

## Notes on Opisthognathid Jawfishes from Hong Kong, with the Description of a New Species\*

W. L. CHAN

Fisheries Research Station, Hong Kong.

In 1964 two jawfishes were collected, one from Hong Kong, the other from the South China Sea. These have become the first records of the family Opisthognathidae in the Colony.

The first specimen, 64.5 mm in standard length, was collected by the author on board the fishing vessel Yuen Ling (of the Agriculture and Fisheries Department, Hong Kong) off the entrance to the Tai-tam Bay, Hong Kong, in 5 to 7 fathoms of water over a sea-bed of soft mud. The life colour pattern of this small jawfish comprised a reddish brown colour to the head and body, and blackish brown median fins, each of which with a narrow pale yellowish white band just above the base of the fin. This specimen is identified to *Opisthognathus evermanni* (JORDAN and SNYDER), a native of Japan. Its first occurrence in southern China has recently been reported by CHU and his collaborators (1962) from O-tau, Kwang-tung Province, China, based on three specimens varying from 52.7 to 78.9 mm in standard length. Although CHU's specimens were collected in 1954 (locality and collecting data unavailable), it appeared that they had not been reported in print. As observed by CHU and his collaborators, the present specimen from Hong Kong differs from the Japanese members of the species (JORDAN and SNYDER, 1902) in having an additional pale yellowish white band close to the caudal fin. This caudal band is most likely a variation of the species.

The second jawfish, which is a much larger specimen, cannot be identified to any existing species of the Opisthognathidae. It is, therefore, herein proposed as new. More pertinent references to the study of this jawfish are BEAUFORT (1951) and CHAPMAN (1920).

*Opisthognathus fasciatus* sp. nov.

Fig. 1

*Holotype*.—BMNH 1965.11.6.5, a male 148.5 mm in standard length, collected by a pair of near-shore Chinese pair-trawlers, from about 20 miles south of Hong Kong,

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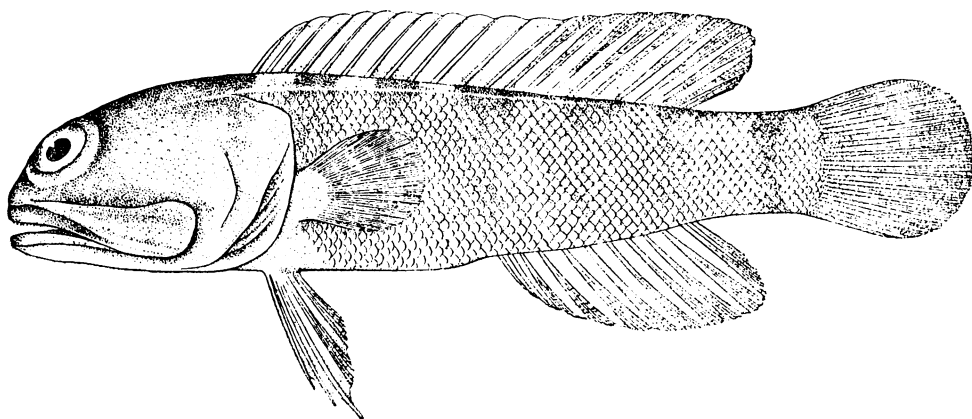


Fig. 1. Holotype of *Opisthognathus fasciatus*, by Mr. Y. W. Tang.

in approximately 30 fathoms of water over a sea-bed of soft mud, May 15, 1964. (Via Aberdeen Wholesale Fish Market, Hong Kong).

*Diagnosis*.—An opisthognathid fish with seven distinct brown vertical bands. Scaleless area including head, nape, interspace between lateral line and base of spinous portion of dorsal fin, base of pectoral fin, and whole of cleithral region extending downward to front of pelvic fin. Lateral line composing of a raised, scaleless ridge of skin, perforated with irregular groups of pores. Maxillary not reaching border of preopercle; its posterior end truncate, with a roundedly triangular elevation postero-dorsally. Teeth pointed, short, arranged in a broad patch to front of each jaw, becoming distinctly uniserial along sides of jaws. About 51 scales in a mid-lateral series; dorsal and anal fins each with 11 rays.

