

## RELATIVE PERFORMANCE OF SIX *HEVEA BRASILIENSIS* CLONES DURING TWO YIELDING REGIMES IN TRIPURA

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Six oriental *Hevea* clones of Indian (RRII 208), Malaysian (RRIM 600), Indonesian (PR 107) and Chinese (SCATC 88-13, SCATC 93-114, Haiken 1) origin were investigated for their performance under two yielding regimes (Regime I = April to September; Regime II - October to January). Regression analysis revealed SCATC 93-114, PR 107 and RRII 208 with the least regression coefficients to be the stable clones and Haiken 1 to be least consistent over the regimes. Though SCATC 93-114 and PR 107 showed a lower regression coefficient, their respective mean yield was low making them less desirable for the tested environment. Comparatively higher contribution was rendered by RRII 208 with a low yield depression (43.8%) during Regime I ensuring higher returns from the stand. Clones SCATC 88-13 and Haiken 1, though not consistent in yield over the regimes, were on par with RRIM 600 with respect to annual mean yield. This study identified three clones, RRII 208, SCATC 88-13 and Haiken 1 as potential ones for on-farm evaluation in Tripura.

Key words : Girth increment, *Hevea*, Yield depression, Yielding regime.

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### INTRODUCTION

The ideal environment for the cultivation of rubber confines to 10° north and south of the equator, where a mean annual temperature of  $28 \pm 2^\circ\text{C}$  (Chandrashekar *et al.*, 1994) prevails with a well spread rainfall of 2000-4000 mm spread over 100 to 150 days an year (Pushparajah, 1983). Tripura state of the North-East India (more than 20°N) offers a non-traditional environment for *Hevea*, where the mean annual temperature is  $30.5^\circ\text{C}$  with a mean annual variation of  $10.5^\circ\text{C}$ . The dry rubber yield is very low

when the temperature falls below  $12^\circ\text{C}$ . Tripura presents two distinct yielding regimes for *Hevea*, viz., Regime I (April-September) and Regime II (October-January). Regime I which includes summer and monsoon seasons denotes a low yielding period and Regime II which largely includes cold season, the peak yielding period. Hence, the best suited clone should have cold tolerance as an attribute besides a moderate yield potential under Regime I in order to ensure near uniform returns through seasons for the planter.