A NEW GENUS AND THREE NEW SPECIES OF PHILIPPINE FISHES

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TWO PLATES

Genus MIROLABRICHTHYS novum

This genus can be distinguished at a glance by the remarkable proboscislike, fleshy, pointed tip on the premaxillary, and the scalation of the head.

The body appears elongate but is really deep, somewhat ellipsoid, everywhere covered with medium-sized ctenoid scales, those on the head much smaller and extending to tip of snout; very small scales cover the preorbital, maxillary, cheeks, opercles, and throat; the dorsal and anal are scaled basally and tiny scales extend upon their free portion; caudal covered with minute scales for half or three-fourths its length: the ventral is elongate, pointed, and one or two of the rays may be very elongate and filiform; mouth of moderate size, the maxillary not slipping under a sheath except anteriorly; upper jaw, or premaxillary, has a narrow band of fine teeth on each side posteriorly, becoming a large patch at anterior end of premaxillary and terminating in a stout canine; the lower jaw has very small teeth in narrow bands posteriorly, with a pair of canines at anterior tip, and one or two pairs of enlarged teeth a little way behind them; branchiostegals 6; pseudobranchiæ present. This genus is close to Caesio but is markedly differentiated from it.

Mirus, wonderful; labrum, lip; ixdis, fish.

MIROLABRICHTHYS TUKA Herre and Montalban sp. nov. Plate 1.

Dorsal IX to XI, 14 to 16; anal III, 7; there are 45 to 48 scales in the lateral line, 5 between the origin of the dorsal and the lateral line, 12 between the lateral line and the origin of the anal.

The somewhat ellipsoid, rather deep body is scaled as given for the genus; dorsal and ventral profiles almost equally convex, the depth 2.8 to 2.93 times in the length; the small pointed head is slightly concave on snout and is remarkable for the elongate, conical, pointed, fleshy tip projecting from the premaxillary, its length 3.11 to 3.4 times in the total length; the tip on snout contained about 2.5 times in the circular eve which is 4.5 times in the head, 1.4 to 1.66 times in the snout, and 14 to 1s times in the rather broad interorbital; posterior margin of eye more or less denticulate; mouth of medium size, oblique, the posterior margin of maxillary extending beyond eye, the greatest width of maxillary two-thirds that of eye, the lower jaw included, its tip coming to the base of the fleshy snout tip. and most of its length concealed by the broad maxillary; the teeth as given for the genus; the posterior margin of preopercle finely denticulate; the opercle has two flat spines on its posterior margin, the upper one larger and extending farther backward. with an elongated epidermal flap beneath them and extending still farther back; the first dorsal spine short, the others successively longer to the fourth, the rest subequal, about 4 times in the depth; the normal number of spines seems to be ten; the soft dorsal elevated, the posterior margin sharply angulate, the posterior portion elongate, the last four rays successively shortened, the fifth from the last equal or nearly equal to head, extending upon caudal when depressed; the second anal spine is the stoutest, the third the longest; the third or fourth anal ray is longest, shorter than the longest dorsal rays, not reaching base of caudal when depressed, the posterior margin of anal acutely angulate; depth of caudal peduncle almost equals its length, and is contained a trifle more than twice in head; caudal deeply lobate, the longest ray in both upper and lower lobes more or less filiform, equal to or greater than the depth; the pectoral elongate, about 1^t times in the head; the ventrals elongate, pointed, the second and third rays often very elongate and threadlike, when they extend upon the anal and are more than the head or the depth.

Color in alcohol dusky reddish brown above, becoming paler and yellowish with reddish glints below, the fins all pale whitish yellow, without marks; a faint reddish or pinkish band extends from behind eye to base of caudal and another one from beneath pectoral backward along side to lower end of caudal base; a blackish blotch on opercle; a violet brown patch on basal portion of posterior two-thirds of soft dorsal. When fresh the color was brownish red above, the sides roseate, with two longitudinal golden red bands, the fins golden, the patch on the soft dorsal violet.

Here described from the type and three cotypes, 84 to 94 millimeters in length, collected at Maricaban Island, in a school of *Caesio*.

Tuka, Tagalog for beak, in allusion to the projecting tip on the snout.

STEPHANOLEPIS NIGROLINEATUS Herre sp. nov.

Dorsal I-I, 29; anal 25.

The depth from the soft dorsal to origin of anal is 2 to 2.18 times in the length; body roughly oblong with pointed head, both much compressed laterally; head 3.2 to 3.27 times in the length; snout elongate with very convex dorsal profile, 1.5 times in head; the circular eye high up, about two-thirds its diameter below the upper profile of the convex interorbital space, 3 times in head and twice in snout; the lower extremity of the diagonal gill slit is just in front of the upper part of pectoral base; it is inclined at an angle of about 45°, its upper extremity beneath posterior margin of eye, its length twice in eye; the stout, backward-curved dorsal spine is over middle of eye, its length equal to that of snout; anterior surface of spine very rough with many small, upward-directed, pointed spinelets; on each corner of the posterior surface is a row of seven to nine stout barbs pointing downward and outward; the short, freely movable ventral spine has a terminal spine and two lateral spines on each side; first dorsal ray low, the next three elongated or very elongate and filiform, in one specimen about as long as head, the other rays uniform, low, equal to anal rays in height, less than an eye diameter in height; the anal rays all about the same height; the length of the subtruncate caudal equals snout, one and a half times in head, or twice eye.

