

Aru Gudgeon *Oxyeleotris aruensis* from Juha, Southern Highlands Province, Papua New Guinea

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Observer: Nick Baker.
Photographs by: Nick Baker.
Subject identified by: Kelvin K. P. Lim.

Location: Juha, Southern Highlands Province, Papua New Guinea. (Lat 5° 50.135'N Long 142° 25.094'E)
Elevation: 960 metres.
Habitat: Cool, shallow stream with rocky substrate.
Date and time: 14 May 2007, 19:10 hrs.
Identity of subject: *Oxyeleotris aruensis* (Teleostei: Eleotridae).

Description of observation: One specimen, with estimated total length of 12 cm (Figs. 1 & 2), was observed in a clear, fast-flowing stream. It was lying motionless on the rocky substrate, in a water depth of 15 cm.



Fig. 1 : Dorso-lateral view of the entire fish, showing the dark chevron markings on the side of the body, dark stripes extending the eye across the cheek, and an ocellus at the tail base.

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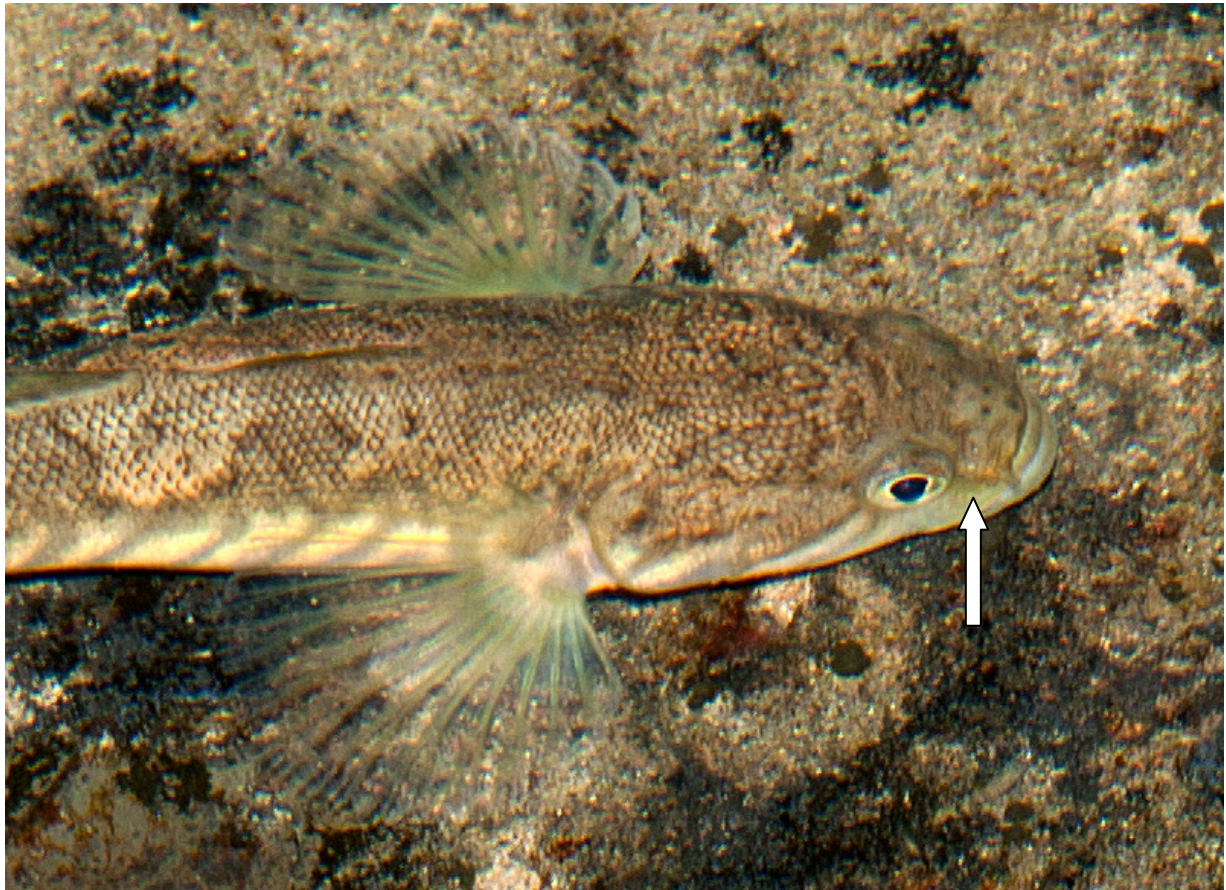


Fig. 2 : Dorso-lateral view of the head and anterior portion of the body. Note that there are two whitish pores between the eye and the end of the snout (indicated by the arrow).

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Fig. 3 : Typical topography and habitat in Juha area.

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Remarks: The subject is tentatively identified as *Oxyeleotris aruensis* on the basis of two pores between the end of the snout and the eye as seen on Fig. 2 (refer to the illustrations in Allen, 1991: 168, fig. 30 and Allen et al., 2008: 146). A very similar species, the Fimbriate Gudgeon *Oxyeleotris fimbriata* also occurs in the area. It shares with the Aru Gudgeon a general colour pattern consisting of brown dorsum and white ventral surface, with a series of dark-coloured chevrons on the sides of the body, two or three dark lines radiating from the eye across the cheek, and a dark ocellus on the upper base of the caudal fin. From the Aru Gudgeon it differs in having only one pore between the eye and the end of the snout (as illustrated in Allen, 1991: 168, fig. 30 and Allen et al., 2008: 146).

The Aru Gudgeon grows to 15 cm in total length, and is distributed in the Trans-Fly region of southern New Guinea and the Aru Islands, as well as on the Cape York peninsula of Australia (Allen et al., 2008: 155).

The Juha area, of Southern Highlands Province, Papua New Guinea is an area of elevated, but gentle topography: the surface geology is dominated by claystone which, in contrast to neighbouring karst regions, supports surface water in the form of streams and ponds (Fig. 3). Fast-flowing streams, fed from mountains to the northeast, erode the soft, weathered claystone to reveal solid bedrock beneath. It is in such a stream, with a rocky substrate, that the subject was found.

References:

Allen, G. R. (1991). *Field Guide to the Freshwater Fishes of New Guinea*. Christensen Research Institute, Madang, Papua New Guinea. 268 pp.

Allen, G. R., Storey, A. W. & Yarrao, M. (2008). *Freshwater Fishes of the Fly River, Papua New Guinea*. Ok Tedi Mining & Tropical Reef Research. viii + 216 pp.