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PERFORMANCE OF *HEVEA* CLONES IN ASSAM

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Growth and initial yield of ten *Hevea* clones were studied under the agroclimatic conditions of Assam in North East India. RRIM 600 exhibited the highest girth in juvenile stage closely followed by PB 235 and RRII 118. At the immature stage, PB 235 showed the highest girth closely followed by RRIM 600 and RRII 118. RRIM 600 showed the highest girth after the commencement of tapping during mature stage also, closely followed by PB 86 and RRII 118. Poor growth as well as low rubber yield was observed in all the ten clones during winter months characterized by low temperature from December to March combined with the wintering and refoliation stresses. High DRC of latex, low dry rubber yield and high plugging index were observed in all ten clones during May to August. An increasing trend in the yielding pattern was observed from August onwards in all the clones with a maximum in November. RRIM 600 had the highest yield for the first three years of tapping followed by RRII 105 and PB 235 with minimum in Gl 1.

Key words : Assam, Climate, DRC, Growth, *Hevea* clones, North East India, Plugging index, Yield.

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INTRODUCTION

Assam region of North East (NE) India is one of the non-traditional areas where rubber cultivation is attempted due to non-availability of potential land for further expansion of cultivation in the traditional rubber growing zone. The major environmental constraints for growth and productivity of rubber in NE India is the prolonged winter with low temperature which affects the growth of *Hevea* and increases the gestation period by one or two years than in the traditional zone. Very limited information is available on the effect of low temperature on the growth of *Hevea* clones (Sethuraj *et al.*, 1989). The effect of low temperature on yield and yield components in this region are also not known though such information is available for the traditional zone (Rao *et al.*, 1988). The present study therefore was taken up to evaluate the growth and yield of ten *Hevea* clones under the prevailing agroclimatic conditions of Assam in NE India.

MATERIALS AND METHODS

The study was conducted in ten *Hevea* clones (RRII 105, RRII 118, RRII 203, RRIM