



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

PLANTATION MANAGEMENT EXHIBITION AND SEMINAR 2018 (PiMES)

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

PLANTATION MANAGEMENT EXHIBITION AND SEMINAR 2018 (PiMES)

*Melaka, Malaysia
December 15, 2018*

DEAN PREFACE



Assalamualaikum Warahmatullahi 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

PLANTATION MANAGEMENT EXHIBITION AND SEMINAR 2018 (PiMES)

Melaka, Malaysia

December 15, 2018

INTRODUCTION

The PiMES committee and UiTM (Melaka), Jasin 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 agribusiness, 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.

PLANTATION MANAGEMENT EXHIBITION AND SEMINAR 2018 (PiMES)

Melaka, Malaysia

December 15, 2018

OIL PALM MANAGEMENT BY USING AERIAL PHOTO AND ARCGIS SOFTWARE

Nabilah Ismail, Zareen Zulkifli*

Faculty of Plantation and Agrotechnology, UiTM (Malacca) Jasin Campus, 77300, Malacca.

Corresponding Author:
zareen.zulkifli@gmail.com

ABSTRACT

Monitoring process for oil palm needed more precise innovation, cheap, fast and accurate technology. Before the existence of new technology, farmers used manual or traditional technique to manage their plantation area that is time and labour consuming. Remote sensing is one of the most reliable measurements tools for accurate monitoring and managing over large area. The purpose of this study is to count the oil palm tree in the plantation, to check the spacing distance between the oil palm trees and to monitor the status and obstacle in the oil palm plantation area. This study was conducted at Share Farm UiTM Jasin Melaka. Drone were used to capture the oil palm area. ArcGIS software 10.3 have been used in this procedure. The tree and the distance of the oil palm was counted. Based on the results, it shows that the oil palm tree area is unorganized because of some barrier. The barriers that has been identify is clogging water, which it resulted from the old water reservoir used to accumulate water for oil palm tree activity usage. A part from that, fallen trees and old tree is also considered as the barrier in the oil palm area. It is because the presence of pest such as Rhinoceros beetle, that eat the old trunk of oil palm which lead to the fallen trees. In conclusion, ArcGIS software facilitates farmers to monitor and manage their plantation field. Thus, Precision Agriculture can be recommended as a better alternative than the existing traditional method.

Keywords: remote sensing, ArcGIS software, oil palm, barriers, precision agriculture