

## Diversity of Chiropteran Fauna in the Southeastern Semi-Arid Zone of Sri Lanka

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Sri Lanka is home to 31 species of bats and however, the diversity of bats in semi-arid habitats of the country is not known. Therefore, a survey of chiropterans was carried out in the south-eastern semi-arid zone. Sand dunes, thorny scrub forests, occupied and unoccupied buildings in and around Jetwing Yala hotel premises (6°15'01.18"N, 081°23'50.66"E) were surveyed during a six day rapid survey. The study area is located in the eastern edge of Hambantota district around 4 km away from the Yala National Park. The area receives <500mm annual rainfall and the average temperature is >29°C. Visual encounter survey (day time to record bat roosts), capture survey and bioacoustics survey (06.30pm to 6.00am) techniques were employed. Triple high mist net system with 7.5x12 m capture area was used to capture bats. Echo Meter Touch 2 Pro and Pettersson M500 microphone were used to record bat sounds. Recorded bat sounds were analyzed using Kaleidoscope Pro 5 software. Total survey effort recorded six species of bats belong to four families representing five genera. Of the total, two species are frugivorous including *Pteropus giganteus* and *Cynopterus sphinx* and four are insectivorous including *Hipposideros speoris*, *Hipposideros ater*, *Pipistrellus coramandra* and *Taphozous longimanus*. *Hipposideros speoris* and *P. coramandra* day roosts were observed in buildings of the hotel. *Taphozous longimanus* colony was observed on a tree trunk of a *Borassus flabellifer* tree. A colony of *Cynopterus sphinx* was observed under lateral sides of a *Borassus flabellifer* leaves. *Hipposideros ater* was only recorded by capture methods. This study recorded 06 species of bats belonging to 05 genera that represent 19% species and 26% genera in order Chiroptera in Sri Lanka.

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