

Integrative Taxonomy Reveals Geographical range expansion of Nine Gobioid species in Indian water, comment on misidentification of *Oxyurichthys paulae* from Odisha coast and confirming its distribution in Arabian Sea

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Abstract

Gobiid diversity in Indian waters varied significantly between mainland India, Andaman & Nicobar Islands (AN) and Lakshadweep (LK) archipelago. In the present study, new distributional records of nine gobioid species from Indian waters are documented based on live specimens collected across Indian coast and Indian Islands groups during 2022–2026. These are, *Amblyeleotris downingi* Randall 1994, *Amblyeleotris periophthalmus* (Bleeker, 1853), and *Ptereleotris zebra* (Fowler, 1938) documented for the first time in Indian waters (collected from Lakshadweep and mainland India); *Yongeichthys audax* (Smith 1959), *Oxyurichthys omanensis* Zarei, Al Jufaili & Esmaeili, 2022 and *Bathygobius cocosensis* (Bleeker, 1854) are documented first time from Andaman & Nicobar Islands; *Ptereleotris evides* (Jordan & Hubbs, 1925), *Valenciennea strigata* (Broussonet, 1782) and *Periophthalmus minutus* (Eggert, 1935) are documented for the first time from mainland India. Morphological examination combined with DNA barcode (COI gene) confirmed the new geographical occurrences of these species in India water. Present study also clarifies misidentification of *Oxyurichthys paulae* Pezold, 1998 recorded from Odisha coast, and confirm its distribution in Arabian Sea, west coast of India.

Keywords: Gobioid, New record, Distribution, Lakshadweep, Andaman & Nicobar Islands, India

Citation: Moumita Das 2026. Integrative Taxonomy Reveals Geographical range expansion of Nine Gobioid species in Indian water, comment on misidentification of *Oxyurichthys paulae* from Odisha coast and confirming its distribution in Arabian Sea. FishTaxa 38: 262-276

Introduction

Suborder Gobioid is one of the largest and most diverse teleost fishes, currently comprising over 2500 valid species worldwide (catalogue of fishes 2026) and accounting for a substantial proportion of coastal fish biodiversity. The Indo-West Pacific region regarded as the global centre of gobiid diversity and endemism (Allen & Erdmann, 2012; Larson & Murdy, 2001). The Indian subcontinent occupies a key bio-geographical position between the Western Indian Ocean and Indo-Pacific provinces, with a coastline more than 7,500 km and two major offshore island systems: Andaman & Nicobar Islands (AN) and Lakshadweep (LK) archipelagos. These regions differ markedly in geological history, oceanographic conditions, and habitat composition, collectively supporting a wide array of marine and costal ecosystems favourable for gobiid fishes. In India, a total of 253 gobioid species has been documented and 48 species having uncertain identity (Larson & Murugan 2026). Recent integrative research in Ashtamudi Lake, Kerala revealed multiple overlooked records and clarified Indian records of *Oxyurichthys omanensis* from west coast India (Sruthi et al., 2025). Recent gobiid records from Gujarat coast including, *Amblygobius semicinctus*, *Istigobius diadema*, and *Yongeichthys nebulosus* contributing to the known gobiid diversity of western India (Vadher et al., 2024). Similarly, Behera et.al. (2024) recorded *Gobiopsis macrostomus* from Chilika Lagoon, Odisha, potentially adding to the diversity of gobies along the Indian east coast; however, species identity of *G. macrostomus* remains uncertain due to insufficient description (Larson & Murugan 2026)) These findings highlights the importance of systematic surveys and detailed morphological and molecular analysis are key to explore and understand the distribution patterns and diversity of gobioid fishes in India.

Present study documents nine gobiid species with geographical range expansion in Lakshadweep, Andaman and Nicobar Islands and mainland India. These include, *Amblyeleotris periophthalmus*, *Amblyeleotris downingi* and *Ptereleotris zebra* are documented first time in Indian waters (collected from Lakshadweep and mainland India). *Bathygobius cocosensis* and *Oxyurichthys omanensis* and *Yongeichthys audax* recorded first time from AN. *Periophthalmus minutus*, *Valenciennea strigata* and *Ptereleotris evides* are recorded first time in mainland India. All records are documented based on live specimens collected from various habitat of LK, AN and Indian coast during 2022–2026. Collection and identification of deeper marine goby *Oxyurichthys paulae* from bycatch fishery of Munambam fishing harbour, Arabian Sea coast, also clarifies misidentification of this species from Bahuda estuary, Odisha (by Acharya et al. 2025) and confirm its distribution in Arabian Sea.

Material and methods

Field surveys were carried out in river, estuary, mangrove and marine habitats along the Indian coast, LK and AN during 2022–2026. Sampling method includes scuba diving, hand net picking, trawl bycatch and gill net catch at depth range 0–70m. The collected specimens were photo-documented using Canon EOS 60d with EF-S 18-135mm lens. From fresh specimens 50 mg of tissue sample were collected and preserved in 99% ethanol prior to preserve the specimen in 10% formalin. The collected specimens were deposited at the National zoological collection of the Marine Biology Regional Centre, Zoological Survey of India, Chennai. Measurements were conducted using a Mitutoyo CD- 6"ASX digital calliper, ensuring a precision of 0.1 mm. Morphometric and meristic characters were documented following Hubbs and Lagler (1964). Total length (TL) measured from the anterior median tip of the snout to the end of the central caudal longest fin ray; standard length (SL) measured from the anterior median tip of the snout to the caudal fin base; head length (HL) measured from snout anterior tip to posterior edge of opercle.

DNA was extracted from the muscle tissue using Qiagen Dneasy Tissue kit. FishF1 (5'TCAACCAACCACAAAGACATTGGCAC-3') and FishR1 (5'TAGACTTCTGGGTGGCCAAAGAATCA -3') (Ward et al. 2005) was the primer pair used for the PCR amplification of COI fragment. Amplification reactions were carried out in a 25 µL reaction volume which contained 1.5 units of Taq DNA polymerase, 1X PCR buffer, 1.5mM MgCl₂, 0.2mM of each dNTP, 5 pmol of each primer, and 2 µL l (25– 50ng) of genomic DNA. The PCR amplification was carried out in a PCR thermal cycler (Eppendorf). Amplification reactions were performed with the initial denaturation at 94°C for 5 min followed by 35 cycles at 94°C for 30 s, annealing at 50°C for 30 s followed by 72°C for 1 min and a final extension of 72°C for 10 min. PCR products were run in 1% agarose gel electrophoresis and purified with Qiagen PCR purification kit. The sequencing reactions were performed on an ABI 377 Genetic Analyzer. The partial COI mtDNA gene sequences of the new species were deposited in GenBank with the accession number. Obtained sequences form tissue samples were aligned using the BioEdit program (Hall, 1999) and checked manually. Sequences were validated through BLASTn (Basic Local Alignment Search Tool) (<https://blast.ncbi.nlm.nih.gov>). For the compression of obtained sequences with other closely related species, representative sequences are downloaded from the NCBI GenBank. Phylogenetic analyses were performed by using the Neighbour Joining method and Kimura 2-parameter model using MEGA X. The bootstrap consensus tree inferred from 1000 replicates is taken to represent the evolutionary history of the taxa analysed.

