SEVEN NEW RECORDS OF FISHES FROM ANDAMAN ISLANDS

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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.


MATERIALS AND METHODS

The new records of fishes were made by fish sampling during the field surveys in the coral reef areas, mangrove habitats and freshwater streams. 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 7 new record of fishes were recorded under 2 orders, 4 families and 7 genera as Rasbora hobelmani Kottelat, 1984, Pogonoperca ocellata Gunther, 1859, Apogonichthyoides nigripinnis (Cuvier, 1828), and the gobies Acentrogobius janthinopterus (Bleeker, 1853), Aulopareia koumans (Herre 1937), Oligolepis acutipennis (Valenciennes, 1837) and Psammogobius biocellatus (Valenciennes, 1837) are associated with coral reef, mangrove and freshwater habitats. With the exception of Rasbora hobelmani, collected from North Andaman, all the other species were collected from South Andaman.
SYSTEMATICS
Class ACTINOPTERYGII
Order CYPRINIFORMES
Family CYPRINIDAE
Rasbora hobelmani Kottelat, 1984


Material examined: Kalpong River, North Andaman; 1 ex.; 5.5 cm; P.T Rajan.

Diagnostic characters: Dorsal soft rays 10; Anal soft rays 8; Lateral line complete with 25 scales. Body elongate; mouth moderate, obliquely directed upwards; dorsal fin inserted behind base of pelvic fins; caudal fin forked; lateral line complete. Body silvery-brown, more grayish on back and head; a black stripe from upper edge of branchial opening to base of caudal fin, the stripe expanded in an irregularly shaped spot on caudal peduncle, lateral stripe being wider on the body between opercle and vertical of dorsal fin than on the caudal peduncle; crescentic brown basal markings on scales; a black stripe at anal fin base; fins hyaline. Attains 7 cm.

Habitat: Found from midwater to surface in pools of small upland freshwater streams.

Distribution: Asia: eastern Myanmar, northern Thailand and the Mekong basin; North Andaman (Kalpong River), Andaman Islands.

Remarks: First report from India

Pogonoperca ocellata (freshly dead specimen)

Family APOGONIDAE

Apogonichthyoïdes nigripinnis (Cuvier, 1828)
Bulls-eye Cardinal

1828. Apogon nigripinnis Cuvier, in Cuvier & Valenciennes Histoire naturelle des poissons, 2: 152. (Type locality: Java, Indonesia; Puducherry, India).


Material examined: Sippyghat, South Andaman; 1 ex.; 5.8 cm; P.T Rajan.

Order PERCIFORMES
Family SERRANIDAE

Pogonoperca ocellata Gunther, 1859 Bearded Soapfish

**Diagnostic characters:** Dorsal fin VIII spines and 9 soft rays; Anal fin II spines and 8 soft rays; Pectoral 15 rays; Lateral line with 28 scales; predorsal scales 2. Low hump above eyes; teeth villiform posteriorly on jaws and vomer, becoming larger and incurved anteriorly; caudal fin truncate. Body with a dark vertical bar under each dorsal and another on caudal base; large ocellus above pectoral; ventral black; pectoral light and other fins dusky to dark. Attains 10 cm.

**Habitat:** Mud bottoms of estuaries and mangroves.

**Distribution:** Indo-West Pacific, Red Sea and south to Delogoa Bay; Sippyghat (Andaman Islands).

**Remarks:** First report from Andaman Islands.

**Apogonichthyoïdes nigripinnis** (freshly dead specimen)

**Acentrogobius janthinopterus** (Bleeker, 1853)

Green-spotted Goby


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

**Diagnostic characters:** Dorsal fin with VII spines and 10 soft rays; Anal fin with I spine and 10 rays; Pectoral fin 16 rays; Longitudinal scales series 32. Spines of first dorsal fin elongate and filamentous in male; caudal fin rounded, about equal to or slightly longer than head; predorsal scaled to just behind eyes; upper half of cheek scaled and opercle fully scaled. Pale grayish to light brown with brown mottling on back, horizontal row of about five brown blotches along midside, scattered iridescent green flecks and submarginal dark band on caudal fin.

**Habitat:** Mud bottoms of estuaries, mangroves and occasionally in the vicinity of reefs if mangroves nearby.

**Distribution:** Sumatra to Australia, north to Japan; ranges throughout most of East Indian region; Sippyghat (Andaman Islands).

