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Laboratory screening of tea clones for their susceptibility to the low-country Live wood termite, *Glyptotermes dilatatus* (Bugnion and Popoff)

K.L.K. Dharmadasa

Supervisors – Dr. M.G.V. Wickramasinghe, Dept. of Zoology, Univ. of Ruhuna
Dr. S.I. Vitarana, Tea Research Institute of Sri Lanka, Talawakele

Low-country Live-wood termite (*Glyptotermes dilatatus*) damage is considered to be a major problem leading to crop loss especially in low country tea plantations. A detailed study was carried out to identify a short cut method to screen termites' susceptibility or repellence towards tea clones. The attractiveness and repellence of termites to the volatiles in tea clones could be measured by using bioassay methods such as Olfactometry, petri-dish couplet assay. The latter method measured the behaviour of termites due to the feeding promoters in tea clones. But termite behaviour such as gallery making, feeding and locomotion cannot be measured by using those two methods. Glass plate method was used to overcome disadvantages of previous methods and as a new method to screening tea clones considering behaviour of termites.

Tea clones were screened as highly susceptible clones (TRI 2023 and TRI 3063) that termites showed higher gallery making, higher activity and attractiveness, resistant clones (TRI 4049, TRI 4048) that were more repellent. These findings are agreement with field observations.