

DEPARTMENT OF ZOOLOGY  
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## The Cantor Collection of Malayan fresh-water fishes

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IN HIS MONUMENTAL CATALOGUE of Malayan Fishes, Theodore Cantor, 1849, Journ. Asia. Soc. Bengal, vol. 18, pt. 2, included 12 species of fresh-water fishes from localities in Penang, Singapore, the Langkawi Islands, Province Wellesley and Malacca. His descriptions constitute not only the first published records of Malayan fresh-water fishes but also include a new species, *Macropodus pugnax* Cantor.

Cantor's collections, which consist partly of skins and partly of spirit specimens, were incorporated into the large collection of Indian fishes in the Museum of the East India Company in Calcutta. In 1860, the entire collection of that Museum was presented to the British Museum (Natural History), London.

During a visit to the British Museum in February 1960, I had the opportunity of examining a part of this interesting collection. I was able to trace the specimens with the assistance of Mr. A. Wheeler and Mr. G. Palmer and wish to thank them for their kind help.

### *Nandus nandus* (Hamilton)

*Nandus marmoratus* CANTOR, 1849, p. 999: Fresh water Malayan Peninsular.

One specimen No. 1860.3.19.931, Malay Peninsular, 79 mm. total length and 65.4 mm. standard length. Lateral line scales 49. This is as yet the only known example of the species collected in Malaya. Cantor's remark that the "fish is as numerous in the Malayan Peninsular as in Bengal" would refer to the other Malayan species, *N. nebulosus* (Gray).

### *Anabas testudineus* (Bloch)

*Anabas scandens* CANTOR, 1849, p. 1064: Fresh water and estuaries Malay Peninsular and Islands (Singapore and Pinang).

*Anabas scandens* GUNTHER, 1861, p. 375: Pinang and Malayan Peninsular.

One specimen No. 1860.3.19.953, Malay Peninsular, 54 mm. total length and 41.4 mm. standard length. In addition, three skins from Penang No. 1860.3.19.312-314 about 155, 115 and 90 mm. total length and about 120, 90 and 70 mm. standard length.

### *Betta pugnax* (Cantor)

*Macropodus pugnax* CANTOR, 1849, p. 1066, pl. II, figs. 1-3: Fresh water, Pinang, Malayan Peninsular.

*Betta pugnax* GUNTHER, 1861, p. 389: Pinang.

The three Syntypes from Penang comprise a specimen No. 1860.3.19.930 of 88 mm. total length and 61 mm. standard length and two skins No. 1860.3.19.317-318, respectively about 88 and 76.5 mm. total length and about 65 and 53 mm. standard length.

**Betta splendens** Regan

*Macropodus pugnax* var. CANTOR, 1849, p. 1068, pl. II, fig. 4: Siam.

Cantor drew up his description from several live specimens which had been sent from Siam to Singapore. Apparently, no specimens were preserved. That the species was later established in Singapore has been shown by Herre (1940, p. 46) and Tweedie (1952, p. 75).

It is of interest that it very likely did not occur in Penang at that time. Three of the Syntypes which were collected by Flower in November 1896 constitute the first record of the species from Penang.

**Osphronemus goramy** Lacepede

*Osphronemus olfax* CANTOR, 1849, p. 1070: (Naturalised) Fresh water, Pinang, Malacca.

*Osphronemus olfax* GUNTHER, 1861, p. 382: Pinang and Malayan Peninsula.

One specimen No. 1860.3.19.929, Malacca, 94 mm. total length and 71.8 mm. standard length. In addition, three skins from Penang Nos. 1860.3.19.307-309 and 1860.3.19.2, respectively about 315, 455 and 335 mm. total length and about 240, 350, and 255 mm. standard length.

**Trichogaster leerii** (Bleeker)

*Trichopodus trichopterus* (part) CANTOR, 1849, p. 1071, pl. II, fig. 5: Fresh water, Pinang, Malayan Peninsular.

*Osphronemus trichopterus* var. *leerii* GUNTHER, 1861, p. 384: Pinang.

One specimen from Penang No. 1860.3.19.882 of 105.5 mm. total length and 76.5 standard length.

**Trichogaster trichopterus** (Pallas)

*Trichopodus trichopterus* (part) CANTOR, 1849, p. 1071, pl. II, fig. 5: Fresh water, Pinang, Malayan Peninsular.

*Osphronemus trichopterus* var. *cantoris* GUNTHER, 1861, p. 384: Pinang.

Gunther reports one skin but I have not been able to locate this. Cantor's account clearly indicates that he was considering the two species together. Gunther's description though brief, confirms that it is the present species.

**Channa striata** Bloch

*Ophiocephalus striatus* CANTOR, 1849, p. 1074: Freshwater and estuaries, Malayan Peninsular and Islands.

*Ophiocephalus striatus* GUNTHER, 1861, p. 474: Sea of Pinang.

Three skins from Penang No. 1860.3.19.314-316 about 280, 250 and 160 mm. total length and about 235, 206 and 135 mm. standard length. Gunther lists a fourth skin but I have not been able to locate this.

**Oryzias javanicus** (Bleeker)*Panchax panchax* (part) CANTOR, 1849, p. 1234: Fresh water Pinang.*Haplochilus panchax* (part) GUNTHER, 1866, p. 311: Pinang.

One specimen No. 1960.3.1.1, Penang, about 24 mm. total length and 20 mm. standard length. This is Gunther's "young" specimen.

