

**HUBUNGAN POPULASI KELELAWAR (Chiroptera) DENGAN
KOMUNITAS ARTHROPODA TANAH DI GUA LIANG
BOEH, LIANG SEUNGIT DAN SARONGGE
KABUPATEN TASIKMALAYA**

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ABSTRAK

Kelelawar adalah komponen penting penghasil guano yang merupakan salah satu sumber makanan utama di ekosistem gua, termasuk bagi kelompok Arthropoda tanah. Tujuan penelitian ini adalah untuk mengetahui hubungan populasi kelelawar dengan komunitas Arthropoda tanah di Gua Liang Boeh, Liang Seungit dan Sarongge di Kabupaten Tasikmalaya. Penelitian dilaksanakan pada bulan Januari-Maret 2019. Metode pengumpulan data populasi kelelawar dilakukan pada pukul 17.00-18.00 WIB, dengan pemasangan jaring *mis-net* dan dihitung menggunakan *Hand Counter*. Sampel guano ditampung selama 24 jam dengan 3x pengulangan menggunakan plastik berukuran 5x4 m dan diuji kandungan senyawa kimia parameter N dan P. Koleksi Arthropoda tanah menggunakan *Hand Collecting*, *Pitfall Trap*, dan ekstraksi tanah corong *Berlesse*. Faktor abiotik yang diukur yaitu intensitas cahaya, suhu udara, suhu tanah, kelembapan udara, kelembapan tanah dan pH tanah. Data dianalisis menggunakan uji korelasi Rank Spearman. Hasil penelitian menunjukkan populasi kelelawar paling banyak adalah Gua Sarongge yaitu 1193 individu, Liang Boeh 188, dan paling rendah yaitu Liang Seungit 471 individu. Berat Guano yang dihasilkan Sarongge sebanyak 222 g, Liang Boeh 148 g, Liang Seungit paling rendah yaitu 10 g. Arthropoda yang paling banyak ditemukan adalah di Gua Sarongge terdapat 22 jumlah spesies, jumlah kelimpahan 4652 individu, Liang Boeh 13 spesies, jumlah kelimpahan 11177 individu, sedangkan yang paling rendah adalah Gua Liang Seungit jumlah 12 spesies dan memiliki kelimpahan 157 individu. Korelasi antara populasi kelelawar, berat guano, jumlah spesies dan kelimpahan individu Arthropoda mempunyai korelasi positif dan sangat kuat.

Kata kunci: *gua, kelelawar, guano, arthropoda.*

CORRELATION OF BAT (Chiroptera) POPULATION WITH
LAND ARTHROPODIC COMMUNITY IN CAVE OF LIANG
BOEH, LIANG SEUNGIT AND SARONGGE, TASIKMALAYA
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ABSTRACT



Bats are an important component of producing guano which is one of the main food sources in eco-cave including the group of soil arthropods. The purpose of this study was to determine the relationship between the population of Bats and the Arthropod community in Liang Boeh Cave, Liang Seungit and Sarongge in Tasikmalaya District. The study was conducted in January-March 2019. The method of collecting data on bat populations was carried out in dark zones at 17.00-18.00 WIB, with the installation of mis-net nets and calculated using Hand Counter. Guano samples were collected for 24 hours with 3x repetitions using 5x4 m plastic and tested the chemical compounds N and P parameters. Soil Arthropod collection used Hand Collecting, Pitfall Trap, and Funnel Extract (Berlesse). Abiotic factors measured are light intensity, air temperature, soil temperature, air humidity, soil moisture and soil pH. Data were analyzed using version 23 spss statistics of rank spearman correlation test. The results showed that the largest population of bats was Cave Sarongge as many as 1193 individuals, Liang Boeh 188, and the lowest number, namely Liang as much as 471 individuals. The weight of Guano produced by Sarongge was 222 g, Liang boeh 148 g, the lowest hole was 10 g. The most abundant arthropods found in the Sarongge Cave are 22 species, the total abundance of 4652 individuals, the total number of 13 species, the abundance of 11177 individuals, while the lowest is the Liang Seungit Cave with 12 species and an abundance of 157 individuals. Correlation between bat population, guano weight, number of species and abundance of individual arthropods have a positive and very strong correlation.

Keywords: *caves, bats, guano, arthropodic.*