

Programme and Abstracts

# PIMES

PLANTATION MANAGEMENT EXHIBITION & SEMINAR

15th December 2018

Faculty of Plantation and Agrotechnology Universiti Teknologi MARA Melaka Branch, Jasin Campus 77300 Merlimau, Melaka, Malaysia

Melaka, Malaysia December 15, 2018

NO	CONTENTS	PAGES
1.	The Dean, Faculty of Plantation and Agrotechnology. Universiti Teknologi MARA	1
2.	Introduction PiMES	3
3.	Committees	4
4.	Schedule of PiMES	5
5.	Room Distribution For Poster Presentation	7
6.	Distribution For Poster Presentation	8
7.	Abstracts	29
.8.	List Of Panels Industries	241

Melaka, Malaysia December 15, 2018

## DEAN PREFACE



Assalamualaikum Warahmatulllahi Wabarakatuh

My heartiest congratulations go to the Committees for successfully organized PIMES September 2018. PiMES September 2018 enables lecturers and panels from strong industrial background to reflect and share significant ideas, experiences and research findings in the workplace and in partnerships. It is also hoped to encourage collaboration among the lecturers and enhance the quality and performance of the faculty. The research findings derived from this substantial event shall indicate the commitment of lecturers not only in teaching, but also in striving to unfold new knowledge and processes that will benefit the nation. The efforts of our lecturers need to be further extended to a wider audience so that the nation will benefit from the research findings. It is also hoped that, the proceedings will trigger serious thought and more robust research in the field of education as well as plantation and technology so as to help Malaysia achieve Vision 2020.

As we know, agriculture production has increased tremendously today because of the demand from various sectors in the world. To meet the challenges of increasing food demand, techniques and ways should be created to improve productivity, profitability and sustainability of the agricultural system. Industrial agricultural system has led to irretrievably changes in the landscape diversity, soil quality, environment integrity, and natural resource base. This has resulted major questions and curiosity worldwide in relation to the sustainability of agricultural production system. The most significant damage to natural ecosystems and the environment was caused by habitat conversion and corresponding climate change, loss of biodiversity and ecosystem functions, soil erosion and degradation, and pollution from fertilizers and pesticides. Concepts in plant protection have changed in past decades from exclusion or destruction of pest to pest management. Serious problems with pesticides, rapid development of pest resistance, environmental effects of pesticides, and high costs led to development of new approaches and techniques in pest management based on improved knowledge of pest dynamics and their natural enemies, and the interaction between the pest and the crop.

It remains only for me to thank all those who have helped to make this events such a great and wonderful success. Much appreciation is due to the board editor, and reviewers of all papers submitted as well as to all authors whose ideas and contributions ensured rich and lively discussion during the various sessions.

DEAN, Assoc Prof Dr Asmah Awal

Melaka, Malaysia December 15, 2018

#### INTRODUCTION

The PiMES committee and UiTM (Melaka), lasin Campus residents are very pleased to welcome all participants in the Plantation and Management Seminar (PIMES) which is organized by Faculty and Agrotechnology.

PiMES aims to give an exposure to the students about the procedure to make a poster by extracting information from their final year project. This seminar will sharpen their communication skill as well as they can exchange and share their research result, projects, experiences and new ideas related to all aspects of studies in plantation management and agribussiness, plant sciences, soil sciences, plant protection, plant biotechnology and agricultural engineering. We sincerely hope that you will enjoy and return home with plenty of inspiration to improve agro-industry plantation practices and research activities.

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# DEVELOPMENT OF TOTAL COST RECORD FOR IN-FIELD TRANSPORTATION. A CASE STUDY IN LADANG TANAH MAKMUR BERHAD

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#### ABSTRACT

In Malaysia, oil palm plantation is one of the major crop industries, and the usage of the tractor is one of the most important programmes of oil palm production. The total cost of the tractor can be measured based on the activity in-field operations. Nowadays, the problems of the high total cost of tractors in plantation can affect the financing problem towards the company. Tractor usage for in-field operation in the plantation is significant to make sure the Fresh Fruit Bunch deliver to the RAM within 24 hours. Besides, tractor usage also important to make sure the fertiliser bag reaches the working area on time. Movement of the tractor is based on the worker while during the broadcasting of fertilizer. The total cost of the tractor in Ladang Tanah Makmur Berhad was investigate. Data were collect from 2016 until 2017 on one tractor. The data were categorized into different costs constituting the cost of operating tractors such as repair and maintenance, fuel and lubricants, driver's wages, insurance, road taxes and miscellaneous costs. Different formula was used to analyze these operating costs. The results showed that the total cost in 2016 is higher than in 2017. Objectives of the study are to know the specific cost of the tractor annually. I take the total cost record of the tractor for the whole 2016 and 2017. Next, to evaluate and make recommendations on the ways that will enhance farm machinery utilisation and maintenance. The recommendation is essential for the company in order to reduce the cost and at the same time, achieve high yields. Third, study and analyse the operating cost of the tractor in the plantation. The last is to compare the tractor cost at the plantation with average.

Keywords: fixed cost, operation cost, total cost, tract