

Evaluation of Four Yield Stimulants on *Hevea brasiliensis* Yield

YIEW ANN LIEW, JING YI LOKE, YIT KHENG GOH AND SENG HENG TEY

Latex yield stimulants, such as ethephon (2-chloroethylphosphonic acid), are widely utilised in the rubber industry to extend latex flow, ultimately improving latex yield. In this study, which lasted 44 months, the efficacy of three promising liquid stimulants (referred to as Products A, B, and D) was compared with Product C which is the common stimulation product used currently. Overall, all tested latex stimulation products demonstrated the ability to increase latex yield per tapping by 75 to 89 grammes per tree per tapping (g/t/t) or 50 to 78 per cent during the months of stimulation. However, on a long-term basis, when the yields of stimulated and non-stimulated (wintering) months were taken into account, the yield per tapping of stimulated trees increased by 11 to 18 g/t/t or 32 to 51 per cent. Notably, Product A, when applied three times a month, showed the highest incidence of tapping panel dryness (TPD) compared to the Control and Product D treatments, where no TPD was observed. The cost-benefit analysis showed that Product C was the most economically viable option, costing only RM 0.10 per kilogramme of latex yield, in contrast to the other stimulants, which ranged from RM 0.19 to RM 2.15 per kilogramme of latex yield.

Keywords: *Natural rubber, panel dryness, rubber production, latex yield stimulants*