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EVALUATION OF *HEVEA* CLONES IN A LARGE SCALE TRIAL IN INDIA WITH SPECIAL REFERENCE TO INTRODUCTIONS FROM MALAYSIA

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Twelve clones of *Hevea brasiliensis* including three clones of the RRIM 700 series introduced from Malaysia in 1993 were planted at the Central Experiment Station of the Rubber Research Institute of India in 1994. Yield of the clones in different tapping panels such as BO-1, BO-2, BI-1 and the pooled yield were analyzed for clonal and seasonal yield performance and stability. Stability of yield of clones over the years and different tapping panels were computed. Yield of the clones in low and high yielding seasons were calculated. Monthly yield contribution and yield trend were also recorded. In the BO-1 panel highest yield was recorded in the hybrid clone 86/44 followed by RRIM 722, 86/120, RRII 105 and RRIM 712. In the BO-2 panel, the top yielders were RRII 105, RRIM 722, 86/44 and 86/120 and their yields were on par. When the pooled yields of the BO-1 and BO-2 panels were analyzed, it was found that clones 86/44, RRII 105, 86/120 and RRIM 722 were the most promising clones in the trial. In the BI-1 panel, RRIM 722 recorded the highest yield. Clone 86/120 was the most stable clone in the high yielding and low yielding environments. Monthly yield contribution varied from four per cent (March and April) to eleven per cent in July, August and November. During the rest of the high yielding months, monthly yield contribution was ten per cent (September, October and December) and nine per cent (January and June). Monthly yield contribution varied from four to six per cent in the low yielding environment. There was a sharp decline in yield contribution in February (4%) from that of January (9%) and significant increase in June (9%) from that of May (6%). The high yielding season represented 81 per cent of the total annual yield and the low yielding season represented 19 per cent. Ranking based on yield and girth showed the hybrid clone 86/120 in rank one position followed by 86/44, RRII 105 and RRIM 722.

Key words: Girth, *Hevea* breeding, Introduced clones, Large scale evaluation, Season, Timber, Yield stability

INTRODUCTION

Economic and industrial importance of NR resulted in extensive cultivation of rubber in the southern and north-eastern states of India. A combination of area expansion under NR and generation of genetically improved planting materials forms the foundation of NR production and productivity. Crop improvement work in *Hevea* directed at yield increase achieved considerable improvement through various breeding methods such as ortet selection, hybridization and introduction. Hybridization is a major breeding program generally aimed at combining desirable

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