**Aplocheilus panchax** (Hamilton)*Panchax panchax* (part) CANTOR, 1849, p. 1234: Fresh water Pinang.*Haplochilus panchax* (part) GUNTHER, 1866, p. 311: Pinang.

One specimen No. 1860.3.19.777, Penang, 55.4 mm. total length and 40.8 mm. standard length.

**Mystus gulio** (Hamilton)*Bagrus abbreviatus* CANTOR, 1849, p. 1236: Sea and estuaries of Pinang.*Macrones gulio* GUNTHER, 1864, p. 79: Pinang.

Two skins No. 1860.3.19.497-498, Penang, about 180 and 95 mm. total length and about 145 and 78 mm. standard length.

**Clarias batrachus** (Linnaeus)*Clarias punctatus* CANTOR, 1849, p. 1245: Estuaries and freshwater, Pinang.*Clarias magur* GUNTHER, 1864, p. 17: Pinang.

One skin No. 1860.3.19.301, Penang, about 205 mm. total length and about 180 mm. standard length.

**Hampala macrolepidota** (Valenciennes)*Capoeta macrolepidota* CANTOR, 1849, p. 1249: Freshwater, Pinang.*Barbus hampal* GUNTHER, 1868, p. 139: Pinang.

One skin No. 1860.3.19.373, Penang, about 235 mm. total length and about 180 mm. standard length. The markings on the body and on the caudal fin are not visible.

**Rasbora sumatrana** (Bleeker)*Leuciscus rasbora* CANTOR, 1849, p. 1250: Freshwater, Pinang.*Rasbora buchanani* GUNTHER, 1868, p. 196: Pinang.

Two skins No. 1860.3.19.376-377, Penang, about 105 and 103 mm. total length and about 85 and 82 mm. standard length. The body markings comprising the lateral stripe, precaudal spot and supra-anal pigment are still clearly indicated and correspond rather well with Brittan's description (1954, p. 134) of specimens from Kedah, Penang Island and Perlis.

**Fluta alba** (Zuiew)*Monopterus javanicus* CANTOR, 1849, p. 1321, pl. V, figs. 6-8: Sea of Pinang, Malayan Peninsula.

Three specimens No. 1960.3.1.2-4, Penang, about 255, 137 and 113 mm. total length.

## References

- BLEEKER, P., 1852. Diagnostische beschrijvingen van nieuwe of weinige bekende vischsoorten van Sumatra, *Nat. Tijdschr. Ned. Indie*, vol. 3, pp. 568-608.
- , 1854. Ichthyologische waarnemingen, gedaan op Verschillende reizen in de Residentie Bantam, *op. cit.*, vol. 7, pp. 309-326.
- BRITTAN, M. R., 1954. The Cyprinid Fish Genus *Rasbora* in Malaya, *Bull. Raffles Mus. Singapore*, No. 25, pp. 127-156, figs. 1 & 2.
- CANTOR, T., 1849. Catalogue of Malayan Fishes, *Journ. Asia. Soc. Bengal*, vol. 18, pt. 2, pp. i-xii, 983-1426, pls. I-XIV.
- CUVIER, G. & A. VALENCIENNES, 1831. *Histoire Naturelle des Poissons*, vol. 7.
- , 1831. *Op. cit.*, vol. 8.
- , 1842. *Op. cit.*, vol. 16.
- FOWLER, H. W., 1938. A list of fishes known from Malaya, *Fish. Bull.* No. 1, Singapore.
- GRAY, J. E., 1830-1834. Illustrations of Indian Zoology, vols. 1 & 2.
- GÜNTHER, A., 1861. Catalogue of the Fishes in the British Museum, vol. 3.
- , 1864. *Op. cit.*, vol. 5.
- , 1866. *Op. cit.*, vol. 6.
- , 1868. *Op. cit.*, vol. 7.
- , 1870. *Op. cit.*, vol. 8.
- HAMILTON, BUCHANAN, 1822. An account of the fishes found in the River Ganges and its tributaries.
- HERRE, A. W. C. T., 1940. Additions to the fish fauna of Malaya and notes on rare or little known Malayan and Bornean fishes, *Bull. Raffles Mus. Singapore*, No. 16, pp. 27-61.
- REGAN, C. TATE, 1910. The Asiatic fishes of the family Anabantidae, *Proc. Zool. Soc. London*, 1909, pp. 767-787, pls. 77-79.
- SMITH, H. M., 1945. The fresh-water fishes of Siam, or Thailand, *U.S. Nat. Mus. Bull.* 188.
- TWEEDIE, M. W. F., 1952. Notes on Malayan fresh-water fishes, Nos. 3 & 4, *Bull. Raffles Mus. Singapore*, No. 24, pp. 63-90, figs. 1-4.
- VAN HASSELT, J. C., 1823. Uittreksel uit een' brief van der Heer J. C. van Hasselt, aan Heer C. J. Temminck, gescreven uit Tjécande Residentie Bantam, den 29sten December, 1822, *Algemeene Konst-en Letter-bode*, 1823, vol. 2, No. 35, Friday, 29th August, pp. 130-133.
- WEBER, M. & L. F. DE BEAUFORT, 1913. The Fishes of the Indo-Australian Archipelago, vol. 2.
- , 1916. *Op. cit.*, vol. 3.
- , 1922. *Op. cit.*, vol. 4.
- , 1936. *Op. cit.*, vol. 7.