

# Night Life

## Ancient Elusive Singers



A night in a tropical rainforest is full of mysteries, you will hear more than you can see. Among insects, Orthoptera are known to be acoustically conspicuous and the group includes some of the most ancient animals that lived on this planet, such as wetas (Carboniferous period). Most of what we know about wetas is based on studies on New Zealand species. Yet, we do have a few of our own in India. The Indian weta *Gryllacropsis* sp. (in picture) is endemic to the Western Ghats and owing to its nocturnal and arboreal habit it cannot be easily detected. Further, males cannot be easily distinguished from the females and females lack an ovipositor making ecological studies on this enigmatic species even harder to conduct. Yet, with the help of bioacoustics, researchers found out that unlike their ensiferan cousins field crickets and katydids where only males produce sound, both sexes of *Gryllacropsis* sp. are capable of producing sound. And they do so by rubbing their hind legs against the sides of the abdomen. This is also unlike field crickets and katydid who produce sound by rubbing their wings together. It was also found that females are not only heavier than males but have a completely different call that they produce sitting high up on tree trunks in the rainforest canopy. The call records of the males and females made by researchers will serve as a ready reference to detect and monitor these elusive and ancient species, making bioacoustics a tool for biodiversity monitoring and conservation.

**Photo credit: Manisha Tomar**

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