

# LONG TERM PERFORMANCE OF SOME PRIMARY AND HYBRID CLONES UNDER THE AGROCLIMATE OF SUB-HIMALAYAN WEST BENGAL, INDIA

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Received: 27 January 2020

Accepted: 17 March 2020

Das, G., Kumar, S., Mydin, K.K. and Jacob, J (2020). Long term performance of some primary and hybrid clones under the agroclimate of Sub-Himalayan West Bengal, India. *Rubber Science*, 33(1): 1-9.

Twenty six clones from India, China, Malaysia, Indonesia and Sri Lanka, cultivated under the agroclimate of Sub-Himalayan West Bengal were evaluated for girth (over 24 years) and yield (over 19 years). A wide range of variability in terms of girth, timber volume, annual yield, yield in different panels and monthly yield was observed. The Chinese clone SCATC 88/13 ranked first with significantly high timber volume, biomass and high yield over different years and months compared to RRIM 600, the widely planted clone in the region. SCATC 88/13 can be considered as a suitable clone for this region.

**Key words:** Clone evaluation, Chinese clone, *Hevea brasiliensis*, Natural rubber, Sub-Himalayan West Bengal, Yield

## INTRODUCTION

Cash crop farming, also called as commercial farming / cash cropping, is enthusiastically accepted by the farmers because of its good return. Rising demand of natural rubber and scarcity of land in the traditional belt of India led to expansion of diverted rubber cultivation in non-traditional area, especially northeastern India. To get a profitable income from rubber, cultivating high yielding clones is inevitable; and adaptation to agroclimate of the region is also one of the characters to be highlighted. However, secondary characters like tolerance to major diseases, timber volume, incidence of tapping panel dryness syndrome, wind damage *etc.* are

also important. With all these in the background, large scale clone trials were initiated in 1990 in Northern part of West Bengal to evaluate clones specific for the region. Effort was taken to initiate multidisciplinary clone evaluation trials in this region to explore scope for maintaining clonal diversity, ensuring better ecological sustainability and appreciable economic return.

## MATERIALS AND METHODS

The present study was conducted at Nagrakata in Jalpaiguri district of sub-Himalayan West Bengal situated at the latitude of 26°43' N, longitude of 88°26' E

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