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A REVIEW OF FISHES AND FISHERIES OF THE SEA BREAMS (FAMILY: SPARIDAE) FROM PAKISTAN

Muhammad Moazzam[1*] and Hamid Badar Osmany[2]

[1]*WWF-Pakistan, Plot No. 11, Block 7/8, KMCHS, Karachi 75400, Pakistan*
[2]*Marine Fisheries Department, Government of Pakistan, Fish Harbour, West Wharf, Karachi 74000, Pakistan*
**Corresponding author:* mmoazzamkhan@gmail.com

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ABSTRACT

Family Sparidae is represented in Pakistan by 21 species belonging to 8 genera. Of these, genus *Acanthopagrus* is represented by 5species, genus *Diplodus* by 4 species, genus *Argyrops*and *Rhabdosargus* each by 3 species, genera *Crenidens* and *Sparidentex* each by 2 species and genera *Cheimerius* and *Pagellu*each by one species. Taxonomy of some species of seabreams from Pakistan needs careful examination because of the existence of overlapping characters, different morphs, and colours. Fanged seabream (*Sparidentex jamalensis*), which was originally described from Pakistan, comes very close to a lesser-known species, Belayewi seabream (*Sparidentex belayewi*), and also has affinities with Sobaity seabream (*S. hasta*), which warrants revision of this genus. Arabian yellow fin bream (*Acanthopagrus arabicus*) is reported to be the most dominant seabream species caught along the coast of Pakistan using bottom-set gillnets and handlines. Other species of the genus *Acanthopagrus*, including *A. berda*, *A. bifasciatus*, *A. catenula*, and *A. sheim*, are also important food fish species that are locally consumed. King soldier bream (*Argyrops spinifer*) used to be the most dominant sea bream species before the year 2000; however, now its landings are substantially decreased, but it is still considered an important species as it is not only consumed locally but also exported. Goldlined seabream (*Rhabdosargus sarba*),which is mainly caught by gillnets and handlines, is also considered an important food fish. Sobaity seabream (*Sparidentex hasta*) is considered as most important seabream species, which is mainly caught in the coastal waters of Pakistan but predominantly in the Indus estuarine area and Miani Hor lagoon. It is one of the species that is exported in large quantities to Persian Gulf countries, mainly to Kuwait. The present paper provides a review of the species of seabreams of the Family Sparidae reported from Pakistan.

Keywords: Seabreams, *Acanthopagrus, Argyrops, Cheimerius, Crenidens, Diplodus, Rhabdosargus, Sparidentex, S. hasta, S. jamalensis, S. belayewi.*

INTRODUCTION

Family Sparidae, which includes seabreams, porgies, and pandoras, is found in tropical and temperate coastal waters of the Atlantic, Indian, and Pacific Oceans. Seabreams are highly regarded as food fish and are important target species for commercial and recreational fisheries in Pakistan. Seabreams are mainly found along the shore from shallow water to deeper water as demersal inhabitants of the continental shelf and rarely on the continental slope. A few species are found in the estuarine area, sheltered bays, and lagoons along the coast of Pakistan. Seabreams are mainly harvested in Pakistan through gillnet, longline, and handline fisheries,as well as bycatch on trawl fisheries. In addition, seabreams are targeted in sport fishing along coastal waters, including creeks of the Indus Delta, lagoons, islands, and around rocky and sandy shores of Sindh and Balochistan coast.

Information about the seabreams from Pakistan is limited and usually, these fishes are included in the list of fish species occurring in Pakistan (Ahmad, 1988; Ahmad *et al.*, 1973; Anonymous, 1955; Bianchi, 1985; Hoda, 1985b, 1988; Hussain, 2003: Jaleel and Khaliluddin, 1972, 1981: Majid, *et al*., 1992, and Psomadakis *et al.*, 2015). In addition, the taxonomy of the seabreams from Pakistan was studied by Amir *et al.* (2013; 2014), Iwatsuki (2013), Iwatsuki and Heemstra (2010; 2011; 2018), Iwatsuki and Maclaine (2013), Parenti (2019), and Siddiqui *et al.* (2014). In addition, various aspects of the biology of members of the Family Sparidae were studied by Ahmad *et al*. (2021), Amir *et al*. (2018), Ayub *et al.* (2021), Lubna *et al*. (2013), Riaz *et al*. (2017), and Siddiqui *et al*. (2022). The present paper provides a review of the species of seabreams of the Family Sparidae reported from Pakistan and described the details about commercial importance of dominating species harvested in Pakistan using various fishing gears.

MATERIAL AND METHODS

The records of occurrence of seabreams from the Pakistan coast were obtained from published scientific literature. In addition, specimens of the members of the Family Sparidae collected between 2003 and September 2025 from Karachi Fish Harbour were photographed, and salient features/measurements were recorded and preserved in 5 % neutralized formalin. Data for commercial landings of seabreams were obtained from Anonymous (2012) and archives of the Marine Fisheries Department, Government of Pakistan, and the Department of Coastal Development and Fisheries, Government of Balochistan.

RESULTS AND DISCUSSION

Members of the Family Sparidae, which includes dentex, pandoras, porgies, and seabreams, that are already known from Pakistan, are studied. In addition, the specimens collected by the authors from Karachi Fish Harbours and other localities along the Pakistan coast are also examined in the preparation of this paper. The species included in this paper are arranged alphabetically.

Genus ***Acanthopagrus*** Peters, 1855 (as subgenus of *Chrysophrys*)
Acanthopagrus arabicus Iwatsuki 2013
(Fig. 1)

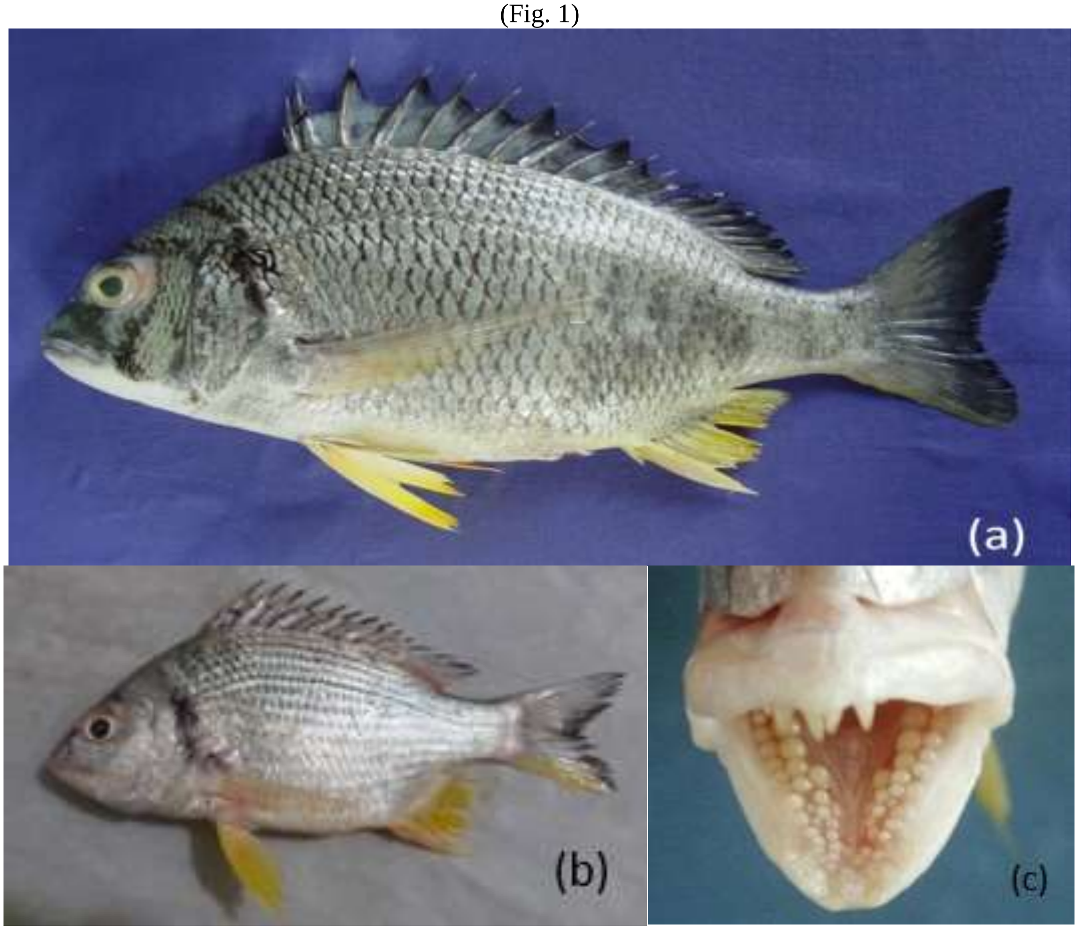

Fig. 1 *Acanthopagrus arabicus.* (a) Adult; (b) juvenile; (c) mouth showing teeth.

This species is commonly known as Arabian yellowfin seabream. In Sindh Province, it is known as “Dandyo”, “Dandia”, “Niyar” (= coconut), “Kissi”, “Kapar-tan”, “Kartan” or “Deleeri”. In Balochistan Province, it is called “Tintle” or “Chan”. In contrast, in the Kutchi language, it is called “Peela Paalo”. This species is reported from the Karachi coast by Niazi (2001); from Karachi Fish Harbour and Manora by Siddiqui *et al.* (2014); from Korangi Creek, Sandspit, Bhutta Village, Jhangi Sir and Keti Bunder by Ahmed *et al*. (1999); from Leth Nullah by Ahmad *et* *al.* (1984) and Niazi and Moazzam (1999); from Paradise Point, Karachi by Moazzam and Rizvi (1980), and from the Balochistan coast by Anonymous (1999). It was reported from Pakistan coast without mentioning any specific location by Ahmad (1988), Ahmad and Niazi (1988), Ali (2002), Bianchi (1985), Bauchot and Smith (1984), Fanning *et al.,* (2016), Hoda (1985b, 1988), Hussain (2003), Jalil and Khaliluddin (1972, 1981), Majid *et al.* (1992), Some of these authors reported this species as *Acanthopagrus latus,* whereas Frickle *et al*. (2025), Froese and Pauly (2025), Iwatsuki (2013), Parenti (2019), Psomadakis *et al.* (2015), and Siddiqui *et al.* (2014) reported this species as *Acanthopagrus arabicus*. This species was originally described from the Western Coast of Qatar (market specimen) by Iwatsuki (2013). Its holotype (MUFS 33840) is housed in the Museum of Maritime Science, Tokyo, Japan (Frickle *et al*., 2025; Iwatsuki, 2013).

The body of this is fairly deep and compressed, whereas the head profile from snout tip to dorsal-fin origin is gently convex. Its first soft dorsal-fin ray is slightly longer than the last dorsal-fin spine. Teeth in both jaws are placed in three to five rows. Smaller anteriorly located and typical molariform teeth are strongly developed posteriorly, whereas there are six canines present on both jaws. Its body is silvery pale grey to whitish, darker dorsally, whereas the belly is usually whitish or with whitish streaks along scale rows. There is a diffuse dark blotch present at the origin of the lateral line. Its pelvic and anal fins are vivid or strong yellow, and the lower caudal-fin lobe is yellow.

This species is known from the Western Indian Ocean, including the Persian Gulf and southern Oman to Qatar, off the coasts of Kuwait, and extending to Iran, Pakistan, and India. It is not known from the Red Sea (Frickle *et al*., 2025; Froese and Pauly, 2025; Iwatsuki, 2013; Iwatsuki and Heemstra, 2022). *Acanthopagrus latus*, which was previously reported from Pakistan many authors to have the presence of black streaks proximally on the inter-radial membranes between the yellow anal-fin rays. In addition, there are 3 1⁄2 or 4 1⁄2 scale rows between the fifth dorsal-fin spine base and the lateral line. The specimens from Pakistan do not have black streaks proximally on the inter-radial membranes between the yellow anal-fin rays, whereas there are only 4 1⁄2 scale rows between the fifth dorsal-fin spine base and the lateral line; therefore, these are identified as *A. arabicus.* According to Iwatsuki (2013), and Froese and Pauly (2025), *A. latus* is known from the Northwest Pacific, including the East Asia Shelf, the coasts of Honshu, Japan, southern Korea, Taiwan, China (from around Shanghai to southern China), and northern Vietnam. Its records from other parts of the Indo-Pacific area, including the Pakistan area, are based on misidentification.

