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ECONOMIC EXPLOITATION OF HEVEA

THESIS PRESENTED

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## ABSTRACT

The extraction of latex from the rubber tree is the most expensive operation in the production of raw rubber. A proper economic evaluation of tapping is therefore of vital importance.

Tapping experiments were carried out on RRIC 45, RRIC 52, RRIC 7 and PB 86, comparing different intensities from 100% to 200%. The covariance analysis on the yield per tree per tapping indicated, that in all four clones, the full spiral and double cut tapping systems gave a higher yield during the first year of the experiment. Observations will be made to establish whether this initial high yield will persist over a number of years. All four clones under test gave higher yields under the higher intensities of tapping, with clone PB 86 performing best under all systems.

The yield data gathered from this experiment was also used to compare the performance of each of the four clones tapped on different intensities in terms of the crop of dry rubber harvested per tapper per tapping as this constitutes a vital factor in ascertaining production costs, especially at times of low rubber prices. The data were also used to assess yield per acre obtainable under each tapping system.

Preliminary observations were made on the vegetative and anatomical characters of the selected clones. The anatomy of the bark tissue from tapping panel area was investigated. A staining procedure for the latex vessels was also devised in the preparation of permanent slides of the bark tissue.

The process of wintering in Hevea in different clones was also studied along with the weather factors affecting the yield variations of the trees.

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