Meghalaya Burrowing Reed Snake

Prelims: *Current events of national importance | Biodiversity & Conservation*

Why in News?

A new species has been discovered in Meghalaya's West Garo Hills, resolving decades-long taxonomic confusion in Northeast India's fossorial snake group.

- **Common Name –** Meghalaya Burrowing Reed Snake
- **Scientific Name –** Calamaria garoensis.
- **Genus –** Calamaria.
- **Family –** Colubridae.
- **Kingdom –** Animalia.
- **Habitat –** Forested, moist soils of Oragitok, West Garo Hills, Meghalaya.
- **Distribution –** Currently known only from this region, indicating a ***restricted range*** and high conservation importance.
- **Morphology**
  - **Scales –** Smooth dorsal scales in 13 rows.
  - **Tail –** Short, non-tapering with an obtuse tip.
  - **Coloration –** Broad median black stripe on underside of tail; faint nuchal ring on neck.
  - **Body Pattern –** Longitudinal striping distinct from related species.

- **Diet –** Primarily insectivorous/vermivorous, feeding on small invertebrates.
- **Genetic Distinction**
  - **Phylogenetic Analysis –** Closely related to *Calamaria mizoramensis* but genetically distinct.
  - **Genetic Divergence –** 6.3%, confirming a separate evolutionary lineage.
- **Taxonomic Resolution –** Previously misidentified as *Calamaria pavimentata* now recognized as a species complex.
- **Ecological Significance**
  - **Burrowing Lifestyle –** Fossorial species that aerate soil and regulate invertebrate populations.
  - **Indicator Role –** Reflects hidden biodiversity in Northeast India's forest ecosystems.
  - **Conservation Need –** Restricted distribution demands habitat protection and further surveys.
- **Conservation Status**
  - **IUCN Red List –** Not yet assessed (newly described).
  - **Potential Concern –** Limited range and habitat specificity suggest Vulnerable status if assessed.
- **Significance - Biodiversity Hotspot –** Reinforces Garo Hills as a *micro-endemic zone* within the Indo-Burma biodiversity hotspot.
- **Scientific Impact –** Highlights importance of integrative taxonomy combining morphology and mitochondrial DNA.
- **Conservation –** focused protection of lesser-known fossorial species is

necessary.

Reference

[The Hindu | Burrowing Reed Snake]