This species is known to inhabit shallow coastal waters, whereas its juveniles and sub-adults are mostly found in the mangrove areas. Typically, this species inhabits creek areas and enters mangroves during high tide to feed on small fish and invertebrates, utilizing the mangroves' root system. Adults are found at the entrance of estuarine and lagoon areas as well as in the upper reaches of the continental shelf (up to a depth of 30 m). It is considered to have excellent flesh and is a popular food fish in coastal villages. This species is one of the most commonly caught species of the Family Sparidae in Pakistan. It is mainly caught in the bottom-set gillnets, which are deployed primarily at the entrances of the Indus Delta creek system, Miani Hor Lagoon, as well as in shallow coastal waters of Sonmiani Bay, Pasni Bay, Ormara (Demi Zur), and Gwadar. This species is also caught frequently by sport fishermen, especially in the mangrove areas along the Sindh and Balochistan coasts. Juveniles of this species are commonly found in the mangrove and associated ecosystems.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 24 June 2010 (17 cm TL)
- 1 specimen collected on board R/V Dr. Fridtjof Nansen Cruise 2010 on 10 November 2010 (26 cm TL).
- 1 specimen collected from Karachi Fish Harbour on 18 August 2014 (19 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 22 August 2014 (21 cm TL)
- 1 specimen collected on board R/V Dr. Firdous Cruise 2015 on 1 October 2015 TL (21 cm).
- 1 specimen collected from Damb, Miani Hor on 11 October 2017 (11cm TL)

Acanthopagrus berda (Forsskål, 1775)
(Fig. 2)

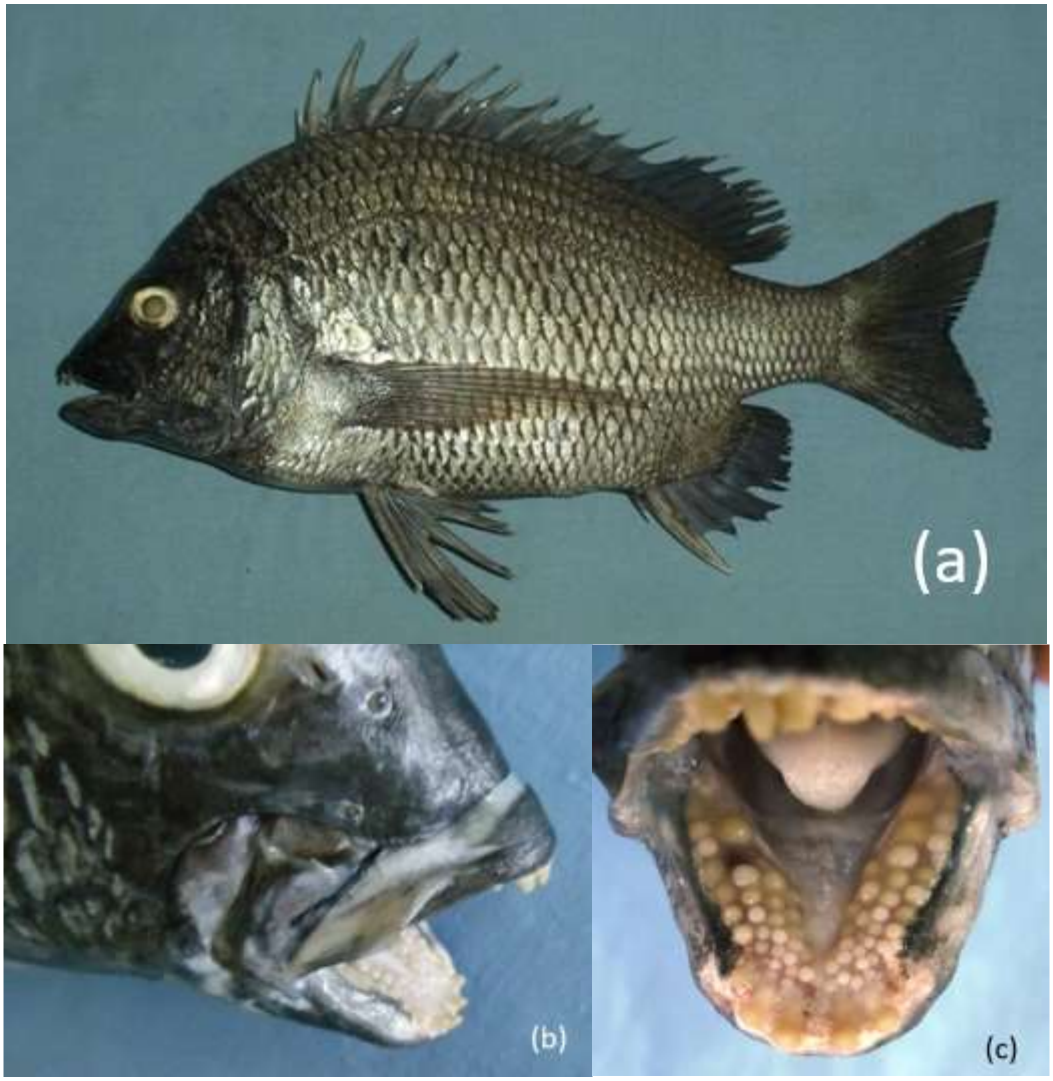

Fig. 2. *Acanthopagrus berda.* (a) Adult; (b) curved concavity on the ventral edge of the first 2 suborbital bones; (c) mouth showing teeth.

This species is commonly known as river bream, goldsilk sea bream, or picnic seabream. It is commonly known as “Kara Dandyo”, “Dandia”, “Kissi”, “Deleeri”, and “Naira” in the Sindh Province, and “Chah”, or “Nawar” in the Balochistan Province. In contrast, in the Kutchi language, it is called “Kala Paalo”. This species is reported from Sindh by Aitken (1907), Anonymous (1955, 1999), Day (1875, 1889), Misra (1962), Murray (1880), and Sorley (1932); from Indus Delta by Mahmood *et al*. (1999); from Karachi by Anonymous (1955, Jenkins (1910), Misra (1962), Niazi (2001), and Nielsen (1960); from Keti Bundar and Manora by Siddiqui *et al.* (2014); from Leth Nullah by Ahmad *et al*. (1984) and Niazi and Moazzam (1999); from Native Jetty, Thandi Sarak by Ahmed and Wazarat (1993); from Manora by Ahmed and Wazarat (1993) and Siddiqui *et al.* (2014); from Balochistan by Anonymous (1953) and Zugmayer (1913); from Makran by Anonymous (1955), Misra (1962) and Qureshi (1952) and from Porali River by Mirza *et al.* (2002). It was reported from Pakistan coast without mentioning any specific location by Ahmad (1988), Ahmed (1996), Ahmad and Niazi (1988), Ali (2002), Bianchi (1985), Bauchot and Smith (1984), Fanning *et al.*, (2016), Froese and Pauly (2025), GBIF (2025), Hoda (1985b, 1988), Hussain (2003), Iqbal *et al.* (1999), Jalil and Khaliluddin (1972, 1981), Kesteven (1950), Majid *et al* (1992), Psomadakis *et al.* (2015), and Siddiqi (1956). This species was originally described as *Sparus berda* from Luhaiya, Yemen, Red Sea by Forsskål (1775). Its holotype (ZMUC P50555) is housed in the Zoological Museum, University of Copenhagen, Denmark (Frickle *et al.*, 2025). Anonymous (1953, 1955), Misra (1962), Qureshi (1952), and Siddiqi (1956) reported this species as *Sparus berda,* whereas Anonymous (1999), Aitken (1907), Day (1875, 1889), and Kesteven (1950) referred it as *Chrysophrys berda*. Jenkins (1910), Sorley (1932), and Zugmayer (1913) listed it as *Chrysophrys berda* and *C. datnia*, and Misra (1962) called it *Sparus datnia*, and Murray (1880) reported it as *Chrsophrys calamari.*

The body of this species is relatively deep and compressed. The profile of its head from the upper jaw to just above the eyes is straight and then gently convex to the dorsal-fin origin. There is a strongly curved concavity on the ventral edge of the first 2 suborbital bones above the rear end of the maxilla (Fig. 2b). The front edge of the scaly area on the head is slightly convex when viewed from above, with small scales anteriorly. There are 3 scale rows between the base of the 5th dorsal-fin spine and the lateral line. The teeth are molariform and are strongly developed along both jaws. The teeth rows are strongly curved laterally at the rear of the lower jaw (Fig. 2c). Its body is dull dark olive-brown dorsally and pale to whitish with dark silvery and brassy reflections below.

This species is known from the Indo-Pacific Area, including the Indian Ocean, the Red Sea, Persian Gulf, India, and to west coast of India and Sri Lanka; elsewhere to the east coast of India and the southern Malay Peninsula (Frickle *et al*., 2025; Froese and Pauly, 2025; Iwatsuki, 2013; Iwatsuki and Heemstra, 2022). The specimens recorded from the Western Pacific as *A. berda* are now referred to as *A. pacificus* (Iwatsuki *et al.*, 2010). Similarly, those recorded from South Africa are now redescribed as *A. vagus* by Iwatsuki and Heemstra (2010).

This species is known to inhabit shallow coastal waters, whereas its juveniles and sub-adults are mostly found in the mangrove areas, which are their nurseries. Typically, this species inhabits creek areas and enters mangroves during high tide to feed on small fish and invertebrates, utilizing the mangroves' root system. Adults are found at the entrance of estuarine and lagoon areas as well as in the upper reaches of the continental shelf (up to a depth of 50 m). It is considered to have excellent flesh and is a popular food fish in coastal villages and among sport fishermen.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 14 January 2008 (22 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 20 February 2013 (13 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 20 November 2013 (33 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 30 October 2014 (31 cm TL)
- 1 specimen collected from Keti Bundar, on 21 December 2016 (19 cm TL)

Acanthopagrus bifasciatus (Forsskål, 1775)
(Fig. 3)

This species is commonly known as twobar seabream. In Sindh Province, it is called “Kukkirio”, “Lado”, “Pokia”, “Captain”, “Doolah”, and “Gotala”, whereas in Balochistan Province, it is called “Shumala”, “Lado”, “Bah-mear” or “Banore”. It was reported from Sindh by Aitken (1907), Ahmad *et al.* (1973), Anonymous (1955), Day (1875), Iwatsuki and. Heemstra (2011); from Leth Nullah by Ahmad *et al.* (1984) and Niazi and Moazzam (1999); from Paradise Point, Karachi by Moazzam and Rizvi (1980); from Balochistan by Day (1875) and Zugmayer (1913), and from Makran by Ahmad *et al.* (1973), Anonymous (1955) and Fowler (1933). This species was reported from Pakistan coast without mentioning any specific location by Ahmad (1988), Ahmad and Niazi (1988), Bianchi (1985), Bauchot and Smith (1984), Fanning *et al.*, (2016), Frickle *et al.* (2025), Froese and Pauly (2025), GBIF (2025), Hoda (1985b, 1988), Hussain (2003) and Jalil and Khaliluddin (1972, 1981). Ahmad *et al* (1973), Anonymous (1955), and Fowler (1933) reported this species as *Sparus bifasciatus,* whereas Aitken (1907), Day (1875), and Zugmayer (1913) listed it as *Chrsophrys bifasciatus.* This species was originally described as *Chaetodon bifasciatus* from Jeddah, Saudi Arabia, Red Sea by Forsskål (1775). Its holotype (ZMUC P50557) is housed in the Zoological Museum of the University of Copenhagen, Denmark (Frickle *et al*., 2025).

The body of this species is relatively deep and compressed. Its head profile from snout tip to above the rear of the eyes is steep and straight, and then curved to the dorsal fin origin. Its both jaws are with the outermost row of molars extending to the rear of the jaw; the basal width of the middle 4 (of 6) incisors at the front of the upper jaw is relatively narrow. There are 5 or 6 scale rows between the base of the 5th dorsal-fin spine and the lateral line. The base of the dorsal and the anal fins are scaly, whereas the interorbital area and preopercle flange are naked. Its body is silvery, often with a black spot at the center of each body scale. There are 2 conspicuous vertical brownish black bars on the head (from occiput through eye and across cheek to rear end of maxilla, and from nape to across opercle). Its pectoral, dorsal, and caudal fins are pale yellow (spinous portion of dorsal fin most yellow distally). There is no dense black margin on the dorsal fin or a narrow black margin on the caudal fin.

Fig. 3. *Acanthopagrus bifasciatus.*

This species is known from the Western Indian Ocean, including the Red Sea (Israel, Egypt, Eritrea, and Saudi Arabia), the Persian Gulf (Bahrain and Kuwait), southern Oman, along the whole southern coast of the Arabian Peninsula, and from Iran to Pakistan. According to Siddiqui *et al*. (2014), specimens collected from Pakistan were examined by Y. Iwatsuki during his visit to Pakistan in May 2012, and he concluded that all previously referred specimens of *A. bifasciatus* from Pakistan were *A. catenula*. Previously, Iwatsuki and Heemstra (2011) reported *A. catenula* from off the Horn of Africa to Oman, including Socotra Island off the coast of Somalia, as well as Kenya, Mozambique, South Africa, Madagascar, Mauritius, and the Rodriguez Shoal. According to Iwatsuki and Heemstra (2011), *A. bifasciatus* is known from the Red Sea (Israel, Egypt, Eritrea, and Saudi Arabia), the Persian Gulf (Bahrain and Kuwait), and off southern Oman. They presumed the occurrence of this species along the whole southern coast of the Arabian Peninsula, and it is also found from Iran to Pakistan. It seems that either both species have a wide and overlapping distribution in the western Indian Ocean, or, considering intermediate forms and similar characters, there is a possibility of a single species. In the latter case, the name *Acanthopagrus bifasciatus* (Forsskål 1775), having priority, may be retained for both species. In the present paper, both species are included despite overlapping characters.

This species is found mainly on the rocky outcrops and reef areas along the Pakistan coast but seldom enters estuaries and lagoons. It is also found commonly in shipwrecks and Islands (Moazzam, 2024a-b). According to El Ganainy *et al.* (2021), this species inhabits outer reef flats, deep lagoons, bays, and seaward reefs up to 20 m depth and tends to be solitary or in small semi-stationary groups near shelter. It is a popular fish among sport fishermen mainly because of its excellent meat.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 21 March 2004 (32 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 11 July 2009 (17 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 10 November 2010 (23 cm TL)
- 1 specimen collected from Churna Island on 13 March 2016 (21 cm TL)

Acanthopagrus catenula (Lacepède 1801)
(Fig. 4)

This species is commonly known as the bridled seabream. In Sindh Province, it is called "Kukkirio", "Lado", "Pokia", "Captain", "Doolah", and "Gotala", whereas in Balochistan Province, it is called "Shumala", "Lado", "Bah-mear" or "Banore". It was reported from Karachi Fish Harbour by Siddiqui *et al.* (2014). It was also reported from Pakistan without specifically mentioning any location by Psomadakis *et al.* (2015). It was originally described by Lacepède (1801) as *Labrus catenula* from the Grand Gulf of India and the seas near the Gulf (= Mauritius, Mascarenes, southwestern Indian Ocean). Its holotype (MNHN A-0691) is housed in the Muséum National d'Histoire Naturelle, Paris, France (Frickle *et al*., 2025; Iwatsuki and Heemstra, 2011).

