

Newly emerged macropterous WBPH females were released, 20/polystyrene disc. The females were allowed free choice between parafilm-wrapped TN1 and exposed TN1; exposed Rathu Heenati and parafilm-wrapped TN1; and parafilm-wrapped Rathu Heenati

and wrapped TN1, with five replications each treatment. Females settling on each tiller were counted at 0.5, 1, 2, and 4 h after release.

WBPH females clearly preferred exposed TN1 over parafilm-wrapped

TN1 plants (see table). Significantly more WBPH settled on exposed resistant Rathu Heenati than on wrapped susceptible TN1. WBPH were oriented nearly equally to wrapped Rathu Heenati and TN1 plants. □

## Minimal dosages of buprofezin to control green leafhopper (GLH), whitebacked planthopper (WBPH), and brown planthopper (BPH)

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Buprofezin, a slow-acting insectistatic compound, has high activity against nymphs of planthoppers, leafhoppers, whiteflies, and mites. It has no knockdown action; most nymphs die during molting to the next instar. While buprofezin does not kill adult insects, it suppresses egg deposition and egg viability to reduce populations of nymphs and adults in the next generation.

In two experiments, we tested minimum rates of buprofezin for leafhopper and planthopper control.

In both trials, buprofezin was applied at 12.5, 25, and 50 g ai/ha. BPMC and cartap were applied at 750 and 1,000 g ai/ha, respectively, for comparison.

IR22 seedlings raised under netting were transplanted 21 d after sowing in 5- × 4-m plots (Aug 1985) and 5- × 5.3-m plots (Nov 1985) at 25- × 25cm spacing with 4 replications. Insecticides (300-500 liters/ha) were sprayed 62 d after transplanting (DT). GLH, BPH, and WBPH adult or nymph populations were sampled using FARMCOP suction machine on 10 hills/plot 1 d before treatment (DBT) and 5-15 d after treatment (DAT).

In general, significantly fewer WBPH, GLH, and BPH adults and nymphs

were found on plots treated with buprofezin, BPMC, and cartap (see table). Hopper populations were less with increasing rates of buprofezin in both trials. Buprofezin at 12.5 g ai/ha was as good as higher rates against WBPH, GLH, and BPH nymphs, and comparable to BPMC and cartap at 750 and 1,000 g ai/ha, respectively. □

### Field evaluation of minimal dosages of buprofezin to control GLH, BPH, and WBPH. IIRRI, 1985.

Chemical <sup>a</sup>	Rate (g ai/ha)	Nymphs <sup>b</sup> (no./10 hills)			
		1 DBT	5 DAT	10 DAT	15 DAT
<i>BPH</i>					
Buprofezin	12.5	17105 a	1413 ab	137 c	6 ab
	25	24774 a	737 ab	11 a	4 a
	50	16142 a	377 a	3 a	1 a
BPMC	750	21899 a	1146 ab	65 ab	14 bc
Cartap	1000	15053 a	1967 ab	55 ab	16 c
No chemical (check)	—	15356 a	3324 bc	257 c	10 c
<i>WBPH</i>					
Buprofezin	12.5	812 a	5 a	1 a	24 bc
	25	1092 a	12 ab	0 a	17 bc
	50	508 a	3 a	0 a	3 a
BPMC	750	995 a	11 ab	4 bc	48 c
Cartap	1000	227 a	26 bc	8 c	28 bc
No chemical (check)	—	987 a	32 c	1 a	40 bc
<i>GLH</i>					
Buprofezin	12.5	103 a	9 ab	6 bc	1 a
	25	122 a	7 a	0 a	0 a
	50	107 a	1 a	1 a	0 a
BPMC	750	107 a	1 a	3 bc	0 a
Cartap	1000	133 a	15 bc	7 bc	1 a
No chemical (check)	—	121 a	23 c	10 c	1 a

<sup>a</sup>Chemicals applied by knapsack sprayer once at 62 DT. Spray volume = 500 liters/ha. <sup>b</sup>Av of 4 replications. In a column for each insect, means followed by a common letter are not significantly different at the 5% level by DMRT.

## Predation by sword-tailed cricket *Anaxipha longipennis* (Serville) (Gryllidae) on eggs of three lepidopterous pests of rice

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We studied the predatory ability of *Anaxipha longipennis* (S.) on eggs of leaf folder (LF) *Cnaphalocrocis medinalis*, green hairy caterpillar *Rivula atimeta*, and green horned caterpillar *Melanitis leda ismene* in the laboratory. Adults of the insect pests collected in the field were caged individually with 35-d-

### Cumulative number of eggs of LF, green hairy caterpillar, and green horned caterpillar consumed by the cricket *Anaxipha longipennis*.<sup>a</sup> IIRRI insectary, 1988.

Insect species	Egg density (no./cage)	Eggs consumed (cumulative no.)		
		24 h	48 h	72 h
Leaf folder	10	8	10	10
	20	15	18	19
	40	34	40	40
Green hairy caterpillar	10	10	10	10
	20	16	19	19
	40	34	39	40
Green horned caterpillar	10	2	2.0	4
	20	4	5	5
	40	6	10	11

<sup>a</sup>AV of 5 replications.