YIELD IMPROVEMENT IN ABANDONED RUBBER FIELDS WITH 2-CHLOROETHYLE PHOSPHONIC ACID (ETHAPHON) APPLICATION

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ABSTRACT

High cost of production, shortage of harvesters and reduced economic lifespan are the key issues in rubber plantations related to harvesting. Yield stimulation of *Hevea brasiliensis* is considered to be a solution to these issues by reducing the number of tappers required and increasing tappers' intake. Chemicals commonly used are formulations of 2-chloroethylphosphonic acid (Ethephon). The objectives of this study were to yield improvement in abandoned rubber fields with ethaphon application and to characterize latex yield variation with girth, bark thickness (upward and downward bark), tapping cut length (upward and downward bark), amount of tapping cuts per plant and amount of tapping cut length per plant. The study was conduct on RRIC 100 rubber clone. The experiment was conducted using 2.5% and 5% Ethaphon. The 2.5% ethaphon application is significant ($p< 5$) effect for abandoned RRIC 100 rubber gtt. The 5% ethaphon application is not significant ($p >5$) effect for abandoned RRIC 100 rubber gtt. There is a profit improvement with 2.5 % ethaphon application. The upward tapping cut length and total tapping cut length is effected significantly ($p < 5$) on average gtt.

Key words: Stimulation, *Hevea brasiliensis*, Abandoned rubber fields, Rubber, 2-chloroethylphosphonic acid.