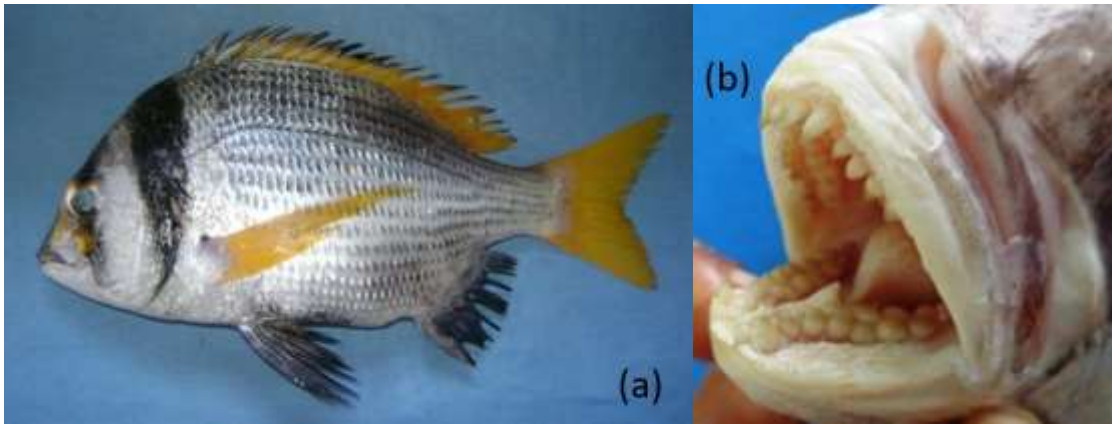

Fig.4. *Acanthopagrus catenula*. (a) Adult; (b) mouth showing teeth.

The body of this species is relatively deep and compressed. Its head profile from snout tip to above the rear edge of the eyes is steep and straight, and then curved to the dorsal-fin origin. The outer (3rd) row of molars in the upper jaw extends to the rear of the jaw, and the 2nd row of molars in the lower jaw extends to the rear of the jaw. The basal width of the middle 4 (of 6) incisors at the front of the upper jaw is relatively wide. There are 4 or 5 scale rows between the base of the 5th dorsal-fin spine and the lateral line. Its body is silvery, sometimes with a black spot at the center of each scale. There are 2 conspicuous vertical black bars on the head (from occiput through eyes and across cheek to rear end of maxilla, and from nape onto opercle). The dorsal fin in this species has with wide black margin, especially distinct in the distal spinous part of the dorsal fin in large fish specimens. The proximal part of the dorsal fin is yellow, whereas the hind margin of the caudal fin has a narrow black edge, which may disappear with growth.

This species is known from the Western Indian Ocean, including Oman, the Persian Gulf, Socotra, Somalia, to South Africa, Madagascar, Mauritius, and Rodrigues Shoal (Frickle *et al*., 2025; Froese and Pauly, 2025). It is a Lessepsian migrant to the Mediterranean Sea (Iwatsuki and Heemstra, 2022). Siddiqui *et al.* (2014) reported the confirmed occurrence of this species in Pakistan.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 11 April 2008 (25 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 9 October 2019 (29 cm TL)

Acanthopagrus sheim Iwatsuki 2013
(Fig. 5)

This species is commonly known as spotted yellowfin seabream. It is commonly known as "Kara Dandyo", "Dandia", "Kissi", "Deleeri", "Chaam", and "Naira" in the Sindh Province, and "Chah", or "Jaraz" in the Balochistan Province. In contrast, in the Kutchi language, it is called "Paalo". This species is reported from Pakistan without identifying any specific location by Parenti (2019) and Psomadakis *et al.* (2015). It was reported by Iwatsuki (2013) and Siddiqui *et al.* (2014) from Karachi Fish Harbour and the Sindh coast. This species was originally described from off Hawar Island, Qatar by Iwatsuki (2013). Its holotype (MUFS 33838) is housed in the Museum of Maritime Science, Tokyo, Japan (Frickle *et al*., 2025).

The body of this fish is deep and compressed. The profile of the head from snout tip to dorsal-fin origin is gently convex. There are 4.5 scale rows between the fifth dorsal-fin spine base and the lateral line, whereas there are 5.5 scale rows above the lateral line. Its second anal-fin spine is strong, whereas the first soft dorsal-fin ray is slightly longer than the last dorsal-fin spine. The teeth in both jaws of this species are present in three to five rows, of which the smaller ones are positioned anteriorly. The typical molariform teeth are strongly developed posteriorly. There are six canine-like teeth in the upper jaw and six in the lower jaw. Its body is pale grey to whitish and darker dorsally. Its belly is usually yellowish or with golden streaks along scale rows. There is a large, diffuse, and dark blotch present at the origin of the lateral line. Its dorsal-fin rays have 2 black blotches (rarely 3) on each membrane between dorsal-fin rays. It has pale or strong yellow to bright yellow pelvic, anal, and caudal fins, whereas the lower caudal-fin lobe is strong yellow and usually has a wide, dense black posterior margin. There are black streaks usually observed from the middle to the lowest portions on the inter-radial membranes between yellow anal-fin rays. There are two black blotches on the lower inter-radial membranes between dorsal-fin rays. The conspicuous diffuse dark blotch at the origin of the lateral line, which continues as dense blackish shading over the upper cleithrum and the upper part of the posterior opercle.

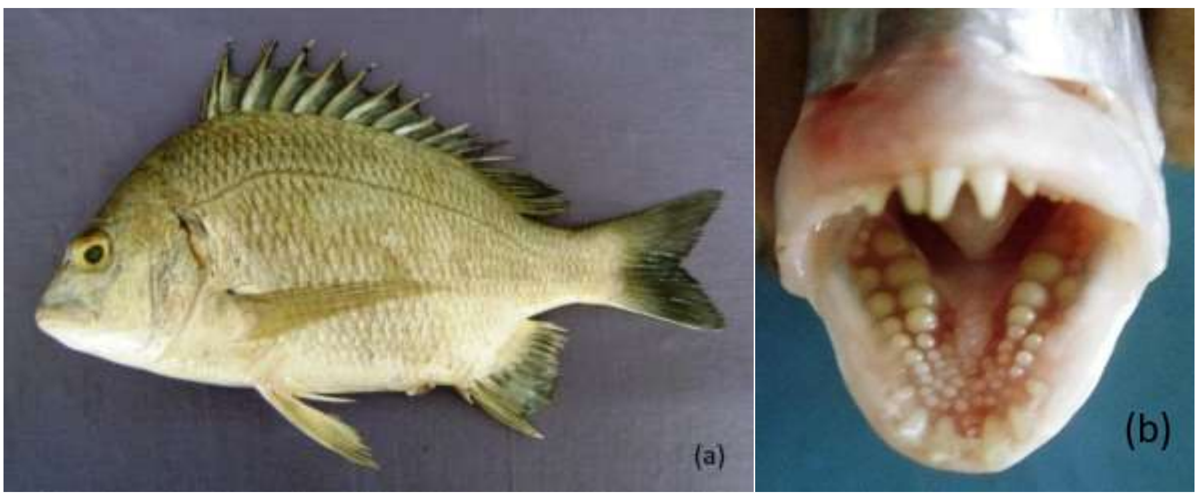

Fig. 5. *Acanthopagrus sheim*. (a) Adult; (b) mouth showing teeth.

This species is known from the Western Indian Ocean, including the Persian Gulf to Pakistan and probably India (Frickle *et al*., 2025; Froese and Pauly, 2025; Iwatsuki and Heemstra, 2022). This species mainly inhabits shallow coastal waters on the continental shelf to a depth of 30 m. Not observed to be entering the mangroves and lagoon areas.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 31 January 2009 (18 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 24 June 2014 (17 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 1 September 2014 (25 cm TL)

Genus ***Argyrops*** Swainson 1839 (as subgenus of *Chrysophrys*)
Argyrops caeruleops Iwatsuki and Heemstra 2018

This species is commonly known as bluesnout soldierbream. In Sindh Province, it is widely known as “Daand”, “Dandya”, and “Kuranti”, whereas in Balochistan Province, it is called “Soro”, “Ma-lay-lak”, “Gwa-tak”, and “Daand”. In Karachi, the Kutchi community calls it “Kharak paalo” and “Paalo”. Its occurrence in Pakistan is reported by Frickle *et al.* (2025) and Parenti (2019). It was originally described from off southern Oman by Iwatsuki and Heemstra (2018). Its holotype (MUFS 29073) is housed in the Museum of Maritime Science, Tokyo, Japan (Frickle *et al*., 2025).

The body of this species is deep and becoming compressed and slender with growth. The first 2 dorsal-fin spines in this species are rudimentary, and the third dorsal-fin spine is the longest (third spine longer than head length and reaching beyond the first soft dorsal-fin ray). Its body is uniformly silvery red, which also has small, obliquely scattered blue spots. The dorsal body above the lateral line, belly, and chin are slightly silvery. Its all fins and pale red. Its 1st and 2nd infraorbital bones, and the area around the eye have blue reflections and also have bluish reflections on the preopercular flange.

This species is known from the Western Indian Ocean, including off Socotra, southern Oman, and the Gulf of Oman, and possibly from Pakistan (Frickle *et al.* 2025; Parenti 2019). No specimen of this species was examined during the present study.

Material Examined

- No specimen examined

Argyrops flavops Iwatsuki and Heemstra 2018

This species is commonly known as yellow-snout soldierbream. In Sindh Province, it is widely known as "Daand", "Dandya", and "Kuranti", whereas in Balochistan Province, it is called "Soro", "Ma-lay-lak", "Gwa-tak", and "Daand". In Karachi, the Kutchi community calls it "Kharak palo" and "Palo". Its occurrence in Pakistan was reported by Frickle *et al.* (2025), Iwatsuki and Heemstra (2018), and Parenti (2019). It was originally described from the Mutrah Fish Market, Oman, by Iwatsuki and Heemstra (2018). Its holotype (MUFS 33612) is housed in the Museum of Maritime Science, Tokyo, Japan (Frickle *et al*., 2025).

The body of this species is deep and compressed. Its first 2 dorsal-fin spines are rudimentary, whereas the third or fourth (rarely fifth) dorsal-fin spine is longest, and the third spine is less than head length and not reaching beyond the origin of the first soft dorsal-fin ray. In juveniles, the third to the eighth dorsal-fin spines are extremely elongated. The anterior and posterior margins of the upper cheek scales are nearly parallel just below the posterior edge of the eye. Its body is uniformly orangish pink, with the belly and chin being silvery. Its head, with a snout, is mostly yellow or orange, whereas sometimes there is a yellow or orange colour on the cheek. The spinous dorsal-fin rays are yellowish or orangish pink, and other fins are somewhat yellowish pink or pale pink. The upper jaw and around the eyes are often yellowish-orange.

This species is known from the Western Indian Ocean, including Oman, the Gulf of Oman, and the Arabian Sea, extending to Pakistan (Frickle *et al.* 2025; Parenti 2019). No specimen of this species was examined during the present study.

Material Examined

- No specimen examined

Argyrops spinifer (Forsskål, 1775)
(Fig. 6)

This species is commonly known as king soldierbream. In Sindh Province, it is widely known as "Daand", "Dandya", and "Kuranti", whereas in Balochistan Province, it is called "Sooro", "Ma-lay-lak", "Gwa-tak", and "Daand". In Karachi, the Kutchi community calls it "Kharak paalo" and "Paalo". This species is reported from Sindh by Ahmad *et al.* (1973), Anonymous (1955), Day (1875), Misra (1962), and Sorley (1932); from Karachi by Ahmed *et al.* (1973), Anonymous (1955), Jenkins (1910) and Niazi (2001); from Karachi Fish Harbour by Siddiqui *et al*. (2014), from Leth Nullah by Ahmad *et al*. (1984) and Niazi and Moazzam (1999); from Balochistan by Day (1875, 1889), Niazi (1994), and Zugmayer (1913); from Makran by Ahmed *et al*. (1973), Anonymous (1955), Misra (1962), and Qureshi (1952). It was reported from Pakistan coast without mentioning any specific location by Ahmad (1988), Ahmad and Niazi (1988), Ali (2002), Bauchot and Smith (1984), Bianchi (1985), Brandhorst (1994), Eggleston (1974), Fanning *et al.*, (2016), Froese and Pauly (2025), GBIF (2025), Hoda (1985b, 1988), Hussain (2003), Hussain and Kidwai (1994), Iqbal *et al*. (1999), Jalil and Khaliluddin (1972, 1981), Khanum *et al*. (2013), Majid *et al*. (1992), Psomadakis *et al.* (2015), and Siddiqi (1956). It was originally described as *Sparus spinifer* from Jeddah, Saudi Arabia, Red Sea by Forsskål (1775), however, no type is known (Frickle *et al*., 2025). Anonymous (1955), Qureshi (1952) and Siddiqi (1956) reported this species as *Sparus spinifer,* whereas Day (1875, 1889), Jenkins (1910), Sorley (1932), and Zugmayer (1913) referred it as *Pagrus spinifer*.

The body of this species is deep and strongly compressed. Large adults have a bulbous growth on the nape. The first 2 dorsal-fin spines are very short, whereas the 3rd to 7th spines are elongated. These spines become proportionately shorter in adults. The colour of its body is mainly silvery pinkish, darker on the head and the dorsal parts. The upper edge of the opercle is usually dark red, whereas the lower jaw is silvery and the head is red. Its spinous dorsal fin is pink or red, whereas other fins are pink or pale pink and have a pink tinge around the eye. The upper jaw is often pinkish, whereas the anterior and posterior margins of the upper cheek scales are nearly parallel just below the rear edge of the eye. Its young have several red vertical bars on the body.

