

1981-82 in six provinces. *T. japonicum* occurred in at least one fly species (see table).

*Sepdon* and *Notiphila* lay egg masses on rice leaves in a similar manner as the rice stem borer. *Trichogramma* wasps

encounter both. Even though fly eggs are much larger than stem borer eggs, they are acceptable to the wasps.

Low rates of parasitization in fly eggs indicate that stem borer eggs are preferred. But such alternate hosts as these

two fly genera would maintain *Trichogramma* in the field at times of low stem borer populations, enhancing its effectiveness as a natural enemy of stem borers. ■

### Populations of gall midge, white-backed planthopper, and thrips on Pragati paddy

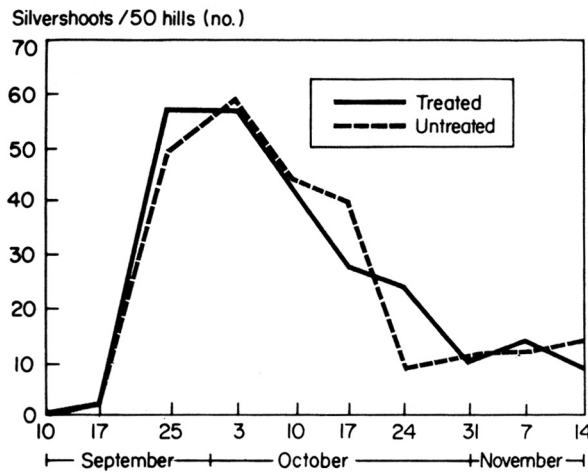
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Pragati paddy was transplanted on 25 August 1979 at the ZARS Labhandi Farm, Raipur. Three sets of 50 hills each were monitored at intervals of 1, 4, and 7 days beginning 1 day after transplanting (DT), for gall midge, white-backed planthopper, and thrips infestation. Another 100 hills were treated with malathion 50 EC 0.05% on 9 and 24 September, 16 October, and 3 November 1979, and monitored.

In untreated hills, gall midge infestation started on 10 September (16 DT). Beginning 17 September, there was a sudden increase in silvershoot development, peaking 25 September (30 DT). In treated hills, silvershoot development also peaked 25 September, then declined (see figure).

Whitebacked planthopper populations on untreated hills began to increase on 11 September (17 DT), peaked on 10 October (45 DT), then declined sharply. In treated hills, the increase was the same as in untreated plants, but populations declined temporarily after each spraying, then increased again but did not attain the level of untreated hills. By 14 November, populations were very low.

Thrip populations were heavy up to 10 September (16 DT) on untreated plants, then declined to near zero on 10 October (45 DT). After 31 October (62 DT), populations again increased rapidly, peaking on 7 November (69 DT). In treated plants, populations were negligible. ■



Populations of silvershoots, whitebacked planthoppers (WBPH), and thrips on transplanted Pragati paddy, with or without malathion 50 EC 0.05%. Madhya Pradesh, India.

