

PERFORMANCE OF CERTAIN EXOTIC *HEVEA* CLONES IN KANYAKUMARI REGION

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Growth and yield performance of nine recently introduced clones of *Hevea* and two established clones were evaluated in a large-scale trial in the Kanyakumari District of Tamil Nadu. Significant clonal variations for growth, yield and bark anatomical traits were evident. Four clones, two each introduced from Malaysia (PB 255 and PB 314) and Ivory Coast (IRCA 109 and IRCA 111), exhibited promising growth and yield in the panel B0-1. However, on completion of eight years of tapping, the yield performance of PB 314, IRCA 109 and IRCA 111 were found to be on par with the control clone RRII 105. The significant yield improvement shown by PB 255, could be considered as a real reflection of the high yield potential of PB 255. Based on the vigorous growth, early tappableability, excellent bark characteristics, stability parameters, consistent high yield, high summer yield *etc.* PB 255 was rated as the best selection for the Kanyakumari region. High girthing clones, in general, showed lower number of latex vessel rows, but higher values for both these characters were found combined in PB 255.

Keywords: Early tappableability, Girth increment, Meteorological variables, Rubber yield

INTRODUCTION

Introduction and evaluation of *Hevea* clones of proven yield potential domesticated in other rubber producing countries have been one of the methods adopted for crop improvement in the Rubber Research Institute of India. So far, 127 such clones evolved in Malaysia, Indonesia, Sri Lanka, China, Ivory Coast, Brazil, Thailand and Liberia have been introduced and are under various stages of evaluation under the local agro-climatic conditions (Varghese *et al.*, 2006). Most of these introductions were made by bilateral

and multilateral clone exchange programs under the auspices of the International Rubber Research and Development Board (IRRDB) and Association of Natural Rubber Producing Countries (ANRPC).

Kanyakumari region of Tamil Nadu is characterized by an agro-climate distinct from other regions in the traditional rubber-growing belt in the country. Rain is moderate (less than 2000 mm), but the well-distributed rainfall pattern associated with fairly good summer showers provide a congenial agro-climate for the good performance of rubber. Almost half of the annual precipitation is