First Record of the Gobioid Fish, *Rhyacichthys aspro*, from Formosa

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On March 28, 1969, I procured a single specimen belonging to the genus *Rhyacichthys* of the family Rhyacichthyidae from Formosa.

This specimen represents the first record of the family from Formosa, and was identified as *Rhyacichthys aspro* (Kuhl and van Hasselt).

The specimen was collected in the upper branch of the Kao-Ping-Chi (Shimo-Tansui Kei) River, near Liukuel (Rokki) at Tek-Ah-Mug (Chikushimon) 51 km from the mouth of the river, Kaosiung County (Takao-Ken), Taiwan. The specimen, an adult female, 98.6 mm in standard length is deposited in the Department of Zoology, University Museum, the University of Tokyo (ZUMT 52500).

Rhyacichthys aspro (Kuhl and van Hasselt)

Platyptera aspro Kuhl and van Hasselt, in Cuvier and Valenciennes, 12, 1837: 321; 22, 1849: pl. 360, (Type locality, Bantam, Java; Célébes.)

Platyptera sinensis Bleeker, 1873 (1874): (127) 157 (China, on Chinese painting "Figure dubiae exactitudinis").

Rhyacichthys aspro (C. V.): Koumans, 1953: 376, fig. 96 (Java; Celebes; Buru; Ceram; Ambon; New Guinea).

Description. The head is large and depressed; its depth is 4 4/5 times in standard length; length of the head is about 6 times the eye diameter. Front end of the snout is slightly lower than level of lower edge of the eye. In preservation eyes are situated laterally, but orbits extend to dorsal aspect of head. The corner of the orbit is coextensive with a lax membrane that reaches dorsal limits of orbit. An adipose fold about 0.6 mm wide at its widest point appears at edge of orbit directly anterior to pupil. A similar fold, about one half as wide, is at posterior edge of orbit. Lower half of eye, in contrast to upper half, is separated from the edge of orbit by a deep groove. Slight bulges in front of eyes and adipose folds almost conceal eyes when viewed from front. It gives appearance that main eye movement is from lateral to dorsal. The maxillary ends in front of eye. Body is more depressed anteriorly. Snout region forms an acute triangle profile in lateral view, and dorsal part of the snout and interorbital space are flat and broad. The preopercle is partially covered with small scales; the opercle is naked; triangular area immediately behind eye is covered with small scales and this squamation continuous to body; upper one third of pectoral base is covered with tiny scales; lower half of the pectoral fin is covered with tiny but conspicuous scales for proximal one-fourth of its length; anterior one third of the caudal fin is covered with small scales.

Tip of the large pectoral fin extends to posterior end of pelvic fin; length of the longest dorsal ray is 1 1/3 in fin base. The caudal fin is about 4 1/2 times in standard length and deeply emarginate. Lateral line begins at eye level, and runs down to back of the pectoral fin, then to mid-line of lateral side on way to the caudal base; lateral line scales 34; scales 5 above (between origin of 2nd dorsal and lateral line), and 5 below lateral line (between origin of anal and lateral line); the head is almost naked except behind the eye; scales are ctenoid but ctenii are very slight;

