

to Jaya. Narrow *L. panicoides* stem lumen may be too small to house maturing larvae.

Field surveys in May-June recorded

borer egg masses, deadhearts, and white-heads, but no live larvae on *L. panicoides*. *L. panicoides* should be considered an occasional host for yellow rice borer. It is a

common weed in wetland rice fields and along irrigation canals. It flowers during July–August and in March.

Whitebacked planthopper *Sogatella furcifera* Horvath on rice in Kathmandu Valley

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In 1982 the delayed monsoon season caused rice to be transplanted nearly a month late. In Jul-Aug whitebacked planthopper *Sogatella furcifera* Horvath populations reached epidemic levels on more than 3,000 ha in Kathmandu Valley. Damage to late planted rice was most serious. Insect population, calculated by taking 10 standard sweeps in 2 infested areas, is shown in Table 1.

Information on the infested localities in three districts of the Valley is given in Table 2.

Table 1. Number of whitebacked planthoppers per 10 standard sweeps, in 4 replications, Kathmandu Valley, Nepal, 1982.

Date	Locality	Whitebacked planthoppers (no.)			
		1	2	3	4
6 Aug 1982	Sundarijal	13,000	14,400	11,200	16,000
19 Aug 1982	Manahara	4,400	3,000	6,000	7,000

Table 2. Area and extent of damage by whitebacked planthopper at different locations in Kathmandu Valley, Nepal, 1982.

District and altitude	Location	Area infested (ha)	Pest status
Kathmandu, 1372-2732 m	Gokarna, Nayapati	1300	Serious ^a
	Sakhu, Pukulachi, Suntole	425	-do-
	Bhadrabas, Mulpani, Indrayani	450	-do-
Lalitpur, 457-2831 m	Thaibo, Kitini, Godawari	250	-do-
Bhaktapur, 1372-2166 m	Bageswari, Nagarkot	100	-do-
	Changu Narayan, Manahara phat	300	Medium ^b

^aMore than 90% infestation (eye estimation). ^bLess than 50% infestation (eye estimation).

BPH outbreak in South Arcot District, Tamil Nadu, India

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A contiguous 243-ha area in Aviyanur, Payithampadi, Kavanur, and Unumdampet along the south bank of Pennai River has been seriously attacked by brown planthopper (BPH). The area has year-around irrigation and is traditionally planted with two short-term rice crops and one medium-duration rice.

Standing crops of IR50, TKM9, IET1722, and Manila planted in Jun-Jul as short-term crops were severely infested in almost all fields. IET1722 had up to 700 BPH/hill, and IR50 had 500-700/hill. Other varieties had about 500/hill. All varieties were hopperburned.

About 2/3 of the BPH population were macropterous females and 1/10 were 3d, 4th, and 5th instar nymphs.

Brachypterous insects were few. Substantial numbers of BPH predators such as *Coccinella arcuata*, *Cyrtorhinus lividipennis*, and ants were observed.

Farmers reported that crops received 173–198 kg N/ha in each rice season. Rice commonly receives three to four applications of quinalphos or BHC. Quinalphos has been reported to be a BPH resurgence-inducing insecticide. Drought with long spells of dry humid weather recently had been broken by late monsoon showers. These factors may have contributed to the BPH infestation. □

Efficacy of buprofezin (NNI-750) for brown planthopper (*N. lugens*), green leafhopper (*Nephotettix* sp.), and whitebacked planthopper (*S. furcifera*) control

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Buprofezin (3-isopropyl-5-phenyl-2-tert-butylimino-tetrahydro-1,3,5-thiadiazin-4-one) effectively kills brown planthopper (BPH), green leafhopper (GLH), and whitebacked planthopper (WBPH) nymphs at molting when the insects are sprayed directly or feed on treated plants (Table 1).

In greenhouse tests, buprofezin did not effectively control adult BPH, GLH, or WBPH. In field tests, the insecticide affected several generations of BPH and reduced population density to a low level (Table 2). Buprofezin is slow acting, has longer residual effect than conventional insecticides, and is relatively safe to natural enemies. □

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