

PRELIMINARY STUDY OF ACTIVE POLLEN OF *Elaeis guineensis*

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ABSTRACT

PRELIMINARY STUDY OF ACTIVE POLLEN OF *Elaeis guineensis*

Pollen of *Elaeis guineensis* is essential for seed production in oil palm. This study was conducted on oil palm pollen which consisted sample that taken from Kg. Hj Noor Simpang Renggam, Johor and sample from Parit Raja, Batu Pahat, Johor. The aims of this study were to identify active and inactive of pollen of *Elaeis guineensis* and to determine the viability percentage from both samples. The pollen was sown in germination media that included 10% of sucrose solution supplemented with 100 ppm of boric acid (H_3BO_3) to increase the germination rate of the pollen. The pollen was germinated for 2 hour and the viability percentage of active pollen was counted for 3 times to get an average. To determine viability percentage of pollen, the number of active pollen had been divided by the total number of pollens per field of view and had been counted under a compound light microscope. The structure of active and inactive pollen was identified. As a conclusion for this study, both sample A and sample B produce pollen tube growth which showed that both samples are active pollen with a viability percentage mean 76.6%. Both samples did not vary too much and it was found that there is no significance different between both samples.