A CASE STUDY ON PERFORMANCE EVALUATION OF POWER TILLER BETWEEN SLOPES $3^0 - 5^0$ ON DRY PADDY FIELD

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Final Year Project Report Submitted in

Partial Fulfilment of the Requirements for the

Degree of Bachelor of Science (Hons.) Plantation Technology and Management

in the Faculty of Plantation and Agrotechnology

Universiti Teknologi MARA

DECLARATION

This Final Year Project is a partial fulfilment of the requirements for a degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

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I hereby declare that I have checked this project and in my opinion, this project is adequate in terms of scope and quality for the award of the degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

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Date: 27/7/2016.

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ABSTRACT

A study was conducted in UiTM Jasin Share Farm to test the relationship between speed and plowing depth and fuel and effective field capacity using two-wheel tractor (model S 120). Data collected includes time taken during plowing, total time, fuel consumption and plowing depth. The average speed recorded for each plot is 0.884, 0.988, 0.945, 1.022 and 0.910 (km/hr), respectively. Mean for plowing depth for each plot (from 20 samples per plot), was 7.46, 7.38, 7.4, 7.34 and 7.42 cm respectively. Effective field capacity recorded 0.0422, 0.0450, 0.0439, 0.0458 and 0.0427 (km/hr). Data recorded show that more speed will give less plowing depth. Fuel consumption recorded 1.39, 1.42, 1.39, 1.45, and 1.38 (l/hr). Fuel cost recorded 2.1548, 2.2012, 2.1542, 2.2477 and 2.1391 (RM/hr).