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YIELD AND YIELD COMPONENTS IN RENEWED PANEL (BI-1) OF RRII 400 SERIES RUBBER CLONES

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Yield components like total volume and dry rubber content (DRC) of latex were analyzed in summer and peak yielding seasons in the renewed bark to assess the performance of RRII 400 series clones. Significant variations were observed among the clones under evaluation with regard to the parameters. RRII 414 and RRII 430 showed the highest total latex volume as well as dry rubber yield both in summer and peak yielding seasons when tapped in the renewed bark. Total latex volume was less irrespective of the clone during summer compared to peak season. Clones responded differently to summer stress. The drop in total latex volume during summer ranged from 39.5 to 64 per cent and 36.6 to 60.9 per cent in LST I and LST II, respectively. The highest drop in summer latex volume was recorded in clone RRII 430. When virgin and renewed panels were compared, the total volume of latex was less in renewed panel compared to virgin panel in both the LST's barring very few exceptions. Status of clones with regard to latex volume, DRC and dry rubber yield in virgin panel (BO-1) and renewed panel (BI-1) were comparable in majority of the clones. The present study proved the superiority of RRII 430, RRII 417 and RRII 414 in the long run as well.

Key words: *Hevea brasiliensis*, RRII 400 series, Renewed panel, Summer yield, Yield components

INTRODUCTION

Hybridization and clonal selection has been successfully employed in the development of several outstanding *Hevea brasiliensis* clones. Licy *et al.* (1992) reported the production of high yielding hybrid clones of the RRII 400 series from the cross RRII 105 x RRIC 100. The heterotic response for yield and related attributes of those clones was reported by Licy *et al.* (2003) and high yield and precocity over four years of tapping by Mydin and Mercykutty (2007). Mydin *et al.* (2011) reported the yield and related attributes in two virgin panels of those clones. Based on the results obtained from evaluation trials of RRII 400 series clones, Rubber Research Institute of India has released RRII 414, RRII 430, RRII 417 and RRII 422 for large scale planting.

Rubber being a long duration crop with half of its yielding period in the virgin panel and another half in the renewed panel, it is imperative to know its yield performance in the renewed panel as well. Certain clones exhibit variation in their performance in renewed panel as compared to virgin panel. Clones such as GT 1 and PB 217 show an increasing trend whereas PB 235 shows a decreasing trend in yield in the renewed panel (Sethuraj, 1992). Since RRII 400 series clones were recommended under category 1 of the planting recommendation and widely

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