UNIVERSITI TEKNOLOGI MARA

EFFECTIVENESS OF ORGANIC ADJUVANT FOR CONTROL OF TAPPING PANEL DISEASE (TPD) OF RUBBER TREES *(Hevea brasiliensis)*

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Final year project report submitted in partial fulfilment of the requirement for the degree of
Bachelor of Science (Hons.) PlantationTechnology and Management

Faculty of Plantation and Agrotechnology

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CANDIDATE'S DECLARATION

I declare that the work in this Final Year project was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledge as referenced work. The final year project report has not been submitted to any other academic institution or non academic institution for any other degree or qualification.

In the event that my Final Year Project is found to violate the conditions mention above, I voluntarily waive the right of conferment of my bachelor degree and agree to be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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ABSTRACT

This research has been carried out in the plantation owned by Rubber research Institute Malaysia (RRIM) located in Kota Tinggi, Johor. Objective on these studies to observe whether microbial-based formulation and fertilizer derived from organic material can help by direct application to the tapping panel of the rubber trees that have been infected by tapping panel disease (TPD) can revive back the phloem vessels and stimulate the production of the latex. This research has been done by using two types of Effective Microorganism (EM) base organic formulation that is Agroplus and BQ-65. The second objectives of this research is to observe changes in the phloem vessels and other tissues contained in the stem of the rubber tree that has been infected by the TPD by using electron microscope. The research has been done continuously for nine (9) weeks starting from 18th August until 22nd October 2014. Weekly data of the quantity of latex produced by the infected trees that have undergoes the treatment were recorded. The result shows that the microbe formulation (Agroplus) can help in stimulating the production of the latex. However, the degree of changes for the phloem vessels and other tissues contained in the stem of the rubber trees cannot be observed and analysed due to several factors.

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