

OCCASIONAL PAPERS OF THE MUSEUM OF
ZOOLOGY

UNIVERSITY OF MICHIGAN

ANN ARBOR, MICHIGAN

PUBLISHED BY THE UNIVERSITY

OOSTETHUS: A NEW GENERIC NAME FOR A
DORYRHAMPHINE PIPEFISH

BY CARL L. HUBBS

DUNCKER (1910, 1912 and 1915) has presented a very able revision of the Syngnathidae. In this work he has divided *Doryrhamphus* into several genera. One of the constituent elements he has named "*Microphis* Duncker 1910" (1910: 26, 1912: 229, and 1915: 43). Although proposed in the form of a new genus ("*Microphis*, mihi") the name was taken from Kaup (1856). In the 1910 paper Duncker has given a diagnosis of the genus, listing and describing only one species, "*Microphis brachyurus* Bleeker." In his 1912 contribution, he has again described the group (and as before has diagnosed related groups), and definitely given *Microphis brachyurus* (Bleeker) as the type-species. In 1915 he redescribed *Microphis* and diagnosed a number of species, *M. brachyurus* included.

In so using Kaup's generic name *Microphis*, Duncker clearly violated one of the International Rules of Zoological Nomenclature: "The following species are excluded from consideration in determining the types of genera . . . species which were not included under the generic name at the time of its

original publication." Kaup (1853: 234, and 1856: 64) included under *Microphis* only two species:

"1) *M. deocata*, Kp., *Syngn. deocata*. Hamilt. Gang. Fish. p. 14. J. Gray Ind. Zool. Ich kenne diesen Fischen nicht in der Natur.

"2) *M. cuncalus* Kp., *Sy. cuncalus* Ham. p. 12. No. 1. *Typhlus Dussumierii* Bibr. Par. Mus. Von Malabar, Calcutta. Par. Mus."

On one of these two species, probably the second, must the genus *Microphis* rest; on which one we are not immediately concerned, for both belong in *Doryichthys*, according to Duncker (1915:52 and 54).

Duncker (1912: 230) selected the second of the two species mentioned above, *Doryichthys cuncalus* (Hamilton), as the type of *Doryichthys*. This action is equally inadmissible, for Kaup included this species in *Microphis* and not in *Doryichthys*, in the paper in which both generic names were first proposed. Furthermore, Jordan and Evermann (1896: 773) had already designated *bilineatus* as the type of *Doryichthys*. Fortunately, the two species appear closely related, and both are referred to *Doryichthys* by Duncker (1915).

Duncker (1912: 229, footnote) has expressed doubt as to the application of the generic name *Microphis*, and has explained his adopted course by stating that he thought the genus should rest on Kaup's description rather than on the included species. This course is untenable according to the accepted rules. In the first place the original account (Kaup, 1853, not Kaup, 1856) contains no actual diagnosis, but does include the listing of the included species as quoted above. Secondly, Kaup's reference of the genus to the Nerophinae, in which "Die Männchen tragen die Eier in Längsreihen an Brust und Bauch ohne Taschen," while apparently by mere coincidence better describing the brood organ of *Microphis* (in Duncker's sense) than of *Doryichthys*, was derived from Buchanan Hamilton's poor description of these structures in the two species originally included in *Microphis*.

I see no valid reason for applying Kaup's name *Microphis* to the group typified by *Doryichthys lineatus* Kaup and *Syngnathus brachyurus* Bleeker. Since I find no other name for this group, I supply the deficiency by creating a new genus.

Oostethus, new genus

Type-species.—*Doryichthys lineatus* Kaup (1856:59).

Diagnosis (after Duncker, 1912).—Syngnathid fishes with an abdominal brood organ, having ventrally divergent protective plates, but no covering membranous fold; eggs small, isolated and uncovered, in open honey-comb on the skin of the breast; upper trunk and tail crests discontinuous; dorsal fin chiefly on the tail; anal behind middle of total length; caudal well developed, and having the median rays somewhat strengthened and elongated; snout much longer than rest of head; opercle with continuous keel and radiating ridges. The species usually live in fresh and brackish water.

On classical grounds the name *Oostethus* should certainly be regarded as of neuter gender, but following general zoological custom and awaiting a pending decision by the International Commission on Zoological Nomenclature, I suggest that it be treated as masculine. It means "egg-breast," and refers to the mode of gestation.

The type-species, *Oostethus lineatus* (Kaup), is chiefly an inhabitant of the brackish waters along the tropical Atlantic coast of the New World, but ranges also into purely fresh water and doubtless also into the sea.

LITERATURE CITED

- DUNCKER, GEORG. 1910. On Some Syngnathids ("Pipe Fish") from Ceylon. *Spolia Zeylandica*, 7, pt. 25: 25-34, 1 pl.
- 1912. Die Gattungen der Syngnathidae. *Mitth. Naturh. Mus. Hamburg*, 29: 219-240.
- 1915. Revision der Syngnathidae. Erster Teil. *Mitth. Naturh. Mus. Hamburg*, 32, Beiheft 2: 9-120, 1 pl.

- JORDAN, DAVID STARR, and EVERMANN, BARTON WARREN. 1896. The Fishes of North and Middle America. Bull. U. S. Nat. Mus., 47, pt. 1.
- KAUP, J. J. 1853. Uebersicht der Lophobranchier. Arch. Naturg., 90, Vol. 1: 226-234.
- 1856. Catalogue of Lophobranchiate Fish in the Collection of the British Museum. London, i-iv, 1-80.