

**DEFOLIATION EFFECTS TOWARD THE OIL PALM, *ELAEIS*
GUINEENSIS SEX DETERMINATION AND DIFFERENTIATION
(A REVIEW)**

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Partial Fulfilment of the Requirements for the
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DECLARATION

This Final Year Project is a partial fulfilment of the requirement for a degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

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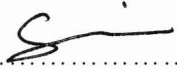
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I hereby declared that I have checked this project and in my opinion, this project is adequate in terms of scope and quality for the award of the degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

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ABSTRACT

DEFOLIATION EFFECTS TOWARD THE OIL PALM, *ELAEIS* *GUINEENSIS* SEX DETERMINATION AND DIFFERENTIATION (A REVIEW)

Oil palm is a monoecious species of the palm subfamily Arecoideae, which produces functionally unisexual male and female inflorescences in an alternating cycle of the same plant. Thus, the species is qualified as temporally dioecious. The sex ratio of an oil palm can be influenced by both genetic and environmental factors. Besides, physiological stress like severe defoliation has been known in some studies can induce a higher frequency of males and abortions but it is not known how such factors interact with endogenous cycles nor the developmental state when sex is determined known with accuracy. This is because the inflorescence sex determination and differentiation also has been identified that it is a complex process where phenological information can only be obtained from the plants growing in the field. In term of defoliation, data from previous studies has shown that defoliation will affected on the inflorescence production. This lead to a decreasing in sex ratio and increasing in abortion rate causing a reduction in the number of yield. So, for the yield predicting and forecasting purpose, the effects from oil palm defoliation on the sex differentiation and differentiation can give impacts on those purpose.