Result

Comment on misidentification of *Oxyurichthys paulae* from Odisha coast, and confirming its distribution in Arabian Sea, west coast of India

Material examined: Registration number: ZSI/MBRC/F/3355, SL 80.12 mm, 1ex; ZSI/MBRC/F/3656, SL79.11 mm, 1ex; Munambam fishing harbour, Kochi, Kerala, Arabian Sea, west coast of India collected by Moumita Das on April 2026. (Figure. 10)

Remarks. *Oxyurichthys paulae* Pezold 1998 is the only valid species under the genus *Oxyurichthys*, described from Kochi, India, Arabian sea coast. Present study and previous records (Pezold 1998, Manilo & Bogorodsky 2003, and Kawade et al. 2024) suggests its distribution in Arabian sea. However, recent record by Achariya et al. 2024 suggests distribution of this species in Bahuda estuary, Odisha; proposing possibility of distribution through larval dispersion; however, in present study, morphological comparison with *O. paulae* from Kochi (Figure 10), suggests it has been misidentified from Odisha coast; if the species disperses through larval transport, it would expected to occur in the Bay of Bengal or in nearby river or estuaries along the eastern and western coast of India; likewise, earlier gobioid studies from Indian waters does not show any occurrence of this species other than Arabian Sea. Moreover, *O. paulae* is a rare marine goby, as per Pezold & Larson 2015, its depth range 34–38m, present study also recorded the species below 35m depth; since 1998, the species recorded three times from Arabian Sea; by Manilo & Bogorodsky 2003, Kawade et al. 2024 and in present study. Similarly, Larson & Murugan 2026, also suggests record of the species from Tamil Nadu, but there is no illustration of the species from that region, they also suggests *Apocryptes caudalis* Paul and Chanda 2015 from West Bengal, could possibly be *O. paulae* species (however, second dorsal fin rays I, 20–22 in *Apocryptes* and I, 11–14 in *Oxyurichthys*). Present author also collected more than 200 individuals of *Apocryptes* (Figure 11) from West Bengal, India (figure 11), and comparative study confirms *A. caudalis* and *Apocryptes batoides* Day 1876 is a synonym of *Apocryptes bato* Hamilton 1822 (with long caudal fin and ontogenic variation within adult and juvenile, and a part of sexual dimorphism in the population). Likely, image of *O. paulae* presented in Achariya et al. 2024 does not match with the original image of *O. paulae* from Kochi, Arabian Sea; in Odisha materials black bars on body is indistinct; however, author claims the image is from formalin preserved samples, though present study materials show, bars are prominent even though in formalin preservation. Other than colouration, *O. paulae* from Arabian Sea possesses morphological characters such as, caudal fin is long, caudal fin length 38–68% standard length, eye tentacle short, fused gill rakers at the angle of epibranchial and ceratobranchial, upper lip constricted at premaxillary symphysis, posterior opercular margin 50–62% head length, body depth at anal fin origin 13–17% SL, posterior naris is oval open pit, gill opening extends forward to under midopercle, dorsal region of opercle and preopercle with single longitudinal and multiple transverse line; vs. in *O. paulae* from Odisha, caudal fin short or broken and fin length not described, upper lip constriction not described, eye tentacle long and other comparative character is insufficient. However, characters such as fin counts and scale counts

(second dorsal fin rays I, 12; anal fin rays I, 13, LS less than 50, transverse scales 11–16), maxillary end, and incomplete head papillae does not confirm its identity as *O. paulae*; such characters are overlapping with other congeners of genus *Oxyurichthys*. Hence, the specimen colouration and insufficient character provided from Odisha coast does not confirm its species identity as *O. paulae*; and therefore, present study confirms distribution of *O. paulae* in Arabian Sea.

New record of gobioid species from India, Lakshadweep and Andaman & Nicobar Islands

***Amblyeleotris downingi* Randall, 1994. Common name: Downing's shrimp goby. (Figure: 2)**

Material examined: Registration number: ZSI/MBRC/F/3158, Off Kakinada, Bay of Bengal, 3ex, 17.12.2022; ZSI/MBRC/F/3625; Lakshadweep, India; 1ex; 06.01.2026.

Habitat. Marine shrimp goby inhabiting silty sand-rubble substrates adjacent to coral reefs. Depth range 13–20 m.

Diagnostic characters. Standard length less than 110mm. Body slender, width subequal from anterior to posterior part of body. First dorsal fin rays VI, second dorsal fin rays I+17; anal fin rays I+18; pectoral fin rays 18–19. Caudal fin rounded, caudal fin procurent rays 8–9; branched rays 15–16. Pelvic fin united, frenum present, forming thin flat pocket; fin count I+5. Lower jaw with 2–3 rows of overlapping teeth; teeth are strong, sharp, pointed; a pair of paired canine teeth on each side of the lower jaw; two rows of strong, sharp, pointed teeth on upper jaw. Body covered with minute ctenoid scales posteriorly and anteriorly cycloid scales; lateral series scales 119; transverse scales 29; median predorsal region is devoid of any scales. Cheek devoid of any scales; prepelvic area with minute cycloid scales. Interorbital pore single, snout with single pore at each side, oculoscapular canal well developed, preopercle with three dorsal pores and opercle with two pores. Head papillae are in longitudinal lines; cheek with two short longitudinal papillae. Mouth terminal, jaws are extended below middle of the eyes; gill opening extended below middle of preopercle. Gill membrane is narrowly joined with isthmus. Inter-dorsal space narrow, 1.69–3.3% in SL. Maximum body depth 11.23–12.08% in SL. Head length 21.85–25.3% in SL. Fresh specimen with pale whitish body, three vertical oranges to brownish color bars on midlateral sides of the body. First dorsal fin base with diffuse blackish spot, second dorsal fin slightly orangish in colour. Pelvic, anal and caudal fin translucent. Anal and caudal fin edges with single blue and orange-brownish line. Presence of a distinct black spot above the pectoral fin base and opercular margin. Presence of short brownish bar across opercle.

Distribution. *A. downingi* is widely distributed in the Indo-West Pacific, originally described from Kubbar Island, Kuwait, Persian Gulf. Distributed in Persian/Arabian Gulf, Oman, western Indian Ocean, Andaman Sea, Bangladesh, Thailand, Indonesia, western Sumatra, Japan, and the western Pacific, indicating a broad Indo-Pacific distribution. In Indian waters, *A. downingi* was previously listed in Andaman Islands (Rajan et.al. 2015), although its occurrence requires further confirmation, as no illustration provided (Larson & Murugan 2026). Present study confirms occurrence of *A. downingi* from mainland India and Lakshadweep Archipelago.

