

## An annotated checklist of the fishes of the family Sparidae

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### Abstract

A checklist of the sparid fishes of the world is presented. The checklist contains 166 valid species, 260 synonyms, including 26 that are here recognized as new, and 19 unplaced nominal species. Seven nominal species recorded as sparid in the Eschmeyer's Catalog of Fishes are here recognized to belong to different families and among them three nominal species predate well established fish names and are here declared nomina obliterata. A list of unavailable names is also included.

**Keywords:** New synonyms, *Nomina obliterata*.

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### Introduction

Sparidae are marine fishes, rarely found in brackish or freshwater, present in the Atlantic, Indian and Pacific oceans at tropical and temperate latitudes, rarely in cooler waters. Interestingly, more than one third of the species lives along South Africa coast, including many endemic species. They are benthopelagic on the shelf to 250 m, but more abundant in fairly shallow waters in small aggregation or school around coral reefs, on rubble, sand or seagrass beds. Aggregation occurs for small species or young individuals where adults are solitary. Diagnosis includes the following morphological traits: deep-bodied, slab-sided fishes, in general appearance similar to Haemulidae, from which they differ for the absence of scales in the suborbital space, preopercular margin not serrated and absence of pores on the chin. The cheek is scaly and the margin of the preopercle is smooth, two features that allow to distinguish sparids from the similar Lethrinidae (cheek scaleless) and Lutjanidae (preopercle margin denticulated). The mouth is small, horizontal or oblique, upper jaw slightly to very protrusible (in *Centracanthus* and *Spicara*); no supramaxilla; upper jaw never extending backward beyond a vertical line through middle of eye; maxilla covered by a sheath when mouth is closed; the anterior jaw teeth are canines, incisors or molars, but laterally there are always molariform teeth. Dentition represents one of the most useful characters to defining species. Dorsal fin X-XII, 10-15 unnotched or slightly notched; anal fin III, 8-14; pectoral fins usually long and pointed; pelvic fins with 1 spine, five soft rays, and axillary scale at their base; caudal fin generally forked. The lateral line is well-developed and continuous, extending to the base of the caudal fin. Dimension varies from 20 cm to a maximal length of 1.2 m.

Many species are hermaphroditic although hermaphroditism is never simultaneous and at the sexual maturity, the majority of individuals are males (protandric hermaphroditism) or females (protogynic hermaphroditism). The sparid fishes are omnivorous, feeding on invertebrates and seaweeds. Sparids are important food fishes and fisheries have been very intensive in several areas causing a drop in the catches.

Based on the phylogenetic analysis of Orrell et al. (2002) the family Sparidae Rafinesque 1818 (Van der Laan et al. 2014) is monophyletic only with the inclusion of *Spicara*, once included in the family Centracanthidae. The family Centracanthidae is presently regarded as a junior synonym of Sparidae. Also, species composition of the presently recognized valid genera is subject to some fluctuation due to advanced molecular studies, revealing that some genera (i.e., *Spicara* and *Pagellus*) are polyphyletic.

According to Nelson et al. (2016:506), the family Sparidae contains 148 species in 37 genera arranged in six subfamilies. Eschmeyer's Catalog of Fishes (Fricke et al. 2019), a large database on fish taxonomy, contains 445 records of sparid fishes, including 166 currently recognized valid species, 201 regarded as synonyms, and

**Table 1.** Genera in the Sparidae.

| Subfamily       | Genus                 | n. of species |
|-----------------|-----------------------|---------------|
| Boopsinae       | <i>Boops</i>          | 2             |
|                 | <i>Crenidens</i>      | 3             |
|                 | <i>Gymnocrataphus</i> | 1             |
|                 | <i>Lagodon</i>        | 1             |
|                 | <i>Oblada</i>         | 1             |
|                 | <i>Pachymetopon</i>   | 3             |
|                 | <i>Polyamblyodon</i>  | 2             |
|                 | <i>Sarpa</i>          | 1             |
|                 | <i>Spicara</i>        | 9             |
|                 | <i>Spondyliosoma</i>  | 2             |
| Denticinae      | <i>Amamiichthys</i>   | 1             |
|                 | <i>Argyrozonata</i>   | 1             |
|                 | <i>Cheimerius</i>     | 1             |
|                 | <i>Dentex</i>         | 14            |
|                 | <i>Petrus</i>         | 1             |
|                 | <i>Polysteganus</i>   | 8             |
|                 | <i>Virididentex</i>   | 1             |
|                 |                       |               |
| Pagellinae      | <i>Boopsoidea</i>     | 1             |
|                 | <i>Lithognathus</i>   | 4             |
|                 | <i>Pagellus</i>       | 6             |
|                 | <i>Stenotomus</i>     | 2             |
| Sparinae        | <i>Acanthopagrus</i>  | 21            |
|                 | <i>Archosargus</i>    | 4             |
|                 | <i>Argyrops</i>       | 7             |
|                 | <i>Calamus</i>        | 13            |
|                 | <i>Chrysoblephus</i>  | 6             |
|                 | <i>Chrysophrys</i>    | 1             |
|                 | <i>Cymatoceps</i>     | 1             |
|                 | <i>Diplodus</i>       | 23            |
|                 | <i>Evynnis</i>        | 4             |
|                 | <i>Pagrus</i>         | 5             |
|                 | <i>Parargyrops</i>    | 1             |
|                 | <i>Porcostoma</i>     | 1             |
|                 | <i>Pterogymnus</i>    | 1             |
|                 | <i>Rhabdosargus</i>   | 6             |
|                 | <i>Sparidentex</i>    | 4             |
|                 | <i>Sparodon</i>       | 1             |
|                 | <i>Sparus</i>         | 1             |
|                 |                       |               |
| Centracanthinae | <i>Centracanthus</i>  | 1             |

