

Fish, Actinopterygii, Perciformes, Gobiidae, *Amblyeleotris rubrimarginata* Mohlmann and Randall, 2002: Range gap filled in northern Borneo

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ABSTRACT: The present work reports the shrimp goby *Amblyeleotris rubrimarginata* Mohlmann and Randall, 2002 in coral sand habitats off three different islands within the Tunku Abdul Rahman marine Park (TARP) off western Sabah in northern Borneo.

The marine, sand-dwelling, shrimp goby *Amblyeleotris rubrimarginata* was first described by Mohlmann and Randall (2002). It is visually distinct from all other members of the genus in life, having small red spots defining the margin of the dorsal fin and a dark spot behind each eye (Figures 1, 2 and 3).

Type specimens for this species were caught on Australia's Great Barrier Reef and off New Caledonia. However, the original description also makes reference to specimens photographed by one of the authors in southern Indonesia, Papua New Guinea, and peninsula Malaysia, as well as to other photographs they had seen taken in the Philippines (Mohlmann and Randall 2002). A gap exists in the described range of *Amblyeleotris rubrimarginata*, separating its southern range (peninsula Malaysia through the Sunda Islands to Papua New Guinea and New Caledonia) from its northern range (the Philippines) – see Figure 4.



FIGURE 1. *Amblyeleotris rubrimarginata* photographed on 4 November 2006 off Sapi island (TARP).



FIGURE 2. *Amblyeleotris rubrimarginata* photographed on 10 February 2008 off Police beach, Gaya island (TARP).

Initially a specimen was photographed *in situ* underwater during SCUBA dives in which all unknown species were targeted. This first example was identified retrospectively using the original description and photographs, alongside other published photographs (Allen *et al.* 2003; Froese and Pauly 2009). Subsequently, it was photographed wherever positively identified underwater, because it was outside its described range. Live collection was not permitted.

Amblyeleotris rubrimarginata was photographed in coral sand habitats on six separate occasions between

30 September 2006 and 6 July 2008, off three different islands (Sapi - 06°00'20" N, 116°00'22" E; Gaya - 06°02'13" N, 116°01'02" E; Mamutik - 05°57'52" N, 116°00'52" E) within the Tunku Abdul Rahman marine Park (TARP) off western Sabah in northern Borneo.

The described range of *Amblyeleotris rubrimarginata* is now known to encompass the majority of the Asian Pacific region without significant gaps, from the southern edges of the south China Sea, through central-southern Indonesia, to the margins of the Coral Sea, and up via Papua New Guinea to the Philippines. It is likely from available internet gray literature that validated reports will emerge from Vietnam and Thailand in due course, to complete its likely western boundary at the Asian mainland.



FIGURE 3. *Amblyeleotris rubrimarginata* photographed on 6 July 2008 off Mamutik island (TARP).



FIGURE 4. *Amblyeleotris rubrimarginata*. Distribution (black = specific reported locations, red = this report; Philippines is a non-specific published location).

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