Remarks. *A. downingi* is frequently observed in trawl bycatch and aquarium trading. In India, other recorded congeners under genus *Amblyeleotris* are, *A. aurora*, *A. diagonalis*, *A. fontanesii*, *A. guttata*, *A. gymnocephala*, *A. latifasciata*, *A. steinitzi* and *A. wheeleri*. Present study documents first verified record of *A. downingi* from India and Lakshadweep; as earlier record not illustrated. *A. downingi* can be differentiated with other congeners by united pelvic fin with well-developed frenum (vs. pelvic fins separate or connected at base in *A. aurora*, *A. diagonalis*, *A. stenzi*, *A. periphthalmus*), second dorsal fin rays I+17, anal fin rays I+18 (vs. second dorsal fin rays I+13, anal fin rays I+14 in *A. aurora* and *A. triguttata*; second dorsal fin rays I+12, anal fin rays I+12 in *A. wheeleri*; second dorsal fin rays I+13, anal fin rays I+13 in *A. diagonalis* and *A. latifasciata*); black stripe absent behind the eye (vs. present in *A. gymnocephala*). Meristic characters of the present material largely agree with earlier descriptions of *A. downingi* from Australia, Allen 2012, however, slight variations were observed; such as second dorsal fin with 17 soft rays, anal fin with 18 soft rays in Indian material (vs. second dorsal with 16 rays and anal fin with 17 rays from Pacific region); other than no additional variation were observed; further DNA analysis shows 99.55% similarities with *A. downingi* from Bangladesh, Islam et.al. 2021; which indicates this variation is intraspecific and may be attributed to geographic variation or developmental plasticity across different region. The expanded meristic range documented here refines the species diagnosis and emphasizes the value of comprehensive regional sampling for resolving population-level variation.

***Amblyeleotris periphthalmus* (Bleeker, 1853). Common name: Periphthalmus prawn goby. (Figure: 3)**

Material examined: Registration number: ZSI/MBRC/F/3538; Kavarathi Island, Lakshadweep; 1ex; 06.01.2025.

Habitat. Benthic and reef-associated, inhabiting unconsolidated sandy to fine rubble substrates of lagoons, sheltered reef flats, and reef slopes. Depth range 10–25 m.

Diagnostic characters. Specimen measuring 77.50 mm in total length and standard length 61.56 mm. Slender elongated body with round head and short snout. Mouth terminal. Dorsal fin rays VI+I, 12; anal fin rays I+12; pectoral fin rays 18; caudal fin procurent rays 8, branched rays 14. Pelvic fins are partially connected at the base of fifth rays by a low membrane, frenum absent, fin count

I+5; 4th fin ray of pelvic fin is elongated. Maximum body depth 13.8 % in SL; head length 27.67 % in SL; central caudal fin rays length 21.31% in SL; snout length 4.17% in SL. Scales are cycloid anteriorly and ctenoid posteriorly, lateral series scales 85, transverse scale 22, median predorsal scales absent, cheek and opercle devoid of any scales. Head with well-developed pores, inter-orbital head pore single, snout with single pore at each side, preopercle with three pores on dorsal side, opercle with two pores. Chin smooth without mental frenum. Tongue rounded. Gill membranes are narrowly joined to the isthmus. Upper and lower jaw with three rows of sharp, pointed and overlapping teeth, lower jaw with a prominent large canine tooth at each side. Eyes are large, located dorsolateral side of the head. Caudal fin rounded. Fresh specimens with pattern of five broad reddish-orange transverse bars on a pale whitish body, first bar crossing above the opercle and succeeding bars located at trunk; in between those bars presence of orange spots (from dorsal to mid half). Head fully covered with orange spots, chin with three orange spots encircled by blue line. Orbit lining covered by red spots, jaw ending with red colour. First and second dorsal fins are translucent with 4–5 rows of orange longitudinal line. Anal fin translucent with 2–3 alternative blue and orange longitudinal line. Caudal fin base with dark brown bar, caudal fin rays translucent, fin lining with narrow blue and orange lines. Pectoral and pelvic fins are translucent to light orange, without any markings.

Distribution. *A. periophthalmus* is broadly distributed throughout the Indo-West Pacific region, occurring from Red Sea, Arabian Gulf, East Africa, Seychelles, and Madagascar eastward through the Maldives, Southeast Asia, and Australia to Papua New Guinea, Micronesia, Samoa, French Polynesia, Taiwan, and southern Japan (Parenti 2021, Catalogue of fishes 2026). Present study illustrates its first distributional record in Lakshadweep, Indian.

Remarks. *A. periophthalmus* is a shrimp associated goby occurring in reef habitats. *A. periophthalmus* differs from other congeners by: five broad reddish-brown transverse bars, a prominent red cheek blotch, dark-edged orange spots on median fins, dorsal fin rays VII+I,12, anal fin rays I,12, and longitudinal scale counts of 85, median predorsal scales absent. In Indian water, *A. periophthalmus* has been earlier documented from Netrani Island, Karnataka, based on photographic records (Zacharia et al., 2008), but without voucher specimens or illustration; and its occurrence remains unverified (Larson & Murugan 2026). Present study describes morphological and molecular illustration of *A. periophthalmus*, which confirms its distribution in Indian waters.

***Bathygobius cocosensis* (Bleeker, 1854). Common name:** Cocos frill-goby (**Figure: 4**)

Material examined. Registration number: ZSI/MBRC/F/3379, 1ex; ZSI/MBRC/F/3390, 1ex, Kavaratti, Lakshadweep, India, 04.11.2024.

Habitat. Marine, brackish water, reef associated goby. It typically inhabits in intertidal to shallow subtidal zone, lagoons, where it shelters beneath stones, within rock crevices, or among algal growth, often in areas exposed to wave action. Depth range 0–10 m; usually at 0–2 m (Allen & Erdmann, 2012; Larson & Murdy, 2001; Kuiter 2001; Bacchet 2006).

Diagnostic characters. Standard length less than 80 mm. Body elongate, robust, and subcylindrical, becoming slightly compressed posteriorly; head broader than deep, mouth terminal and slightly oblique, snout rounded, jaws with small conical teeth in several rows. Dorsal fin rays VI+I, 9; anal fin rays I+8. Pectoral fin with upper four rays are free and filamentous distally; branched pectoral rays 13. Pelvic fins united, with well-developed frenum, frenum without posterior projection, fin counts I+5. Caudal fin rounded, procurent rays 5–6, branched caudal rays 16–17. Mandibular frenum curved with long free lateral lobes. Eyes dorsolateral on head. Cheek fold absent, anterior nostril without any flap; oculoscapular canal broken, detached tube over opercle, three pores above opercle. Ctenoid scales on the posterior region of the body and cycloid on breast and nape; predorsal scales 10–12 and extend forward to above or just behind the posterior margin of the preopercle. Cheek, operculum, and pectoral fin base are naked. Longitudinal scales 36–38, transverse scale rows 11–13. Check sensory papillae are arranged in short longitudinal rows and suborbital region with distinct transverse rows. Body with elongate midlateral blotches and black spot behind eyes. Live specimens with head and body greyish brown, marked by five dark brown broad saddles along the dorsal midline, five to seven rectangular dark blotches along the lower flanks, lower half of the body paler with diffuse to dusky lines following scale rows; numerous small pale or whitish spots on the cheek and operculum; fins are dusky and may show faint barring, fin linings are yellow.

Distribution. Distributed throughout the Indo-West Pacific region from East Africa, the Persian Gulf, Seychelles, Madagascar, and Mascarene Islands eastward to Hawaii and Pitcarin Islands extending north to southern Japan and south to Australia, New Caledonia, and Rapa, with addition records from Micronesia, Indonesia and South China Sea (Parenti 2021, catalogue of fishes 2026). Earlier record includes Lakshadweep (Sreeraj 2022), present study extends its distribution to mainland India and AN, indicating a broader northern Indian Ocean distribution.