*Relationships*.—The most distinctive feature of *Opisthognathus fasciatus* is the vertically banded colour pattern. The scaleless area coupled with the relatively large scales somewhat resemble the Japanese species, *O. ivonis* JORDAN and THOMPSON (1913). However, it differs from *O. ivonis* in having quite a different conformation of the posterior portion of the upper jaws and different meristic counts. Despite these distinctive differences, *O. fasciatus* is possibly most related to *O. ivonis*.

*Description*.—Dorsal XI, 11; anal II, 11; pectoral 19; ventral I, 5; caudal ii, 12, ii; gill rakers on first branchial arch 9-1-19; about 51 scales in a mid-lateral series (to end of hypural); about 24 scales between lateral line and origin of anal.

The following measurements are expressed as percentages of the total length. Greatest depth (ventral to dorsal origins) 28.0; least depth of caudal peduncle 14.5. Head 38.1; upper jaw 28.7; eye (bony orbit) 10.8; snout 7.1; interorbital width 2.8; postorbital distance 22.9. Predorsal distance 35.9; preanal distance 63.9; prepectoral distance 38.0; preventral distance 31.3. Base of dorsal 54.9; base of anal 23.5. Length of 10th or 11th dorsal spine 11.9; length of 4th dorsal ray 18.2. Length of second anal spine 9.1; length of 7th or 8th anal ray 20.2. Length of caudal 25.9. Length of

pectoral 17.9. Length of second ventral ray (from spine) 23.9.

Head large, slightly compressed. Body compressed, more so posteriorly. Eyes large, located antero-dorsally closely to each other, so that interorbital width (between bony orbital rims) conspicuously less than diameter of pupil. Snout very short, broadly rounded anteriorly. A pair of small nostral openings in front of each eye: posterior one without a rim, immediately in front of bony orbit; anterior one much smaller, as a very short tube. Mouth large, upper jaw extending to about 5 mm in front of preopercular border. Maxillary narrow anteriorly, becoming broad and truncate posteriorly, its width about half depth of caudal peduncle; postero-dorsally maxillary with a broadly rounded convex profile.

Teeth slender, pointed, arranged in a broad patch anteriorly, becoming uniserial on the sides of jaws. Vomer and palatine toothless.

Scales small, cycloid, deeply embedded in skinny pockets (scales mostly fallen off); absent on head, base of pectoral, between lateral line and base of spinous portion of dorsal, and along cleithral region extending downward to around ventral.

Numerous mucous pores present dorsally on head.

Spinous and soft-rayed portions of dorsal with only a slight notch. Edges of caudal, soft dorsal and anal, and pectoral rounded. Ventral with its second ray slightly produced.

Colour pattern of holotype in ethanol consisting of a very pale brown ground colour with a number of seven dark brown vertical bands. First band on nape region; second to sixth bands evenly spaced along base of dorsal; seventh band on caudal peduncle. Interspace and band of similar width. Each band extending a short distance onto dorsal, with upper section above lateral line darker than lower section. On scaleless areas, rhombic border of each scale pocket with a band dark brown, while enclosed area pale brown. Edges of soft dorsal, anal, and caudal with an extremely narrow dark margin. Tips of ventral rays dark.

### References

- BEAUFORT, L. F. DE and CHAPMAN, W. M. 1951. The Fishes of the Indo-Australian Archipelago, vol. ix, 848 pp.
- CHU, Y. T. 1962. Fishes of the South China Sea, 1184 pp. (In Chinese).
- JORDAN, D. S. and SNYDER, J. O. 1902. A review of the trachinoid fishes and their supposed allies found in the waters of Japan. Proc. U. S. N. M., vol. xxiv, pp. 461-497.
- JORDAN, D. S. and THOMPSON, W. F. 1913. Notes on a collection of fishes from the island of Shikoku in Japan, with a description of a new species, *Gnathypops iyonis*. Proc. U. S. N. M., vol. xlv, pp. 65-72.
- OGILBY, J. D. 1920. Edible fishes of Queensland. Brisbane Mem. Queensland Mus., vol. vii, pp. 1-30.