

**FAO - Key to the marine and estuarine genera occurring in the Western Central Pacific by Helen Larson and E.O.Murdy [modified and revised from Hoese, in Smith and Heemstra, 1986, Kottelat et al., 1993, and Larson, unpubl.]**

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- 1a. Scales on body small and cycloid, typically 90 or more scales in a lateral series..... 2
- 1b. Scales on body ctenoid, at least posteriorly, scales moderate to large, typically fewer than 100 in a lateral series ..... 3
- 2a. Vomerine teeth present (estuaries, mangroves)..... [\*Bostrychus\*](#)
- 2b. No teeth on vomer (estuarine to freshwater)..... [\*Odonteleotris\*](#)
- 3a. Rear of preopercle with a ventrally directed spine (covered by skin) (Fig. 1); predorsal scales 35-53 (estuarine to freshwater)..... [\*Eleotris\*](#)
- 3b. Preopercle without spine; predorsal scales in fewer than 30 rows..... 4
- 4a. Bony irregular ridge or row of spiny serrations above eye and on top of snout (spines may be indistinct) (Fig. 2) ..... 5
- 4b. No bony irregular to spiny ridge above eye or top of snout..... 6
- 5a. Lower jaw distinctly anteriormost, chin protruding; head without fleshy knobs or barbels on chin; distinct black spot on pectoral base or on bases of pectoral fin rays (marine to estuarine)..... [\*Butis\*](#)
- 5b. Lower jaw about equal to upper jaw, chin not protruding; chin (and side of head in one species) with small to elongate fleshy barbels; pectoral base and pectoral fin ray bases dusky or mottled but without distinct black spot (marine to estuarine)..... [\*Prionobutis\*](#)
- 6a. Side and underside of head with rows of elongate papillae, including groups of branched barbels; eye greatly reduced; ctenoid body scales with auxiliary cycloid scales (estuarine)..... [\*Pogoneleotris\*](#)
- 6b. Head without elongate papillae or branched barbels, if barbels under head present then eye not greatly reduced in size and body scales without cycloid auxiliary scales..... 7
- 7a. Head scaleless; first (or first and second) branchiostegal rays with anteriorly-directed spine (Fig. 3); sensory papillae on head in longitudinal pattern (estuarine to freshwater)..... [\*Belobranchus\*](#)
- 7b. Head partly or totally scaled; if spine present on first or second branchiostegal ray, then sensory papillae on head in transverse pattern..... 8
- 8a. Predorsal scales 10 or fewer; small coral reef-dwelling fish (marine)..... [\*Calumia\*](#)
- 8b. Predorsal scales 10 or more; brackish to freshwater dwelling fish..... 9

- 9a. Head and body usually compressed; body short (less than 6 cm TL); 26-28 scales in a lateral series (estuarine to freshwater)..... [Hypseleotris](#)
- 9b. Body cylindrical, at least anteriorly; usually more than 28 scales in lateral series..... 10
- 10a. Sensory papillae on head arranged in transverse pattern (Fig. 4a)..... 11
- 10b. Sensory papillae on head arranged in longitudinal pattern (Fig. 4b)..... 13
- 11a. Scales in lateral series about 60-100; pectoral rays 17-19; head may be somewhat depressed, body cylindrical; size usually greater than 100 mm SL when adult (estuarine to freshwater)..... [Oxyeleotris](#)
- 11b. Scales in lateral series about 55 or fewer; pectoral rays 13-15..... 12
- 12a. Scales in lateral series about 45-55; when live, body grey with several indistinct whitish saddles across back; size usually less than 60 mm SL when adult (estuarine, mangroves)..... [Incara](#)
- 12b. Usually 33-42 scales in a lateral series; body brown with 2-3 wedge-shaped whitish to yellowish bars across back (most pronounced in juveniles), when live, body with pale golden speckles; adults reaching up to 250 mm SL (estuarine)..... [Ophiocara](#)
- 13a. Head pores present (may be very small); scale number and colouring variable..... 14
- 13b. Head pores absent; scales in lateral series about 50-60; colouring brown with fine narrow dark lines along side of body (following scale rows), head lighter brown with dark and light blotches and mottling on side of head and lips (estuarine)..... [Bunaka](#)
- 14a. Vomerine teeth present; interorbital narrow, width about equal to eye diameter; body usually with one or more dark brown lateral stripes, but without orange, blue and yellow spots and other markings (freshwater) ..... [Gobiomorphus](#)
- 14b. Vomerine teeth absent; interorbital wide, width greater than eye diameter; body often with single dark lateral stripe and irregular black double blotch present on pectoral base; when live, body with orange, blue and yellow markings (estuarine to freshwater)..... [Ophieleotris](#) (now a synonymy of [Giuris](#))

**List of marine and brackish water species occurring in the area.**

[\*Belobranchus belobranchus\*](#) (Valenciennes, 1837)

[\*Bostrychus sinensis\*](#) Lacépède, 1801

[\*Bostrychus zonatus\*](#) Weber, 1908

[\*Bunaka gyrinoides\*](#) (Bleeker, 1853)

[\*Butis amboinensis\*](#) (Bleeker, 1853)

[\*Butis butis\*](#) Hamilton, 1822

[\*Butis gymnopomus\*](#) (Bleeker, 1854)

[\*Butis humeralis\*](#) (Valenciennes, 1837)

[\*Butis koilmatodon\*](#) (Bleeker, 1849)

[\*Calumia godeffroyi\*](#) (Günther, 1877)

[\*Calumia profunda\*](#) Larson & Hoese, 1980

[\*Eleotris acanthopoma\*](#) (Bleeker, 1853)

[\*Eleotris fusca\*](#) (Bloch & Schneider, 1801)

[\*Eleotris melanosoma\*](#) Bleeker, 1852

[\*Gobiomorphus australis\*](#) (Krefft, 1864)

[\*Gobiomorphus coxii\*](#) (Krefft, 1864)

[\*Hypseleotris compressa\*](#) (Krefft, 1864)

[\*Hypseleotris cyprinoides\*](#) (Valenciennes, 1837)

[\*Incara multisquamata\*](#) Rao, 1971

[\*Odonteleotris macrodon\*](#) (Bleeker, 1853)

*Ophieleotris margaritacea* = [\*Giuris margaritaceus\*](#) (Valenciennes, 1837)

[\*Ophiocara porocephala\*](#) (Valenciennes, 1837)

[\*Oxyeleotris marmorata\*](#) (Bleeker, 1852)

[\*Oxyeleotris urophthalmoides\*](#) (Bleeker, 1853)

[\*Oxyeleotris urophthalmus\*](#) (Bleeker, 1851)

[\*Pogoneleotris heterolepis\*](#) (Günther, 1869)

[\*Prionobutis dasyrhynchus\*](#) (Günther, 1868)

[\*Prionobutis microps\*](#) (Weber, 1908)