Remarks. *B. cocosensis* is a benthic goby that has been widely overlooked in Indian waters, despite its broad Indo-West Pacific distribution, ranging from the eastern coast of Africa and the Red Sea to Southeast Asia, northern Australia, and western Pacific islands. Other recorded congeners are *B. coalitus*, *B. cotticeps*, *B. cyclopterus*, *B. fuscus*, *B. laddi*, *B. meggitti*, *B. niger* and *B.*

petrophilus (Larson & Murugan 2026). Morphologically, *B. cocosensis* distinguished from other congeners by, scales ctenoid (vs. cycloid in *B. niger*); anterior nostril without flap (vs. flap present in *B. cotticeps*); mandibular frenum with lateral lobes (vs. no lateral lobes in *B. fuscus* and *B. coalitus*); no cheek fold, three pores above opercle (vs. presence of distinct cheek fold, two pores above opercle in *B. cotticeps*, *B. laddi*, *B. meggitti* and *B. cyclopterus*). Morphological data of *B. cocosensis* from present study is compared with reference data of *B. cocosensis* from Japan, Akihito & Meguro 1980; to confirm its species identity. Earlier studies records *B. cocosensis* from Gujarat and Gulf of Mannar (Larson & Murugan 2026), but there is no record of occurrence from AN. Present study documents its first confirmed occurrence from mainland AN.

***Valenciennea strigata* (Broussonet, 1782) Common name:** Blueband goby. (Figure: 6)

Material examined: Registration number: ZSI/MBRC/F/3541; 90.97 mm SL, 1ex, Gulf of Mannar, India, 06.06.2025.

Habitat. Inhabits shallow coastal reef systems, including lagoons, reef flats and outer reef slopes with sandy or rubble substrates (Myers, 1991). Usually found along reef crest in depths of 1–6 m, depth of occurrence 1–25 m (Parenti, 2021; Larson, 2022).

Diagnostic characteristic. Elongate body, compressed laterally; head large and rounded, slightly compressed; mouth terminal to slightly oblique. Snout short and directed downward in 45° angle with eye lining. Eyes are large and located dorsolateral side of the head, interorbital space narrow. Dorsal fin rays VI+I, 17; 2nd and 3rd spine of first dorsal fin is filamentous, when appressed reaching upto front half of the second dorsal fin; anal fin rays I+17; total pectoral fin elements 21; caudal fin rounded, caudal procurent rays 8–9, caudal branched rays 15–16. Pelvic fin separated, frenum absent, fifth fin rays are slightly attached by small membrane at the base, fin counts I+5. Body covered with minute ctenoid scales; lateral series scales 126; transverse scales 27; predorsal midline devoid of scales, predorsal side scales extended upto posterior opercular region; cheek devoid of any scales; pectoral fin base and preopercle area covered with cycloid scales. Oculoscaphular canal well developed; interorbital pore single; snout with single pore each side; post orbital pore paired; preopercle with three dorsal pores and opercle with two pores. Suborbital papillae row short and longitudinal; prominent cheek papillae absent, only few scattered papillae are present. Infraorbital region with short transverse papillae. Teeth in upper jaw in one row; lower jaw with two rows; presence of single canine teeth at each side of the lower jaw; jaws are extended below middle of the eyes. Tongue thick, rounded, and broadly attached with the floor of the lower jaw. Chin relatively smooth without any mental frenum; gill opening restricted to pectoral fin base or slightly extended towards opercle. Body is whitish to grey. Snout yellowish. Prominent blue stripes extended below the eye to posterior margin of opercle. Pectoral base with single broken curved blue line. Lower margin of opercle and preopercle with three broken blue curved line. In between pelvic fin and pectoral fin three lateral blue spots present. Behind the eyes single, small blue spot present. Fins are transparent without any spots.

Distribution. Indo-Pacific distribution, occurring from African coast and Red Sea, eastward through the Indian Ocean into the western and central Pacific, encompassing the Seychelles, Comoros, Madagascar, and Mascarenes (La reunion, Mauritius, Rodrigues), Line Islands, Society and Marquesas Islands, including locales such as the Tuamotu Islands, northern limits at the Ryukyu Islands to Kagoshima Prefecture (southern Japan), and south to western Australia, extends to Sydney and Lord Howe Island, New Caledonia and Tonga (Fricke et al., 2020; Allen & Erdmann, 2012, Parenti 2021, Catalogue of fishes 2026). In Indian waters, previous records include AN and LK (Larson & Murugan 2026). Present study record *V. strigata* from Gulf of Mannar, mainland India.

Remarks. In Indian water other *Valenciennea* congeners recorded are *V. helsdingenii*, *V. muralis*, *V. puellaris*, *V. sexguttata* and *V. wardii*. In earlier Indian record of *V. strigata* doesn't include any illustration or photo, present study provides detailed description and confirmed its occurrence in mainland India, and extending its distribution within the northern Indian Ocean. *V. strigata* can be differentiated from other congeners by without black spot on first dorsal fin (vs. present in *V. sexguttata* and *V. wardii*), first dorsal fin 2–3 spines are elongated (vs. not elongated in other congeners), caudal fin base without black bar (vs. black bar in *V. wardii*), body without any stripes or vertical bars (vs. stripes present in *V. helsdingenii*, orange vertical bar in *V. decora*), second dorsal fin soft rays 17 (vs. 12 in *V. puellaris*). Morphological data of *V. strigata* from present study are compared with reference holotype data of *Gobius strigatus* from South Pacific, Broussonet 1782; to confirm its species identity. Globally, *V. strigata* shows a broad Indo-Pacific distribution extending from the Red Sea and eastern Africa through the Indian Ocean to Japan, northern Australia and central Pacific islands, reflecting both high dispersal potential and ecological specialization for sandy reef habitats (Randall et al., 1997; Allen & Erdmann, 2012). Present records from mainland Indian along with earlier occurrence from LK and AN highlight faunal connectivity between Indian oceanic islands and adjacent reef systems.

***Yongeichthys audax* Smith, 1959. Common name.** Mangrove goby (Figure: 7)

Material examined: Registration number: ZSI/MBRC/F/3194; 2ex, Ashtamudi Lake Kerala, India, 29.04.2022; ZSI/MBRC/F/3540; 3ex, Ograbraij, Andaman and Nicobar Island, 09.04.2025. **Habitat.** Benthic, brackish water goby. Inhabits in shallow waters of mangrove fringes, estuarine creeks with muddy, silty substrates and tidal channels. Depth range 2–16 m.

