

Diet of *Draco spilopterus* from Ilocos Norte Province and Laguna Province, Philippines

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Location: Ilocos Norte Metro Watershed and Forest Reserve, Pasuquin, Ilocos Norte Province, Philippines (18.37167°N, 120.64682°E); and Mount Banahaw in Barangay Bukal, Municipality of Majayjay, Laguna Province, Philippines (14.12292°N, 121.469°E).

Habitat: Trunks of mango, lanzone (langsat), and coconut trees.

Date and time: 12-15 June 2017, 09:00- 16:30 hrs; 14-17 September 2017, 08:15-16:00 hrs.

Identity of subject: Philippine Spotted Flying Lizard, *Draco spilopterus* (Reptilia: Squamata: Agamidae).

Description of record: We collected samples of *Draco spilopterus* (Fig. 1U) on July and September 2017 at Ilocos Norte Metro Watershed and Forest Reserve, Pasuquin, Ilocos Norte Province (18.37167°N, 120.64682°E) under the Philippine Wildlife Gratuitous Permit #265 issued by the Philippine Department of Environment and Natural Resources; and at Mount Banahaw in Barangay Bukal, Municipality of Majayjay, Laguna Province (14.12292°N, 121.469°E) under the research permit of the National Museum of the Philippines with the approval of the Municipal Environment and Natural Resources. Collected specimens were immersed in dissolved chloretone to anaesthetize (McDiarmid et al., 2011) and to halt digestion. We dissected the specimens to remove the stomach for prey items identification. The ants found in the stomach were identified to the genus level. Other prey items were identified to family level.

A total of 1127 individual prey items were quantified and identified. Based on the 25 examined stomachs, the diet of *D. spilopterus* was mainly ant arthropods (Formicidae) (Figs. 1A-1L). Other invertebrates found in the stomach include millipedes (Asiomorpha) (Fig. 1M), bugs and beetles (Chrysomelidae, Coccinellidae, Languriidae) (Figs. 1N-1Q), caterpillars (Pyralidae larvae) (Fig. 1R), termites (Isoptera 1S) and scale insects (Pseudococcidae) (Fig. 1T).

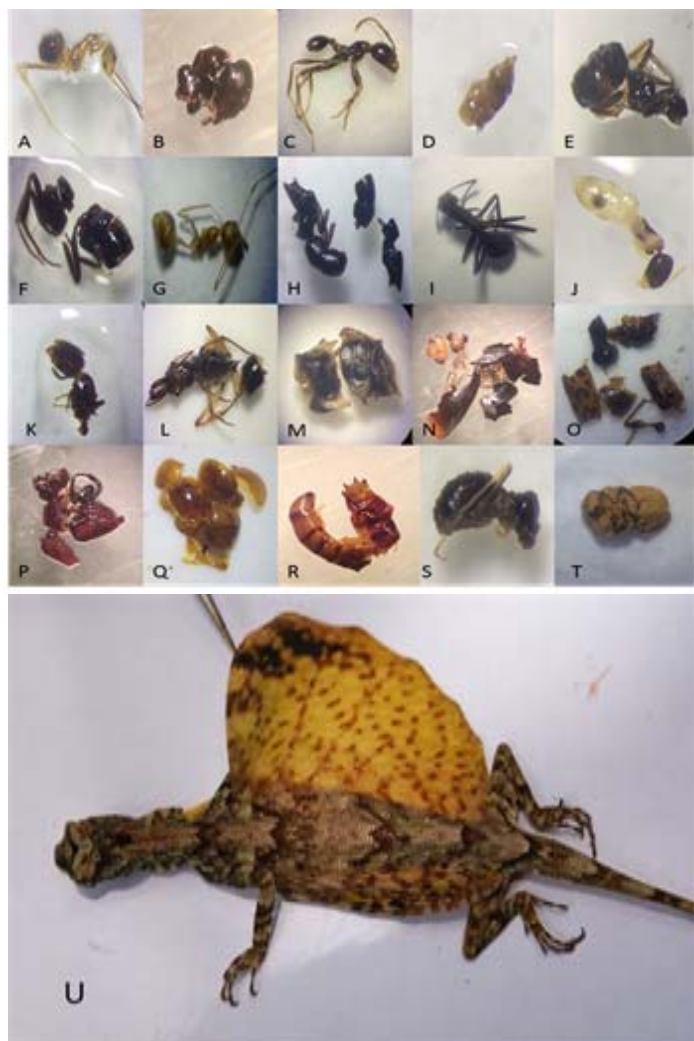


Fig. 1.

Remarks: *Draco spilopterus* is one of 10 endemic species of flying lizard in the Philippines and is widely distributed across the north and central parts of the country (McGuire & Alcala, 2000). It is known to forage in secondary and disturbed forests (McGuire & Alcala, 2000; McGuire & Heang, 2001). As an arboreal and diurnal lizard, its foraging habit was easily observed in the field, feeding on arboreal invertebrates found in their microhabitat particularly ant arthropods (Formicidae).

Analysis of gut content revealed that *D. spilopterus* has a high consumption of Formicidae with frequency of occurrence of 100% and a numeric percentage of 98.13%. There are 13 genera of Formicidae identified in the diet namely *Anoplolepis gracilepis* (Fig. 1A), *Camponotus* sp. (Fig. 1B), *Carebara* sp. (Fig. 1C), *Crematogaster* sp. (Fig. 1D), *Dolichoderus* sp. (Fig. 1E), *Monomorium* sp., *Odontoponera* sp. (Fig. 1F), *Oecophylla smaragdina*. (Fig. 1G), *Platythyrea* sp. (Fig. 1H), *Polyrhachis* sp. (Fig. 1I), *Tapinoma* sp. (Fig. 1J), *Tetramorium* sp. (Fig. 1K), and *Tetraoponera* sp. (Fig. 1L). Hence, the results are related to the abundantly and strongly clumped distribution of these genera of ants in the microhabitat inhabited by lizards

In order to further understand dietary pattern, identification and quantification of the diet of other populations of this flying lizard are required.

References:

- McDiarmid, R.W., Mercedes S., Guyer, C., Whitfield Gibbons, J. & Chernoff, N. (2011). Reptile Biodiversity; Standard Methods for Inventory and Monitoring. *University of California Press*. pp. 424.
- McGuire, J.A. and Alcala, A.C. (2000) A taxonomic revision of the Flying Lizards (Iguania: Agamidae: Draco) of the Philippine Islands, with a description of a new species. *Herpetological Monographs*. 14, 81-138
- McGuire, J.A. and Heang, K.B. (2001). Phylogenetic systematics of Southeast Asian flying lizards (Iguania: Agamidae: Draco) as inferred from mitochondrial DNA sequence data. *Biological Journal of the Linnean Society*, 72: 203–229.