Body covered with very small scales, each bearing on its posterior margin a slender spinelet or prickle; anteriorly these are very short and fine, but on the posterior half of body they become elongate and on caudal peduncle are stouter, recurved, forming a mat of conspicuous bristles.

Color in alcohol blackish gray, a little paler on throat, with nine black longitudinal lines on sides, extending from eye and breast back toward caudal peduncle; the fins are all concolorous and unmarked.

Here described from two specimens, 59 and 48 millimeters in length, collected by me on the reef at Bungau, Sulu Province.

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GALLIONYMUS SPLENDIDUS Herre sp. nov. Plate 2.

Dorsal IV, 8; anal I, 7; pectoral 30; caudal 10.

Body stout, robust, wedge-shaped when viewed from above, the depth a trifle more than 4 times in the length, head very broad, its length 3 times in total length, its breadth four-fifths of its own length; the large eye equals the length of the narrow pointed snout and the width of the somewhat concave interorbital space; the stout preopercular spine contained 3 times in head; it terminates in three strong spines, the terminal one slenderer and straighter than the two anterior to it; the lower edge of spine smooth; the small circular gill opening is below and a little posterior to origin of lateral line.

The filamentous first dorsal spine reaches to base of last dorsal ray when depressed, and is contained 2.25 times in the total length; the other spines short, barely reaching origin of second dorsal when depressed, the second spine 17 times in head, the third spine almost as long, the fourth much shorter; second dorsal low, the rays of the posterior half more elevated than the anterior rays, except the last one which is low, reaching base of caudal when depressed, slightly greater than the depth, 3.75 times in the length, 1.25 times in the head; the two anterior and last anal rays shortest, the others of nearly equal length, equal to second dorsal in height and extending beyond base of caudal when depressed; the depth of the caudal peduncle is 5.625 times in the total length, its own length $\frac{7}{4}$ of its depth; caudal subtruncate, the lower rays longest, a little longer than head; the very broad pectoral equals the depth and is $\frac{11}{10}$ of the length of the head; the ventrals are somewhat pointed and extend back beyond origin of anal, but are shorter than the pectorals.

In life this bizarre little fish is most gorgeously and brilliantly colored. The ground color of the body is reddish brown, the head, trunk, and soft dorsal are covered with broad irregular bands of intensely brilliant green, the transverse bands on top of the head and between the eyes margined with black; a large deep indigo blue circular spot on belly between pectorals; a blue area on side of head between the eye, preopercular spine, and ventral sprinkled with brilliantly shining golden spots; top of head and throat pale yellowish; a large green ocellus, margined by a broad blue band on the spinous dorsal between second and fourth spines, the fin above this blue-black; the ground color of second dorsal dusky to blackish; the caudal has a broad terminal band of green, the rays are green, the membranes pale or yellowish with longitudinal spots and lines of deep blue; the anal

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and ventrals dusky with irregular bands of deep blue; pectoral green with a broad basal crossbar of deep blue, eye blue, with a golden ring about the pupil.

In alcohol the green fades to blue or disappears; golden lines crossing the throat and breast from side to side, and not mentioned above, are changed to pinkish violet.

Here described from the type and only specimen, 45 millimeters long, collected by me on a coral reef at Bungau, in about 2 fathoms of water. A Samal datu, the headman of the village, when this extraordinary and fantastically marked little creature was placed in his hand, said; "I never saw anything like that before." It excited greater interest than I ever saw those keeneyed observers, the Samals, display in a fish.

Splendidus, glittering, brilliant.

ILLUSTRATIONS

PLATE 1. Mirolabrichthys tuka Herre and Montalban sp. nov. × 1.5. (Drawing by M. L. Nievera.)

2. Callionymus splendidus Herre sp. nov. (Drawing by P. Bravo.) 224089-10 419 HERRE: NEW PHILIPPINE FISHES.] [PHILIP. JOURN. SCI., 32, No. 3.

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PLATE 1. MIROLABRICHTHYS TUKA HERRE AND MONTALBAN G. AND SP. NOV.

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[PHRIP. JOURN. SCI., 82, No. 8.

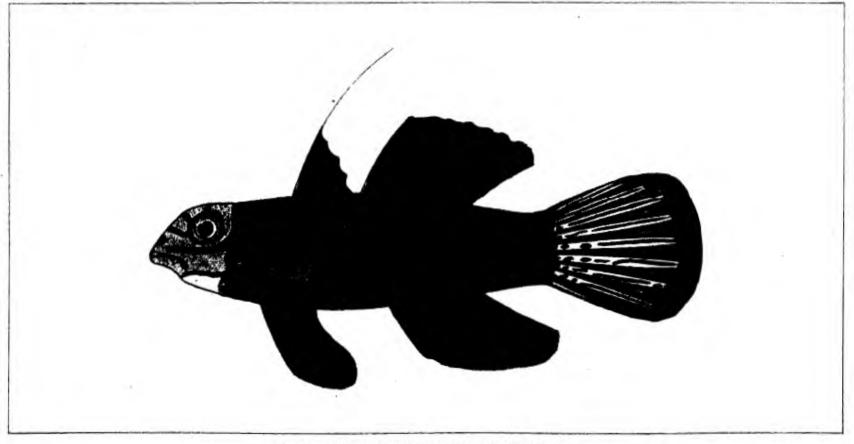


PLATE 2. CALLIONYMUS SPLENDIDUS HERRE SP. NOV.