Diagnostic characters. Standard length less than 120 mm. Body elongate, oval anteriorly and compressed posteriorly. Dorsal fin rays VI, I+9; anal fin rays I+9; pectoral fin rays 16; caudal fin procurent rays 6/7, caudal fin branched rays 13; pelvic fin united, well developed flat frenum forming pocket, pelvic fin elements I+5. Second and third spine of first dorsal fin elongated. Body covered with large ctenoid scales, prepelvic scales are cycloid, predorsal scales extended upto posterior margin of preopercle, lateral series scales 38–40, transverse line scales 9–10, predorsal scales 14–15. Cheek with 3–4 long longitudinal line of sensory papillae, one short line of papillae on suborbital region. Interorbital pore single. Pore behind the eyes rounded. Villiform teeth, outer row with strong, sharp and pointed teeth in both jaws, lower jaw outer row contains single large canine teeth at each side. Tongue thick and rounded. Snout short, mouth subterminal, jaws opening extended below front part of the eyes. Gill opening restricted to pectoral fin base. Body dusky yellow in colour, presence of five brown colour patches along lateral side of the body, scattered brown spots are present all over the body, presence of black transverse line below eye to anterior part of snout, opercle with distinct single blue line, few scattered spots present on body and preopercle, fins are creamy white, presence of round brown line on caudal fin base, first dorsal fin with single thick brown line near base, four brown line on second dorsal fin, anal fin edges are yellow, remaining with three thick brown line.

Distribution. Across the Indo-West Pacific, particularly in the western Indian Ocean, including South Africa, Mozambique, Madagascar, and Seychelles, extending eastward to Indonesia and Japan, Odisha, India (Smith 1959; Smith & Heemstra 1986, Acharya et al. 2025). Present study records *Y. audax* from AN.

Remarks. In India, other *Yongeichthys* congeners recorded are *Y. griseus*, *Y. nebulosus*, *Y. signatus* and *Y. viganensis* (Larson & Murugan 2026). Originally describes as *Acentrogobius audax* Smith (1969) from Mozambique later synonymized as *Yongeichthys audax*, and the species recently recorded from Odisha, India by Acharya et al. 2025. *Y. audax* can be differentiated with other congeners by; presence of predorsal scales (vs. absent in *Y. nebulosus*); second dorsal fin and anal fin I+9 (vs. I+10 in *Y. signatus*, I+11 in *Y. viganensis*); pectoral fin rays 16, second dorsal fin rays I+9, lateral series scales 38–40 (vs. second dorsal I+10–11; pectoral fin rays 17; lateral series scales 42 in *Y. griseus*, lateral series scales 28–29 in *Y. viganensis*). Morphological characters of *Y. audax* from present study are compared with reference data of *Y. audax* from *Coastal fishes of Western Indian Ocean* (Larson et al. 2022) to confirm its species identity.

***Periophthalmus minutus* (Eggert, 1935). Common name: Minute mudskipper. (Figure:8)**

Material examined: Registration number: ZSI/MBRC/F/3380; Ratnagiri, Maharashtra, India1, 2ex, 19.11.2024; ZSI/MBRC/F/3630, Orgabraj, Andaman and Nicobar Islands, India, 2ex, 06.04.2025.

Habitat. *P. minutus* inhabits upper inter tidal zones of sheltered estuaries and mangrove forests, favoring fine silty-mud substrates with dense pneumatophore cover.

Diagnostic characteristics. First dorsal fin spines XI–XII, second dorsal fin rays I+10–11; anal fin rays I+10–11; pelvic fin well separated, frenum completely lacking, fin counts I+5. Upper caudal procurent rays 7/8, lower caudal procurent rays 9, caudal branched rays 13. Maximum size less than 80 mm. Single row of conical teeth on each jaws. Tongue thick and rounded. Lower eyelid dermal cup present. Mouth inferior. First dorsal fin convex. Mental frenum absent. Eyes are large and located on top of the head. Cheek papillae indistinct. Body covered with minute cycloid scales, opercle covered with cycloid scales, lateral series scales 63–64, transverse scales 16–17, predorsal scales 29–30. First dorsal fin without any filamentous spines. Dorsal and anal fins base length and height are very short; in resting condition its fin rays ended far before caudal fin base, caudal peduncle long. First dorsal fin with white round spots, second dorsal fin with two white stripes, in between these stripes single dusky stripe present, dorsal fins are close together. First dorsal with light brown stripe infra marginally. Anal fin base length 18–23% SL; second dorsal fin base length 20–22% SL. Gill opening restricted to pectoral fin base. Pelvic fin length 14.4–14.7% SL. Body colour dark brown to yellowish brown. Presence of six dark brown blotches from dorsal surface of the body to mid-lateral half of the body. Anal fin transparent to yellowish without any pattern or spots. Pelvic fin without any pigmentation.

Distribution. *P. minutus* is widely distributed in Eastern Indian Ocean and Western pacific, across Southeast Asia and northern Australia, with confirmed records from the Andaman Islands, Thailand, Indonesia (including Java and Sumatra), Philippines, and Queensland, Australia (Murdy, 1989; Takita et al., 2011; Parenti, 2021, catalogue of fishes 2026). Earlier Indian records limited to Andaman and Nicobar Islands; present study documents *P. minutus* from Maharashtra, representing the first verified record from mainland India (west coast of India) and confirmed its occurrence in coastal areas of Western Indian Ocean.

Remarks. Indian records of *Periophthalmus* group have historically centred on larger taxa along the Bay of Bengal and east coast mangroves, with west coast occurrences poorly known, only *P. waltoni* recorded in west coast India by Koumans 1941. Comprehensive regional surveys have recorded multiple *Periophthalmus* species from mangrove systems of mainland India, though *P. minutus* is not recorded. Other than *P. minutus* groups, other Indian records are *Periophthalmodon septemradiatus*;

Periophthalmus argentilineatus, *P. chrysosphilus*, *P. novemradiatus*, *P. walailakae*, *P. waltoni*; and occurrence of *P. variabilis* is uncertain with possibility for misidentification (Larson & Murugan 2026). *P. minutus* can be differentiated by its congeners by small size less than 8 cm, single row of teeth in upper jaw, dorsal fin white spots, first dorsal with 11–12 fin spines and pelvic fin separated or absence of pelvic frenum; first dorsal with light brown stripes infra-marginally. *P. minutus* in present study collected from west coast India and AN, both showing morphological and molecular similarities, which extend its known distribution from AN to west coast, India (from Northern to Western Indian Ocean), indicating a broader bio-geographic distribution than earlier recognized.

***Oxyurichthys omanensis* Zarei, Al Jufaili, and Esmaeili 20222. Common name. Oman's eyebrow goby. (Figure: 9)**

Material examined: Registration number: ZSI/MBRC/F/3159; Ashtamudi Lake Kerala, India, 1ex, 27.04.2022; ZSI/MBRC/F/3539; Ograbraij, Andaman and Nicobar Island, 1ex, 06.04.2025.

Habitat. Demersal gobiid inhabiting shallow coastal and estuarine habitats with soft muddy to fine sandy substrates and sheltered in tidal creek margins and mangrove areas.

