

Discovery of new moth species

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Why in News?

Scientists recently discover 2 new lichen moth species namely, *Caulocera hollowayi* and *Asura buxa* in the eastern Himalayas.

- It represents a significant addition to India's biodiversity records, particularly within the **Lepidoptera** group.
- Lepidoptera is the ***second-largest order of insects***, comprising butterflies and moths.

Species Name	Discovery Location	Key Identifiers
Caulocera hollowayi	Near Golitar, Sikkim	Named after the late Dr. Jeremy D. Holloway, a renowned lepidopterist. Distinguished by unique wing color patterns and microscopic reproductive structures.
Asura buxa	Panijhora, West Bengal	Named after the Buxa Tiger Reserve region where it was found. Identified through its specific wing bands and "chaetotaxy" (the arrangement of tiny body scales/bristles).

- **Ecological Importance - "Bio-indicators"** - Lichen moths are of high interest to environmental scientists because of their specific life cycle.
- **Dietary Niche** - As caterpillars, these moths feed almost exclusively on **lichens**.
- **Environmental Sensors** - Lichens are highly sensitive to air pollution.

Therefore, the health and population of these moths serve as a natural indicator of **air quality** and the overall health of fragile mountain ecosystems.

- **Ecosystem Role** - They contribute to nutrient cycling and act as a food source for other high-altitude predators.
- **Taxonomic Milestone** - Along with these two new species, they also recorded 7 other lichen moth species for the first time in India.
- **Biodiversity Hotspot** - The Eastern Himalayas (Sikkim and North Bengal) continue to be a primary focus for discovering "lesser-known" insect groups, which are vital for understanding complex ecosystem functioning.

Reference

[Telangana Today | Discover of two new moth species](#)

