

Comparison of Abundance of Rodents in Immature and Mature Oil Palm Plantations in Lahad Datu, Sabah

HAMZAH TALIBE, DZULHELMI MUHAMMAD NASIR, ARIFF ATEED MOHD NOH AND CIK MOHD RIZUAN ZAINAL ABIDIN

*Regardless of palm age, rodents have been the main concern for oil palm planters. The present study examined the abundance of rodents in immature (1-3-year-old) and mature (18-20-year-old) oil palm plantations (FGVAS Sahabat 17) in Lahad Datu, Sabah. Over a period of 30 months, 150 cage traps were set in a 300-palm area for four consecutive nights each month for immature and mature palms, respectively. During the study, four rodent species, *Callosciurus notatus*, *Rattus exulans*, *Rattus rattus diardii*, and *Maxomys whiteheadi* were captured. In immature oil palm, *R. exulans* (53.59%) was the highest number recorded, and *R. r. diardii* (88.56%) was the highest number in mature oil palm. The total number of rats varied between immature and mature oil palms [$t(54) = 7.392, p = 0.0001$]. The ratio of the number of rodents captured in immature and mature oil palms was 4:1. There was a significant difference in the abundance of rats in immature and mature oil palms between the wet ($U = 25.50, p = < 0.0003$) and dry seasons ($U = 12.50, p = < 0.001$). This study identified the abundance of rodent species in immature and mature oil palm plantations as a baseline for rodent pest management.*

Keywords: Oil palm, rodent species, wet season, dry season, Lahad Datu