First record of a Homatula species from the Red River drainage

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Originally, *Homatula* has been erected by J. T. Nichols in 1925 as a subgenus of *Barbatula* Linck, 1790. Chinese ichthyologists have denied the usage of this taxon for long time; they used the genus *Paracobitis* Bleeker, 1863 instead. Hence, all species actually belonging into *Homatula* were placed by Chinese workers in *Paracobitis* until Hu & Zhang broke with this tradition in 2010 using the generic designation *Homatula* for elongate nemacheilid fishes with conspicuous dorsal and abdominal crests as the major and in the field most useful characteristic. In the same year a team around Yang Junxing from KIZ, Kunming, Yunnan Province, described *Paracobitis nanpanjiangensis* (referenced: Min, Chen & Yang 2010) still using the generic name of similar fishes from the western part of Asia.



Figure 1: Biotope E-CN 146-11, habitat of *Homatula* sp. N51, picture taken on 2011-12-29, Puer Prefecture, Yunnan Province, PR China.

To date eleven valid species are recognized in *Homatula, viz. H. acuticephala, H. anguillioides, H. berezowskii, H. erhaiensis, H. nanpanjiangenis, H. oligolepis, H. pycnolepis, H. potanini, H. variegata, and H. wujiangensis*, with *H. laxiclathra* being the most recent contribution. *Homatula* species are endemic to virtual all major water sheds in China, but they are absent in the Red River basin. The absence in the Red River drainage is rather uncommon since *Homatula* species occur within neighboring Mekong (4 spp.) and Pearl River (3 spp.) basins.

During my Yunnan-2011-II excursion to various Red River reaches I have been invited by friends (Hani people) to climb up the hills around Chahe tracking through the remaining pristine rain forests. We found two small streams which might be associated with each other. Both were in pristine condition, thus, we spent the whole day up there photographing and investigating the nature. The second stream we have found is a tiny creek at most 1 m wide and 20 cm deep (during dry season in December 2011), running over cascades deeply hidden in the rain forest featuring full

canopy over the stream. The stream itself is carved 1-2 m deep into the landscape providing a cool and dark microhabitat. I did not take my water testing equipment and hence can not report water parameters, but I remember clear water with moderate to fast current over rocks. There was sand, leaf

litter and twigs in sluggish areas. Suddenly I caught a small (~50 mm TL) elongate nemacheilid and identified the species as a member of the *Schistura poculi* complex due to its flank coloration of broken up bars. Knowing that there is no member of the mentioned species-complex present within the Red River basin I thought to deal with a new species. The next catch revealed a midsize specimen large enough to see that my generic assumption was wrong: conspicuous crests along the dorsal and ventral

midlines! "That must be *Homatula*! Here, far within the Red River basin, even close to the border with Laos?" I was thinking. The *Homatula* species, back at home assigned with the code N51, turned out to be the only ichthyospecies at this spot (code: E-CN 146-11). The only further aquatic vertebrate we found was the anuran frog *Limnonectes kuhlii* (Tschudi, 1838).

Homatula sp. N51 seems to be closely related to the Mekongnese species *H. anguillioides* and *H. pycnolepis*. Short diagnosis: Body fully scaled despite abdomen in front of pelvics and head, complete lateral line, short but high adiposal crest starting at vertical through anal fin base end. It differs from *H. pycnoplepis* by dorsal fin base



Figure 2: *Limnonectes kuhlii* was the only further aquatic vertebrate found together with *Homatula* sp. N51.

longer (vs. shorter) than longest branched dorsal fin ray, anal fin shape (completely convex vs. convex and straight) (further reading: Hu & Zhang, 2010). It differs from *H. anguilloides* in higher number of bars, dorsal fin position (dorsal fin located more backwards) and absence of dorsal saddles (vs. 3-5 saddles) (further reading: Zhu & Wang, 1985). Relevant osteological characters such as number of vertebrates and skull formation not yet checked. The original description of this new species is triggered and ongoing.



Figure 3: *Homatula* sp. N51, juvenile, E-CN 146-11, 2011-12-29, life coloration, Puer Prefecture, Yunnan Province, PR China.



Figure 4: *Homatula* sp. N51, matured fish, E-CN 146-11, 2011-12-29, life coloration, Puer Prefecture, Yunnan Province, PR China.

Marco Endruweit, 2012-10-05

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