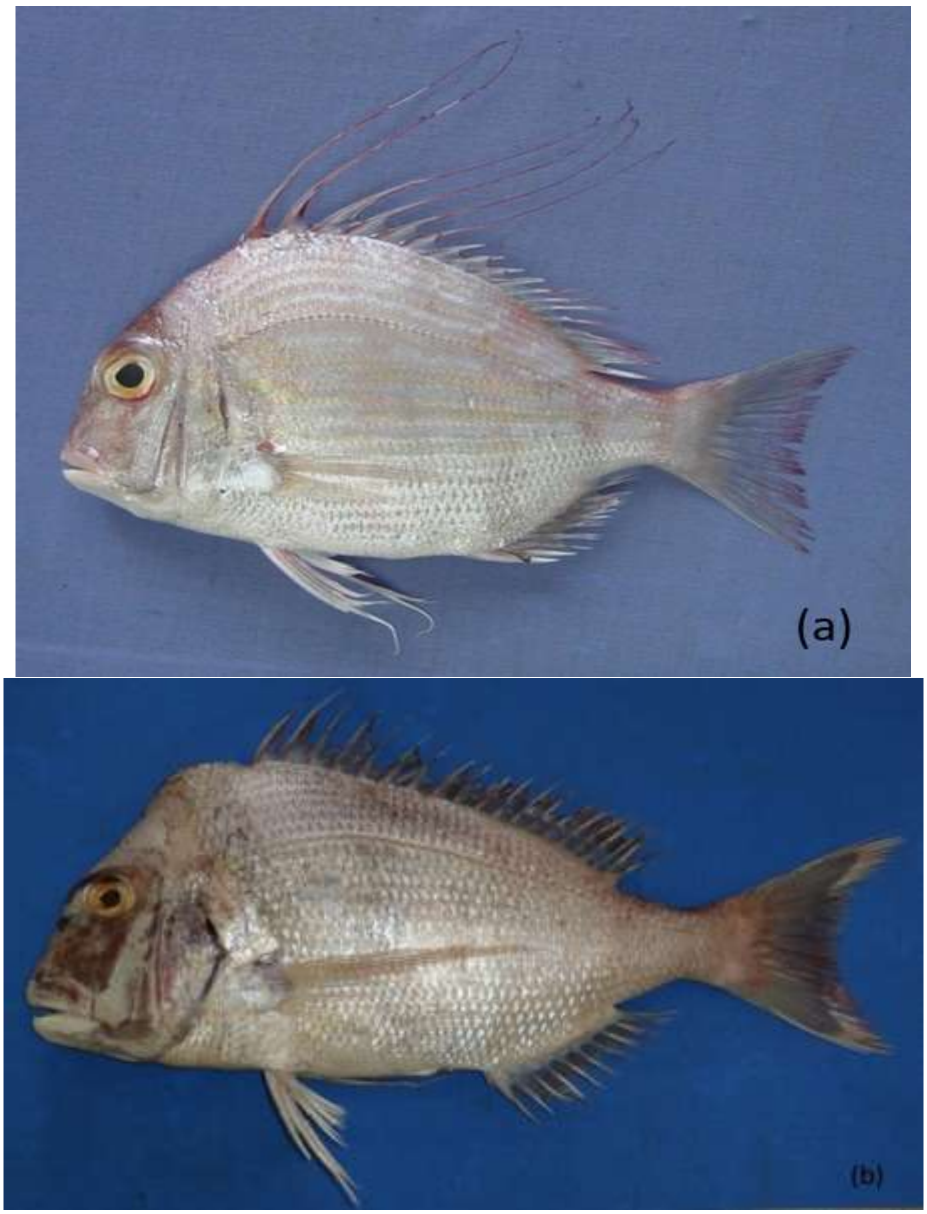

Fig. 6. *Argyrops spinifer*. (a) Medium-sized specimen; (b) large-sized specimen with a typical hump on the head before dorsal fin.

This species is known from the Indo-Pacific area, including the Western Indian Ocean, including Red Sea to South Africa, Madagascar, the Mascarenes, the Persian Gulf, Pakistan, and India, as well as to Indo-Malayan Archipelago, to Singapore, and possibly the South China Sea and northern Australia

This species is found mainly on the continental shelf to a depth of 120 m. Juveniles are sometimes found in the shallow waters, outer estuarine, and lagoons. There used to be an important target fishery for this species around the Astola Island and Gwadar Headland. It feeds on benthic invertebrates, mainly mollusks, shrimp, and small fish. It is considered to have excellent flesh and is a popular food fish in coastal villages.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 15 November 2008 (26 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 19 October 2009 (21 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 29 October 2014 (26 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 1 November 2014 (12 cm TL)
- 1 specimen collected on board R/V Dr. Firdous Cruise 2015 on 1 October 2015 (25 cm TL).

Genus *Cheimerius* Valenciennes, 1830
Cheimerius nufar (Valenciennes, 1830)
(Fig. 7)

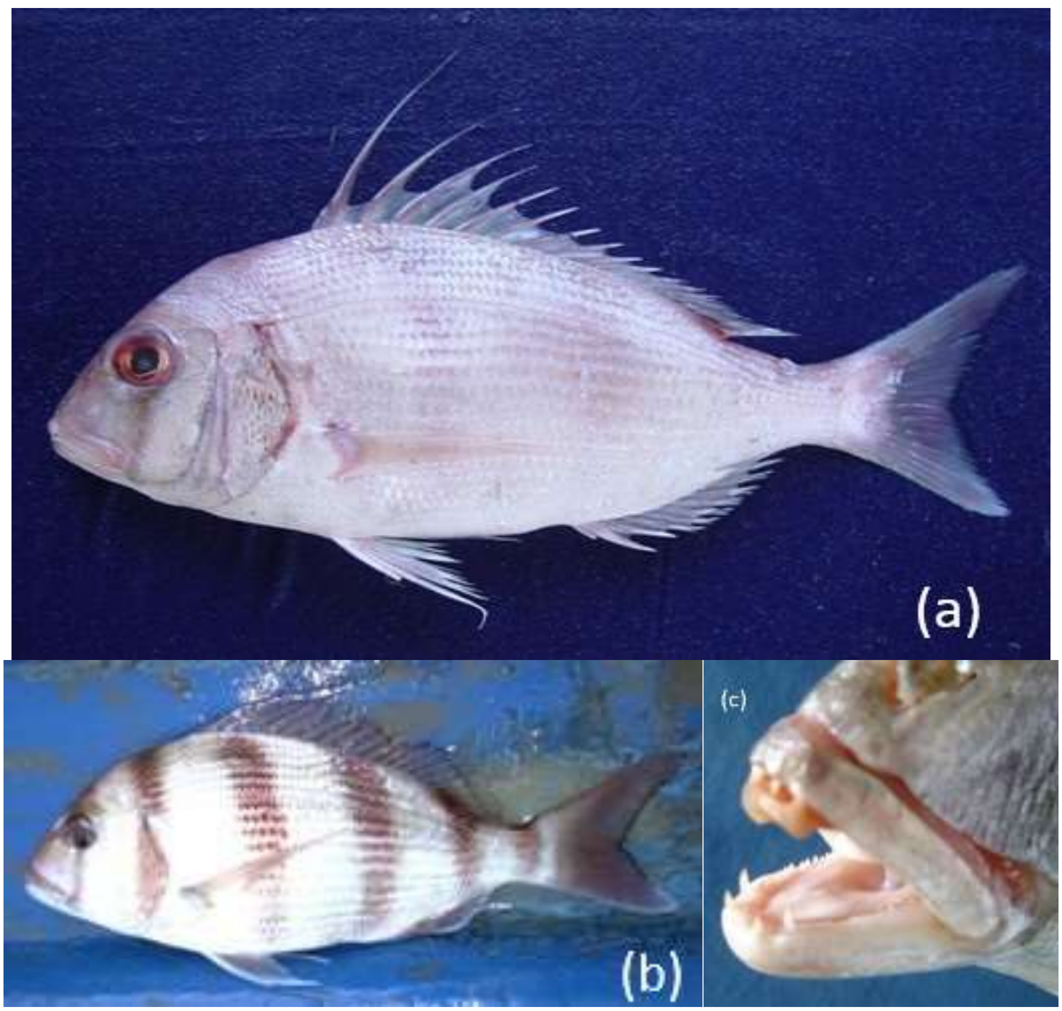

Fig. 7. *Cheimerius nufar*. (a) Adult; (b) juvenile; (c) mouth showing teeth.

This species is commonly known as Santar seabream. In Sindh Province, it is widely known as "Dandya", "Dola", and "Chan", whereas in Balochistan Province, it is called "Chah" and "Shumala". In Karachi, the Kutchi community calls it "Paalo". It was reported from Karachi Fish Harbour by Siddiqui *et al.* (2014). It was also reported from the Pakistan coast without mentioning any specific location by Ahmad and Niazi (1988), Bauchot and Smith (1984), Bianchi (1985), Fanning *et al.*, (2016), Froese and Pauly (2025), GBIF (2025), Hoda (1985b, 1988), Hussain (2003), Parenti (2019), Psomadakis *et al.* (2015), and Smith and Smith (1986). It was originally described as *Dentex nufar* from the Red Sea and Massawa, Eritrea, Red Sea by Valenciennes (1830). Its holotype is not known; however, syntypes are housed in the Muséum National d'Histoire Naturelle, Paris, France, and the Zoologisches Museum, Humboldt Universität, Berlin (Frickle *et al*., 2025).

The body of this species is oblong and not deep, and its head profile is convex from the upper lip to the dorsal-fin origin. There are no molars present on the jaws (Fig. 7c). Its preopercle margin has a few small scales, whereas the interorbital area is partly scaly, but there are no scales on the soft-rayed portion of the dorsal and anal fins. Its body is silvery rosy pink to pinkish tan, whereas it is ventrally silvery in colour. The juveniles have 6 faint, darker vertical bars on the head and body, of which 1 bar passes through the eyes (Fig. 7b), but these disappear in large adults.

This species is known from the Western Indian Ocean, including the Red Sea to South Africa, Madagascar, Mauritius, Reunion, and Pakistan to India and Sri Lanka (Frickle *et al.* 2025; Parenti 2019). It is mostly found over rocky bottom, at 60–100 m.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 14 January 2008 (26 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 15 November 2008 (29 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 22 August 2014 (25 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 12 November 2014 (30 cm TL).

Genus *Crenidens* Valenciennes, 1830
***Crenidens crenidens* (**Forsskål, 1775)
(Fig. 8)

This species is commonly known as Karanteen seabream. In Sindh Province, it is widely known as "Karpal", "Lal Kishti" or "Tikki wari kissi", whereas in Balochistan Province, it is called "Nawar" and "Keen-si". It was reported from Sindh by Aitken (1907), Anonymous (1955), Day (1875, 1889), and Murray (1880), from Karachi Anonymous (1955, 1999), Day (1873), Fowler (1933), Nielsen (1960), Punwani (1934), from Leth Nullah by Ahmad *et al*. (1984) and Niazi and Moazzam (1999), from Balochistan by Day (1875, 1889), Zugmayer (1913) and Makran by Anonymous (1955). Others: Ahmad (1988), Ahmad and Niazi (1988), Bauchot and Smith (1984), Bianchi (1985), Fanning *et al.*, (2016), Froese and Pauly (2025), GBIF (2025), Hoda (1988), Hussain (2003), Jalil and Khaliluddin (1972, 1981), and Smith and Smith (1986). This species was originally described as *Sparus crenidens* from Jeddha, Saudi Arabia, and Suez, Red Sea by Forsskål (1775). Its holotype is not known; however, the syntype is housed in the Zoological Museum, University of Copenhagen, Denmark (Frickle *et al*., 2025). *Crenidens indicus* described by Day (1873) from Karachi, Pakistan, and Madras, India, is considered to be a synonym of this species. Ahmad and Niazi (1988), Ahmad *et al.* (1984), Anonymous (1955), Bauchot and Smith (1984), Bianchi (1985), Fowler (1933), Froese and Pauly (2025), Hoda (1988), Hussain (2003), Jalil and Khaliluddin (1972, 1981) and Niazi and Moazzam (1999) reported this species as *Crenidens crenidens indicus* whereas Anonymous (1955, 1999), Day (1873, 1875, 1889). Punwani (1934) and Zugmayer (1913) referred it as *Crenidens indicus,* and Aitken (1907), Day (1876, 1889), and Murray (1880) listed it as *C. forskalii.*

The body of this species is oblong oval and slightly compressed. The profile of its upper head of juveniles is gently convex to the origin of the dorsal fin, and the profile of adults becomes concave above the eyes and convex or produced in front of the eyes. Its opercular flange and interorbital area are naked. Its body is silvery, with a greenish-blue or olive tinge which fades ventrally. There are narrow and longitudinal stripes along the scale rows. The fins are tinged yellowish or olive, whereas the pectoral-fin axil is sometimes darkish.

This species is known from the Western Indian Ocean, including the Red Sea and Persian Gulf, East Africa to South Africa (Frickle *et al.* 2025; Parenti 2019). It is usually found in muddy areas along the shallow coastal waters and in the mouths of deeper creeks. It is commonly caught by various fishing gears deployed in shallow waters along the coast of Pakistan.

