



## Jayanti: New Species of Cricket

### Why in News

Recently, a new species of Cricket named '**Indimimus jayanti**' was found in the **Kurra caves of Chhattisgarh**.

- The new species was **named after Professor Jayant Biswas**, one of the leading cave explorers in the country.



### Key Points

- **About the New Spider Cricket:**
  - The new species of cricket has been identified under the **genus Arachnomimus Saussure, 1897**.
  - **Jayanti** has led to the **new subgenus 'Indimimus'**.
  - Males of the new Jayanti subgenus **cannot produce sound** and their **females don't have ears**.
- **About the New Subgenus:**
  - The newly discovered subgenus, Indimimus, is different from the two subgenera, **Arachnomimus and Euarachnomimus**, because of the **male genitalia structure**.
  - Insects have a **lock-and-key model genitalia structure** which is unique to each subgenus.
- **Arachnomimus Saussure, 1897:**
  - Arachnomimus is the **genus name given by Swiss Entomologist Henri Louis Frédéric de Saussure in 1878** to crickets that resembled spiders.

- Crickets of this group are **commonly called spider crickets** because of their smaller body size and long legs.

▪ **Significance of the Discovery:**

- It can **help in designing hearing aids for humans.**
  - The new species **may be communicating by beating their abdomen or any other body part on the cave walls.**
  - **Vibrational communication** is one of the softest but fastest modes of signal transmission.
    - Vibrational communication can be regarded as an interaction between the physical properties of the environment and insect's anatomy and physiology and resulting behavior.
  - Further studies on their skills of vibrational communication may help in designing hearing aids for humans which can capture quietest signals and amplify to an audible hearing range.
- With the discovery of Jayanti from India, the **genus Arachnomimus is now known from 12 species.** Distribution of these species is very wide, ranging from Brazil to Malaysia.
- In India, the diversity of spider crickets is still unexplored. Given India is home to four **biodiversity hotspots**, and all the hotspots have unexplored caves, there is **significant scope for many more discoveries.**

▪ **About Crickets:**

- Cricket, any of approximately 2,400 species of leaping insects that are worldwide in distribution and known for the musical chirping of the male.
- They have mainly cylindrical bodies, round heads, and long antennae. Behind the head is a smooth, robust pronotum.
- Crickets are noticeable for their loud calls, especially at night. Male crickets produce this sound by rubbing their wings against each other to attract females.
- The females listen to these calls using ears located on their legs and approach the males for mating and reproduction.

**Source: IE**

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