GROWTH PERFORMANCE OF *HEVEA BRASILIENSIS* CLONES IN DOOARS REGION OF WEST BENGAL

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Submitted: 7 November 2002 Accepted: 31 December 2004

Gohain, T., Meti, S., Mandal, D., Singh, R.P. and Chaudhuri, D. (2004). Growth performance of *Hevea brasiliensis* clones in Dooars region of West Bengal. *Natural Rubber Research*, 17(2) : 133-138.

Evaluation of growth of eleven clones of *Hevea brasiliensis* in the Dooars region of West Bengal revealed that though the initial survival was high (100%) for the clone RRII 105, the growth of the clones varied significantly from the second year and by the end of the eighth year RRII 208 recorded the highest mean girth (46.53 cm) followed by RRIM 600 (46.50 cm). The mean girth increment over 8 years was also higher for the clone RRII 208. Although the overall percentage of tappable trees at the end of 7 years was only 40, RRIM 700 recorded the highest (67%) tappability followed by RRII 208 (64%). By the eighth year, overall tappability increased to 66 per cent indicating one year delay in attaining tappable girth in comparison to the trees in the traditional rubber growing region of India. On the basis of growth index the clone RRIM 600, RRII 208, RRII 105, PB 235 and SCATC 93/114 were identified as better adapted clones under the sub-tropical and sub-humid climatic conditions of Dooars region.

Key words: Clones, Dooars region, Growth, *Hevea brasiliensis*, North East India, West Bengal.

INTRODUCTION

Rubber (*Hevea brasiliensis*) is traditionally grown in India in the SouthWest India comprising of the states of Kerala and adjoining Kanyakumari district of Tamil Nadu. Among the non-traditional areas, North East (NE) India has been identified as one of the suitable areas for rubber cultivation. In NE India, the northern part of West Bengal, located in the sub-Himalayan region, is a potential area for rubber cultivation though there are some limitations. This region receives an annual rainfall of 3300 mm, which is comparable to that in the traditional region, but it is mainly distributed between May to September. The remaining months receive only less than 50-100 mm of rainfall. Unlike the traditional region, the winter temperature falls as low as 5°C. Because of moderate moisture and less favourable thermal regimes, the northern part of West Bengal is classified as a marginally suitable zone (Rao *et al.*, 1993) for rubber cultivation. The girth of the trees is the most important evaluation parameter based on which the degree of maturity of the plantation is decided for harvesting latex from *H. brasiliensis* (Sethuraj and George, 1980; Paardekooper, 1989). As the income generation for farmers is dependent on the gestation period, the time taken to attain maturity is important. The present study was undertaken to evaluate the performance of some *H. brasiliensis* clones under the agroclimatic conditions of Northern West Bengal, to identify the clones suitable for this region.