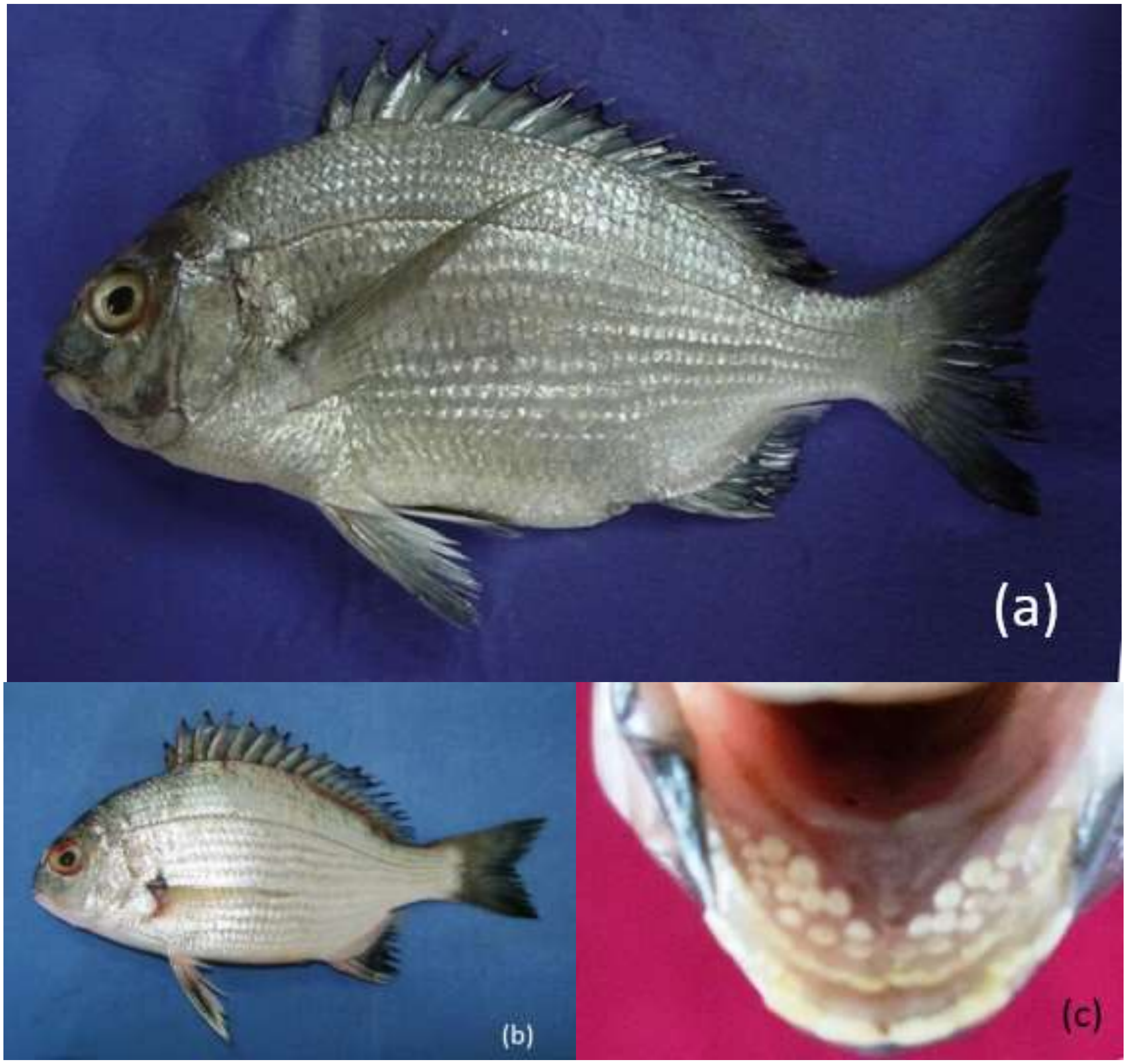

Fig. 8. *Crenidens crenidens.* (a) Adult; (b) juvenile; (c) mouth showing teeth.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 30 October 2009 (26 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 25 June 2013 (13 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 18 November 2013 (21 cm TL).

Crenidens indicus Day 1873
(Fig. 9)

This species is commonly known as Day's Karanteen seabream. In Sindh Province, it is widely known as "Karpal", "Lal Kishti" or "Tikki wari kissi", whereas in Balochistan Province, it is called "Nawar" and "Keen-si". This species was reported from Karachi Fish Harbour by Siddiqui *et al*. (2014). It was also reported from Pakistan without identifying any specific location by Psomadakis *et al.* (2015). It was originally described from the Northern

Indian Ocean by Day (1873). Its holotype is not known; however, the lectotype (ZSI 1774) is housed in the Zoological Survey of India, Kolkata, India (Frickle *et al*., 2025).

The body of this species is oblong oval and slightly compressed. The profile of the upper head of juveniles is gently convex to the dorsal-fin origin, whereas the profile of adults becomes concave above the eyes and convex or produced in front of the eyes. Its opercular flange and interorbital area are naked. The colour of its body is silvery, with a greenish-blue or olive tinge. There are narrow longitudinal stripes along scale rows. It is somewhat darker dorsally, and the fins are dull yellowish hyaline. There is a blackish spot in the pectoral fin axil, extending above the pectoral-fin base. This species is generally confused with *Crenidens crenidens* from which it can be differentiated as it has 41/2 scale rows between the 10^{th} dorsal-spine base and lateral line (51/2-61/2 in *C. crenidens*), gill rakers in the lower arch 10-12 (9-10 in *C. crenidens*), having dark spot located dorsally in the pectoral-fin axil (absent in *C. crenidens*) and having a relatively deeper body 2.13-2.34 times in the standard length (slender body with 2.42-2.93 times in the standard length in for *C. crenidens*).

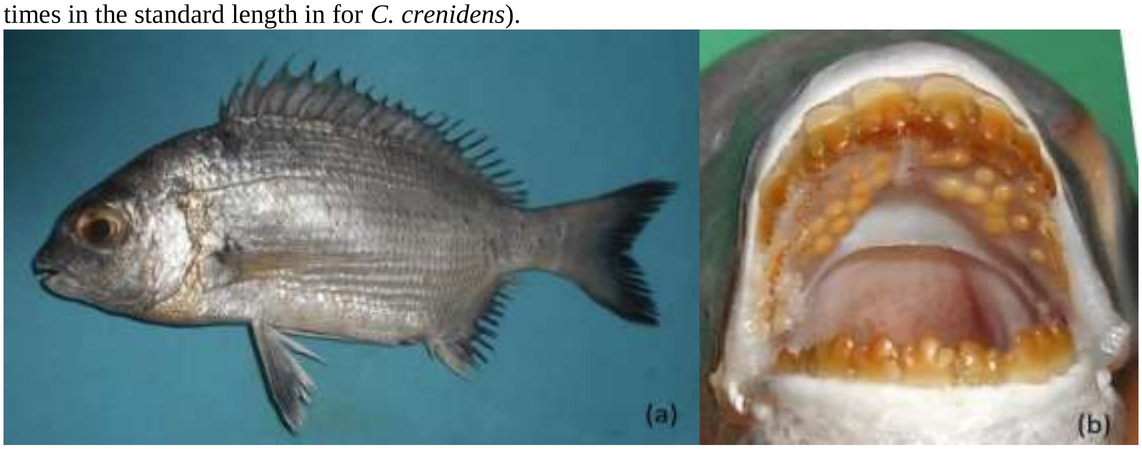

Fig. 9. *Crenidens indicus.* (a) Adult; (b) mouth showing teeth.

This species is known from the Western Indian Ocean, including the Red Sea, Persian Gulf, Iran, Pakistan, to India, the Bay of Bengal, and the Nicobar Islands (Frickle *et al.*, 2025; Parenti, 2019).

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 23 November 2009 (27 cm TL).
- 1 specimen collected from Karachi Fish Harbour on 20 February 2013 (22 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 26 August 2024 (28 cm TL)

Genus ***Diplodus*** Rafinesque, 1810
Diplodus capensis (Smith 1844)
(Fig. 10)

This species is commonly known as blacktail seabream or Cape white seabream. In Sindh Province, it is widely known as “Taikairi”, “Tikka kissi” or “Tikki wari kissi”, whereas in Balochistan Province, it is called “Tip-puch”. This species was reported from Karachi Fish Harbour by Siddiqui *et al.* (2014). This species was reported from Pakistan without identifying any specific location by Parenti (2019), and Psomadakis *et al.* (2015). This species was originally described as *Sargus capensis* by Smith (1844) from the Southeastern coast of South Africa, the southwestern Indian Ocean. Its holotype (BMNH 1845.7.3.52) is housed in the British Museum of Natural History, London, U.K. (Frickle *et al*., 2025).

The body of this species is oval and compressed, with a relatively deep shape. Its both jaws have 8 large inclined incisors at the front, which are followed by 3 or 4 more incisors in the upper jaw, and 2 or 3 molars in the lower jaw. The colour of the body of large adults is uniformly silvery, with a large saddle-like black blotch at the peduncle, whereas youngs have faint vertical bars. This species can be differentiated from its congeners by lacking vertical bars and the presence of a saddle-like black blotch larger than the eye on its caudal peduncle.

Fig. 10. *Diplodus capensis.* (a) Adult; (b) mouth showing teeth.

This species is known from the Southeastern Atlantic (Angola to South Africa) and the Western Indian Ocean, including Pakistan to Oman, Mozambique, South Africa, southern Madagascar, to Mauritius (Frickle *et al.*, 2016; Iwatsuki and Heemstra, 2022). This species is found in the sheltered rocky habitats, including in bays along the Balochistan coast.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 21 December 2016 (26 cm TL).

Diplodus kotschyi (Steindachner 1876)
(Fig. 11)

Fig. 11. *Diplodus kotschyi*.

This species is commonly known as the one-spot seabream. In Sindh Province, it is widely known as "Taikairi", "Tikka kissi" or "Tikki wari kissi", whereas in Balochistan Province, it is called "Tip-puch". This species is known from Buelji, Karachi, by Hoda (1985a). It was reported from the Pakistani coast without specifying any particular location by Ahmad and Niazi (1988), Bauchot and Smith (1984), Bianchi (1985), Fanning *et al.*, (2016), Froese and Pauly (2025), Hoda (1985b, 1988), and Hussain (2003). It was originally described as *Sargus kotschyi* from the Persian Gulf and Madagascar by Steindachner (1876). Its holotype is not known; however, syntypes are housed in Naturhistorisches Museum, Wien (Vienna), Austria (Frickle *et al.*, 2025). It was reported by Ahmad and Niazi (1988), Bauchot and Smith (1984), Bianchi (1985), and Hoda (1985b, 1988) as *Diplodus sargus kotschyi*. Previous records of *Diplodus noct* from Pakistan are likely misidentifications of this species. The report of *Diplodus sargus* made by Fanning *et al.,* (2016), Hoda (1985a) and Hussain (2003) appears to be a misidentification, as it is a purely Atlantic Ocean inhabitant.

The body of this species is oval, which is somewhat deep and compressed. Both jaws have 8 broad incisor-like teeth at the front, which are compressed and inclined forward. It has a well-developed scaly sheath at the base of the dorsal and anal fins. The colour of its body is silvery, with a distinct, round black blotch present on the peduncle. This species can be differentiated from its congeners by lacking vertical bars and the presence of a distinct, round, and black blotch on its peduncle, which is smaller than or subequal to eye diameter.

This species is known from the Western Indian Ocean, including the Persian Gulf and Arabian Sea, to northern India (Frickle *et al.,* 2016; Iwatsuki and Heemstra, 2022). It is of common occurrence on the rocky areas of shallow coastal waters. Usually caught by sport fishermen on handlines.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 11 April 2005 (21 cm TL).
- 1 specimen collected from Karachi Fish Harbour on 14 October 2013 (24 cm TL)

Diplodus noct ([Ehrenberg MS] Valenciennes, 1830)

This species is commonly known as the Red Sea seabream. In Sindh Province, it is widely known as "Taikairi", "Tikka kissi" or "Tikki wari kissi", whereas in Balochistan Province, it is called "Tip-puch". It was reported from Sindh by Aitken (1907), Anonymous (1955), Day (1875, 1889), and Murray (1880), from Balochistan by Day (1875, 1889) and Zugmayer (1913), and from Makran by Anonymous (1955) and Qureshi (1952). It was reported from the Pakistani coast without specifying any particular location by Hoda (1988), Qureshi (1952), and Siddiqi (1956). It was originally described as *Sargus noct* from the Red Sea by Valenciennes (1830). Its holotype is not known; however, syntypes are housed in the Muséum National d'Histoire Naturelle, Paris, France, and the Rijksmuseum van Natuurlijke Historie, Leiden (Frickle *et al*., 2025). Bauchot and Smith (1984) and Froese and Pauly (2025) pointed out that this species may be endemic to the Red Sea. Pakistani specimens may be misidentified and could be attributed to *Diplodus kotschyi.* Anonymous (1955, 1999), Aitken (1907), Day (1875, 1889), Murray (1880), Qureshi (1952), Siddiqi (1956), and Zugmayer (1913) reported this species *as Sargus noct.*

It has an oval, rather elongate, and compressed body. Its upper jaw has 7–10 incisors at the front, whereas its lower jaw has 7 incisors, which are compressed and inclined forward. The colour of its body is silvery, and it has scale rows that form darker stripes. There is a dark blotch over the lateral line on the anterior part of the peduncle, which becomes indistinct with age. This species is discernible from its congeners in having 12–14 gill rakers on the lower limb of 1st arch (8-10 gill rakers in *D. capensis* and *D. kotschyi*), 6 or 7 scales between the lateral line and the base of 4th dorsal-fin spine (7–9 scales in *D. capensis* and *D. kotschyi*), and (having a body depth of 2.3–2.6 times in the standard length (body depth 2–2.3 times the standard length in *D. capensis* and *D. kotschyi*).

This species is known from the Western Indian Ocean and is apparently endemic to the Red Sea (Iwatsuki and Heemstra, 2022). The records of this species from Pakistan may be treated as *Diplodus kotschyi.* No specimen of this species was examined during the present study.

Material Examined

- None.

Diplodus omanensis Bauchot and Bianchi 1984

It is commonly known as the Oman porgy. In Pakistan, it is known as "Patta patti". It was reported from Karachi Fish Harbour by Amir *et al.* (2013) and Siddiqui *et al.* (2014). It was also reported from Pakistan without specifying any specific location by Parenti (2019) and Psomadakis *et al.* (2015). This species was originally described as *Diplodus cervinus omanensis* by Bauchot and Bianchi (1984) from Kuria Muria Bay, Oman, Arabian Sea (17°44'N, 55°62'E) from a depth of 55 meters. Its holotype (MNHN 1984-0358) is housed in the Muséum National d'Historie Naturelle, Paris, France (Frickle *et al*., 2025; Iwatsuki and Heemstra, 2011).

