

## Short Communication

### NEW RECORD OF TWO SPECIES OF *ACENTROGOBIUS* (TELEOSTEI: PERCIFORMES: GOBIIDAE) FROM ANDAMAN ISLANDS

#### INTRODUCTION

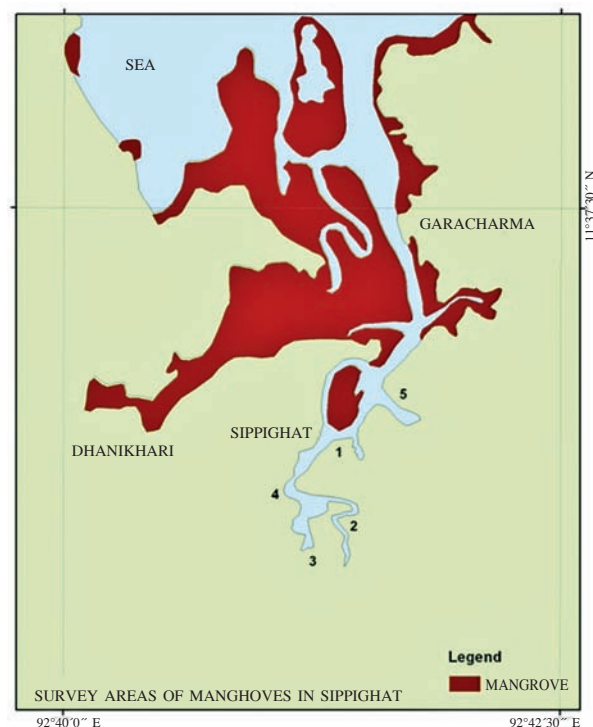
Andaman Nicobar Islands situated in the Bay of Bengal between 6°45′-13 45′ N and 92°10′-94°15′ E consist of 352 islands 220 islets and rock. It covers a distance of almost 470 km over North South, with a coastline of 1962 km, and brings in for India an Exclusive Economic Zone (EEZ) of 600 thousand sq km. The coast is under the influence of a diverse set of oceanographic and ecological conditions. The shelf topography of these islands show frequent rises supporting coral reefs, which are characterized as fringing reefs on the eastern side and barrier reefs off west coast; the depressions are known as passages and straits. Besides coral reefs, the shore is composed of rocky and sandy areas and vast stretches of mangrove swamps, also few freshwater rivers and streams.

A comprehensive and authoritative account of fishes of the Indian region including Andaman and Nicobar Islands was published by Francis Day (1870, 1875-78 and 1888). Herre (1941) listed 490 species of fishes. Talwar (1990) prepared a comprehensive list of fishes consisting of 724 species, followed by a supplementary list by Kamla Devi (1991), Rao (2009), Ramakrishna *et al.*, 2010 and Rajan *et al.*, 2013 listed a total of 1434 species of fish.

#### MATERIALS AND METHODS

The new records of fishes were made by fish

sampling during the field surveys in mangrove habitats of Sippyghat, South Andaman. The identified fishes were deposited in the reference collection of Zoological survey of India, Port Blair. Taxonomic classification follows Nelson (2006).



#### RESULTS AND DISCUSSION

The last few years represent a significant increase of knowledge about the fishes of Andaman and Nicobar Islands. During this study two new records of fishes were recorded as *Acentrogobius madraspatensis* (Day, 1868) and *Acentrogobius suluensis* (Herre, 1927) of the family gobiidae.

## SYSTEMATICS

Class ACTINOPTERYGII

Order PERCIFORMES

Family GOBIIDAE

### 1. *Acentrogobius madraspatensis* (Day, 1868)

Many band Goby

1868. *Gobius madraspatensis*, Day, *Proc. Zool. soc. London* **1868**(pt 1): 152. (Madras, India).

1993. *Acentrogobius madraspatensis*, Rema Devi, *Rec. Zool. Surv. India* v. **90**(nos 1-4): 161-189.

*Material examined*: Sippighat, South Andaman; 1 ex; 6.2 cm; P.T. Rajan

*Diagnostic characters*: Dorsal fin with VII spines and 10 soft rays; Anal fin I spine and 9 rays; Pectoral fin 17 rays; Longitudinal scale series 29; Predorsal scales 18. Body elongate and compressed; eyes moderate; cheeks and operculum naked. Body olivaceous with irregular, ill defined brownish blotches and dots; five to eight very narrow vertical black lines from head to belly, between base of pelvic fins and caudal peduncle; first dorsal fin with 2-3 rows of black blotches; caudal fin minutely dotted in rows.

