

**PRELIMINARY STUDY ON OIL PALM WEEVIL (*Elaeidobius kamerunicus*)
POLLINATION ACTIVITY ON OIL PALM (*Elaeis guineensis*) IN
PEMBANGUNAN PERTANIAN MELAKA SDN BHD (PPMSB), JASIN,
MELAKA**

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ABSTRACT

TITLE: PRELIMINARY STUDY ON OIL PALM WEEVIL (*Elaeidobius kamerunicus*) POLLINATION ACTIVITY ON OIL PALM (*Elaeis guineensis*) IN PEMBANGUNAN PERTANIAN MELAKA SDN BHD (PPMSB), JASIN, MELAKA

Elaeidobius kamerunicus is identified as an efficient insect of oil palm pollinators. Introducing oil palm weevil (*Elaeidobius kamerunicus*) from Africa to growing region of Asia and the Pacific oil palm in early 1890s gave a positive impact to the growth of oil palm. Nowadays, poor pollination and low fruit set has been a main issue in most oil palm estate. The decline in oil palm yield has been associated with the factors that may affecting the pollination activity of *Elaeidobius kamerunicus* (Oil palm weevil). Naturally, male pollen grain will be pollinating by wind to the female inflorescences but the existence of *Elaeidobius kamerunicus* has made pollinating process faster and efficient. This study was conducted in Pembangunan Pertanian Melaka Sdn. Bhd (PPMSB), Jasin, Melaka, to investigate the abundance of *Elaeidobius kamerunicus* at different time of anthesis process of oil palm inflorescence and difference sex of oil palm inflorescence. Besides, to determine the effect abundance population of *Elaeidobius kamerunicus* toward the number of oil palm fruit production. Other than that, to identify the vigorousness activity of *Elaeidobius kamerunicus* between in the morning (0800-1200) hours and in the evening (1400-1800) hours. Anise-like fragrance is an odour that emitted by both male and female inflorescences. Male inflorescence appeared to reward the oil palm weevil with nectar and pollen, whereas female inflorescence only appeared to reward copious nectar production. The number of visiting *Elaeidobius kamerunicus* an inflorescence was identified by using a sticky trap encircling it and calculating the number of *Elaeidobius kamerunicus* present on samples of spikelets of inflorescence. On the 3rd day anthesis of male and 2nd day female inflorescences, the population of oil palm weevils were peaked. The abundance of oil palm weevils was recorded during 0800-1200 was higher compare to 1400-1800. To encourage the population of *Elaeidobius kamerunicus* in Pembangunan Pertanian Melaka Sdn. Bhd (PPMSB), some good practices need to be considered to increase the number of yields and fruit sets.

Keywords: *Elaeidobius kamerunicus*, pollination activity, sticky traps, inflorescence