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## An extraordinary new blind catfish, *Xiurenbagrus dorsalis* (Teleostei: Siluriformes: Amblycipitidae), from Guangxi, China

LI-HUI XIU<sup>1</sup>, JIAN YANG<sup>1,3</sup> & HUI-FANG ZHENG<sup>2</sup>

<sup>1</sup>School of Chemistry and Life Sciences, Guangxi Teachers Education University, Nanning, 530001, China. E-mail:  
yangjian81@gmail.com

<sup>2</sup>College of Animal Science and Technology, Guangxi University, Nanning, 530005, China.

<sup>3</sup>Corresponding author. E-mail: yj1981yj@163.com

### Abstract

*Xiurenbagrus dorsalis*, a new cave-dwelling amblycipitid catfish species, is described based on one specimen collected from the Pearl River drainage in Guangxi, China. The new species can be distinguished from congeners in having a unique combination of features, including the absence of eyes, long barbels, dorsal-fin origin posterior to vertical line at tip of pectoral fins and an adipose fin confluent with caudal fin. This is the first record of a blind catfish in China.

**Key words:** Siluriformes, Amblycipitidae, *Xiurenbagrus*, new species, blind fish, China

### Introduction

Species of the family Amblycipitidae inhabit rivers and streams in southern and eastern Asia (Nelson 2006). The family contains four genera and 33 species, including *Amblyceps* Blyth 1858 with 16 species, *Liobagrus* Hilgendorf 1878 with 14 species, *Xiurenbagrus* Chen & Lundberg 1995 with two species, and *Nahangbagrus* Nguyen & Binh in Nguyen 2005 with one species. Nine species of *Liobagrus* (*L. aequilabris* Wright & Ng 2008, *L. kingi* Tchang 1935, *L. marginatoides* (Wu 1930), *L. marginatus* (Günther 1892), *L. nigricauda* Regan 1904, and *L. styani* Regan 1908a, are from the Changjiang system; *L. formosanus* Regan 1908b and *L. nantouensis* Oshima 1919 are from Taiwan; *L. anguillicauda* Nichols 1926 is from the Pearl River drainage and streams flowing into the southeastern sea in Anhui, Fujian, Guangxi and Zhejiang Provinces, and the two species of *Xiurenbagrus* (*X. xiurenensis* (Yue 1981) and *X. gigas* Zhao et al. 2004) are from the Pearl River drainage, China.

In 2011, one specimen of a blind amblycipitid catfish was collected from Fuchuan County, Guangxi Zhuang Autonomous Region, southern China. It was thought to be a new species of *Xiurenbagrus* for eyeless and extraordinary relatively posterior insertion of dorsal-fin origin.

### Material and methods

Most counts and morphometric measurements followed Chu et al. (1999) and Wright & Ng (2008), and were made on the left side of specimen. Caudal-peduncle depth is the narrowest depth and excludes the dorsal and ventral crests. Measurements were made with digital calipers, and data were recorded to nearest 0.1 mm. The type specimen is in the collection of Guangxi Institute of Fisheries (GIF).

## References

- Blyth, E. (1858) Report of Curator, Zoological Department, for May, 1858. *Journal of the Asiatic Society of Bengal*, 27, 267–290.
- Chen, X.P. & Lundberg, J.G. (1995) *Xiurenbagrus*, a new genus of amblycipitid catfishes (Teleostei: Siluriformes), and phylogenetic relationships among the genera of Amblycipitidae. *Copeia*, 1995, 780–800.  
<http://dx.doi.org/10.2307/1447027>
- Chu, X.L., Zheng, B.S. & Dai, D.Y. (1999) *Fauna Sinica (Osteichthyes: Siluriformes)*. Science Press, Beijing, 230 pp.
- Günther, A. (1892) List of the species of reptiles and fishes collected by Mr. A. E. Pratt on the upper Yang-tze-kiang and in the province Sze-Chuen, with description of the new species. Appendix II. In: Pratt, A.E. (Ed.), *To the Snows of Tibet Through China*. Longmans, Green and Co., London and New York, pp. 238–250.
- Hilgendorf, F.M. (1878) Einige neue japanische Fischgattungen. *Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin*, 1878, 404–457.
- Nelson, J.S. (2006) *Fishes of the World*. 4<sup>th</sup> Edition. John Wiley and Sons, New York, 601 pp.
- Nguyen, V.H. (2005) *Ca Nuoc Ngot Viet Nam. Tap II*. Nha Xuat Ban Nong Nghiep, Hanoi, 760 pp.
- Nichols, J.T. (1926) Some Chinese fresh-water fishes. XVIII.— New species in recent and earlier Fukien collections. *American Museum Novitates*, 224, 1–7.
- Oshima, M. (1919) Contributions to the study of the fresh water fishes of the island of Formosa. *Annals of the Carnegie Museum*, 12, 169–328.
- Regan, C.T. (1904) A monograph of the fishes of the family Loricariidae. *Transactions of the Zoological Society of London*, 17, 191–350.  
<http://dx.doi.org/10.1111/j.1096-3642.1904.tb00040.x>
- Regan, C.T. (1908a) Descriptions of new freshwater fishes from China and Japan. *Annals and Magazine of Natural History*, Series 8, 1, 149–153.  
<http://dx.doi.org/10.1080/00222930808692377>
- Regan, C.T. (1908b) Description of new fishes from Lake Candidius, Formosa, collected by Dr. A. Moltrecht. *Annals and Magazine of Natural History*, Series 8, 2, 358–360.  
<http://dx.doi.org/10.1080/00222930808692494>
- Tchang, T.L. (1935) A new catfish from Yunnan. *Bulletin of the Fan Memorial Institute of Biology, Peiping (Zoological series)*, 6, 95–97.
- Wright, J.J. & Ng, H.H. (2008) A new species of Liobagrus (Siluriformes: Amblycipitidae) from southern China. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 157, 37–43.  
[http://dx.doi.org/10.1635/0097-3157\(2008\)157\[37:ansols\]2.0.co;2](http://dx.doi.org/10.1635/0097-3157(2008)157[37:ansols]2.0.co;2)
- Wu, H.W. (1930) Description de poissons nouveaux de Chine. *Bulletin du Muséum National d'Histoire Naturelle*, Série 2e, 2, 255–259.
- Yue, Z.H. (1981) Siluriformes. In: Zheng, P. S. (Ed.) *Freshwater Fishes of Guangxi Province*. Guangxi People's Publishers, Nanning, pp. 175–196.
- Zhao, Y.H., Lan, J.H. & Zhang, C.G. (2004) A new species of amblycipitid catfish, *Xiurenbagrus gigas* (Teleostei: Siluriformes), from Guangxi, China. *Ichthyological Research*, 51, 228–232.  
<http://dx.doi.org/10.1007/s10228-004-0220-z>