

DIETARY COMPOSITION OF *Myotis* BATS AT IPB UNIVERSITY

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**DEPARTMENT OF BIOLOGY
FACULTY OF MATHEMATICS AND NATURAL SCIENCE
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ABSTRAK

HANIFAH FAUZIAH. Komposisi Makanan Kelelawar *Myotis* di IPB University. Dibimbing oleh KANTHI ARUM WIDAYATI dan YAMATO TSUJI.

Komposisi makanan merupakan bagian penting dalam biologi kelelawar yang memberikan wawasan mendasar tentang ekologi, perilaku, dan pemahaman hubungan dengan habitat. Penelitian ini bertujuan untuk mengetahui komposisi pakan dari genus *Myotis* yang diamati di kawasan Kampus IPB University, Dramaga, Jawa Barat. Sampel tinja dikoleksi dari empat spesies *Myotis*, yaitu *M. adversus*, *M. hasseltii*, *M. horsfieldii*, dan *M. muricola*. Analisis dilakukan menggunakan mikroskop untuk mengidentifikasi taksa mangsa, yang terdiri atas tujuh ordo serangga dan jejak mangsa ikan berupa sisik dan otolit. Data dianalisis berdasarkan frekuensi kemunculan (%PO) dan diuji dengan menggunakan uji chi-square. Hasil penelitian menunjukkan bahwa Diptera merupakan mangsa yang dominan pada *M. horsfieldii* (95,8%) dan *M. hasseltii* (82,4%), Coleoptera pada *M. adversus* (100%), dan Lepidoptera pada *M. muricola* (94,4%). Hasil uji chi-square menunjukkan adanya perbedaan yang signifikan pada komposisi mangsa di antara spesies, yang mungkin dipengaruhi oleh morfologi, ketersediaan mangsa, dan strategi mencari makan.

Kata kunci: analisis fekal, kelelawar, komposisi makanan, *Myotis*

ABSTRACT

HANIFAH FAUZIAH. Dietary Composition of *Myotis* Bats at IPB University. Supervised by KANTHI ARUM WIDAYATI and YAMATO TSUJI.

Dietary composition is an essential part of bat biology that provides fundamental insights into ecology, behavior, and understanding of the relationship with habitat. This study aimed to determine the diet composition of the *Myotis* genus, which was observed in the IPB University Campus area, Dramaga, West Java. Fecal samples were collected from four *Myotis* species, namely *M. adversus*, *M. hasseltii*, *M. horsfieldii*, and *M. muricola*. Analyses were conducted using a microscope to identify prey taxa, consisting of seven insect orders and traces of fish prey in the form of scales and otoliths. Data were analyzed based on frequency of occurrence (%PO) and tested using the chi-square test of independence. Results showed that Diptera were the dominant prey in *M. horsfieldii* (95.8%) and *M. hasseltii* (82.4%), Coleoptera in *M. adversus* (100%), and Lepidoptera in *M. muricola* (94.4%). Chi-square results indicated significant differences in prey composition among species, possibly influenced by morphology, prey availability, and foraging strategies.

Keywords: bat, dietary composition, fecal analysis, *Myotis*



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HANIFAH FAUZIAH

Undergraduate Thesis
Intended to Acquire Bachelor Degree in
Biology Study Program

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FACULTY OF MATHEMATICS AND NATURAL SCIENCE
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FOREWORDS

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Bogor, July 2025

Hanifah Fauziah

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