THE EFFECTS OF DIFFERENT TYPES OF ORGANIC COMPOUND ON THE GROWTH PERFORMANCE AND DEVELOPMENT OF PADDY (*Oryza sativa*) MR220 SHOOTS AND ROOTS EXPLANTS

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Final Year Report Submitted in

Partial Fulfillment of the Requirements for the

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

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Universiti Teknologi MARA

DECLARATION

This Final Year Project is a partial fulfillment 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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ABSTRACT

A STUDY ON THE EFFECTS OF DIFFERENT ORGANIC COMPOUND ON THE GROWTH PERFORMANCE AND DEVELOPMENT OF PADDY MR220 SHOOTS AND ROOTS EXPLANTS

A study on the effects of different organic compound on the growth performance and development of paddy MR220 shoots and roots explants. This study was conducted in UiTM Jasin Campus in order to investigate the effects of using three types of organic additives on the same level of concentration towards the three treatments responsive to the number of shoots and roots produced for six weeks in culture medium. In this study, seeds explants of paddy cultivar MR220 were cultured on MS medium that have been supplemented with different kinds of organic compound which are young coconut water, old coconut water and coconut milk at 200 g L⁻¹. Each treatment was replicated five times and the numbers of shoots and roots that initiated from the explants were recorded and the mean of five replicates explants were calculated. From this study, young coconut water shows the medium was result the highest number of shoots and roots produced followed by the old coconut water medium and coconut milk medium. The numbers of shoots were significantly influence by coconut water concentration.