

AN INTEGRATED CONTROL PROGRAMME FOR THE MANAGEMENT OF THE LIVE-WOOD TERMITE PESTS OF LOW-COUNTRY TEA FIELDS (*GLYPTOTERMES DILATATUS* BUGNION AND POPOFF, ISOPTERA: KALOTERMITIDAE)

P. Sivapalan, K. A. D. W. Senaratne, A. A. C. Karunaratne,
S. I. Vitarana and D. G. S. Jayatilleke
(Tea Research Institute of Sri Lanka, Talawakelle)

With the commencement of a large-scale tea replanting programme in the low-country in the late 1950s, and with an increase in the use of nitrogenous fertilizers, live-wood termite pest incidence was found to magnify and by the early 1970s began to threaten the very existence of vast acreages of tea in the low-country districts. The main access points for swarming colony founders are the die-back of prune cuts that suffer wood-rot (Sivapalan & Senaratne, 1977). Such symptoms that follow pruning are significantly higher in the high-yielding soft-wooded clonal tea plants (Sivapalan *et al.*, 1977). The removal of the shade tree, *Gliricidia sepium*, had also contributed to an upsurge in the incidence of these pests (Sivapalan *et al.*, 1977).

A strategy has now been developed by integrating the following cultural practices to manage this pest effectively: (1) use of selected hard-wooded clones that suffer minimum die-back and rot following pruning; (2) adoption of sanitary pruning by cleaning all dead-wood and snags, which serve as entry points; (3) painting of prune cuts with fungicidal wound dressings to minimize wood-rot; (4) optimize fertilizer applications with the right N/K ratio (3:1); (5) planting of *G. sepium* as a shade tree, at a spacing of 4.5 x 2.2 m; (6) prompt removal of tea plants or, blocks of tea plants, that are in an advanced state of attack, which serve as sources of swarming colony founders.

References :

1. Sivapalan, P. and Senaratne, K. A. D. W. (1977). Some aspects of the biology of the tea termite, *Glyptotermes dilatatus*. *PANS* 23: 9-10.
2. Sivapalan, P., Senaratne, K. A. D. W. and Karunaratne, A. A. C. (1977). Observations on the occurrence and behaviour of live-wood termites (*Glyptotermes dilatatus*) in low-country tea fields. *PANS* 23: 5-8.