78 nominal species with no status. These latter names could represent valid species, senior or junior synonyms or species not belonging to Sparidae. The aim of this checklist is to present in a comprehensive manner the status of all nominal species presently allocated to the family Sparidae.

## Material and Methods

The status of unplaced nominal species have been determined by examining the original description of the species. Species and genera are listed alphabetically with the published source, their synonyms, distribution, and specific comments. Genera are arranged in the subfamilies as reported in the Table 1.

## Results

Main results can be summarized as follows. The family Sparidae includes 426 available names representing 166 valid species in 39 genera and 260 synonyms. Fifty-nine nominal species that are unplaced in the Eschmeyer's Catalog of Fishes are placed into synonymy and in this assemblage, there are 33 new synonyms, of which 26 are junior synonyms of sparid fishes, whereas seven are recognized not to belong to the Sparidae and are listed separately at the end of the checklist. Among the non-sparid fishes, three nominal species represent senior synonyms of well-established species and need to be invalidated applying the reversal of precedence as allowed by the Code of the Zoological Nomenclature (ICZN 1999).

### Family Sparidae Rafinesque 1818

(Porgies; sea breams)

Sparidae Rafinesque 1818:417, Journal of the Academy of Natural Sciences, Philadelphia, v. 1 (pt 2).

Des Menides Cuvier 1829:186, Le Règne Animal, distribué d'après son organisation, pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée. Edition 2, v. 2 (latinized to Maenidae by Bonaparte 1831:105, Saggio di una distribuzione metodica degli animali vertebrati) Cantharini Bonaparte 1831: 105, Saggio di una distribuzione metodica degli animali vertebrati. [invalid, ICZN Article 39]

### Subfamily Boopsinae Fowler 1936

Obladini Bonaparte 1831: 105, Saggio di una distribuzione metodica degli animali vertebrati.

Bogini Smitt 1892:53, A History of Scandinavian Fishes, v. 1.

Boopsinae Fowler 1936:812, Bulletin of the American Museum of Natural History, v. 70.

Spondylosominae Fowler 1958:16, Notulae Naturae (Philadelphia) No. 310. [correct family-group name is Spondyliosomatinae]

Teeth in the outermost row incisor-like. They are typically herbivorous, feeding sometimes on small invertebrates; 25 species.

### Genus *Boops* Cuvier

*Boops* Cuvier 1814:91, Bulletin des Sciences, par la Société Philomathique de Paris (Sér. 3), v. 1. Masculine. (Type species *Sparus boops* Linnaeus 1758 by absolute tautonomy).

*Box* Valenciennes in Cuvier & Valenciennes 1830:346, Histoire naturelle des poissons, v. 6. Masculine. (Type species *Sparus boops* Linnaeus 1758 by subsequent designation of Jordan and Fesler 1893:529, United States Commission of Fish and Fisheries, Report of the Commissioner, v. 17).

*Exocallus* de la Pylaie 1835:532, Congrès Scientifique de France, v. 2 (art. 5). Masculine. (Type species *Exocallus insignis* de la Pylaie 1835 by being a replacement name).

Eastern Atlantic, Mediterranean, and western Indian Ocean, living in shoals in rocky coast or sea-grass often in mid-waters; two species.

### *Boops boops* (Linnaeus 1758)

*Sparus boops* Linnaeus 1758:280, Systema Naturae, Ed. X, v. 1 (type locality, Mediterranean Sea).

*Sparus minutus* Rafinesque 1810:49, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy, Mediterranean Sea).

*Boops vulgaris* Risso 1827:350, Histoire naturelle des principales productions de l'Europe méridionale, v. 3 (type locality, Based on *Sparus boops* Linnaeus 1758).

*Box vulgaris* Valenciennes in Cuvier & Valenciennes 1830:348, pl. 161, Histoire naturelle des poissons, v.

6 (type locality, Toulon, Nice, Naples, Genes, Sicily; Corsica and France, western Mediterranean Sea; Ibiza, , Balearic Islands, Mediterranean Sea; Biserte Lake, Midi, Tenerife, Madeira).

