ABSTRAK

Potensi Tanaman Berbunga Sebagai Sumber Pakan Lebah Klanceng (*Trigona* sp.) di Pertanian Organik Beji Jawa Tengah

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Ketersediaan pakan merupakan prasyarat utama dalam budidaya lebah tanpa sengat. Pakan dari lebah tanpa sengat memiliki variasi dan hal ini sangat terkait dengan kondisi ekologis dan keanekeragaman tumbuhan pada lokasi budidaya. Pada penelitian ini dilakukan pengamatan terhadap keanekaragaman dan kelimpahan serangga dan tanaman pakan serta kondisi vegetasi pada lokasi penelitian di Kampung Organik Beji. Sampel tumbuhan diamati menggunakan metode *multiple line transect* sedangkan serangga menggunakan metode *scan sampling* pada tiga periode waktu pukul 07.00-09.00, 10.00-12.00 dan 13.00-16.00. Beberapa jenis tumbuhan diamati fenofase dan waktu antesisnya. Bentuk morfologi polen di kaki lebah klanceng, perilaku kunjungan, dan pola aktivitas turut diamati. Data serangga yang diperoleh dianalisis keanekaragaman, kemerataan dan dominansinya, untuk tumbuhan dianalisis keanekaragaman dan kelimpahanya. Berdasarkan hasil penelitian kondisi umum vegetasi pertanian yang diamati didominasi tanaman hias dan tanaman pertanian. Terdapat 145 jenis tanaman dari 54 famili dengan indeks keanekaragaman kategori tinggi. Ditemukan 22 jenis tanaman yang polennya dikoleksi lebah klanceng dengan morfologi unit monad. Serangga yang ditemukan sebanyak 57 spesies dari 23 famili dan 6 ordo dengan kategori keanekaragaman tinggi. Sebagian besar serangga aktif di pagi hari dan mengalami puncak aktivitas di siang hari.

Kata Kunci: potensi tanaman, sumber pakan, *Trigona* sp. dan pertanian organik Beji.

ABSTRACT

Potential of Flowering Plants as Food Source for Klanceng Bees (*Trigona* sp.) in Organic Farming of Beji, Central Java

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Availability of feed is a major prerequisite in stingless beekeeping. Feed from stingless bees has variations and this is closely related to the ecological conditions and plant diversity in the cultivation site. In this study, observations were made on the diversity and research of plants and feed as well as vegetation conditions at the research site in Beji Organic Village. Plant samples were observed using the multiple line transect method while insects used the scan sampling method at three time periods at 07.00-09.00, 10.00-12.00 and 13.00-16.00. Several plant species were observed for their phenophase and anthesis time. The morphology of pollen on the feet of the klanceng bee, visiting behavior, and activity patterns were observed. The insect data obtained were analyzed for their diversity, evenness and dominance, to analyze their diversity and use. Based on the results of the study, the general condition of agricultural vegetation observed was dominated by ornamental plants and agricultural crops. There are 145 species of plants from 54 families with a high category diversity index. It was found 22 types of plants whose pollen was collected by klanceng bees with monad unit morphology. Insects were found as many as 57 species from 23 families and 6 orders with high diversity category. Most insects are active in the morning and peak in activity during the day.

Keywords: plant potential, feed source, *Trigona* sp. and Beji organic farming.