

**INVESTIGATION OF CRAWLER'S EFFICIENCY ON PEATLAND DURING  
RAINING SEASON IN LADANG DELIMA, ROMPIN, PAHANG, MALAYSIA**

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## **ABSTRACT**

### **INVESTIGATION ON CRAWLER'S EFFICIENCY ON PEAT LAND DURING RAINING SEASON IN LADANG DELIMA, ROMPIN, PAHANG, MALAYSIA**

Harvesting oil palm is one of important process in oil palm production. This is because the main objective in harvest the Fresh Fruit Bunches is to obtain maximum yield potential per round. Currently, in Malaysia, most of the estate uses a simple machine such as wheelbarrow because it is easier to use. But in peat soil, harvesting using a wheelbarrow or any mechanical that using tires are less suitable and spongy structure itself made the harvester harder to access and evacuate FFB. Moreover, during the raining season, it is harder to evacuate FFB in peat. Harvesting and the collection of FFB need to execute quickly and properly to maintain oil production. Malaysia consist of approximately 2.6 Mha and about 30% (~1.0 Mha) are in Peninsular. This study is done to prove the effectiveness of the raining season throughout a year to mechanization efficiency in peat soil. Ladang Delima consists of 90% peat and 10% and soil. So, it is the best place to test how efficient the transporter is. SPSS was used and the result shows that the rainfall throughout the year is significantly not affecting the crawler's efficiency in peat soil. The more rain in that estate, the more productivity the machine will be. So, with this study, it is proven that rain not affecting the productivity of machinery in oil palm plantation.

Keyword: oil palm, collector, transport, mechanization, peat soil, rainfall season