

## A New Record of Anguillid Fish in Lancangjiang River, China: *Anguilla bicolor*

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**Abstract:** One specimen was collected from Lancangjiang River in Jinghong, China on August 1st, 2006. It is identified as *Anguilla bicolor* McClelland, 1844, a new record of Anguillidae species occurring in Lancangjiang River in China. It could be distinguished from other *Anguilla* species by the character as: dorsal-fin origin located above vent vertically. It is an active nocturnal forager, feeding largely on a diet of crustaceans and mollusks.

**Key words:** *Anguilla bicolor*; Fish; New species record; Lancangjiang River; China

### 中国澜沧江鳗鲡科鱼类一新纪录——二色鳗

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**摘要:** 2006年8月1日在云南西双版纳州景洪段的澜沧江水域采集到鱼类标本1尾, 经鉴定为中国澜沧江水域鳗鲡科鱼类一新记录种——二色鳗 (*Anguilla bicolor* McClelland, 1844)。本种的主要鉴别特征为: 背鳍起点位于排泄孔上方。二色鳗分布于印度洋至太平洋地区沿岸的江河口及淡水内, 为夜行性动物, 喜食甲壳类动物和软体动物。

**关键词:** 二色鳗; 鱼类; 新纪录; 澜沧江; 中国

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One specimen was collected from Lancangjiang River in Jinghong, China on August 1st, 2006. The specimen is identified as a new record of Anguilla: *Anguilla bicolor* McClelland, 1844, and deposited in the museum of the Life Science School of Yunnan University. The catalogue number of this specimen is YNU200608001.

### 1 Morphological characteristics

Body length 365.2 mm; body height 18.8 in body length, head length 7.3 in body length, the vertical distance between the origins of the dorsal fin and anal fin 21.2 in body length, posterior-anal body length 1.9 in body length. Snout length 3.6 in head length, eye

diameter 18.4 in head length, Interorbital width 3.7 in head length, and the vertical distance between the origins of dorsal fin and anal fin 2.9 in head length.

The body extended and snake-like, and tail laterally compressed. Head wide and flat, snout blunt and circularly wide. Two nostrils located on each side, separated far from each other, the anterior nostril short tube-like, on snout; the posterior nostril longitudinally long and oval-shaped, near anterior edge of eyes. Eyes small, round, laterally posited, the anterior margin of eye posterior to the central point of upper jaw. Interorbital space wide, and the central slightly concave. Mouth superior, lower jaw slightly protruding from upper jaw. Mouth large, tilted, far extending beyond the posterior

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margin of eyes. Upper and lower jaws, vomer with sharp, thin conical teeth, arranged in teeth band; the central of front upper jaw-vomer teeth band wider than the upper jaw teeth band, longitudinal groove between them clear; the end of front upper jaw-vomer teeth band far separated from the end of upper jaw teeth band; lower teeth band divided with a longitudinal groove. Lip developed. Gill opening large, vertical, upper corner slightly higher than the middle of the pectoral fins base, lower corner extend slightly to belly.

The origin of dorsal fin at the upward side of vent, vent very near to the origin of anal fin, the origins of anal fin and dorsal fin close vertically, nearly symmetrical position. Dorsal and anal fins developed, low flat and extending to the tail, linking with tail fin and not easy to distinguish from with each other. Tail fin round. Pectoral fins small, outer edge a little convex, outer

corner a little sharp. No pelvic fins. Body covered with slender small scales, the scales arraying paralleling to clusters, the scale clusters perpendicularly cross to each other, striated, buried under the skin. Lateral line pores are clear.

Color of the preserved specimen: no spot on the body, abdomen pale, and back grey-brown. Dorsal fin gray, other fins light gray.

## 2 Ecological characteristics

*Anguilla bicolor* is catadromous, spawn in tropical ocean waters. It usually inhabits in the deep sea, sandy and mud bottom water, estuarine, freshwater and coastal waters (Shao, 2009). It is an active nocturnal forager, and it mainly feeds on crustaceans and mollusks (Rainboth, 1996).



Fig. 1 *Anguilla bicolor* McClelland, 1844, body length 365.2 mm

## 3 Distribution

It distributes in coast and freshwater estuary from Indian Ocean to the Pacific Ocean, the larvae lives in the ocean and river mouth, adult live in fresh water, and it is one of rare Mekong River fish species (Rainboth, 1996). This species had no record in the Lancangjiang River in China before, and currently it is only found in the lower reach of Lancangjiang River in Jinghong. In September 2007, a local fishermen caught one about 50 cm long, 2–3 kg of eel (estimated to be the species according to his description) in Lancangjiang River, where is near the

### Reference:

Rainboth WJ. 1996. Fishes of the Cambodian Mekong [M]. Rome: Food and Agriculture Organization of the United Nations.

estuary of the Luosuo River in Lancangjiang River, as never seen before, the fisherman felt a little fear, and throw it back to river.

## 4 Conclusion

The morphological characteristics and the proportion of the specimen is similar to the *Anguilla bicolor* in Fish Database of Taiwan (Shao, 2009) and the *Anguilla bicolor* in "Fishes of the Cambodian Mekong" (Rainboth, 1996). So in this paper, we treat the specimen as *Anguilla bicolor*.

Shao KT. 2009/1. The Fish Database of Taiwan[DB]. WWW Web Electronic Publication.