



A new genus and a new species of royal Maharaja barbs from the Western Ghats

Collaborative research by scientists from the Bombay Natural History Society (BNHS), the Kerala University of Fisheries and Ocean Studies (KUFOS), Modern College, Pune and the Indian Institute of Science Education and Research (IISER) – Pune, has unravelled a new genus and a new species of the royal Maharaja barbs of the Western Ghats

Mumbai, July 3: Maharaja barbs are a group of small cyprinid fishes found in the high-altitude mountainous rivers of northern and central parts of Western Ghats of India. The group of fish was known only from a single species, Puntius sahyadriensis (now Waikhomia sahyadriensis) described in 1953, from Yenna (Venna River), a tributary of Krishna River, near Mahabaleshwar. They are popular among aquarium hobbyists around the world, because of their majestic appearance and beautiful coloration males achieve in breeding coloration. New research employing an integrative approach of evidence gathering using morphological and genetic analysis, and based on fresh collection of specimens from throughout the Western Ghats, has now resulted in the discovery of a new genus and a new species. Researchers found the group unique among species included in genus Puntius, which required assignment to a new genus, which they describe as Waikhomia, named in honour of eminent Indian ichthyologist, Dr Vishwanath Waikhom.

This research has given a new identity to the Maharaja barbs, endemic to the Western Ghats of India, by placing it under the new genus Waikhomia. Our study has also led to the description of a new species, Waikhomia hira, popularly to be known as Kohinoor Barb, which appears to be distributed only in west flowing Kali River basin of Karnataka. “The high endemism we are recognising among small barbs, at species and the generic level, will pave a way for improved conservation prioritisation and attention for these least studied fish”, said Unmesh Katwate, Fish Scientist at the Freshwater Research Unit of the Bombay Natural History and PhD student at KUFOS, lead author of the study.

"This study on Maharaja barb, a lesser-known group of freshwater fish, led by a BNHS scientist is a remarkable contribution to Indian Ichthyology. There's something unique about, Kali River basin as we are seeing many new species getting described from this small west flowing river in Karnataka. Our researchers described a stone loach, Balitora chipkali in 2016 and now, Kohinoor barb, Waikhomia hira from the same river. This study highlights the urgent need to recognise and advocate such small riverine systems for conservation prioritization." said Deepak Apte, Director of the BNHS.

“Professor Waikhom is one of India’s most well-known fish taxonomist who has described over 100 species of freshwater fish, and worked tirelessly to promote the science of taxonomy and systematics in the country through supervising dozens of students and researchers”, said Dr. Rajeev Raghavan, Assistant Professor at KUFOS, and a senior author on the paper.

The rivers in the central and northern parts of Western Ghats, particularly in northern Karnataka and Maharashtra are poorly explored for their fish diversity. “Some of the rivers in the northern part of the Western Ghats possesses high levels of ichthyofaunal diversity, but intensive exploratory surveys, taxonomic revisions, and molecular based studies are urgently required to uncover this hidden diversity” said Dr. Neelesh Dahanukar, Scientist at IISER, Pune and senior author of the paper.

The scientific paper presenting these results has been published in leading international journal – ZooTaxa, on Monday. Access to the paper: <https://doi.org/10.11646/zootaxa.4803.3.9>

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