

Verna home to 193 species of moth, says study

Abdul Wahab Khan

Panaji

A recent study conducted in the picturesque village of Verna has uncovered a rich diversity of moths, identifying a total of 193 species and throwing light on the region's nocturnal biodiversity.

The research, led by Dafilgo Fernandes from the School of Earth, Ocean and Atmospheric Sciences at Goa University, marks the first comprehensive survey of moths in the area surrounding River Sal.

Fernandes, who is also associated with the Verna Biodiversity Management Committee, chose Verna



Agathia Laetata



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Biston strigaria



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Cepphis advenaria



Chiasmia nora



Digrammia ocellinata

Moths play a vital role as pollinators, decomposers and prey for various predators, making them important indicators of environmental health.

as the study site due to its unique topography and varied ecosystem. The village, situated in Salcete taluka, features a higher plateau in the east and a lower flat riverine plain in the west, providing diverse habitats for flora and fauna.

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The study, published in the Journal of Applied Entomologist, spanned several months during monsoon season. A combination of methods was employed to document the moth species.

Fernandes conducted regular surveys of house walls, observed moths getting attracted to tu-

belights, and carried out daytime field surveys in bushes and grasslands. Adhering to ethical principles, no live specimens were collected. Instead, the researcher relied on visual observation and photography using a phone camera.

"A total of 193 moth species were identified. Based on the number of species, the family Ere-

bidae was the most dominant with 61 species, followed by Crambidae with 42 species, Noctuidae with 26 species, Geometridae with 19 species and Spingidae with five species. The least dominant were Nolidae, Zygaenidae and Pterophoridae with four species each," the report states.

The research also identified several moth spe-

cies that pose a potential threat to agricultural crops in the area. This information could prove valuable to the local farmers and for devising pest management strategies.

"The most well-known crop-damaging moths in this region include Sylepta derogate and Helicoverpa armigera, which attack *Abelmoschus esculentus* (okra), while *Agrostis ipsilon* and *Helicoverpa armigera* majorly affect *Vigna unguiculata* (cowpea). *Spodoptera frugiperda* is known for its damage to *Citrullus lanatus* var. *lanatus* (watermelon)," states the report.

<http://irgu.unigoa.ac.in/drs/handle/unigoa/7396>