

New honey bee species found in Western Ghats

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In news– A new species of endemic honeybee has been discovered in the Western Ghats **after a gap of more than 200 years.**

About the new species-

- The **new species has been named *Apis karinjodian*** and given the common name **Indian black honeybee.**
- **The last honeybee described from India was *Apis indica* in 1798 by Fabricius.** Although Fabricius named the Indian bee *Apis indica*, it was not considered a valid species till now.
- The research team of Kerala Agricultural University's Integrated Farming Systems Research Station restored the status of *Apis indica* based on a new measure for species discrimination in honeybees termed '**Radio-Medial Index (RMI).**'
- They obtained high resolution photographs of the type specimen from the Natural History Museum, Copenhagen, Denmark, to prove the distinct identity of *Apis indica*, which led to the discovery of the *Apis karinjodian*.
- ***Apis karinjodian* has evolved from *Apis cerana* morphotypes** that got acclimatised to the hot and humid environment of the Western Ghats.
- Molecular analysis of mitochondrial DNA was also carried out and molecular sequence data available in the public open database NCBI-GenBank also helped confirm the species status of the new honeybee.
- **The distribution of *Apis karinjodian* ranges from the central Western Ghats and Nilgiris to the southern Western Ghats,** covering the States of Goa, Karnataka, Kerala and parts of Tamil Nadu.
- **The species has been classified as near threatened (NT)**

in the State based on the IUCN Red List Categories and Criteria.

- **Till date, only a single species, *Apis cerana* was noted across the plains of central and southern India** and Sri Lanka as a 'fairly uniform population' in the Indian subcontinent.
- The research has given a new direction to apiculture in the country by proving that it has three species of cavity nesting honey bees viz., *Apis indica*, *Apis cerana*, and *Apis karinjodian*, the last being visibly dark in appearance.
- **The ability of the Indian black honey bee to produce higher quantities of honey**, which is thicker in consistency, opens up new avenues for increasing honey production.
- **The new find has increased the species of honeybees in the world to 11.**

