More species of snakehead fish found

Many of the currently wide ranging species Channa are listed as of ‘least concern’ in the Red List of IUCN.

Confusions over snakehead fish species identity need not bother ichthyologists any more, as a global digital database of the species has been developed.

A global collaborative initiative involving as many as 10 scientific institutions has barcoded these freshwater fish varieties, which got their name from their unique snakelike snout. The members of the species are found distributed from the Middle East to eastern Asia, Central and West Africa and the Nile.

Earlier, it was widely believed that there were 38 species in this group. However, DNA-level analysis showed that there were several more species than first thought. The species strength of snakeheads could be 53 or even more, said Rajeev Raghavan, Assistant professor of the Kerala University for Fisheries and Ocean Studies, Kochi, which is one of the partnering institutions in the project. The research findings were recently published in *PLOS ONE.*

New species

Snakeheads are of great demand in the domestic market for food as well as for ornamental purposes. Since these species are mostly found in the inland waterbodies, no data on their catch is available. It’s mostly the brightly coloured ones from northeastern India that find their way into aquaria.

The barcoding also succeeded in identifying new species *Channa* from Assam, foothills of Bhutan, Myanmar and another one from Congo.

The analysis of the data revealed that the eastern Himalaya and the adjoining region of Myanmar were hotspots for snakehead diversity, as up to 10 snakehead species described during the last quarter century originated from this region, explained Dr. Raghavan.

Current status

India is currently home to 15 species of *Channa* and the species diversity could go up as more studies would be undertaken.

Four currently known species — *Channa bankanensis* found in Indonesia and Malaysia, *Channa marulius, Channa striata* and *Channa gachua* — found in the Indian subcontinent and parts of southeast Asia, are considered species complexes, where different species are currently known under a single name because their taxonomy is poorly known or studied, he explained.

More taxonomic studies on the species complexes are required for conservation purposes as many of the currently wide ranging species are listed as of “least concern” in the Red List of IUCN.

One of the criteria for assessing a species as of least concern is its wide distribution. The breaking down of the species complex into individual species may have a different story to tell about its distribution which may prompt the scientific community to think for more species-specific conservation programs, felt researchers.

A study of nearly 300 people living in different parts of India found that nine single-base variants

(single-nucleotide polymorphisms or SNPs) account

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