Diagnostic characteristic. Standard length less than 150 mm. Elongate laterally compressed body. Caudal fin lanceolate, end pointed. head broad and rounded; marked atrophy of cephalic soft tissue exposed portions of the skull and associated cranial structures. Presence of well-developed nape crest. First dorsal fin rays VI, second dorsal fin rays I+12, anal fin rays I+13, caudal fin procurent rays 9, caudal fin branched rays 14, total pectoral fin rays 21, pelvic fin united with frenum, pelvic fin count I+5. Body covered with cycloid scales anteriorly and posteriorly ctenoid scales, lateral line scales 53–54, transverse scales 14–15, predorsal midline devoid of any scales. Presence of two interorbital pores, four transverse suborbital papillae, cheek with two longitudinal lines of papillae, in between these two lines, presence of broken transverse papillae. A prominent tentacle present above eyes. Sharp and pointed teeth in both jaws, upper jaw with single teeth row; lower jaw in two rows, premaxillary symphysis devoid of any teeth, prominent canine tooth absent in both jaws. Tongue thick, rounded slightly long at the edge, attached to the floor of mouth. Chin smooth, mental frenum absent. Jaws are extended below in midway of eyes. Gill opening extended slightly towards operculum base. Second dorsal and anal fin ray end extended upto the one third length of the caudal fin length. Body yellowish grey, presence of brown vertical cross bar along lateral side of the body. Prominent black bar below the eyes and pectoral fin base. Edges of anal, pelvic and caudal fins are whitish. Dorsal fin margin and upper caudal fin margins are yellowish colour. Caudal base with prominent black patch. Fins are translucent yellow in colour, caudal fin midline is slightly reddish, first dorsal fin membrane with light brown spots, second dorsal fin with 4–5 lines of brown dot, caudal and anal fin with line of brown streaks.

Distribution. Mudflat at Yeti near the mouth of Wadi Aday along Gulf of Oman and was long considered endemic to this restricted locality (Zarei et al. 2022). From western Indian Ocean distribution in Kenya, Mayotte, and Madagascar, indicating a wider regional presence (Zarei et al. 2025). In India, earlier record includes Kerala, southwest coast, India (Sruthi et al. 2025). Present study records from AN. **Remarks.** Other congeners of *Oxyurichthys* recorded from Indian waters are, *O. auchenolepis*, *O. microlepis*, *O. ophthalmonema*, *O. papuensis*, *O. paulae* and *O. tentacularis*. *O. omanensis* can be distinguished from its congeners by presence of tentacle over eyes (vs. tentacle absent or presence of callus or fleshy knob in *O. microlepis*, *O. auchenolepis*, *O. papuensis*); presence of dark patch on caudal peduncle, body with 5–6 dark blotches in midline, and lateral series scales 43 (vs. dark patch on caudal peduncle absent, body with 4–5 vertical bar along midline of body, and lateral series scales 43 in *O. paulae*); dark saddle over caudal peduncle, first dorsal fin 1st spine longest (vs. dark saddle absent, first dorsal fin 1st spine short in *O. tentacularis*); in between two longitudinal cheek papillae row, 2 long and 5–6 short transverse line present (vs. two long, 3–4 broken transverse line in *O. ophthalmonema*). In India, all congeners of *Oxyurichthys* are earlier recorded from ANI (except *O. paulae* from Kerala, India); indicating their rich species complex within AN. Previous record of *O. omanensis* from Kerala (Sruthi et al. 2025); suggests misidentification of the species from India in last decades, due to close resemblance of the species with *O. ophthalmonema* and *O. tentacularis*. Present study record *O. omanensis* from Andaman & Nicobar Islands.

***Ptereleotris evides* (Jordon & Hubbs, 1925). Common name. Blackfin dartfish. (Figure: 5a)**

Material examined: Registration number: ZSI/MBRC/F/3626; Gulf of Mannar, India, 1ex, 06.06.2025.

Habitat. Marine, inhabiting rocky reefs and coral reefs. Found over sandy and rubble substrates adjacent to coral reefs, including lagoon areas and outer reef slopes. Depth ranges 0–30 m, usually occurs at 2–15 m (Coleman et al. 2018, Baensch et al. 1997).

Diagnostic characters. Standard length less than 130 mm. Elongate laterally compressed body, divided into two colour, from snout to first dorsal fin is creamy white and from mid half to the back is black. First dorsal fin is short and clearly separated from the second dorsal fin. Dorsal fin rays VI+I, 24; anal fin rays I+24; pectoral fin rays 22. Pelvic fins are short and separated, joined at the base of 5th rays, frenum absent, pelvic fin elements I+4. Scales are very small, embedded, usually not overlapping, body covered with cycloid scales; lateral series scales 133; transverse scales 27. Cheek and nape region devoid of scales, preopercle area covered with cycloid scales, pectoral fin base devoid of scales. Chin without any median barbles, with low fleshy knob with median fold present posteriorly. Eyes are large and laterally placed, eyes are larger than snout. Mouth small, jaws extended below the front part of the eyes. Gill openings are extended upto rear edge of the preopercle. Tongue narrow, compressed, and pointed. Teeth are villiform arranged in a narrow bands. Gill membrane united at narrow isthmus. Caudal fin deeply emerginate with lobes are

rounded, without any filaments. Body is translucent to pale bluish, grey anteriorly from snout to first dorsal fin, shading to black or purplish black posteriorly; operculum with faint blue markings. Dorsal, anal and caudal fins are without distinct bands, spots, or dark markings. Dorsal and anal fin margins are black, middle portion of fins are creamy white. Upper and lower lobes of caudal fin reddish to blackish, centre of fin whitish, presence of large oval spot on lower edge of caudal peduncle. Body lacking any kind of stripes. Pectoral and pelvic fins are transparent to slightly whitish, blending with the body.

Distribution. Distributed across the Indo-west. In Western Indian Ocean from East and South Africa to Seychelles, Maldives including Red Sea. Southeast Asia to Philippines, Australia, Micronesia, Africa to Japan, Australia, and New Caledonia. Pacific islands including Micronesia and Tahiti. In Indian water, *P. evides* previously reported from AN and LK. The present study documents its first confirmed occurrence from mainland India.

Remarks. In Indian water, other congeners of *Ptereleotris* are *P. caeruleomarginata*, *P. cyanops*, *P. hanae*, *P. heteroptera*, and *P. microlepis*; *P. evides* can be differentiated with other congeners by: having 2nd dorsal fin with 25 rays (vs 2nd dorsal fin 29–33 rays in *P. heteroptera*), head and anterior half of the body pale, posterior half of the body dark, body without vertical orange line, pectoral fin base without narrow black line (vs. body and fins pale, narrow black line on pectoral fin base in *P. microlepis*, body with vertical orange line in *P. zebra*), chin without barbules (vs. with barbules in *P. zebra*). Morphological data of *P. evides* from present study were compared with reference holotype data of *P. evides* from Japan, Jordan 1925; to confirm its species identity. *P. evides* species distributed across Indo-West Pacific region; however, within Indian waters its occurrence has previously been documented only from AN and LK, though there are no confirmed records from mainland India. The present record from mainland India therefore extended known distribution range of *P. evides* within Indian waters.

***Ptereleotris zebra* (Fowler, 1938). Common name. Chinese zebra goby. (Figure: 5b)**

Material examined: Registration number: ZSI/MBRC/F/3393, 1ex; ZSI/MBRC/F/3537, 1ex; Kavarathi Island, Lakshadweep, 06.01.2025.

Habitat. Marine, benthopelagic, inhabits coral reef ecosystems within sandy to rubble substrates adjacent to reef slopes and lagoon. Depth range 2–31m, usually occur at 2–4m (Myers 1991).