Its body is oval, deep, and compressed. Both jaws in this species have 10–12 incisor teeth at the front, which are compressed and inclined forward. Its pectoral fins reach above the third anal spine. The colour of its body is white, and it has 5 broad black vertical bars (of which 1st bar passes through the eyes and 5th passes across the peduncle). Its head is yellowish and has an indistinct dark patch on the dorsal surface of the snout. Its dorsal, anal, and pelvic fins are dark, whereas caudal and pectoral fins are pale to transparent. This species can be differentiated from its congeners in having the sides of body with 5 or 6 broad dark vertical bars (no dark vertical bars on sides in adults, but juveniles with 8 or 9 narrow dark bars disappearing with age in all other species of genus *Diplodus* occurring in Pakistan) and 10–12 incisors at front of upper jaw (usually 8 (7–10) incisors at front of upper jaw in all other species of genus *Diplodus* occurring in Pakistan).

This species is known from the Western Indian Ocean, including southern Oman to Pakistan (Frickle *et al.*, 2016; Iwatsuki and Heemstra, 2022). No specimen of this species was examined during the present study.

Material Examined

- None.

Genus ***Pagellus*** Valenciennes, 1830
Pagellus affinis Boulenger, 1887
(Fig. 12)

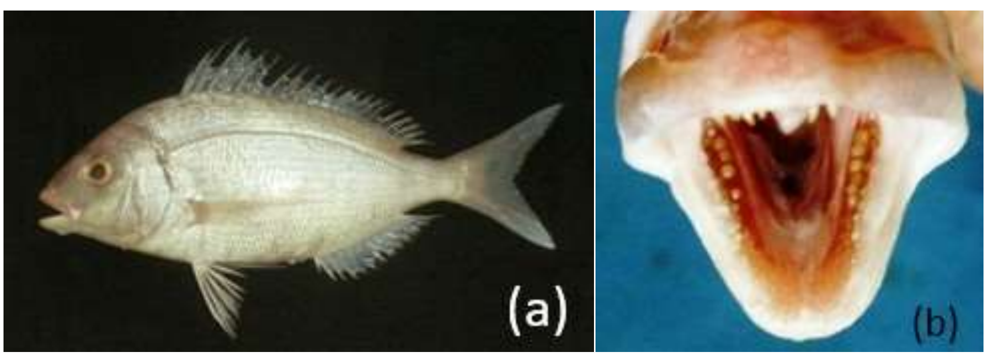

Fig. 12. *Pagellus affinis.* (a) Adult; (b) mouth showing teeth.

This species is commonly known as Arabian pandora. In Sindh Province, it is widely known as "Dandya", whereas in Balochistan Province, it is called "Nawar" or "Dand". Amir *et al.* (2013) and Siddiqui *et al.* (2014) reported this species from Karachi Fish Harbour. It was also reported from the Pakistan coast without identifying any specific location by Psomadakis *et al.* (2015). It was originally described from Muscat, Oman, by Boulenger (1887). Its holotype (BMNH 1851.10.26.26 or 1887.11.11.144) is housed in the British Museum of Natural History, London, U.K. (Frickle *et al*., 2025).

This species has an elongate and somewhat fusiform body. Its head profile is convex from the upper lip to the dorsal fin origin. Its jaws have fine and sharp teeth and small molars. Its preopercular flange is naked. The colour of its body and head is silvery pink, and paler ventrally.

This species is known from the Western Indian Ocean, including northern Somalia to the Gulf of Aden, Yemen, Oman, the Persian Gulf, and Pakistan (Bauchot and Smith, 1984; Froese and Pauly, 2025; Randall, 1995).

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 28 August 2014 (28 cm TL).

Genus ***Rhabdosargus*** Fowler 1933 (as a subgenus of *Diplodus*)
Rhabdosargus haffara (Forsskål, 1775)
(Fig. 13)

This species is commonly known as Haffara seabream. In Sindh Province, it is widely known as "Chan" or "Kapartan", whereas in Balochistan Province, it is called "Nawar" or "Chah". It was reported from Sindh by Day (1875) and Murray (1880), from Karachi Fish Harbour by Siddiqui *et al.* (2014). It was also reported from the Pakistan coast without mentioning any specific location by Bauchot and Smith (1984), Fanning *et al.*, (2016), Hoda (1985b, 1988) and Psomadakis *et al.* (2015). It was originally described as *Sparus haffara nandus* from the Red Sea by Forsskål (1775). No type of this species is known (Frickle *et al*., 2025). Day (1875) and Murray (1880) reported this species as *Chrysophyrs haffara.*

Fig. 13. *Rhabdosargus haffara.*

The body of this species is oval and compressed. Its head is large, and has a strongly convex (most abruptly at eye level profile. Its preopercular flange is naked. The colour of its body is silvery grey with golden or bluish reflections on the dorsum. There is a dark blotch at the origin of the lateral line. There are small dark spots at the pectoral fin axil, whereas the fins are pale pink and hyaline.

This species is known as the Red Sea, Oman, and presumably the Gulf of Aden and Persian Gulf, whereas it is considered a Lessepsian migrant to the Mediterranean Sea (Iwatsuki and Heemstra, 2022).

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 29 October 2014 (33 cm TL).

Rhabdosargus niger Tanaka and Iwatsuki, 2013

This species is commonly known as the Indian Ocean black seabream. In Sindh Province, it is widely known as "Chan" or "Kapartan", whereas in Balochistan Province, it is called "Nawar" or "Chah". It was reported from Karachi by Siddiqui *et al.* (2022). It was originally described from Southwestern Kalimantan, Indonesia (according to the Korean fisheries company) by Tanaka and Iwatsuki (2013). Its holotype (MZB 20726) is housed in Museum Zoologicum Bogoriense, Bogor, Indonesia (Frickle *et al*., 2025; Tanaka and Iwatsuki, 2013).

The body of this species is deep. The anterior profile of its head is somewhat convex, which is usually arched evenly between the snout tip and dorsal-fin origin. The posterior tip of its maxilla reaches beyond the vertical at the middle of the eye. The length of its upper jaw is longer than the orbit diameter. There are six anteroposteriorly flattened incisors at the front of its upper and lower jaws, with their edge triangular when viewed anteriorly. The molars are present in six regular series on each side of its upper jaw, and in three irregular series on each side of lower jaw. The molars on each side of both jaws are bluntly rounded, increasing in size gradually from front to back in each jaw. The posteriormost molar of each jaw is greatly enlarged. There are five transverse rows of scales on its preopercle, whereas the interorbital entirely naked. There are 11-12 scale rows below the lateral line, whereas 5 scale rows between the fifth dorsal-fin spine base and the lateral line, and there are 53-55 pored lateral-line scales 53-55, but there are no scales on the preopercular flange. Its dorsal fin originates above the pectoral fin origin, whereas the first dorsal spine is the shortest, and the fourth spine is the longest, third subequal; dorsal spines equally strong. Its first dorsal-fin soft ray is the longest, but clearly shorter than the longest spine, whereas the anal fin commences below the base of the second dorsal-fin soft ray. The third anal-fin spine is subequal to the second, and the first anal-fin soft ray is subequal to the third anal-fin spine. The dorsal and anal fins have with scaly sheath along their base. The colour of its head and dorsal part of body is silvery-black, but lacks vertical dark bars or golden longitudinal lines. However, there are some faint longitudinal dusky streaks on the sides. Its pectoral, pelvic, and anal fins are dusky gray, and the caudal fin is dusky with a darker posterior margin. There are no yellow streaks on the belly. There is no black spot in the pectoral axilla; however, a black blotch is present at the origin of the lateral line.

This species can be distinguished from *R. haffara* in having a deeper body and a higher count of anal-fin soft rays (body depth 2.2 times in the standard length and 11 anal-fin soft rays in *R. niger*, whereas 2.4-2.6 times in the standard length and 10 anal-fin soft rays in *R. haffara*). It also differs from *R. sarba* in having lower counts of pored lateral-line scales and scale rows between the fifth dorsal-fin spine base and lateral line (53-55 pored lateral-line scales and 5 scale rows between the fifth dorsal-fin spine base and lateral line in *R. niger*, whereas 56–64 pored lateral-line scales and 6-7 scale rows between the fifth dorsal-fin spine base and lateral line in *R. sarba*). *R. niger* also has a silvery-black body and lacks golden longitudinal lines on the body, as well as dusky gray coloration of pelvic and anal fins, while *R. sarba* possesses a silvery gold sheen body with yellow or golden longitudinal lines, as well as yellow or yellowish coloration of pelvic and anal fins.

This species is known from the Western Pacific, including Southwestern Kalimantan, Indonesia (Frickle *et al*., 2025; Tanaka and Iwatsuki, 2013). During the study, a large number of specimens of genus *Rhabdosargus* were examined, which belonged to *R. haffara* and *R. sarba*, and none of them were found to have characteristics of *R. niger*. The presence of *R. niger* in Pakistan is, therefore, doubtful. To ascertain the presence of *R. niger* in Pakistan further studies are required. No specimen of this species was examined during the present study.

Material Examined

– None.

Rhabdosargus sarba (Forsskål, 1775)
(Fig. 14)

Fig. 14. *Rhabdosargus sarba*.

This species is commonly known as goldlined seabream. In Sindh Province, it is widely known as “Chan” or “Kapartan”, whereas in Balochistan Province, it is called “Nawar”, “Tintle”, or “Chah”. It was reported from Sindh by Aitken (1907), Anonymous (1955), and Murray (1880), from Ibrahim Hayderi, Karachi by Amir *et al.* (2013), and Siddiqui *et al.* (2014), from by Karachi by Anonymous (1955) and Jenkins (1910), from Korangi Creek by RETA (2003), from Leth Nullah by Ahmad *et al.* (1984) and Niazi and Moazzam (1999), from Thandi Sarak and Native Jetty, Karachi by Ahmed and Wazarat (1993), from Balochistan by Day (1875, 1889), and Zugmayer (1913), and from Makran by Anonymous (1955) and Qureshi (1952). It was reported from Pakistan coast without mentioning any specific location by Ahmad (1988), Ahmed (1996), Ahmad and Niazi (1988), Bauchot and Smith (1984), Fanning *et al.*, (2016), Froese and Pauly (2025), GBIF (2025), Hoda (1985b, 1988), Hussain (2003), Jalil and Khaliluddin (1972, 1981), Kesteven (1950), Psomadakis *et al.* (2015), and Siddiqi (1956). It was originally described as *Sparus sarba* from Jeddah, Saudi Arabia, Red Sea by Forsskål (1775). Its holotype is not known; however, the lectotype (ZMUC P50553) is housed in the Zoological Museum, University of Copenhagen, Denmark (Frickle *et al*., 2025). Aitken (1907), Day (1875, 1889), Jenkins (1910), Kesteven (1950), Murray (1880), and Zugmayer (1913) reported this species as *Chrysophrys sarba*, whereas Anonymous (1955), Qureshi (1952), and Siddiqi (1956) referred it as *Sparus sarba* and Day (1889) listed it as *Chrysophrys aries.*

The body of this species is compressed. It has a large head, whereas the profile of the head is convex, which is most strongly arched from the snout to the dorsal fin origin. Its eyes are moderate, which become proportionately smaller in adults. The last molars of the 3rd outer row in the upper jaw are the largest. Its preopercular flange is naked. Its body colour is bright silvery with a golden center on each scale, forming golden lines on the body. Its pectoral and pelvic fins are dusky yellowish green, whereas the anal fin is yellow, which is hyaline towards the margin. The lower lobe of the caudal fin is yellowish, with a whitish lower edge.

This species is known from the Indo-Pacific. Area including the Red Sea, Oman to South Africa, Madagascar, Reunion Islands, whereas its distribution is extended to the Arabian Sea, Bay of Bengal, further to the Philippines, China, southern Japan, and northern Australia (Frickle *et al.* 2025; Parenti 2019).

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 7 October 2002 (26 cm TL).
- 1 specimen collected from Karachi Fish Harbour on 23 November 2009 (27 cm TL).
- 1 specimen collected from Karachi Fish Harbour on 26 June 2013 (18 cm TL).

Genus ***Sparidentex*** Munro, 1948
Sparidentex hasta (Valenciennes, 1830)
(Fig. 15)

This species is commonly known as Sobaity seabream. In Sindh Province, it is widely known as “Dhaathi”, whereas in Balochistan Province, it is called “Jaraz”. It was reported from Karachi Fish Harbour by Amir *et al.* (2013) and Siddiqui *et al.* (2014), from Balochistan by Zugmayer (1913). It was reported from the Pakistan coast without mentioning any specific location by Bauchot and Smith (1984), Bianchi (1985), Fanning *et al.*, (2016), Froese and Pauly (2025), Hoda (1985b, 1988), Hussain (2003), Khanum *et al.* (2013), and Psomadakis *et al.* (2015). It was originally described as *Dentex hasta* from Malabar, India, by Valenciennes (1830). Its holotype is not known; however, syntypes are housed in Muséum National d’Histoire Naturelle, Paris, France (Frickle *et al*., 2025). Zugmayer (1913) reported this species as *Chrysophrys hasta,* whereas Day (1875) referred to it as *Acanthopagrus cuvierii.*

The body of this species is elongate and compressed. Its head profile is generally straight from snout tip to dorsal-fin origin. Its mouth somewhat oblique, lips thick; snout somewhat pointed, two nostrils just in front of both eyes; upper jaw protruding slightly in front of lower jaw; maxilla reaching to bellow mid eye level (pupil or center of orbit); at front of each jaw, 4–6 enlarged, fang-like, conical teeth, outer series of lateral teeth conical and compressed with parallel rows of villiform teeth; least suborbital depth is much shorter than eye diameter, 6 (6–7) transvers rows of scales on cheek; anterodorsal profile ascending somewhat gently from mouth to eyes and above; profile of fish body is somewhat arched; Head and eyes moderately large; no scales on preopercular flange; its posterior margin weakly serrated; low scaly sheath on soft dorsal and anal-fin ray bases; dorsal-fin spines strong, first one is smaller (4.5–6.0% of SL), fourth one is longer (13–19% of SL); first anal-fin spine short (4–12% of SL);

2nd and 3rd anal-fin spine subequal (11–14% of SL); pectoral-fin long nearly equal to head length, pelvic-fin spine longer than snout length; caudal fin forked and both lobes are pointed.