**Remarks:** First report from India

**Acentrogobius janthinopterus** (Preserved specimen)

**Aulopareia koumansi** (Herre 1937)

Kouman’s Goby


**Material examined:** Sippyghat, South Andaman; 1 ex.; 4.4 cm; P.T. Rajan.

**Diagnostic characters:** Dorsal fin with VII spines and 10 soft rays; Anal fin I spine and 9 rays; Longitudinal scale series 29; Lateral transverse scales 10; Predorsal scales 16. Body elongate, compressed; eye small; mouth oblique,
lower jaw prominent; teeth in 3-4 rows, outer row enlarged; both the jaws with a canine on each side; isthmus broad; head scaled behind eyes; cheek with 6 longitudinal rows of scales, between which 4 longitudinal mucous canals; opercle scaled; first dordal fin lower than body, 3rd ray longest; 2nd dorsal and anal fins becoming higher posteriorly. Body pale brownish and each scale bearing a pearl coloured spot; over nape a narrow black stripe; caudal fin dusky and all other fins black.

**Habitat:** Marine in mangrove creeks.

**Distribution:** Western Pacific and Sippyghat (Andaman Islands).

**Remarks:** First report from India.

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**Aulopareia koumansi** (freshly dead specimen)

**Oligolepis acutipennis** (Valenciennes, 1837) Sharp-tail Goby


**Material examined:** Sippyghat, South Andaman; 1 ex.; 8.9 cm; P.T Rajan.

**Diagnostic characters:** Dorsal fin with VII spines and 10 rays; Anal fin I spine and 10 rays; Pectoral fin 20 rays; Longitudinal scales series 27. Body elongate and compressed; mouth oblique; tongue largely fused to floor of mouth, its tip free; dorsal spines 3rd to 5th prolonged and filamentous in male; predorsal and pectoral fin base scaleles. Body brownish with numerous dark blotches along back and a black blotch at caudal fin base; a black bar from eye to cheek; fins hyaline to dusky, often spotted. Attains 15 cm.

**Habitat:** Found in muddy estuaries and coastal bays, enters lower reaches of freshwater streams.

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**Psammogobius biocellatus** (Valenciennes, 1837) Sleepy Goby


**Material examined:** Sippyghat, South Andaman; 1 ex.; 7.2 cm; P.T Rajan.

**Psammogobius biocellatus** (freshly dead specimen)

**Diagnostic characters:** Dorsal fin with VII spines and 9 rays; Anal fin 1 spine and 8 rays; Pectoral with 17 rays; Scales in lateral series 28; lateral transverse scales 8; predorsal scales 15. Body is cylindrical and tapers towards the tail; head is big, triangular at the snout, mouth is large; with the lower jaw slightly longer than the upper jaw; eyes near the top of the head, large and placed close to one another; branchiostegal membranes form a free fold across isthmus. Body dark brown to black, with longitudinal rows of small black spot; 2-3 saddles on back and side; black 1st dorsal fin; dark cross-bands on pelvic fins; iris with a lappet dorsally covering part of pupil. Attains 12 cm.
Habitat: Inhabits intertidal areas, estuaries, lagoons and coastal rivers. Common in the mangroves.

Distribution: Indo-Pacific; Sippyghat (Andaman Islands).

Remarks: First report from Andaman Islands.

CONCLUSIONS

It appears 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 zoo-geography 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 distribution patterns along the coast of Andaman and Nicobar Islands as well as the possible establishment of new populations of species. Review of literature revealed that Rasbora hobelmani Kottelat 1984, Pogonoperca ocellata Gunther 1859, Acentrogobius janthinopterus (Bleeker 1853) and Aulopareia koumansi (Herre 1937) are new additions to Indian waters and Apogonichthyoides nigrifinnis (Cuvier, 1828), Oligolepis acutipennis (Valenciennes, 1837) and Psammogobius biocellatus (Valenciennes, 1837) are new additions to Andaman Islands. Addition of these seven new records of fishes resulted a total of 1434 species to the fish diversity of Andaman and Nicobar Islands, under 576 genera belonging to 33 orders and 165 families.

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RAJAN and SREERAJ: Seven new records of fishes from Andaman Islands


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