PERFORMANCE OF *HEVEA* CLONES UNDER TWO TAPPING PRACTICES IN ASSAM

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A comparison of two tapping practices (continuous tapping throughout the year and with annual tapping rest during February to April) with respect to 18 *Hevea* clones (*viz* RRII 105, RRII118, RRII 203, RRIM 600, RRIM 605, PB 86, PB 235, PB 5/51, GT 1, Gl 1, RRIC 102, RRIC 105, RRII 208, RRII 5, PB 260, PB 310, PB 311 and PR 255) of varying yield potential was evaluated in Assam. The performance of these clones with respect to rubber yield, girth, dry rubber content (DRC) and tapping panel dryness (TPD) under two tapping practices during Regime I (non-cold season) and Regime II (cold season) were evaluated. Trend in yield was always higher in annual tapping rest (ATR) than in continuous tapping (CT) except in 3 clones (PB 260, PB 5/51 and PB 311). Among the clones evaluated, RRIM 600, RRII 203, RRII 208, PB 235, PB 310, RRII 118 and GT 1 yielded above average under both tapping practices indicating these clones were more efficient in yield potential under sub-tropical humid conditions of Assam.

Keywords: Assam, DRC, Girth, Hevea clones, Tapping practices, TPD, Yield

INTRODUCTION

North East India, especially Assam, has been identified as one of the most potential non-traditional tract for *Hevea* rubber plantation (Mondal *et al.*, 1999; 2007a). Assam has a sub-tropical humid climate experiencing a low temperature spell beginning with a cool period (October-November), which stimulates the production of dry rubber yield and total volume of latex (Priyadarshan *et al.*, 1998). Thereafter, a recession in yield follows consequent to further decline in temperature towards the end of December to January. The preceding months (February to July) form a low

yielding regime due to changes in the attributes of macroenvironment. In north east region, *H. brasiliensis* presents two distinct yielding regimes (Priyadarshan *et al.*, 1998; Mondal *et al.*, 1999) consisting of non-cold season (April to September - Regime I) and cold season (October to March - Regime II). Information on the relative performance of *Hevea* clones with regard to yielding trends in different months under continuous tapping (CT) and annual tapping rest (ATR) in Assam is very meagre. Moreover, the information on the impact of CT on the growth of rubber plants and TPD as compared to ATR is also very little. This