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Short Communication

ON THE OCCURRENCE OF *REDIGOBIUS RÖMERI* (WEBER) (PISCES : GOBIIDAE) IN THE MAINLAND OF INDIA

INTRODUCTION

Through a recent survey of Dakshin Kannada, Karnataka, six specimens of *Redigobius römeri* (Weber) were collected by Zoological Survey of India parties. Talwar and Jhingran (1991) included six species under the composite genus *Stigmatogobius* with a remark that *römeri* has not been reported from Indian inland waters though recorded from some insular parts of the Indo-west Pacific. This is the first report of this species from the inland waters of the mainland of India. It has been reported earlier from Sulawesi, Mollucas, New Guinea, the Philippines, Fiji, Australia, Java, Andamans, all insular areas, and hence is of Ichthyological significance. The specific identity of the species is discussed.

KEYWORDS : Gobiid fish, *Redigobius römeri*, *neglectus*, India.

Redigobius römeri (Weber)

(Fig. 1)

Gobius römeri Weber, 1911, *Abh. Senckenb. Naturf. Ges.*, **34** p. 39, fig. 8.

Stigmatogobius neglectus Koumans, 1932, *Zool. Meded.*, **15**, p. 5.

Pseudogobiopsis römeri : Koumans, 1935, *Zool. Meded.*, **18**, p. 132.

Stigmatogobius römeri : Koumans, 1953, *Fish. Indo. Australian Arch.*, **10**, p. 113.

Material : 6 exs. 26.5–29.0 mm SL., Reg. No. F.6136 ZSI/SRS., 15.04.1999, Alt. 100 m., Kukki, Subramania, Kallagi, G. Thirumalai & party. 1 ex., 24 mm. SL., Reg. No. F.7363 ZSI/SRS., 27.02.2002, Seedhanadhi, Karnataka, Arunachalam & party.

Description : D. 1. VI; D.2.1.7; A.I.6; L.1. 25–27; L. tr. 6½–7; Predorsal scales 8–9. Body elongate, posteriorly compressed, its depth 6.33 (5.53–7.71) in SL, 7.36 (6.68–8.78) in TL; width of body 7.15 (5.97–8.29) in SL, 2.08 (1.77–2.46) in HL. Head subcylindrical to compressed,



Fig. 1. : Lateral view of *Redigobius romeri*, 26.5 mm. SL, F.6136, ZSI/SR.

its length 3.34 (3.11–3.63) in SL, 4.19 (4.06–4.39) in TL; its depth 1.68 (1.53–1.90) in HL, 5.63 (5.14–6.19) in SL; its width 1.55 (1.43–1.69) in HL, 5.19 (4.91–5.58) in SL. Snout shorter than eye, its length 4.43 (4.21–4.60) in HL; its tip before or below lower margin of eye; interorbital width $1/3$ – $1/2$ eye diameter, 12.45 (7.74–15.5) in HL; maxillary extends to below middle of eye in females its length is 2.57 (2.19–2.92) in HL. Teeth in front in several rows, outer row a little enlarged, no canines. Tongue emarginate to bifid. Two mucous canals longitudinally on cheek, a vertical canal behind preopercular border, another along lower border of cheek extending upto maxilla; a pair of anterior interorbital pores, a median posterior interorbital pore, a pore behind eye, a few pores below lower margin of eye, a pore on posterior end of preopercle, several pores along preopercular border and a few along its lower border; a row of pores run parallel to sensory canal row below cheek and mandible. Head scaled above behind eye; scales of head, nape, breast and belly cycloid; other scales ctenoid.

DISCUSSION

Koumans (1935, 1941) placed *römeri* Weber under the genus *Pseudogobiopsis*, based especially on the prolonged maxillary, narrow interorbital width and emarginate to truncate tongue.

A species similar to *römeri* but without the prolonged maxillary, he (1932) described as *Stigmatogobius neglectus* and remarked (1941) that "it is possible that this species is the female of *Pseudogobiopsis römeri* (Weber). In that case, the male will have a prolonged maxillary, while in the female the maxillary is not prolonged" Subsequently Koumans (1953) treated *neglectus* as a junior synonym of *römeri*.

In a recent work by Kottelat *et. al.* (1993) both the species were kept separate under different genera, *römeri* under *Redigobius* Herre and *neglectus* under the genus *Pseudogobiopsis* Koumans, with a note that this is possibly a synonym of *Redigobius römeri* as communicated to him by H. K. Larson. Of the several generic characters of *Redigobius* given by Koumans (1953), a significant feature is the presence of numerous short canals radiating under the eyes. However, both *römeri* and *neglectus* have only two longitudinal canals on cheeks. The key provided by Kottelat *op. cit.* assigns the species with radiating canals under eye to the genus *Stigmatogobius* and the species with only longitudinal rows under the genus *Redigobius*. This genus is also characterised by paired interorbital pores. (Fig. 280 in Kottelat Figs. A & B are found to be interchanged).

The specimens collected from Karnataka bear some resemblance to the picture captioned as *isognathus* in pl. 70 of Kottelat (*op. cit.*). However the description of both the species given in Koumans (1952) enables the identification of the Karnataka specimens as *römeri* especially by its bilobate tongue and paired interorbital pores whereas in *isognathus* the tongue is rounded and the species lack interorbital pores.

A comparison of the biometric details of the specimens from Karnataka with those of *römeri* Koumans 1953 indicate no significant differences except in body depth, the present specimens being comparatively more slender. On dissection all the 6 specimens were observed to be females. Earlier females of this species have been described as *neglectus* by Koumans (1941).

SUMMARY

Redigobius römeri (Weber) is reported for the first time from the mainland of India. The specific identity of the species is discussed.

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REFERENCES

- Kottelat, M., Whitten, A. J., Kartikasari, S. R. and Wirjoatmodjo, S. 1993. *Freshwater Fishes of Western Indonesia and Sulawesi*. Periplus Editions (HK) Ltd. In collaboration with the Environmental Management Development in Indonesia (EMDI) Project, Ministry of State for Population and Environment, Republic of Indonesia.
- Koumans, F. P. 1932. Notes on gobioid fishes (1-5). *Zool. Meded.*, **15**(1-2) : 1-16.
- Koumans, F. P. 1935. Notes on gobioid fishes 6. On the synonymy of some species from the Indo-Australian archipelago. *Zool. Meded.*, **18** : 121-150.
- Koumans, F. P. 1941. Gobioid fishes of India. *Mem. Ind. Mus.*, **13** : 205-403.
- Koumans, F. P. 1953. *The Fishes of the Indo-Australian Archipelago*. X. Gobioidae, 423 pp. E. J. Brill Ltd., Leiden.
- Talwar, P. K. and Jhingran, A. G. 1991. *Inland Fishes of India and Adjacent Countries*, Vol. 2. 543-1158. Oxford & IBH Publishing Co. Pvt. Ltd.

K. REMA DEVI AND T. J. INDRA
*Southern Regional Station,
Zoological Survey of India,
Chennai-600 028, India*