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ON THREE NEW GENERA OF SCIAENID FISHES (PISCES : SCIAENIDAE) FROM INDIA

ABSTRACT

Three new genera *Kathala, Macrospinosa* and *Panna* are proposed for the sciaenid fishes *Corvina axillaris* Cuvier and Valenciennes, *Bola cuja* Hamilton-Buchanan and *Otolithus microdon* Bleeker respectively. These species were formerly placed in various inappropriate genera. The present study is based on the structure of air-bladder, otoliths, lateral line pores on head and other morphological characters.

THE taxonomy of the sciænid fishes based on the external morphology remains very ambiguous. Chu, Lo and Wu (1963) arranged and classified the sciænid fishes of China into a well-defined system based on the structure of air-bladder, otoliths and rostral, marginal and mental pores on the snout and lower jaw. Though Chu, Lo and Wu (1963) classified the sciænid fishes of China correctly, they were not correct in classifying the sciænid fishes of India as pointed out by Trewavas (1965) in her review.

While studying the sciænid fishes of India, the necessity of creating three new genera was felt to accommodate three sciænid fishes, *Corvina axillaris* Cuvier, *Bola cuja* Hamilton-Buchanan and *Otolithus microdon* Bleeker that occur in India and at present placed in genera not appropriate.

Kathala gen. nov.

GENOTYPE : *Corvina axillaris* CUVIER, 1830

Generic Diagnosis.—Air-bladder simple, round anteriorly with a horn-like tubule on each side and tapering posteriorly. No lateral arborescent tubules (Fig. 1 *a*). Snout with 3 rostral pores, and five marginal pores, lower jaw with five mental pores—one median and an inner and an outer mental pore on each side Otolith (Sagitta) with a pointed anterior end and truncated posterior end, depression on anterior side very shallow and that of a posterior side deep, ventral side with three sharp tubercles. Teeth differentiated in upper and lower jaws. Gill rakers long, slender, serrated on both sides. Mouth terminal, oblique, upper jaw not overlapping the lower. Head 2·7 to 3·0 to S.L.D. IX-X, I, 26–29, A. 11, 7.

Kathala axillaris (Cuvier) Monotypic.

Distribution: India, Ceylon, Java, New Guinea, Philippines, Australia.

Macropinos gen. nov.

GENOTYPE : *Bola cuja* HAMILTON-BUCHANAN, 1822

Generic Diagnosis.—Air-bladder simple, round in front with a pair of slender, bifurcated tubules on each side ventrally; posteriorly the air-bladder elongates into a narrow tube extending to the base of anal fin (Fig. 1 b). Otoliths (Sagitta) flat with truncated anterior and posterior ends, anterior

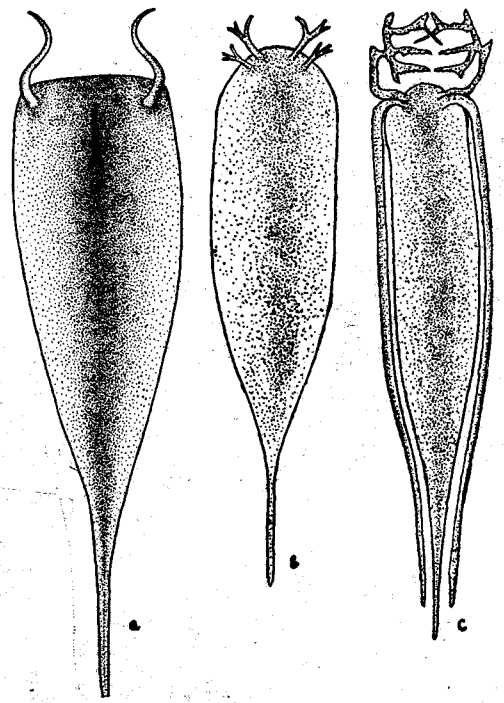

FIG. 1. Air-bladders of (*a*) *Kathala axillaris* Cuvier, gen. nov.; (*b*) *Macrospinosa cuja* Hamilton-Buchanan, gen. nov.; (*c*) *Panna microdon* Bleeker, gen. nov.

dorsal surface with a shallow depression and posterior dorsal surface with a deep curved groove; ventral side with granules. Snout with 3 distinct rostral pores and five distinct marginal pores. Lower jaw with six mental pores, two median, and a slit-like inner and oval-shaped outer marginal pores on each side. Teeth, enlarged anteriorly in upper jaw, lower jaw with short teeth externally and a row of villiform teeth internally. Gill rakers flat, pointed terminally. Mouth sub-terminal, cleft of mouth nearly

straight, upper jaw not over-hanging. Second anal spine stout, strong, equals to post-orbital length. Head 3·1 to 3·4 in S.L.D. X. I, 28, A. 11, 7.

Macrospinosa cuja (Hamilton-Buchanan). Monotypic.

Distribution: Bengal coast (Bay of Bengal), Sitang river.

Panna gen. nov.

GENOTYPE: *Otolithus microdon* BLEEKER, 1849

Generic Diagnosis.—Air-bladder simple with a single branch on each side which divides into an anterior and posterior tubes. Anterior tube ramifies into the head and posterior tube extends up to posterior end of the bladder and ends blindly near the base of anal fin. Otoliths (Sagitta) narrow, elongate, with pointed anterior and posterior ends; anterior end with a shallow depression and the posterior end with a deep curved groove; ventrally with many granulated grooves. Snout with three indistinct rostral pores and five marginal pores. Lower jaw with six mental pores-2 median and an inner and an outer pores on each side. Body elongated, snout pointed, mouth oblique, outer row of enlarged teeth in both jaws and inner row of villiform teeth. Upper jaw with two pairs of cananoid teeth anteriorly. Eyes small, second anal spine short. Head 3·1 to 3·4 in S.L.D. VII-IX, I, 33-34, A. 11, 7.

Panna microdon (Bleeker). Monotypic.

Distribution: India, Malaya, Southern China Sea.

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1. Trewavas, E., *Copeia*, 1965, p. 253.
2. Bleeker, P., *Verh. Batav. Gen.*, 1849, **22**, 10.
3. Chu, Y. T., Lo, Wu H. L., *Monograph of Fishes of China*. 1963, p. 1–100.
4. Cuvier, G., *Hist. Nat. Poiss.*, 1830, **5**, 113.
5. Hamilton-Buchanan, *Fish Ganges*, 1822, p. 81.