COMPARISON OF BIOTRANSFORMATION METHODS OF PADDY STRAW INTO BIOETHANOL

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Partial Fulfilment of the Requirements for the

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DECLARATION

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I hope this paper will give benefit to all student of plantation management in order to found new method for bioethanol.

Thank you.

NURUL NADIA BINTI SARIF

TABLE OF CONTENTS

ABSTRACT

COMPARISON OF BIOTRANSFORMATION METHODS OF PADDY STRAW INTO BIOETHANOL

Biofuel production can be categorized into biodiesel and bioethanol. Bioethanol is one alternative for transport fuel substitution. The most common renewable fuel today is ethanol derived from sugar. Besides that, future large-scale use for ethanol will most certainly have to be based on production from lignocellulosic materials. This review gives on overview of the new technologies of biotransformation on paddy straw into bioethanol. Rice straw have lignocellulosic material for bioethanol production since it is one of the most abundant renewable resources. The paddy straw have special characteristics such as high hemicellulose and cellulose content that can be readily hydrolyzed into fermentable sugars. One of the major challenges in developing technology for bioethanol production from paddy straw is selection of an appropriate pretreatment and fermentation method.

Keywords: *Pretreatment method, Future perspective, Bioethanol*