

gill laminæ short, especially on the convex portion of the arches; gill-rakers long, lanceolate, closely set, 20 + 10 on the outer branchial arch.

The bones of the shoulder-girdle project at the symphysis as two rather long pointed spikes.

The vent is much nearer to the root of the caudal than to the gill-opening. The dorsal fin commences immediately above it, the anal behind; both fins are very similar in shape and of moderate height. Caudal peduncle more than half as deep as long, its depth being increased by a fold of the integument between the vertical fins. Caudal fin rather short and forked. Pectoral fin very short, only half as long as the eye and directed towards the back.

Scales small, cycloid, each with a longitudinal keel which is not composed of spines as in *Macrurus*, but simple as in the keeled scales of a snake; the striations, instead of continuously crossing the scale, are interrupted by the raised median line. Head entirely scaleless. Lateral line straight, running along the middle of the body and tail, and composed of very small pores.

Brown; head, pectoral region, the vent and fringes of the caudal peduncle black.

Xenodermichthys.

Xenodermichthys, Günth., Ann. and Mag. Nat. Hist., 1878, vol. ii. p. 250.

Body rather elongate, compressed, without true scales. The skin is rather tough, finely wrinkled longitudinally, with numerous small nodules, regularly arranged, which possess the structure and probably the function of luminous organs. Minute, rudimentary, scale-like productions are embedded in the skin, especially on the trunk. Mouth very small, with feeble jaws and rudimentary teeth in the intermaxillary and mandible, and a few in the maxillary. Palate toothless. Dorsal and anal fins equal in length. Caudal forked. Gill-opening wide, but not extending much above the level of the pectoral fins. Gills well-developed; pseudobranchiæ. Gill-rakers long.

Xenodermichthys nodulosus (Pl. LVIII. fig. C).

Xenodermichthys nodulosus, Günth., Ann. and Mag. Nat. Hist., 1878, vol. ii. p. 250:

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The height of the body is nearly one-seventh of the total length, without caudal; the length of the head two-elevenths. Eye of moderate size, its diameter being more than the width of the interorbital space. Uniform black.

Habitat.—South of Yedo, Station 232; depth, 345 fathoms. One specimen, 8 inches long.