

Keanekaragaman Jenis Serangga Hasil Koleksi *Fruit Trap* dengan Tiga Macam Atraktan Buah pada Ekosistem Polikultur dan Monokultur Hutan Wanagama, Yogyakarta

(Miftaql Rizky Alamsyah 2012/333924/BI/8922)

Serangga merupakan kelompok hewan yang melimpah. Penelitian mengenai serangga dan keanekaragamannya terus berkembang di Indonesia. Namun dalam pelaksanaannya terkendala pada keterbatasan alat koleksi (*sweep net*) serangga. Koleksi serangga menggunakan *fruit trap* dengan tiga macam atraktan buah pernah dilakukan dan ternyata masih perlu dilakukan penyempurnaan dalam hal kualitas alat. Penelitian ini bertujuan membandingkan keanekaragaman jenis serangga hasil koleksi tangkapan tiga macam atraktan buah pada ekosistem hutan polikultur dan monokultur.

Penelitian koleksi serangga dengan *fruit trap* yang sudah dimodifikasi dengan *furing* dilakukan pada bulan Juli 2016 di hutan Wanagama, Yogyakarta. Pengujian *fruit trap* dengan tiga macam atraktan buah (pisang, nanas, dan apel) dilakukan pada dua macam ekosistem hutan yang berbeda (polikultur dan monokultur). Hasil koleksi serangga selama 4 hari pada waktu pagi dan sore selanjutnya dilakukan identifikasi di laboratorium. Parameter lingkungan yang diukur meliputi suhu, kelembapan, dan intensitas cahaya.

Hasil menunjukkan, secara keseluruhan serangga yang tertangkap terbagi dalam 3 ordo, 6 famili, dan 14 spesies dengan didominasi serangga anggota Ordo Lepidoptera (78,5%). Koleksi serangga dari ekosistem hutan polikultur lebih banyak daripada ekosistem hutan monokultur. Koleksi serangga pada waktu pagi hari lebih banyak daripada sore hari. Hasil koleksi serangga yang tertarik pada atraktan pisang, nanas, dan apel berturut-turut adalah pisang 10 spesies, nanas 9 spesies, apel 8 spesies. Parameter lingkungan selama pelaksanaan koleksi menunjukkan hasil yang optimal (suhu 26-29°C, kelembapan 79-81%, dan intensitas cahaya 1020-1600 lux).

Kata kunci : *fruit trap*, atraktan buah, koleksi serangga, ekosistem hutan

Insect's Biodiversity from Fruit Trap Collection with Three Kinds of Fruit Attractant in
Polyculture and Monoculture Forest Ecosystem at Wanagama Forest, Yogyakarta

Miftaql Rizky Alamsyah (2012/333924/BI/8922)

Insect is the most abundant in animal group. Research about biodiversity of insect is developing in Indonesia. But the sampling method is constrained by limitation of insect collection tools (sweep net). Fruit trap's insect collecting had conducted and apparently needed enhancement in the tool quality. The aim of this research was to compare the diversity of insect collection from three kinds of fruit attractant in polyculture and monoculture forest ecosystem.

Modified fruit trap with *furing* in this research was used to collect insects. This research was conducted on July 2016 at Wanagama Forest, Yogyakarta. Fruit traps were tested with three kinds of fruit attractant (banana, pineapple, and apple) held in two different types of forest ecosystem (polyculture and monoculture). Insect data collection during 4 days in 2 periods of time (in the morning and afternoon) were analysed and identified in Entomology Laboratory, Faculty of Biology UGM. Environmental parameters such as temperature, humidity, and light intensity were measured.

Result showed that the total of insect collection distributed into 3 orders, 6 families, and 14 species and were dominated by order of lepidoptera (78,5%). The number of insect collected from forest ecosystem of polyculture was higher than monoculture. There was higher number of insect collection in the morning than afternoon. The number of insect which had attracted on each fruit traps were 10 species in banana, 9 species in pineapple, and 8 species in apple. Environmental parameters during this research were optimal (temperature 26-29°C, humidity 79-81%, light intensity 1020-1600 lux).

Keywords : fruit trap, fruit attractant, insect collection, forest ecosystem