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## IMPROVING RUBBER PRODUCTIVITY BY REDUCING TAPPING FREQUENCIES IN GUATEMALA

T. Chapuset<sup>1</sup>, Victor Anleu<sup>2</sup>, Didier Snoeck<sup>1</sup>, Serge Palu<sup>1</sup>, and Carlos Najera<sup>2</sup>

<sup>1</sup>CIRAD, UPR Tree Crop-Based Systems, F-34000 Montpellier, France; <sup>2</sup>Gremial de Huleros de Guatemala, GT- Guatemala, Guatemala

*Hevea brasiliensis*, perennial crop, can be exploited on cycles from 30 to 40 years. It has a particular system of harvesting, the tapping, which consists in removing a thin layer of bark of 1.5 to 2.0 mm depth, so that the latex can be expelled. This operation is repeated regularly at intervals of 1 to 5 days. This interval determines the frequency of tapping. The improvement of productivity and profitability can be done either by increasing the yield per tree, or by reducing the labor. The productivity per tree depends on the clone genetic potential, its behavior in a given environment and its reaction to the tapping frequency. The tapper's productivity will depend on the number of trees tapped per tapper and the quantity of latex the tree will produce after each tapping. This last parameter can evolve with the tapping frequency.

In Guatemala, a study was conducted on the reduction of the tapping frequencies (tapping every 4, 5, 6 or 7 days) combined with stimulant (ethephon, 2.5% a.i) applications frequencies, varying from 8 to 14 applications a year. The results show that the yields per tree per year ( $\text{g.t}^{-1} . \text{y}^{-1}$ ) decreases with the tapping frequency whereas the yield per tapping ( $\text{g.t}^{-1} . \text{t}^{-1}$ ) increases when the frequency of tapping is reduced. The economic impact of the reduction of tapping frequency is presented with various assumptions of rubber price.

Contact: Thierry Chapuset, ICIRAD, UPR Tree Crop-Based Systems, F-34000 Montpellier, France. E-mail: [thierry.chapuset@cirad.fr](mailto:thierry.chapuset@cirad.fr)