

Euphaea Wayanadensis

Prelims - Bio-diversity.

Mains (GS III) - Conservation.

Why in News?

A group of researchers have discovered a new species of damselfly in the Wayanad landscape of the Western Ghats, Kerala.

Odonate species

- Odonate species, commonly known as dragonflies and damselflies, are a group of insects belonging to the order Odonata.
- Odonates are *predatory insects with 4 wings* and are known for their vibrant colors and agility in flight.
- **Suborders** Anisoptera (dragonflies) and Zygoptera (damselflies).
- **Dragonflies (Anisoptera) -** Typically, larger and more robust, with eyes that touch on top of the head and wings spread out at rest.
- **Damselflies (Zygoptera) -** Usually slenderer, with eyes separated and wings folded together along the body at rest.
- **Ecological Importance** Odonates play a crucial role in freshwater ecosystems as both predators and prey, helping to control populations of other insects, including mosquitoes.
- **Global Distribution-** While they are predominantly found in warmer regions, some species thrive in habitats as far north as Canada.
 - It is Kerala's 191st recorded *odonate species*.
 - Family Euphaeidae.
 - The team first observed the distinct morphotype of *Euphaea wayanadensis* at the *Kalindi River*, Thirunelli, in Wayanad district in 2013.
 - **Morphology** A longer black hind wing patch, broader and uninterrupted humeral and ante humeral stripes in males, and unique structural traits in the male genital vesicle.
 - Genetic analysis also played a crucial role in confirming the species' status.
 - **Habitat** The species preferred fast-flowing streams with rocks and aquatic vegetation with evergreen and semi-evergreen tree growth on the banks to thrive.



Reference

The Hindu | Euphaea wayanadensis

