

## ESTABLISHMENT, EARLY GROWTH AND YIELD INDICATIONS OF SOME MODERN *HEVEA BRASILIENSIS* CLONES IN THOVALAI TALUK OF KANYAKUMARI DISTRICT

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Eleven clones of *Hevea brasiliensis* were evaluated in a large-scale field trial at Keeriparai in the Thovalai Taluk of Kanyakumari District in India. The clones showed significant variations in casualty due to sun-scorch, juvenile girth, early tappareability, girth at opening, mean girth increment over five juvenile years, bark thickness, number of latex vessel rows and test tap yield. The clones showed high variability for sun scorch casualty. This trait was also negatively correlated with growth attributes and test tap yield recorded after the incidence of sun scorch. The clones IRCA 111 and PB 314 were found suitable for the area with respect to establishment, growth, early tappareability and initial yield. PB 255 and IRCA 230 were also promising clones in terms of establishment, growth and bark characters. No incidence of pink disease was observed in this trial. The control clone RRH 105 was ranked low for most of the characters evaluated.

Key words: Bark thickness, Early tappareability, Heritability, *Hevea brasiliensis*, Latex vessel rows, Sun scorch.

### INTRODUCTION

Kanyakumari District of Tamil Nadu at the southern tip of peninsular India is considered as a traditional rubber belt. It consists of four taluks (regions) namely Vilavancode, Kalkulam, Thovalai and Agastheeswaram. The agroclimate of Vilavancode and Kalkulam taluks is more suitable for rubber (*Hevea brasiliensis*) cultivation and these regions are well known for high yield. The occurrence of *Phytophthora* and pink diseases is very rare in these regions which adds to their suitability. Agastheeswaram is not suitable for rubber

cultivation. Thovalai taluk, lying in between the highly fertile Kalkulam and the semi-arid Agastheeswaram taluks, represents an agroclimate in between these two.

Moderate rain (around 1500 mm annually) and prolonged soil moisture stress during post-monsoon season make the agroclimate of Thovalai distinct from other rubber growing areas. Summer season is characterized by a long duration of sunshine, high day temperature and low atmospheric humidity. The high velocity wind lashing from the hotter regions of the northern districts is considered as an additional con-