

**EFFECT OF SUBLETHAL DOSES OF SOME PYRETHROID INSECTICIDES ON THE  
REPRODUCTIVE RATE OF BROWN PLANTHOPPER, *NILAPARVATA LUGENS***

**I. D. R. Peries, B. M. Tennakoon  
and Y. Katippearachchi**

*(Div. of Entomology, Central Agricultural Research Institute,  
Gannoruwa, Peradeniya)*

Three synthetic pyrethroids—decamethrin, cypermethrin and alfoxylate—and a carbamate were tested on the rice brown planthopper, *Nilaparvata lugens* Stal. (Homop.: Delphacidae) in a laboratory experiment. Evaluations were carried out at two sub-lethal doses and one lethal dose for each of the four insecticides. Insecticides were applied to rice seedlings in a Potter's spray tower.

Pyrethroid treatment resulted in significantly higher levels of *N. lugens* numbers, although the degree of resurgence did not vary among the different levels tested. These pyrethroids caused nymphal mortality at 3 days after treatment, but not at seven days after treatment. Pyrethroids at sublethal doses used had no effect on nymphal mortality. The results indicated a possible mode of resurgence *via* increased egg-hatchability.