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ANARCHOPTERUS, A NEW GENUS OF SYNGNATHID FISHES FROM THE WESTERN ATLANTIC

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ANTICIPATING a much needed revision of the numerous American species of the fish genus *Syngnathus*, and in a small way clearing the ground for such a review by setting apart one species long confounded with that large genus, I describe in this paper a new genus of Syngnathidae. This action follows the precedent set by Duncker (1912 and 1915), who presented valuable revisions of the genera of syngnathid fishes, and of the species of the smaller genera, but left untreated most of the species of *Syngnathus*.

Anarchopterus, new genus

Type species: Siphostoma crinigerum Bean and Dresel (1884: 99), Swain and Meek (1884: 239), Jordan and Evermann (1896: 771).

Tail non-prehensile, with well-developed caudal fin; pectoral fin present; anal fin lacking (hence the name *Anarchopterus*); dorsal fin very short, with only about 16 rays, confined to anteriormost 4 caudal rings, without elevated base; axis of head in line with that of body; brood organ subcaudal, without protecting plates but with complete dermal roof; opercle without trace of keel, either horizontal or submarginal; crista media trunci continuous with crista inferior caudae; crista inferior trunci disappearing at edge of peritroct, contacting neither the crista media trunci nor the crista inferior caudae; crista superior caudae lying close below and parallel to the subdorsal extension of the crista superior trunci; one nuchal and one prenuchal plate; scutellae well developed; lateral line present; body with numerous short, simple cirri; head and trunk together only half as long as tail; snout very short, only one-third length of head, little produced, rather weakly keeled above; nuchal keel obsolescent.

This genus differs from Syngnathus, as that genus was technically distinguished by Duncker (1912 and 1915) in the discontinuity between the cristae inferiores of trunk and tail, in the absence of the anal fin, and the lack of even an anterior trace of the horizontal opercular keel. In the characters of the body crests it agrees with *Hippocampus* and a number of genera regarded as more or less transitional between Syngnathus and Hippocampus. From the Indo-Pacific genera Trachyrrhamphus, Yozia, Halicampus, and Haliichthys as defined by Duncker (1915: 71), Anarchopterus differs in lacking any trace of an opercular keel, the absence of the anal fin, the non-elevated dorsal base, and the character combination of one nuchal and one prenuchal plate with a lateral line. It seems to be most closely related to *Micrognathus* Duncker (1912:235, 1915:74), from which it differs in lacking an anal fin and all traces of an opercular keel.

Anarchopterus agrees with Bombonia Herre (1927: 274) in lacking the anal fin, but differs greatly in the arrangement of the body crests, for in the latter genus the upper and lower trunk crests are continuous respectively with the upper and lower tail crests.

Among the western Atlantic species of pipefishes (excluding Hippocampus) having the crista media trunci continuous with the crista inferior caudae, Duncker (1915) recognized only Microphis lineatus (Kaup) = Oostethus lineatus (Kaup),¹ See Hubbs (1929). The Museum of Zoology has lately received three specimens of Oostethus lineatus: one from the west side of St. Simon Island, Glynn County, Georgia, collected by E. P. Creaser and H. R.

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Micrognathus jonesi (Günther), and, doubtfully, the Patagonian M. crinitus (Jenyns) and the Brazilian M. vittatus (Kaup). Of these M. crinitus, described as lacking the anal fin, may on rediscovery prove referable to Anarchopterus. More recently three other species have been described as having this arrangement of the body crests, Corythoichthys ensenadae Silvester and the two species of the odd genus Amphelikturus Parr (for references see Parr, 1930: 27-34).

The four specimens of *Anarchopterus criniger* at hand were collected February 20, 1935, by Leonard Giovannoli, in algae in water 2 to 3 feet deep, in Lemon Bay, Englewood, Florida.

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Becker (the first record for the United States); one from grass near the shore of Gatun Lake near Barro Colorado Island, Panama Canal, the second example taken there by Prof. A. M. Chickering; one from a small creek at Puerto Barrios, Guatemala, collected by me.