The colour of its body is silvery grey, which is darker dorsally and paler to whitish ventrally. It sometimes has dark mottling on the sides, forming irregular bars. There are 7 or 8 scale rows on the cheeks forming thin radiating dusky lines.

Fig. 15. *Sparidentex hasta.* (a) Specimen collected from Karachi Fish Harbour (48 cm TL); (b) Large specimen caught on handline in Pitiani Creek (96 cm TL).

It is found in the Indian Ocean, including the Persian Gulf to Pakistan, India, and the Bay of Bengal (Frickle *et al.* 2025; Parenti 2019). It is a commercially important species that fetches high prices in Pakistan and some Persian Gulf countries like Kuwait. This species is being farmed in some Persian Gulf countries.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 16 April 2002 (48 cm TL).
- 1 specimen collected from Karachi Fish Harbour on 15 April 2013 (23 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 24 June 2014 (32 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 28 October 2014 (29 cm TL)

Sparidentex jamalensis Amir, Siddiqui, and Masroor, 2014
(Fig. 16)

This species is commonly known as the fanged seabream. In Sindh Province, it is widely known as “Kukri”, whereas in Balochistan Province, it is called “Jaraz”. This species was reported from Karachi Fish Harbour by Amir *et al.* (2014), and Siddiqui *et al.* (2014). It was also reported from the Pakistan coast without identifying any specific location by Frickle *et al*. (2025), Froese and Pauly (2025), Parenti (2019), and Psomadakis *et al*. (2015). This species was originally described from West Wharf Fish Harbour, Karachi, Pakistan (24°50'57.08" N, 66°58'38.27"E) by Amir *et al.* (2014). Its holotype (PMNH 52062) is housed in the Pakistan Museum of Natural History, Islamabad, Pakistan (Amir *et al.*, 2014; Frickle *et al*., 2025).

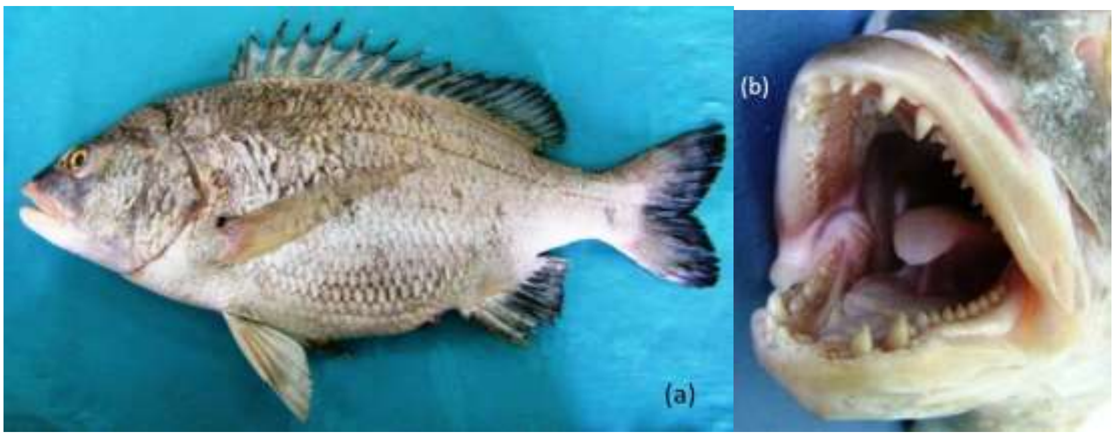

Fig. 16. *Sparidentex jamalensis.* (a) Adult; (b) mouth showing teeth.

The body of this species is broadly oval and compressed. Its head profile is generally straight from snout tip to dorsal-fin origin. There are 3½ scale rows between the fifth dorsal-fin spine base and lateral-line, whereas 3½ scale rows are also between the ninth dorsal-fin spine base to lateral-line. There are 4½ scale rows below the first dorsal spine to the lateral-line and 12½ scale rows below the lateral-line. There are 6 enlarged fang-like, slightly curved conical teeth at the anterior portion of both jaws. There are 2-3 rows of villiform teeth in the lower jaw and 3-4 rows on the upper jaw. The outermost teeth in the posterior portion, after the canine teeth, are distinctly conical and the largest from parallel rows of small villiform teeth. Its second anal-fin spine is distinctly stouter and longer than the third anal-fin spine. The colour of its head and body is silvery-black. There is a black, vivid spot at the beginning of the pectoral fin and a diffused black blotch at the beginning of pored lateral-line scales. Its pelvic, anal, and caudal fins are dusky greyish black.

Sparidentex belayewi (Misra in Hora and Misra 1943), which was originally described as *Petrus belayewi* from rivers and hors of Iraq, is known to have the highest body depth of 42 % in standard length and has 52 pored lateral-line Scales also has 5½ scale rows between the fifth dorsal-fin spine base and the lateral line. According to Iwatsuki and Heemstra (2022), there is a need for a taxonomic review of this genus as several morphs and colours are recognized. *Sparidentex jamalensis,* known from Pakistan, is reported to have 3–4 scale rows between the lateral line and base of the 5th dorsal-fin spine, compared to 5–5 in *S. hasta.* It may be added that *S. hasta* and *S. jamalensis* are commonly found in the creek system of the Indus Delta, in the lagoons and bays, and shallow waters along the coastline. Local fishermen in Sindh identify two species by distinct local names. In folk taxonomy, *S. hasta* is known as “Dhaathi,” whereas *S. jamalensis* is called “Kukri”. *S. hasta* is identified from the body shape, which is more elongated and compressed, as well as from the teeth in the jaws. It has at the front of each jaw, 4–6 enlarged, fang-like, conical teeth, an outer series of lateral teeth conical and compressed with parallel rows of villiform teeth. The body of *S. jamalensis* is broadly oval and compressed, and there are 6 enlarged fang-like, slightly curved conical teeth at the anterior portion of both jaws. There are 2-3 rows of villiform teeth in the lower jaw and 3-4 rows on the upper jaw. The outermost teeth in the posterior portion, after the canine teeth, are distinctly conical and the largest from parallel rows of small villiform teeth. *S. hasta* is a high-priced fish as it is not only consumed locally but also exported to Persian Gulf countries, mainly to Kuwait, whereas *S. jamalensis* is not exported and does not fetch high prices in local markets. From the general examination, it seems that *S. jamalensis* has close affinities with

Sparidentex belayewi, which is known from Iraq and Iran; however, no recent collection of this species has been made. Taxonomy of *S. jamalensis* will remain questionable till a details examination of these three species is made.

This species is known from the Western Indian Ocean, including Pakistan and the West coast of India (Frickle *et al.*, 2025; Shilta *et al*., 2021). It is highly probable to occur in the coastal waters of Iran, Oman, and the Persian Gulf.

Material Examined

- 1 specimen collected from Karachi Fish Harbour on 24 June 2010 (24 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 15 April 2013 (23 cm TL)
- 1 specimen collected from Karachi Fish Harbour on 12 July 2013 (21 cm TL).
-

CONCLUSIONS

Family Sparidae includes commercially important fish species that are caught in the estuarine, coastal as well as in offshore waters of Pakistan. The paper reports 21 species of the seabreams belonging to 8 genera. Of these, genus *Acanthopagrus* is represented by 5 species, genus *Diplodus* by 4 species, genera *Argyrops* and *Rhabdosargus* each by 3 species, genera *Crenidens* and *Sparidentex* each by 2 species, and genera *Cheimerius* and *Pagellus*, each by one species. Five species, namely *Acanthopagrus omanensis*, *A. randalli*, *Argyrops filamentosus*, *Boops lineatus*, and *Polysteganus coeruleopunctatus*, which are known from regional countries, may also occur in Pakistan. It is worth mentioning that seabreams are considered a commonly occurring food fish in Pakistan, which is harvested by commercial fishing as well as by sport fishermen. Members of the genera *Acathopagrus, Argyrops, Rhabdosargus* and *Sparidentex* are the most popular fish among sport fishermen.

Fig. 17. Landings of king soldierbream (*Argyrops spinifer*) in Pakistan

Genus *Argyrops* is represented by 3 species in Pakistan; however, two species, *A. spinifer* and *A. flavops* are of commercial importance and are landed in commercial quantities. Annual landings of king soldierbreams from Pakistan (Anonymous, 2012, updated) are presented in Fig. 17, which indicates that annual landings fluctuated between 1,780 m. tons in 2020 and about 3,736 m. tons during 2015 and 2016. Data on landings of king soldierbreams before 1983 is not separately available, as it was reported to be merged with miscellaneous seabreams. There were two peaks of landings of this species; the first between 1985 and 2001, and the second between 2009 and 2017 (Fig. 17). Major decreases in its landings were observed between 2003 and 2007 and between 2018 and 2022. It may, however, be pointed out that king soldierbream is a commercially important species that fetches high prices in local fish markets.

Analysis of Commercial Landings: Data on annual landings of king soldierbream from various fishing centres along the Balochistan coast are presented in Table I; however, such data for the coast of Sindh are not separately recorded. The data indicate that Gwadar is the main landing centre of Balochistan, followed by Gaddani and

Pushukan, where these fish are mainly landed by the gillnet fleet. Minimum landings were observed in Surbundar and Jiwani, where fisheries are of a small-scale nature, which do not operate in deeper waters along the coastline.

Table 1. Landings of king soldierbream from various fishing centres along the Balochistan coast.

LANDINGS OF KING SOLDIERBREAM ALONG THE BALOCHISTAN COAST (IN METRIC TONS)									
YEAR	**PASNI**	**PISHUKAN**	**DAMB**	**GWADAR**	**SURBANDER**	**ORMARA**	**JIWANI**	**GADDANI**	**TOTAL**
2019	48	185	165	653	29	1	46	245	1,373
2020	39	119	92	589	10	0	27	548	1,424
2021	114	621	80	890	33	43	51	15	1,847
2022	8	114	356	851	-	183	35	37	1,583
2023	7	190	280	487	-	-	35	560	1,560
2024	8	354	324	-	43	46	-	278	1,052

Source: Coastal Development and Fisheries Department, Government of Balochistan

Several other species of seabreams are also harvested commercially in Pakistan, dominating among these are species of the genera *Acanthopagrus*, *Diplodus*, *Crenidens*, *Rhabdosargus*, and *Sparidentex*. The landing data of these miscellaneous species are presented in Fig. 18, which indicates three peaks of landings (1971-1985; 1991-2007, and 2009-2024) in the past 53 years. It may be pointed out that before 1983, separate landing data of king soldierbream were not recorded; therefore, the data presented in Fig. 18 includes landings data of genus *Argyrops* in the period from 1971 to 1982. Highest landings of 3,663 m. tons were reported in 1979, whereas two peaks of high landings of 3,330 m. tons and 3030 m. tons were reported in 2021 and 2022, respectively. Lowest landings of miscellaneous seabreams of 159 m. tons were reported in 1989. The variations in the landings of king soldierbream and miscellaneous seabreams were attributed to interannual variability, diversion of the fishing fleet to other fisheries, and to the prevailing prices and demand in local and export markets.

Fig. 18. Landings of miscellaneous seabreams along the coast of Pakistan

Commercial Landings of Selected Genera: Almost all known species of seabreams occurring in Pakistan are considered to be of economic importance and exploited commercially. These species are usually consumed locally; however, *Argyrops spinifer*, *Rhabdosargus sarba* and *Sparidentex hasta* are exported to Persian Gulf countries.

Genus *Acanthopagrus*: All species of the genus *Acanthopagrus* are considered commercially important as this group of seabreams is prized for the excellent quality of their flesh. Species of *Acanthopagrus* are found in coastal waters, including mangrove areas, lagoons, bays, rocky shores, shipwrecks, and coral areas, as well as on sandy and muddy habitats. Some species are found in the nearshore continental shelf area, extending up to a maximum depth of 60 m. These species are targeted by both commercial and recreational fisheries. Landings data of various species of *Acanthopagrus* are not recorded; however, data of miscellaneous seabreams are reported in the fisheries statistical data of Pakistan. In 2024, it was estimated that commercial landings of miscellaneous seabreams from the Sindh coast were recorded to be 1,911 m. tons, which included predominantly species of the genus *Acanthopagrus*. Data for Balochistan on miscellaneous seabreams is not recorded.

Arabian yellowfin seabream (*Acanthopgarus arabicus*), although known to occur on the continental shelf up to a maximum depth of 50 m, however found in shallow coastal waters, including mangroves and other coastal habitats. Observed to be more abundant along the Balochistan coast (especially Miani Hor) and rare in the mangroves of the Indus Delta, where *Acanthopagrus berda* seems to be more abundant. Arabian yellowfin seabream is the most dominant seabream presently being landed at Karachi Fish Harbour, which is the largest fish landing center along the coast of Pakistan. Data of commercial catches collected during 2010 and 2025 revealed that Arabian yellowfin seabream contributes about 70 % of the total landings of seabreams (Fig. 19a). The major landings of this species in Karachi Fish Harbour originate from small-scale fisheries that operate in coastal waters using bottom-set gillnet (locally called “Thukri”) and coastal longline fisheries. It is also caught commonly with handlines in commercial and recreational fishing, as well as landed as bycatch of trawl and other gillnet fisheries, as well.

