



**Group B09- START UP FUND**  
**Diversity of Hymenoptera Bees in Three Types of Plantations and Villages adjacent to the Harapan Rain Forest, Jambi**

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Deforestations from primary forest to rubber and oil palm plantation in Jambi occur dramatically through the last 20 years. Bees from several families of Hymenoptera are possible to be as bioindicator of the habitat alteration. This research was aimed to study the diversity of Hymenoptera bees in oil palm plantation, rubber plantation and jungle rubber adjacent to Harapan Rain Forest, Jambi. In the three vegetation habitats and villages, we found six families of Hymenoptera bees, i.e. Apidae, Halictidae, Megachilidae, Pompilidae, Sphecidae and Vespidae. The first three families are known as herbivore insects, while the last three families are predators. A total of 28 species were found from the four habitats, i.e. *Apis cerana*, *A. dorsata*, *Trigona laviceps*, *T. reepeni*, *T. itama*, *T. terminata*, *T. ventralis*, *T. minangkabau*, *T. nitidiventris*, *Ceratina lieftincki*, *C. accusator*, *C. cognata*, *C. comberi*, *C. bryanti*, *Xylocopa collaris*, *X. confusa* (Apidae), *Reopenia* sp., *Lasioglossum* sp., *Agapostemon* sp., *Halictus* sp., *Megachile fulvifrons* (Halictidae), *Vespa tropica*, *V. bellicosa*, *Pseudepipona* sp., *Polistes* sp., *Stenodynerus* sp. (Vespidae), *Sphex aurulentus* (Sphecidae), dan *Monodontyx javanus* (Pompilidae). The highest number species were the stingless bee *Trigona* (Apidae) and *T. minangkabau* was the endemic stingless bee. Despite the monoculture of palm oil habitat, our result showed that the highest of Hymenoptera bees (16 species) was occurred in that habitat. The bees might attract to *Mimosa pudica* pollen that were abundance covering the ground in palm oil plantation. We proposed in our future to conduct rearing activities of the *Trigona* and *Apis* by the local people as the value added of bee richness to the ecosystems and communities.