

**A COMPARISON OF SELECTED BIOCHEMICAL  
PARAMETERS IN BETWEEN SUSCEPTIBLE AND  
TOLERANT TEA CULTIVARS FOR *Glyptotermes  
Dilatatus* (LOW COUNTRY LIVE WOOD TERMITE)**

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## ABSTRACT

Pest damages are a severe problem to the Sri Lankan tea industry. Low Country Live Wood Termite (LCLWT), *Glyptotermes dilatatus* is one of the most economically important pests in Sri Lanka as they attack to the low grown teas which have the highest contribution to the Sri Lankan tea production. Introducing highly tolerant cultivar with high yielding is the most promising method among various methods of controlling pest. Feasibility of using biochemical parameters for the screening of new cultivars for the pest attack of LCLWT is a new approach in today's world. This research was conducted to compare selected biochemical parameters; Caffeine, total Catechin and total Polyphenol contents in between tolerant and susceptible cultivars for this pest. Healthy stems and Rotted stems of nine cultivars (TRI 4042, TRI 4049, TRI 4053, TRI 4054, TRI 4061, TRI 3014, TRI 3025, TRI 3055, TRI 3069) which were susceptible and tolerant to LCLWT were collected separately. Caffeine content had increased in all cultivars upon infestation. Tolerant, moderately tolerant and susceptible cultivars had high, moderate and low total catechin content in the healthy stems accordingly. Total catechin and total polyphenol content were decreased in all the cultivars upon infestation. There are main three clusters at 0.75 distances according to the biochemical parameters considered in healthy stems and tolerant, moderately tolerant and susceptible cultivars to the LCLWT are divided into clusters separately.

**Keywords:** Low country live wood termite, semio-chemicals, cultivar screening