

PERFORMANCE ANALYSIS FOR WINTERING PATTERN IN *HEVEA BRASILIENSIS* CLONES

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Vinod, K.K., Meenattoor, J. R., Pothan, J., Krishnakumar, A.K. and Sethuraj, M.R. (1996). Performance analysis for wintering pattern in *Hevea brasiliensis* clones. *Indian Journal of Natural Rubber Research*, 9(1): 44-47.

A study was undertaken to group rubber (*Hevea brasiliensis*) clones based on their wintering behaviour in Tripura, one of the rubber growing areas of North East India. Fifteen clones from a clone evaluation trial were scored for the wintering pattern at weekly intervals for six weeks from December to February during 1988-89, 1989-90 and 1991-92 period. Wintering pattern of clones was uniform for all the years under study. Mean weekly scores were used for clustering process. Three distinct clusters of early, intermediate and late wintering clones were obtained viz., (i) RRII 105 and RRIC 105, (ii) RRIM 600, PB 86, GT 1, RRIC 52 and PB 235 and (iii) RRII 118, RRIM 605, GI 1, Harbel 1, RRII 5, PB 5/51 and RRIM 703. The remaining clone, RRII 203, was found to fall in between the second and the third clusters. The results can be used in characterising clones as well as selecting clones for establishing polyclonal breeding gardens.

Key words : *Hevea brasiliensis*, Wintering, Cluster analysis, Tripura

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INTRODUCTION

The rubber tree, *Hevea brasiliensis* exhibits regular annual leaf shedding called 'wintering'. Wintering pattern in different rubber clones varies from complete defoliation followed by refoliation to simultaneous shedding and flushing (Webster and Paardekooper, 1989). Wintering in traditional regions is reported to start during December and continue upto February. The clonal specificity on wintering behaviour in these regions also is well established (George *et al.*, 1980; Webster and Paardekooper, 1989). The rubber growing areas of North East India experience severe winter. Clonal characterisation based on wintering pattern of different clones in the non-traditional region of India has not yet been attempted.

The present study was aimed at analysing the wintering behaviour of different clones in Tripura and to group them into different categories.

MATERIALS AND METHODS

Fifteen oriental clones viz., RRIM 600, RRIM 605, RRIM 703, RRII 5, RRII 105, RRII 118, RRII 203, RRIC 52, RRIC 105, PB 5/51, PB 86, PB 235, GT 1, GI 1 and Harbel 1 planted during 1979, in a clone evaluation trial at the Rubber Research Institute of India's regional research farm at Taranagar, Agartala, Tripura (91° 15'E; 23° 25'N; 30 m MSL) were used for the study. Twenty trees per clone were selected and observed individually for the entire leaf fall period at weekly intervals from December to