Diagnostic characters. Standard length 130 mm. Slender body laterally compressed, tapering anteriorly, with a highly oblique terminal mouth. Distinct short fleshy chin barbules and median ventral fold on head are present. Eyes are large, positioned laterally of the head, interorbital space wide. Dorsal fin separated, interdorsal space narrow, dorsal fin rays VI+I, 28; anal fin rays I+27; pectoral fin rounded, total pectoral fin counts 24; lateral series scales 128; pelvic fin separated, frenum absent, pelvic fin counts I+4; caudal fin truncate with edges are slightly emerginate, caudal fin procurent rays 10, caudal fin branched rays 17. Upper jaw is slightly protruding, upper and lower jaw teeth in two rows, outer row teeth conical, inner row of teeth villiform. Body covered with tiny, embedded cycloid scales, nape region devoid of scales. Two interorbital pores, snout with single pore at each side. Prepelvic area devoid of any scales. Belly covered with minute scales. Body colour pale yellowish to greenish, lateral side of the body with 20 narrow orange to pink vertical bars. Presence of a prominent blue-edged dark purple patch below the eyes, opercle with 2–3 blue stripes, pectoral fin base with orange and blue stripes. Both dorsal fin margins are black and blue lines, base of the dorsal fin with blue lines, midline of second dorsal fin with scattered blue dots. Anal fin margins with dark maroon and blue lines, midline of anal fin with scattered blue dots. Chin barbules dark purple in colour with blue lines. Pelvic, pectoral and caudal fin yellowish in colour without any markings.

Distribution. *P. zebra* was originally described from Dasol Bay, Luzon, Philippines (Fowler 1938). The species is widely distributed in the Indo-Pacific, occurring from the Red Sea and western Indian Ocean, from East Africa, Mozambique Channel to Marquesas Islands; further range extends to Indo-Pacific north to southern Japan and Ryukyu Islands, and south to Australia and New Caledonia (Randall & Hoese 1985; Allen & Erdmann 2024; Sergey Bogorodsky & Menachem Goren 2023; Fricke et al. 2019). In India, present study records the species in Lakshadweep archipelago, India, which further extends its known distribution into Arabian Sea.

Remarks. *P. zebra* recorded for the first time from Indian waters, extending its known Indo-Pacific distribution. In 2020, Kodeeswaran et.al. describes *P. cyanops* from Tamil Nadu, India; other than *P. cyanops*, all of its congeners are distributed in LK and AN, suggesting that regional diversity is still incompletely documented. Morphologically, the species *P. zebra* is clearly separable from its Indian congeners by having chin with fleshy barbules (vs without barbules but low fleshy knob in *P. heteroptera*, *P. microlepis*, *P. evides*); body with 20 vertical bands (vs. other congeners without any vertical bands); caudal fin truncate without any filaments (vs. 5th and 13th branched rays are greatly prolonged as filaments in *P. cyanops*); uniform yellow body colour with band (vs. body colour pale bluish anteriorly and shading black posteriorly in *P. evides*); first and second dorsal fin margin with black and blue line (vs. absent in other species). Morphological data of *P. zebra* from present study are analysed with reference holotype data of *P. zebra* from Philippines, Fowler 1938; to confirm its species identity. However, in present study individual having anal fin I+27 (vs. holotype I+26), whereas description of *P. zebra* from Western Indian Ocean shows anal fin I+25–28 in Larson 2022; indicating the intraspecific variation among different geographical regions.

Phylogenetic analysis. Phylogenetic tree generated from the analyzed sequences revealed distinct and well supported species-level clade, demonstrating clear genetic differentiation among the examined gobioid taxa. The sequence generated from present study are; *Oxyurichthys omanensis* with accession number PZ117564, PZ117570, PZ117565, PZ117566, PZ117571; *Yongeichthys audax* with accession number PZ120905, PZ120903, PZ120904; *Amblyeleotris downingi* with accession number PZ120899, PQ211268, PQ211266, PQ211267; *Amblyeleotris periphthalmus* with accession number PZ459945; *Valenciennea strigata* with accession number PZ385390; *Ptereleotris zebra* with accession number PZ120900, PZ120901; *Ptereleotris evides* with accession number PZ116894; *Bathygobius cocosensis* with accession number PZ117579, PZ117580, PZ117577, PZ117578, PZ117584; *Periophthalmus minutus* with accession number PZ904853, PZ904854, PZ904859, PZ904860, PZ904861; all the submitted sequence are clustered together with their respective reference sequences, indicating strong sequence similarity and conforming their taxonomic placement. The topology showed that individuals assigned to the same species formed monophyletic groups, supported by moderate to high boot straps values. Short branches lengths within species clade reflected low intraspecific genetic variation, whereas longer branches between clade indicated substantial interspecific divergence. Overall, the phylogenetic reconstruction provides robust evidence for the genetic distinctiveness of the examined taxa and confirms the affinity of the newly generated sequences with previously reported conspecific lineages.

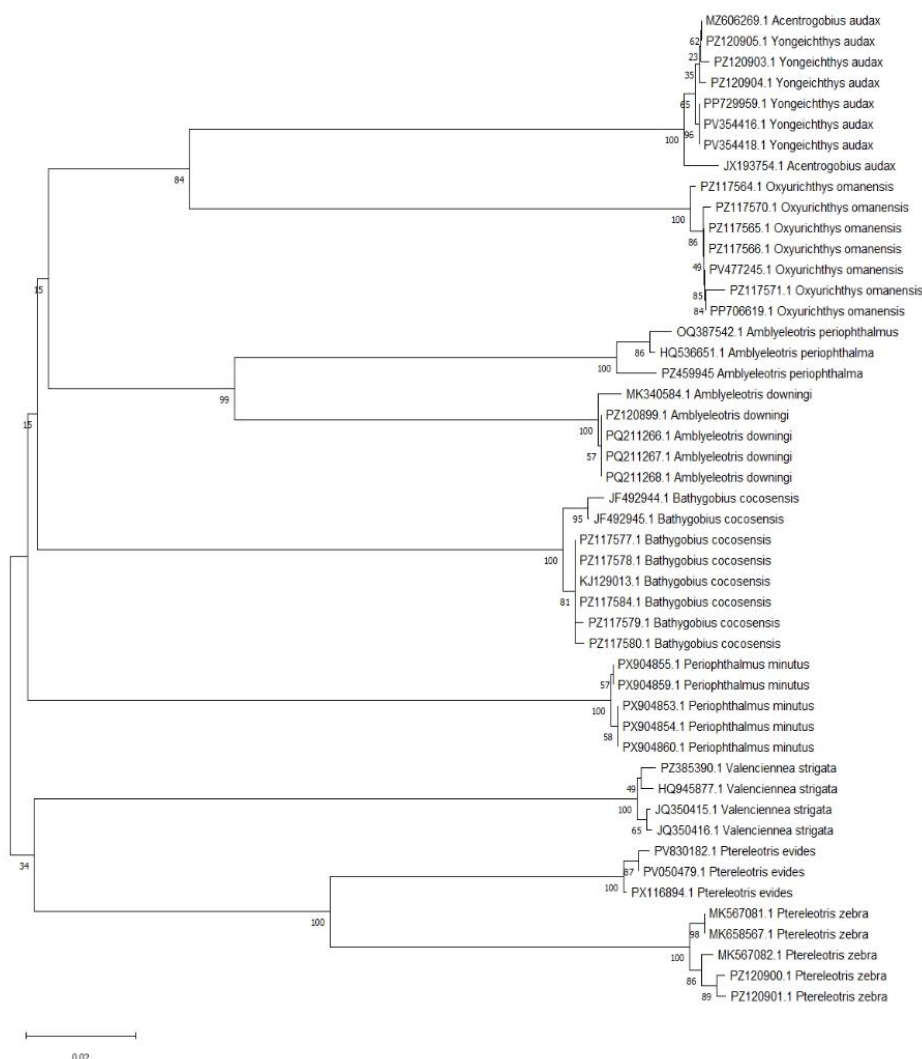


Figure 1. Mitochondrial COI gene-based neighbour-joining phylogenetic tree of new record gobioid species from Lakshadweep and Andaman & Nicobar Islands, India.