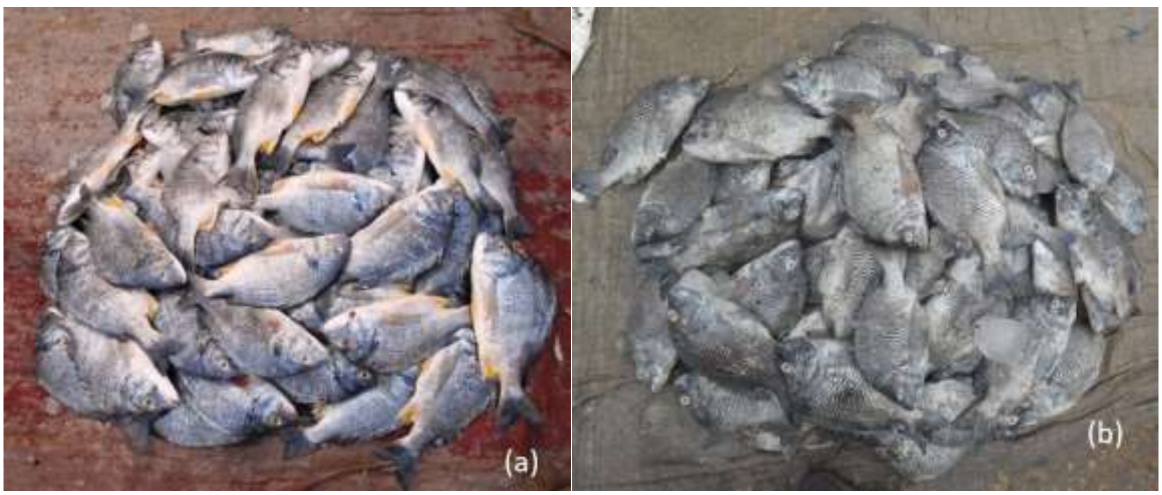

Fig. 19. Commercial landings at Karachi Fish Harbour. (a) Arabian yellowfin seabream (*Acanthopagrus arabicus*); (b) goldsilk seabream (*Acanthopagrus berda*).

Goldsilk seabream (*Acanthopagrus berda*) is another common species of this genus, landed in large quantities at the Karachi Fish Harbour (Fig. 19b). It was seen to be more abundant along the mangroves of the Indus Delta, where *Acanthopagrus latus* seems to be more common along the Balochistan coast. It is mainly caught using bottom-set gillnets and handlines in coastal waters, especially in the creeks along the Balochistan coast. It is also a plentiful species in rocky habitats and shipwrecks in shallow coastal waters. This species may also thrive in heavily polluted waters, as it is found in Karachi Fish Harbour and near the entrance of Korangi Creek (Do Darya), which are known to be polluted from untreated discharge from Karachi city. Data on commercial catches collected between 2010 and 2025 show that the Arabian yellowfin seabream makes up about 7% of the total seabream landings. Since its flesh is considered to be of excellent quality, therefore, it fetches high prices in local markets.

Two-bar seabream (*Acanthopagrus bifasciatus*) and bridle seabream (*A. catenula),* which have nearly identical coloration and general identification features, are also common seabreams landed in the Karachi Fish Harbour (Fig. 20a). These two species are marketed under their common names of “Kaptan” or “Dullah” and fetch high prices due to their excellent meat. Although these species are primarily caught by sport fishermen from rocky and coral areas using handlines, they are also caught with bottom-set gillnets from coastal waters, especially along rocky habitats. Data on commercial catches collected between 2010 and 2025 show that these two seabream species account for about 1% of the total seabream landings. Other species of the genus *Acanthopagrus* (*A. shiem*), are rarely represented in commercial landings.

Fig. 20. Commercial landings of at Karachi Fish Harbour. (a) Two-bar seabream (*Acanthopagrus bifacsiatus*); (b) king soldier seabream (*Argyrops spinifer*).

Genus *Argyrops*: There are three species of the genus *Argyrops* known from Pakistan (*A. caeruleops, A. flavops* and *A. spinifer*), all of which are of immense commercial importance (Fig. 20b). Due to the difficulties in identifying the the species of genus *Argyrops*. Two species (*A. flavops* and *A. spinifer*), which are generally referred to as "Dand" in the Province of Sindh and as "Sorro" in the Province of Balochistan, are considered important food fish in Pakistan, which is also exported to Persian Gulf countries. Bluesnout soldierbream (*A. caeruleops*) is of extremely rare occurrence and is seldom seen in the landing centers.

There used to be an important aimed fishery for handlining of king soldierbream around Astola Island, Pasni, and Koh-e-Batil in Gwadar, before 2000 (Moazzam, 2024a-b). This fishing was mainly undertaken during the southwest monsoon (May to September). Soldierbream used to be caught with handlines baited with shrimp mainly on the western and northern side of the Astola Island, Pasni, and lesser extent on the south of Koh-e-Batil, Gwadar. Large-sized soldierbreams (2.0 to 4.0 kg) used to be targeted. Each boat used to catch about 300 to 1,000 kg of soldierbreams during a fishing operation of about 8 to 12 hours. In these operations, about 200 boats used to be involved. This important fishery continued till the late 1990s; however, this fishery was almost stopped because of the depletion of stocks of king soldierbreams and the shifting of the fishing fleet to gillnetting for Indian mackerel (Moazzam, 2024b). Soldierbreams are now caught by gillnet fisheries of coastal areas as well as the continental shelf. Data on commercial catches collected between 2010 and 2025 from Karachi Fish Harbour show that these two seabream species account for about 8 % of the total seabream landings.

Fig. 21. Commercial landings of Santerr seabream (*Cheimerius nufar*) at Karachi Fish Harbour

Genus *Cheimerius*: Santer seabream (*C. nufar*), which is generally similar in shape to soldierbreams, is therefore generally marketed under the name of soldierbream in local fish landing centers (Fig. 21). The juveniles of Santar seabream have 6 darker vertical bars on the head and body, which is generally used to distinguish them from the soldierbream. Data on commercial catches collected between 2010 and 2025 show that Santar seabream is not of common occurrence, and its contribution is much less than 1 % of the total seabream landings.

Genus *Crenidens*: This genus is represented by two species karanteen seabream (*C. crenidens*) and Day's karanteen seabream (*C. indicus*); of these, the latter is more commonly caught in shallow coastal waters, mainly along sandy and sandy cum rock shores. These are mainly caught by fishing gears operated along sandy shore, such as beach seine net, cast net, bottom-set gillnet, as well as line gears. Although commonly caught in coastal waters, however, seldom landed in large quantities in Karachi Fish Harbour and other fish landing centers along the Pakistan coast. Data of fish landed at Karachi Fish Harbour monitored during 2010 and 2025 did not reveal substantial quantities of the two species. Their flesh is considered to be high quality; therefore, these are popular fish among sport fishermen.

Genus *Diplodus*: The seabreams belonging to genus *Diplodus* are generally known to have a black spot on the caudal peduncle, except *D. omanensis,* which is known to have black bars on the body. Generally, the members of this genus are found in shallow coastal waters along rocky and coral habitats. These species, therefore, are caught mainly by handline by sport fishermen. In addition, these species are also caught by bottom-set gillnets, which are operated in areas adjacent to rocky and coral habitats. Because of the good quality of their meat, these species are generally liked by fishermen and coastal communities; however, seldom landed in large quantities in the fish landing centers. One-spot seabream (*Diplodus kotschyi*) was observed to be the most dominant species of this genus caught by sport fishermen or landed in the fish harbours in Pakistan (Fig. 22a). Data of fish landed at Karachi Fish Harbour monitored during 2010 and 2025 did not reveal substantial quantities. *D. omanenis* is of extremely rare occurrence in Pakistan and known only from a few specimens.

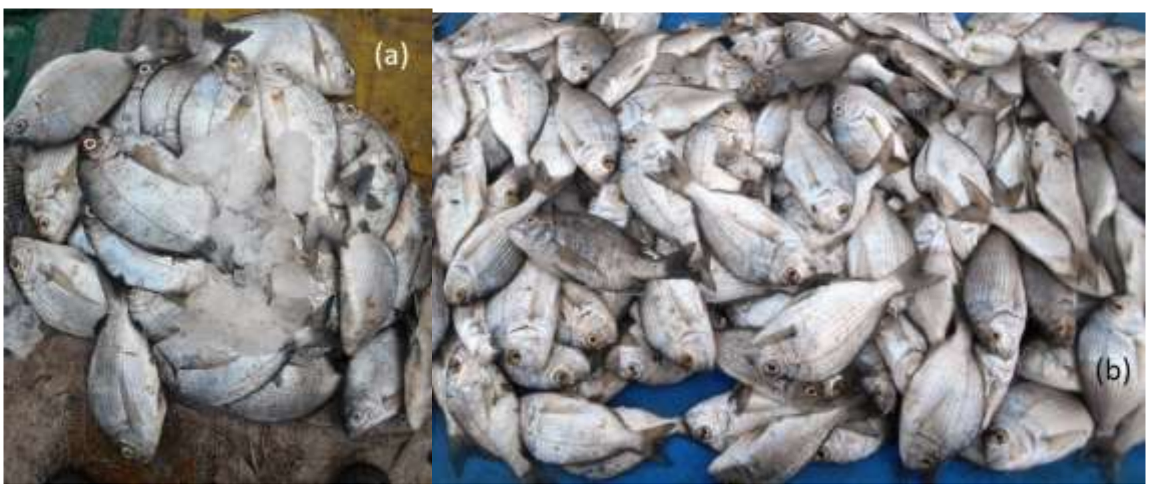

Fig. 22. Commercial landings at Karachi Fish Harbour. (a) One-spot seabream (*Diplodus kotschyi*); (b) Goldlined seabream (*Rhabdosargus sarba*)

Genus *Pagellus*: Only one species, Arabian Pandora (*P. affinis*), which is seldom caught by fishermen and usually not seen in Karachi Fish Harbour and other landing centers.

Genus *Rhabdosargus*: Characteristically, members of the genus *Rhabdosargus* are known for their stumpnose head and large molar-like teeth, and have good-quality meat; therefore, they are considered a good food fish that fetches high prices in the local market. Of the two species, haffara seabream (*R. haffara*),) and goldlined seabream *(R. sarba*), the latter seems to be more commonly caught by commercial fishermen. *R. sarba,* which is the most dominant member of this genus, is generally caught by bottom-set gillnets in coastal and offshore waters up to a depth of 60 m. It is also caught by commercial longline fisheries in coastal waters. Genus *Rhabdosargus* is also considered to be a popular fish among sport fishermen who operate in comparatively deeper waters along the Pakistan coast. Data of fish landed at Karachi Fish Harbour monitored during 2010 and 2025 indicates this genus to be the most dominant after Arabian yellowfin seabream (*Acanthopagrus arabicus*), contributing about 8 % in total landings of seabreams in Karachi Fish Harbour (Fig. 22b). Large specimens of this genus are exported to Persian Gulf countries.

Genus *Sparidentex*: This genus is represented by two species; the sobaity seabream (*S. hasta*) and fanged seabream (*S. jamalensis*), which are found in shallow coastal waters, bays, lagoons, and in the estuarine area of the Indus Delta. Sobaity seabream is considered to be the most popular and expensive seabream species found in Pakistan. It is not only relished in Pakistan but exported to Persian Gulf countries, mainly Kuwait, where it is used for celebratory meals. Both these species are caught mainly by handlines; however, sometimes it is also caught by bottom-set gillnets deployed in the mouth of creeks of the Indus Delta and the Miani Hor lagoon, as well as along shallow intertidal areas of the sandy shores along the coast of Pakistan. Although in terms of quantity, it is a comparatively rare fish and is seldom landed in appreciable quantities. Data of fish landed at Karachi Fish Harbour monitored during 2010 and 2025 indicates that this genus does not contribute substantially to total landings of seabreams; however, on some rare occasions, small heaps of both species can be seen in Karachi Fish Harbour at Ibrahim Haidri Fisheries Jetty (the largest landing center catering to the fisheries of the Indus Delta).

Fanged seabreams are also caught mainly by handlines, especially from the creeks of the Indus Delta, more commonly along the mangrove swamps. This species is comparatively rare in occurrence along the Balochistan coast. It is also caught in the bottom-set gillnets (“Thukri”) that are placed in the creek system of the Indus Delta, mainly near the mangrove areas. It is seldom landed in appreciable quantities in the landing centers except on rare occasions (Fig. 23). Although its meat is considered to be good quality, however, as compared to Sobaity seabream it does not fetch high prices. It is mainly consumed locally, as it is not exported from Pakistan.

Fig. 23. Commercial landings of fanged seabream (*Sparidentex jamalensis*) at Karachi Fish Harbour

Stock Status and Management Advice: Seabreams are some of the most desirable commercial fish, which are large and have excellent flesh. Some species like king soldierbream (*Argyrops spinifer*), Sobaity seabream (*Sparidentex hasta*), picnic seabream (*Acanthopagrus berda*), and Arabian yellowfin seabream (*Acanthopagrus arabicus*) are the more valuable species. Analysis of the commercial landings (Fig. 17-18) demonstrates that there is a long, persistent decline in landings since the late 1980s, with a couple of exceptional years; however, the long-term growth in fishing effort has resulted in an 80% decline in catch rate over the same period (Fanning *et al*., 2016). They observed that the biomass estimates for the seabream from the last resource surveys (2009-2015) conducted by the Government of Pakistan and FAO are less than 10% of the earlier period. If bias correction is not used, the recent stock is 5% of the earlier period.

Fanning *et al*. (2016) have given a Kobe plot which shows that seabreams have been overfished since the mid-1980s and below the biomass depletion target since 1990. They have used the landings data before 2015, which indicates that the trend of depletion has continued to worsen. The condition must have worsened in the last ten years (2015-2024). Production model projections presented by Fanning *et al*. (2016) indicate that the exploitation level in 2015 is much higher than the target level and would be expected to lead to continued decline in stock biomass and landings. It may be worth noting that fish stocks must have deteriorated in last ten years since the publications of Fanning *et al*. (2016). While residual patterns indicate projections may not be reliable, the heavy depletion estimated in the production model is fully consistent with the declines reported from the resource surveys (2009-2015). This indicates that there is strong evidence that the seabreams are severely over-fished, that over-fishing is continuing, and increasing likelihood of stock collapse, biomass falling below 2% of unexploited size, in the near future.

Seabream are large and relatively slow-growing species, so although catches are not large, the lower productivity of the group (growth and recruitment) makes it more vulnerable than many other fish species occurring in Pakistan. Fanning *et al*. (2016) recommended effort reduction for any chance of rebuilding any of the resources of the fisheries; however, extra measures are likely required to rebuild seabream stocks. These may include species-specific size limits or time and area closures.

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