

Rediscovery of *Cyclopodia sykesii*, an ectoparasite on the Indian Flying Fox from Udayagiri Range, Odisha, India

Cyclopodia sykesii Westwood (1834) distributed in most of the Indian peninsula in the area of distribution of *Pteropus medius* except in northwestern India (Theodor 1959). *Cyclopodia sykesii* parasites on *Pteropus medius*, *P. arial*, *P. intermedius*, *Cynopterus sphinx*, *Pipistrellus ceylonicus*, *Tupaia* sp. and its distribution in India ranges from Kerala, Karnataka, Tamil Nadu, Maharashtra, Dadra & Nagar Haveli, Gujarat, Rajasthan, Uttar Pradesh, Bihar, Assam, West Bengal, and Odisha; and Maldives (Advani & Vazirani, 1981).

Cyclopodia sykesii Westwood (1834) is a dipteran insect in the family Nycteribiidae. These are blood sucking ectoparasite of fruit bats. The head is highly reduced to form a pin like structure for blood sucking. The legs are enlarged as compared to other dipterans with claws present to hold the hairs



Pteropus medius hanging from the Eucalyptus tree. © Ashirwad Tripathy.

of the host bat. Here, the host is *Pteropus medius* (Pteropodidae).

Pteropus medius is commonly called as Indian Flying Fox and the greater Indian Fruit Bat found in south Asia. It is the second largest bat in the world. It is nocturnal and feeds mainly on ripe fruits and nectar.

This species is often regarded as vermin due to its destructive tendencies towards fruit farms, but it helps in pollination and seed propagation.

In Odisha *C. sykesii* was first observed on *Pteropus medius* in Balugaon, Puri District (Now Khordha District) by Annandale (1913)



Spine like reduced head of *Cyclopodia sykesii*. © Ashirwad Tripathy.



Abdomen with hair tuft. © Ashirwad Tripathy.



Ventral portion of body. © Ashirwad Tripathy.

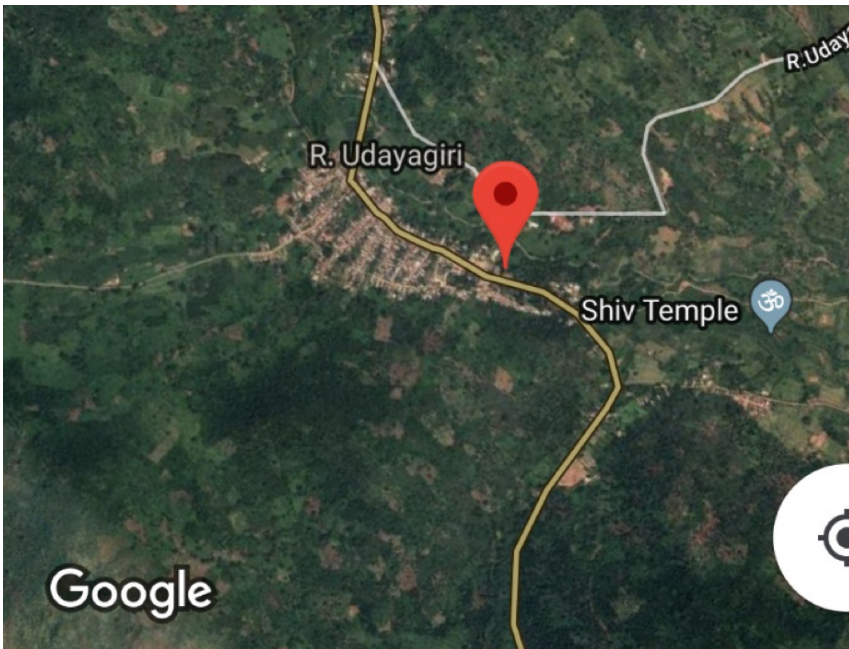
and from *Pteropus medius* from Satpada, Puri District by Caunter, (1908) (Scott, H., 1925). Till now no records about this insect has been found from Udayagiri Range, southern Odisha, India since 1913. Therefore, this is a rediscovery of *Cyclopodia sykesii* Westwood (1834) from southern Odisha after 107 years.

During a field survey in the mountain ranges of Udayagiri, Parlakhemundi Division, Gajapati District, Odisha (19.156° N & 84.144°E) on 8 September 2018 an accidental catch was made. *Cyclopodia sykesii* fell from the body of the *P. giganteus* during their flight and resting condition under a Eucalyptus tree roost. The samples were collected in 70% ethyl alcohol and identified as *Cyclopodia sykesii*.

Diagnosis: Palps laterally compressed, broad, with short terminal setae. Sclerite connecting the thoracic ctenidium with coxa two more or less narrowly triangular and covered with several rows of setae. Tergites of the male abdomen with either



Dorsal portion of the body. © Ashirwad Tripathy.



Sample collection location. © Ashirwad Tripathy.

continuous or interrupted marginal rows of setae or short spines. Fifth and sixth tergite always much shorter than the preceding tergites. Anal segment of the male broadly conical, less than twice as long as wide at the base. A row of short thick spines at the hind-margin of sternite 5 of

the male. Male genitalia: aedeagus membranous, without apodeme, completely invaginated inside the abdomen in the resting position. There is a connecting tube which bears a field of spines. Segmentation of the abdomen of the female much reduced. No sclerites

between the basal sclerites and the anal segment, except sternite 7 which is transformed into a genital plate with spines at the posterior margin. Anal sclerite is absent (Theodor 1959).

References

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