

GLH occurrence was significantly higher during the eighth lunar cycle (6 Aug-3 Sep), closely followed by the twelfth (2 Dec-30 Dec) and seventh (8 Jul-5 Aug) cycles (Table 1). Moonlight had a significant influence on GLH nocturnal activity: it was lowest during the new moon week and highest in the full moon week (Table 2). The ratio of activity between new moon and full moon weeks was 1:8.1. ■

Table 2. Effect of lunar phase on light trap catches of GLH. RRS, Tirur, India, 1987.

Week	Mean incidence	
	Actual no.	Transformed value (log x)
New moon week	280.8	2.026
First quarter week	358.5	2.187
Full moon week	2273.4	2.790
Last quarter week	1602.4	2.772
LSD		0.336

Rice ratoons as potential host for African rice gall midge (GM)

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African rice GM *Orseolia oryzivora* Harris and Gagné recently caused substantial yield losses in Anambra, Cross River, Imo, and Niger States. We measured African GM infestation on rice varieties from Asia reported to be resistant to the closely related Asian GM *Orseolia oryzae* (Wood-Mason).

Observations covered the main crop and the dry season ratoon crop at Badeggi, Niger State. Percentage silvershoots was calculated as the ratio of silvershoots to total number of tillers in 20 hills for each variety at 45 d after transplanting the main crop and 15 d after ratooning.

African GM damage was encouraged by maintaining standing water and by high fertilizer application (120 kg N/ha as urea).

In general, damage on ratoons was higher than on the main crop in all varieties except ARC5988, ARC14421, PTB18, and Warangal Culture 1251 (see table).

Dissection of galls and ratoons showed pupae and, in some cases, diapausing larvae. This suggests that ratoons as well as volunteer plants may help African GM survive until the next rainy season. ■

African GM damage on Asian rice varieties resistant to it. Badeggi, Nigeria, 1989 rainy season.

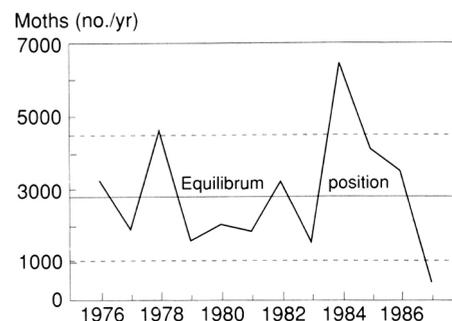
Variety	Silvershoots (%)	
	Main crop ^a	Ratoons ^b
ACI423	4.8	10.5
ARC5842	8.2	12.0
ARC5951	8.6	25.0
ARC5988	9.0	0.0
ARC6010	5.9	14.3
ARC6136	5.7	23.1
ARC6157	6.1	24.7
ARC6557	12.9	20.0
ARC6632	7.0	11.6
ARC7213	4.2	11.1
ARC10227	9.6	19.2
ARC10360	9.0	13.2
ARC10377	8.7	17.3
ARC10963	6.3	14.9
ARC14421	11.7	11.1
ARC14725	5.9	20.0
ARC14748	6.6	8.1
ARC15159	3.0	15.1
ARC18601	5.7	9.1
DNJ 45	5.5	15.4
Eswarakora	6.5	18.4
Malalwariyan	5.8	11.5
Muey Nawng 62	7.1	37.0
Nigersail	5.8	14.1
PTB10	7.1	19.6
PTB18	12.5	0.0
PTB21	5.4	22.3
PTB28	3.9	23.1
Siam 29	10.7	11.7
T10	8.6	15.6
Warangal Culture 1251	13.6	0.0
Warangal Culture 1257	6.1	16.2
Warangal Culture 1263	7.0	27.1

^aTransplanted 23 Nov 1989. ^bRatooned on 22 Jan 1990.

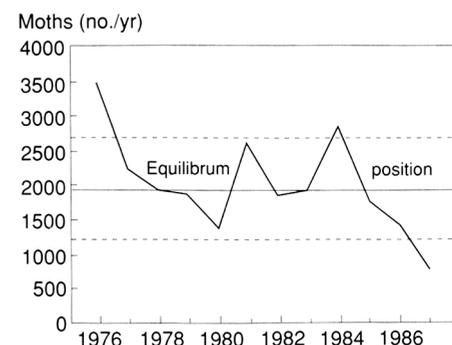
Fluctuations in rice stem borer density in the Punjab

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Fluctuations in population density of yellow stem borer (YSB) *Scirpophaga incertulas* (Walk.) and white stem borer (WSB) *S. innotata* (Walk.) (based on the number of moths trapped in a light trap between 1976 and 1977) are plotted in Figures 1 and 2. YSB population was highest in 1984 and lowest in 1987. The mean of the series, $2,897.92 \pm 1654$, may be designated as the equilibrium position of YSB (Fig. 1). WSB population was highest in 1976 and lowest in 1987. The mean, 1998.67 ± 728.71 , may be designated as the equilibrium position of WSB (Fig. 2). ■



1. YSB catches, 1976-87.



2. WSB catches, 1976-86.

Space limitations prevent IRRN from publishing solely yield data and yield component data from routine germplasm screening trials. Publication is limited to manuscripts that provide either a) data and analysis beyond yield and yield components (e.g., multiple or unique resistances and tolerances, broad adaptability), or b) novel ways of interpreting yield and yield component data across seasons and sites.