Conclusion. The Gobioid genera documented in the present study exhibit diverse ecological adaptations and widespread Indo-Pacific distribution. Present study redefines the distribution of *A. downingi*, *A. periphthalmus*, *B. cocosensis*, *Y. audax*, *P. evides*, *P. zebra*, *O. omanensis*, *V. strigata* and *P. minutus* within Andaman & Nicobar Islands, Lakshadweep Archipelago and mainland India. The discovery of previously unrecorded species suggested that the gobioid diversity of Indian waters remains incompletely documented, however, continued systematic surveys integrating with morphological and molecular taxonomic approaches are therefore essential for accurately assessing species identity, species diversity and distribution patterns within Indian waters.

Acknowledgement. The author sincerely thanks the Director, Zoological Survey of India, and the Officer-in-Charge, Marine Biology Regional Centre, Chennai; University of Madras, Chennai for institutional support and access to facilities essential for fieldwork and laboratory analyses. The author acknowledges the Department of Science and Technology (DST-SERB), Government of India, for funding this research under the project “Molecular Taxonomy, Distribution, and Species diversity of fishes of Order Gobiiformes from Indian waters”.

Funding. The work was supported by research funding from the Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Government of India under the project titled “Molecular Taxonomy, distribution and species diversity of fishes of order Gobiiformes from Indian waters.” The grant facilitated comprehensive field surveys, taxonomic investigations, and molecular analyses undertaken in this study.

Conflict of Interests. The authors declare that there is no conflict of interest regarding the publication of this study.

Ethical approval & declaration. Specimens were collected in strict accordance with institutional and national ethical regulations governing the use of animals in research. All sampling procedures were authorized under relevant permits, ensuring minimal ecological disturbance and adherence to internationally accepted standards for the ethical handling of fish in biodiversity studies.

Consent for publication. Not applicable.

Data availability. The datasets generated and analyzed during this study, encompassing detailed morphological measurements and COI DNA barcode sequences, are fully available from the corresponding author upon reasonable request.

Author Contribution. MD collected the samples, made molecular and morphological analysis of the collected samples, prepared the manuscript, tables and figures, review and confirm the final version of manuscript.

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Figure 2. a) Live specimen of *Amblyeleotris downingi* (reg. ZSI/MBRC/F/3625) collected from Lakshadweep, India; b) dead specimen of *A. downingi* (reg. ZSI/MBRC/F/3158) collected from off Kakinada, east coast India, Bay of Bengal.



Figure 3. Live specimen of *Amblyeleotris periophthalmus* (reg. ZSI/MBRC/F/3538) collected from Lakshadweep, India.



Figure 4. Live specimen of *Bathygobius cocosensis* (reg. ZSI/MBRC/F/3628) collected from Andaman & Nicobar Island.



Figure 5. a) Live specimen of *Ptereleotris evides* (reg. ZSI/MBRC/F/3393) collected from Gulf of Mannar, South-east coast, India; b) live specimen of *Ptereleotris zebra* (reg. ZSI/MBRC/F/3393) collected from Lakshadweep, India.



Figure 6. a) Live specimen of *Valenciennesa strigata* (ZSI/MBRC/F/3628) collected from Gulf of Mannar, South-east coast, India.



Figure 7. a) Dead specimen of *Yongeichthys audax* (reg. ZSI/MBRC/F/3194) collected from Ashtamudi Lake, Kerala, India; b) live specimen of *Y. audax* (reg. ZSI/MBRC/F/3540) collected from Ograbraij, Andaman & Nicobar Island.

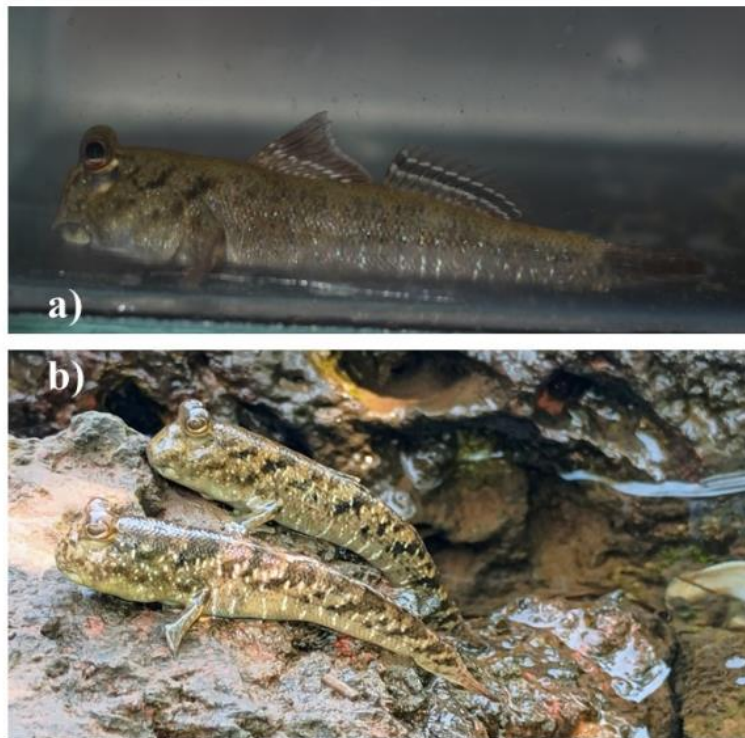


Figure 8. a) Live specimen of *Periophthalmus minutus* collected from Andaman Islands, India; b) live specimen of *P. minutus* (ZSI/MBRC/F/3380) from Ratnagiri mangrove habitat, Mumbai, west coast of India.



Figure 9. Live specimens of *Oxyurichthys omanensis* (ZSI/MBRC/F/3539), Ograbraij, Andaman and Nicobar Island.



Figure 10. Dead specimen of *Oxyurichthys paulae* (reg. ZSI/MBRC/F/3355) from Munambam fishing harbour, Kochi, Kerala, Arabian Sea coast, India, collected by Moumita Das on April 2026. (Up) formalin preservation specimens, (down) field collection from bycatch.



Figure 11. Live specimen of *Apocryptes bato* (Hamilton, 1822) (reg. ZSI/MBRC/F/3357) collected from West Bengal by Moumita Das on July 2023.