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GROWTH PERFORMANCE OF *HEVEA* CLONES IN NORTHERN REGION OF WEST BENGAL

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Growth performance of *Hevea* clones was studied in Dooars area of West Bengal. Growth of *Hevea* was slow during December-March with a peak during June to September. Significantly higher growth was observed in cool season (1.13 cm/month) followed by monsoon (1.02 cm/month), hot (0.24 cm/month) and cold season (-0.01 cm/month). Among the 18 clones evaluated, GT 1, RRII 118, SCATC 88/13, SCATC 93/114 and Cl 1 showed comparatively more stability for growth. Except the clones PB 5/51, RRII 300, PR 107 and GT 1, all others recorded significantly higher girth during immaturity period and attained tappable girth by the seventh year. Preliminary observations during the initial year of tapping recorded significantly higher latex yield in clones SCATC 88/13, SCATC 93/114, PB 235 and RRII 118 compared to RRIM 612 and Haiken 1. Dry rubber content was more in PR 107, RRIM 612, PB 86 and Haiken 1.

Key words : Clonal performance, *Hevea*, Latex yield, Seasonal growth, Stability, West Bengal.

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INTRODUCTION

In order to meet the growing demand, rubber (*Hevea brasiliensis*) cultivation in India has been extended beyond the traditional region of Kerala and southern part of Tamil Nadu. The northern part of West Bengal, located in the sub-Himalayan region, has been identified as a potential area for rubber cultivation though there are some limitations. The region receives annual rainfall of 3300 mm which is comparable to that in the traditional region, but it is mainly distributed between May to September. Rest of the months receive less than 50-100 mm rain. Unlike the traditional region the winter temperature goes as low as 5°C. Because of moderate moisture regime and less favourable thermal regime the northern part of West Bengal is classified as a marginally suitable zone (Rao *et al.*, 1993). This study was undertaken to evaluate the performance of *Hevea* clones under the limiting hydrothermal conditions of northern part of West Bengal to identify clones suitable for the region.

MATRIALS AND METHODS

The study was conducted at the Regional Experiment Station (RES), Nagrakata with 18 clones in two separate trials laid out during 1990 in a randomised block design with three replications. Polybag plants were used as planting material and planted at 5 m x 5 m spacing.