



NEW SIGHTING RECORDS OF FOUR CORAL REEF FISHES FROM ANDAMAN AND NICOBAR ISLANDS

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ABSTRACT

The last few years have seen a significant increase of knowledge about the fishes of Andaman and Nicobar Islands. During this study, four new record of fishes were made under 1 order, 2 families and 4 genera: *Lepidozygus tapeinosoma* (Bleeker, 1856), *Neopomacentrus cyanomos* (Bleeker, 1856), *Pomacentrus pavo* (Bloch, 1787), and *Acanthurus auranticavus* Randall, 1956 associated with coral reefs.

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 and cover a distance of almost 470 km over North South, with a coastline of 1962 km, and bring in for India an Exclusive Economic Zone (EEZ) of 600 thousand sq km. The coast is under the influence of a diverse set of oceanographical 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 Rajan *et al.*, 2013 listed a total of 1434 species of fish, further new records of fishes have been published by Rajan, and Sreeraj, 2013, 2014, Rajan, 2015.

MATERIALS AND METHODS

The new records of fishes were made by field surveys and underwater observations in the coral reef ecosystem using scuba gears. The photographs were taken in the coral reef areas of Havelock Islands, Andaman and Nicobar Islands from 5 m to 30 m by the authors. Taxonomic classification follows Nelson (2006).

SYSTEMATICS ACCOUNT

Class TELEOSTEI

Order PERCIFORMES

Family POMACENTRIDAE

1. *Lepidozygus tapeinosoma* (Bleeker, 1856)
Fusilier Damsel fish

1856. *Pomacentrus tapeinosoma* Bleeker, *Nat. Tijds. voor Ned. Indie* v., **10**: 376. (Type locality: Ternate, Indonesia).

2012. Allen and Erdmann, *Reef fishes of East Indies*: 602.



Fish Observed: Minerva ledge in between Havelock and Neil Island; 12:3.7:756N, 93:09:050E. Open ocean reef, usually very clear water, flushed by good current, depth range 18m. Mainly *Acropora* rubble, with *Porites* also abundant.

Diagnosis: Greenish to reddish brown, often grading to yellowish on posterior back and small yellow spot at base of last dorsal rays.

Habitat: Outer reef slopes, often in strong currents. Forms large aggregations that feed on zooplankton.

Distribution: East Africa to Line, Marquesas and Tuamotu islands and Great Barrier Reef to Ryukyu Islands; ranges throughout East Indian region.

2. *Neopomacentrus cyanomos* (Bleeker, 1856) Regal Demoiselle

1856. *Pomacentrus cyanomos* Bleeker, *Nat.Tijd.voor Ned. India v.*, **11**: 89 (Type locality: Jakarta, Indonesia).

2012. *Neopomacentrus cyanomos* Allen and Erdmann, *Reef fishes of East Indies*: 606.



Fish Observed: Southern Part of Rosamund shoal, Havelock Island. (Slope 12, 03,450 N/92, 57,757 E) Depth range 3m to 15m, gradually slopes to 30m on the north-eastern side with sandy bottom, with ridges of rock. The site mainly dominated by *Porites* coral. The site is subject to strong currents running south-east to north-west direction, which brings sediment waters from the channel between Peel and Havelock Islands. The north-west to south-east current brings in clear water from the west side of the ridge. Eastern side covered with wipe coral and gorgonians from 5m to 20m.

Diagnosis: Suborbital margin hidden by scales.

Dark brown overall, yellow caudal fin with dark margins on upper and lower lobes, posterior dorsal fin yellowish with brilliant yellow spot at base of last rays and blackish ear spot.

Habitat: Coastal fringing reefs and patch reefs. Forms aggregations.

Distribution: Indo-West Pacific: Red Sea and East Africa to Vanuatu and New Caledonia, and Australia to Japan; ranges throughout East Indian region.

3. *Pomacentrus pavo* (Bloch, 1787) Blue Damsel fish

1787. *Chetodon pavo* Bloch, *Nat.der Ausl. Fische v.*, **3**: 60, pl. 198 (fig. 1) (Type locality: East Indies).

2012. *Pomacentrus pavo* Allen and Erdmann, *Reef fishes of East Indies*: 621.



Fish Observed: Southern Part of Rosamund shoal, Havelock Island. (Slope 12, 03,450 N/92, 57,757 E) Depth range 3 m to 15 m, gradually slopes to 30 m on the north-eastern side with sandy bottom, with ridges of rock. The site mainly dominated by *Porites* coral. The site is subject to strong currents running south-east to north-west direction, which brings sediment waters from the channel between Peel and Havelock Islands. The north-west to south-east current brings in clear water from the west side of the ridge. Eastern side covered with wipe coral and gorgonians from 5 m to 20 m.

Diagnosis: Pale blue to light green with vertical dark streaks on scales, Yellowish posteriorly on caudal fin, dark ear spot and scattered blue spots and streaks on head.

Habitat: Sheltered coastal and lagoon reefs. Forms groups around coral patches.

Distribution: Indo-West Pacific: East Africa and islands of western Indian Ocean to Line, Society and Tuamotu islands and Australia to Taiwan; ranges throughout East Indian region.

Family ACANTHURIDAE

4. *Acanthurus auranticavus* Randall, 1956 Orange-Socket Surgeonfish

1956. *Acanthurus auranticavus* Randall, *Pacific Science* v., **10**: 210 (no. 2), Figs 2u,19 (Type locality: Atulayan Island, Luzon, Philippines).
2012. *Acanthurus auranticavus* Allen and Erdmann, *Reef fishes of East Indies*: 1019.



Fish Observed: Southern Part of Rosamund shoal, Havelock Island. (Slope 12, 03,450 N/92, 57,757 E) Depth range 3 m to 15 m, gradually slopes to 30 m on the north-eastern side with sandy bottom, with ridges of rock. The site mainly

dominated by *Porites* coral and is subject to strong currents running south-east to north-west direction, which brings sediment waters from the channel between Peel and Havelock Islands. The north-west to south-east current brings in clear water from the west side of the ridge. Eastern side covered with wipe coral and gorgonians from 5 m to 20 m.

Diagnosis: Head brown without spots, body very fairly striped with purplish blue, orange ring around eye and caudal spine and slightly oblique dark band behind upper gill cover; often with white bar at base of caudal fin.

Habitat: Inhabits in lagoons and outer reefs.

Distribution: Indo-West Pacific: Seychelles, Maldives, Indonesia, Philippines and Australia.

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