

Pest survey in Kalutara district, Sri Lanka

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We surveyed rice insect pests and natural enemies in farmers' fields in the 1984 Apr-Aug growing season.

Kalutara district was divided into 3 districts and 2 fields of 0.6 ha or more were selected in each district. Distance between fields was at least 5 km. The rice variety grown in the selected fields was the most common variety.

Assessments were made once a month from seedling to ripening. Fifteen sweeps/field were taken for insect counts and five 1-m² samples were observed for damage.

The harmful insects present in considerable amounts were whitebacked planthopper (WBPH) *Sogatella furcifera* (Horvath) at the vegetative phase and paddy bug *Leptocorisa oratorius* at the reproductive phase.

Natural enemies found included spiders, dragonflies, mirid bugs, and hymenopteran parasites (see table).

The WBPH at the vegetative phase dropped in number with crop age. This decrease may be due to the presence of natural enemies.

Farmers had used chemical control in previous seasons. □

Number of insects/15 sweeps in farmers' fields. Sri Lanka, 1984.

District	Area	Insect pests (no.)		Natural enemies (no.)			
		WBPH	Paddy bug	Spiders	Dragonflies	Mirid bugs	Hymenopterans
<i>Seedling stage</i>							
Kalutara	Nagoda	0	0	0	3	16	0
	Uggalboda	51	0	0	3	1	0
Horana	Kananwila	23	0	0	0	5	18
	Kulupana	9	0	0	1	5	86
Matugama	Matugama	16	0	1	7	5	5
	Bellana	56	0	0	0	2	13
<i>Tillering</i>							
Kalutara	Nagoda	18	8	1	2	3	0
	Uggalboda	133	9	6	14	9	0
Horana	Kananwila	17	2	10	1	0	13
	Kulupana	29	136	0	1	0	—
Matugama	Matugama	35	0	2	4	0	12
	Bellana	0	0	1	3	40	40
<i>Booting</i>							
Kalutara	Nagoda	0	18	22	2	1	13
	Uggalboda	0	36	4	1	14	22
Horana	Kananwila	19	8	3	0	1	24
	Kalupana	2	16	2	1	2	13
Matugama	Matugama	30	12	2	1	0	0
	Bellana	2	0	1	6	0	0
<i>Flowering</i>							
Kalutara	Nagoda	0	52	12	4	0	5
	Uggalboda	0	12	1	0	0	0
Horana	Kananwila	0	19	9	0	0	0
	Kulupana	0	48	2	0	0	0
Matugama	Matugama	0	67	0	0	2	10
	Bellana	0	35	0	1	0	0
<i>Ripening</i>							
Kalutara	Nagoda	0	25	0	5	0	0
	Uggalboda	0	144	0	0	0	0
Horana	Kananwila	0	87	0	0	0	0
	Kalupana	0	170	0	0	0	0
Matugama	Matugama	0	11	1	—	—	—
	Bellana	—	—	—	—	—	—

Trap crop for green leafhopper (GLH) and tungro (RTV) management

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A trap crop is a small, early planting of a crop that is more attractive to insect pests than the crop to be protected and effective enough to justify using it instead of other control measures.

We tested using a trap crop instead of intensive chemical control of *Nephotettix virescens* in May-Sep 1986. RTV-susceptible IR42 was used as both trap crop and main crop.

Table 1. RTV incidence in ricefields with and without a trap crop.^a IRRI, May-Sep 1986.

Treatment ^b	Date planted	Proportionate area/ha	RTV incidence ^c (%)	Combined RTV incidence (%)
2-row trap crop	9 May	0.074	0.3	8.5 a
Main crop	23 May	0.926	8.2 a	
3-row trap crop	9 May	0.109	0.5	7.5 a
Main crop	23 May	0.891	7.0 a	
4-row trap crop	9 May	0.144	0.5	5.2 a
Main crop	23 May	0.856	4.7 a	
Treated control ^d	9 May	1.000	6.4 a	6.4 a
Untreated control ^e	23 May	1.000	36.8 b	

^aAv of 4 replications. Means followed by a common letter are not significantly different at the 5% level by DMRT. ^bTrap crops were sprayed. ^cProportionate RTV incidence (%) in trap crop was not analyzed. ^dMain crop fields sprayed with cypermethrin @ 0.05 kg ai/ha. ^eUnsprayed fields.

In trap-crop fields, 2, 3, or 4 border rows were planted 15 d before the main crop and sprayed each week up to 60 d

after transplanting (DT) with cypermethrin at 0.05 kg ai/ha. The main crop was not sprayed.