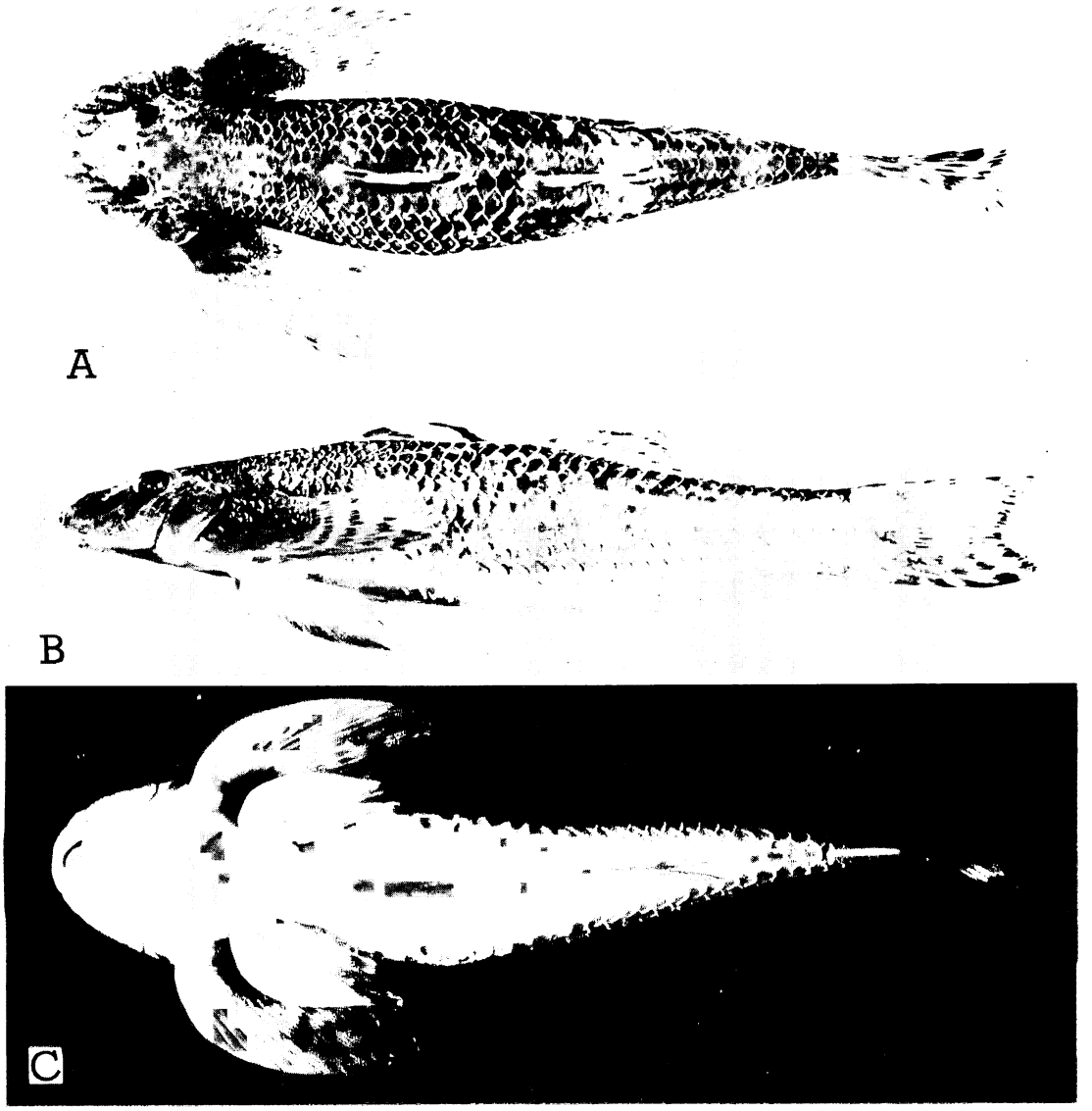

Fig. 1. The specimen of *Rhyacichthys aspro* from Formosa (ZUMT 52500). A, dorsal view; B, lateral view; C, ventral view.

the dorsal fins are VII–I, 8; the first and second fins are separated by about the length of the base of the first dorsal; spines are flexible with the third one longest; the second dorsal fin is situated behind the highest part of the body. The anal fin is I, 7; the longest anal fin ray (2nd ray) is longer than the anal fin-base and as long as head; ventral side of abdomen is very flat and naked. The pectoral rays are 23; the pelvic fins are broad and wide with I, 5 rays. The left and right pelvic fins are widely separated. The number of vertebrae is 28. The number of gill-rakers on the first arch is 4+9=13.

Measurements (in millimeters) of body parts of the specimen of *Rhyacichthys aspro* from

