rabi* 2005 at Agricultural Research Station, Warangal. Each treatment was replicated four times. The test variety grown was Kayya, with recommended agronomic practices. The plot size was 25 sq.m with a spacing of 20 x 15 cm. Observations on the total no. of leaf folder damaged

leaves (LFDL)/ 10 hills (fresh damage) were recorded from each plot before spraying, 10 days after I spray and 7 days after II spray. The data was statistically analysed using RBD analysis.

A perusal of the data (Table 1) shows that during *Kharif* 2004, there was a significant decrease in LFDL/10 hills after the 1st spray with a per cent reduction ranging between 18.60 to 50.36 over the pre-treatment counts. KN128 @ 20,30 and 40 g ai/ha was on par with Caldan 50 SP @ 500 g ai /ha and significantly reduced the population of leaf folder. During *Rabi* 2005, the per cent reduction in LFDL over the pre-treatment counts was less ranging between 8.9 to 13.3 % with no significant difference among the treatments. However, counts recorded after 2nd spray showed significant reduction in LFDL with per cent reduction ranging between 70.3 to 75.9 over the LFDL recorded 10 days after 1st spray. All the treatments were on par in reducing the leaf folder damage and were significantly superior over the untreated control. Dani (2005) also reported that the LFDL ranged from 0.3 to 9.6 % in different doses of indoxacarb application.

Table 1. Efficacy of KN 128(Indoxacarb 15 EC) against the rice leaf folder during *Kharif* 2004

Treatment No.	Particulars	Dose g ai ha ⁻¹	LFDL 10 hills ⁻¹			% reduction in LFDL after I spray over pre-treatment
			Pre-treatment	10 days after I spray	7 days after II spray	
T1	KN 128 15 EC	20	29.75	17.8	7.75	40.17
T2	„	30	21.50	17.5	5.75	18.60
T3	„	40	29.25	16.5	6.75	43.59
T4	„	50	31.50	24.5	8.50	22.22
T5	Caldan 50 SP	500	34.25	17.0	5.50	50.36
T6	Untreated control	-	30.00	26.3	6.75	12.3
F cal			NS	Sig	NS	-
CD (5 %)			-	6.4	-	-
CV			28.7	21.3	34.80	-

Table 1. Efficacy of KN 128(Indoxacarb 15 EC) against the rice leaf folder during *Rabi* 2005

Treatment No.	Particulars	Dose g ai ha ⁻¹	LFDL 10 hills ⁻¹			% reduction in LFDL after I spray over pre-treatment
			Pre-treatment	10 days after I spray	7 days after II spray	
T1	KN 128 15 EC	10	24.5	21.5	6.0	72.0
T2	„	20	26.3	22.8	5.5	75.9
T3	„	30	24.5	21.5	5.8	73.0
T4	„	40	25.5	22.5	5.5	75.5
T5	„	50	22.3	21.0	5.8	72.3
T6	Caldan 50 SP	500	20.3	18.5	5.5	70.3
T7	Untreated control	-	25.8	23.3	16.3	30.3
F cal			NS	NS	Sig.	-
CD (5 %)			-	-	2.39	-
CV			23.76	32.05	23.47	-

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