*Habitat*: Inhabits estuaries and mangroves.

*Distribution*: Indo-west Pacific; Sippighat, South Andaman (Andaman Islands).

*Remarks*: First report from Andaman Islands.



*Acentrogobius madraspatensis* (Day, 1868)  
(Photo Rajan)

### 2. *Acentrogobius suluensis* (Herre, 1927)

Sulu Goby

1927. *Rhinogobius suluensis* Herre, *Monographs, Bureau of Science Manila Monogr.* **23**: 193, Pl. 14 (fig. 3). Bungau, Sulu Province, Philippines.

2012. *Acentrogobius suluensis*, Allen and Erdmann, *Reef fishes of the East Indies*, V. **III**: 954.

*Material examined*: Sippighat, South Andaman; 1 ex; 5.5 cm; P.T. Rajan.

*Diagnostic characters*: Dorsal fin with VI spines and I spine and 9 soft rays; Anal fin I spine and 9 rays; Pectoral fin 18 rays; Longitudinal scale series 28. First three spines of first dorsal may have filamentous tips; caudal fin lanceolate, longer than head; no scales on head. Pale grey with brown band below eye, dark brown streak and blue margin on gill cover, irregular, brown spots and blotches on head and upper half of body and chain link pattern at level of upper pectoral fin base to caudal base, composed of five rectangular blotches between two brown stripes, with 2-3 blue spots between each blotch.

*Habitat*: Silty sand and mud bottoms of brackish waters, but occasionally near reefs.

*Distribution*: Western Pacific: Ryukyu Islands, Philippines, Indonesia, Papua New Guinea and Andaman Islands.

*Remarks*: First report from India.



*Acentrogobius suluensis* (Herre, 1927) (Photo Rajan).

## SUMMARY

It seems that the Andaman and Nicobar Islands coast has a regular connectivity with the south-

eastern coast of Indonesia and north-eastern coast of Burma as observations of tropical affinity species. The fish diversity in these waters also receives special interest in terms of marine zoogeography because of the confluence of Andaman Sea fishes with Western Pacific and the Eastern Indian Ocean. Long-term monitoring studies will allow a better understanding of connectivity patterns along the coast of Andaman and Nicobar Islands as well as the possible establishment of new populations of species. The present paper

reports that *Acentrogobius madraspatensis* (Day, 1868) and *Acentrogobius suluensis* (Herre, 1927) are new additions to Andaman Islands and the later species is first record from India.

#### ACKNOWLEDGEMENT

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#### REFERENCES

- Day, F. 1870. On the fishes of the Andaman and Nicobar Islands. *Proc. Zool. Soc. Lond.*, pp 677-705.
- Day, F. 1875-78. The Fishes of India being a natural history of the fishes known to inhabit the seas and freshwaters of India, Burma and Ceylon. 4 pts. London, 778 pp.
- Day, F. 1888. Fishes of India. Supplement. William Dawson, London, pp. 779-816.
- Devi, K. 1991. Supplementary list to the fishes of Bay Islands. *J. Andaman Sci. Assoc.*, **7**(2): 101-103.
- Herre, A.W.C.T. 1941. List of the fishes known from the Andaman Islands. *Mem. Indian Mus.*, **13**(3): 331-403.
- Ramakrishna, Titus Immanuel. Sreeraj, C.R., Raghunathan, C., Raghuraman, R., Rajan, P.T. and Yogesh Kumar, J.S. 2010. An account of additions to the Ichthyofauna of Andaman and Nicobar Islands. *Records of the Zoological Survey of India*, Occasional paper no. **326**: 1-140 (Published-Director, Zool. Surv. India, Kolkata).
- Rajan, P.T, Sreeraj, C.R. and Titus Immanuel. 2013. Fishes of Andaman and Nicobar Islands: A Checklist. *J. Andaman Sci. Assoc.* **18**(1): 47-87.
- Rao, D.V., 2009. Checklist of fishes of Andaman and Nicobar Islands, Bay of Bengal. *Environ. Ecol.*, **27**(1a): 334-353.
- Talwar, P.K. 1990. Fishes of the Andaman and Nicobar Islands: A Synoptic analysis. *J. Andaman Sci. Assoc.*, **6**(2): 71-102.

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