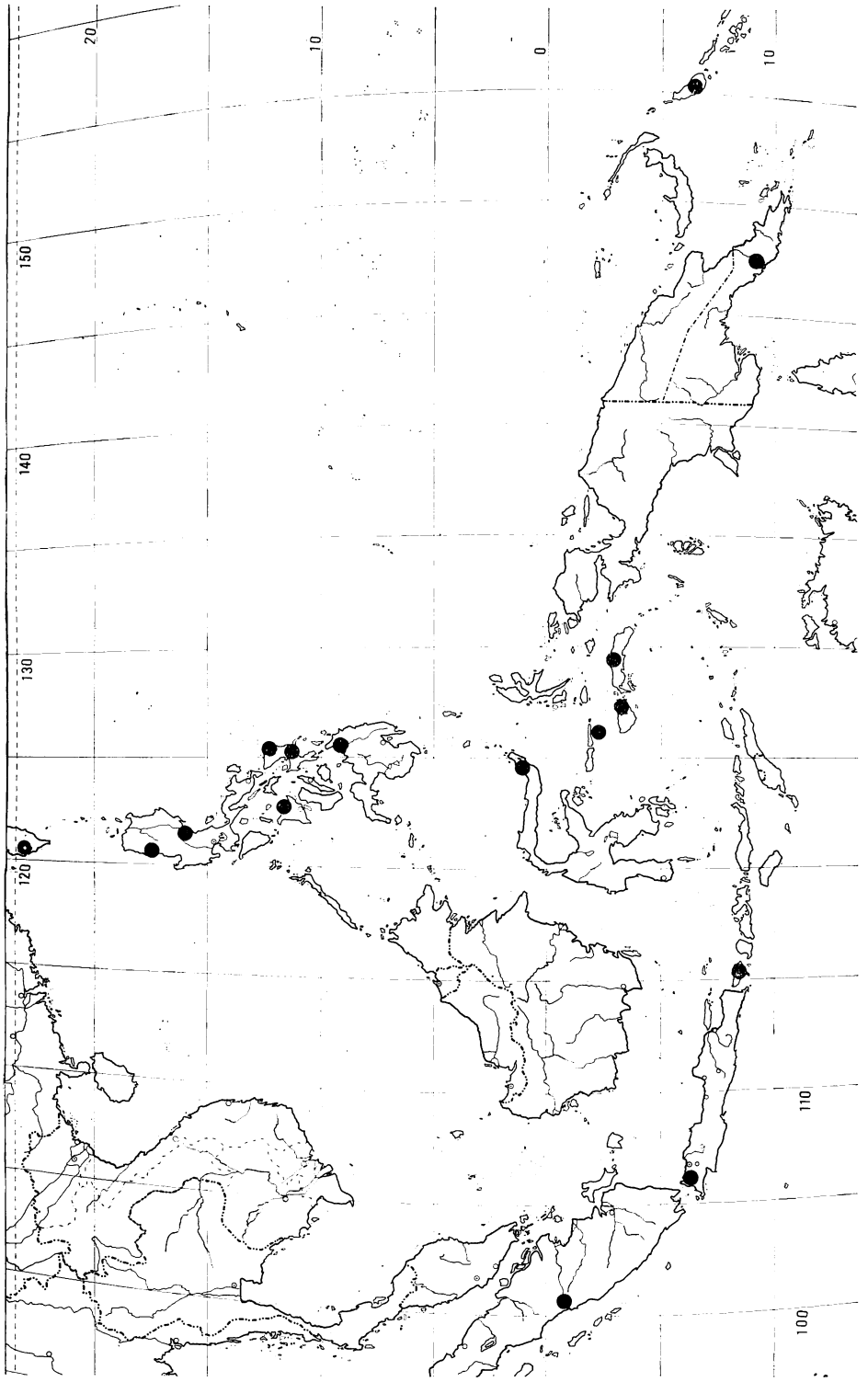

Fig. 2. The distribution records of *Rhyacichthys aspro*.

Formosa are: total length 121.2; standard length 98.6; body depth 12.1; body width 19.4; head length 22.1; head depth 12.0; head width 22.8; caudal peduncle length 22.8; caudal peduncle depth 5.6; predorsal length 36.3; preanal length 61.8; prepelvic length 23.6; snout length 11.2; upper jaw length 5.6; width of isthmus 11.0; eye diameter 3.8; postorbital length 7.0; interorbital length 5.1; first dorsal spine 12.8; longest dorsal spine 16.2; longest dorsal ray 16.5; anal spine 10.1; longest anal ray 18.8; pelvic spine 6.4; longest pelvic ray 21.0; first pectoral ray 11.8; and longest pectoral ray 22.2.

Color (fixed in 10% formalin and preserved in 70% ethanol) yellowish brown, darkest on top of head and back, side with 5 dark blotches, belly brownish white; first dorsal fin with dark bands; ventral edge and apex of pectoral fins dark; anal with a dark band; caudal fin with 4 dark bands.

Remarks

As far as I am aware, there has been no detailed report on the distribution of *R. aspro* in the Indo-Pacific Ocean except the list by Koumans (1953). *R. aspro* lives in the upperstream of rivers between approximately lat. 11°S and 21°N, long. 132°W (Nicobar Islands) and 140°E (Bougainville) and is limited to freshwater.

Some specimens of *R. aspro* were reported by Cuvier and Valenciennes (1837), Bleeker (1873), Koumans (1953), Günther (1861), Herre (1927) and Fowler (1928), and others from the region. The localities are shown in Fig. 2.

The distribution of *Rhyacichthys* is limited to the Indo-Pacific region as mentioned above, and the northernmost record of its distribution was Luzon Island in the Philippines. This report establishes the new northern limit for the family Rhyacichthyidae at some 600 km farther north.

Most of reported specimens of *R. aspro* were found on islands swept by the equatorial current, but the present specimen was found on an island washed by the Kuroshio current.

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Rhyacichthys aspro の台湾での新記録について

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中華民国，台湾省の高屏溪（下淡水溪）上流，六亀付近，竹子門より，*Rhyacichthys aspro* 1 尾を得た．これは同省よりの新記録である．これまでに報告されている同種の分布北限はフィリピンの Luzon 島までであって，その分布範囲は赤道環流の影響下にある島々の渓流に限られていたが，新に黒潮流域の台湾島より発見されたのである．

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