*Exocallus insignis* De la Pylaie 1835:532, Congrès Scientifique de France, v. 2 (art. 5) (based on *Boops vulgaris* of Cuvier).

*Boops canariensis* Valenciennes in Webb & Berthelot 1839:[36], pl. 10 (fig. 1), Ichthyologie des îles Canaries, v. 2 (pt 2) (type locality, St. Croix de Tenerife, Canary Islands).

*Cynaedus gracilis* Gronow in Gray 1854:57, Catalogue of fish collected and described by Laurence Theodore Gronow (type locality, Mediterranean Sea).

**Distribution:** Eastern Atlantic from Norway to Angola, including oceanic islands, and Mediterranean and Black seas.

#### ***Boops lineatus* (Boulenger 1892)**

*Box lineatus* Boulenger 1892:134, Proceedings of the Zoological Society of London 1892 (pt 1) (type locality, Muscat, Oman, Gulf of Oman, Arabian Sea).

**Distribution:** Gulf of Oman to Yemen.

#### **Genus *Crenidens* Valenciennes**

*Crenidens* Valenciennes in Cuvier & Valenciennes 1830:377, Histoire naturelle des poissons, v. 6. Masculine.

(Type species *Crenidens forskalii* Valenciennes 1830 (= *Sparus crenidens* Forsskål 1775) by monotypy)

Western Indian Ocean in shoals; three species.

#### ***Crenidens crenidens* (Forsskål 1775)**

*Sparus crenidens* Forsskål 1775:xv, Descriptiones animalium (Forsskål) (type locality, Jeddah, Saudi Arabia, Red Sea; Egypt, Gulf of Suez, Red Sea).

*Crenidens forskalii* Valenciennes in Cuvier & Valenciennes 1830:378, pl. 162 quater, Histoire naturelle des poissons, v. 6 (type locality, Jeddah, Saudi Arabia, Red Sea; Suez, Egypt, Gulf of Suez, Red Sea; Massawa, Eritrea, Red Sea).

**Distribution:** Red Sea to Durban and Mediterranean Sea as Red Sea immigrant.

#### ***Crenidens indicus* Day 1873**

*Crenidens indicus* Day 1873:CLXXXVI, Sea-fishes of India and Burma. (Type locality, Northern Indian Ocean).

**Distribution:** from Nicobar Islands and coast of India to Persian Gulf.

#### ***Crenidens macracanthus* Günther 1874**

*Crenidens macracanthus* Günther 1874:368, Annals and Magazine of Natural History (Series 4), v. 14 (no. 83) (art. 47) [type locality, Chennai, Bay of Bengal, India (Original locality: Madras, India)].

**Distribution:** India.

#### **Genus *Gymnocrataphus* Günther**

*Gymnocrataphus* Günther 1859:413, 432, Catalogue of the fishes in the British Museum, v. 1. Masculine.

(Type species *Gymnocrataphus curvidens* Günther 1859 by monotypy).

South Africa in shallow water; monotypic.

***Gymnocrapthus curvidens*** Günther 1859

*Gymnocrapthus curvidens* Günther 1859:432, Catalogue of the fishes in the British Museum, v. 1 (type locality, Cape of Good Hope, South Africa).

**Distribution:** Cape of Good Hope to Durban.

**Genus Lagodon** Holbrook

*Lagodon* Holbrook 1855:56, Ichthyology of South Carolina. Masculine. (Type species *Sparus rhomboides* Linnaeus 1766 by monotypy).

*Sphenosargus* Fowler 1940:1, Notulae Naturae (Philadelphia) No. 49. Masculine. (Type species *Salema atkinsoni* Fowler 1940 by original designation).

Western Atlantic in shallow marine, grassy flats entering brackish and even fresh waters; monotypic.

***Lagodon rhomboides*** (Linnaeus 1766)

*Sparus rhomboides* Linnaeus 1766:470 Systema naturae sive regna tria naturae, v. 1 (pt 1) (type locality, America, Carolina, U.S.A. and Jamaica).

*Salema atkinsoni* Fowler 1940:2, Figs. 1-4, Notulae Naturae (Philadelphia), No. 49 (type locality, Brought by off-shore trawlers into Cape May, New Jersey, U.S.A.).

*Lagodon mercatoris* Delsman 1941:70, Fig. 9, Mémoires du Musée royal d'histoire naturelle de Belgique (Ser. 2), No. 21 (type locality, 15-20 miles off Dry Tortugas, Florida, U.S.A.).

**Distribution:** Cape Cod to Yucatan.

**Genus Oblada** Cuvier

*Oblada* Cuvier 1829:185, Le Règne Animal (Edition 2), v. 2. Feminine. (Type species *Sparus melanurus* Linnaeus 1758 by monotypy).

*Oblata* Valenciennes in Cuvier & Valenciennes 1830:366, Histoire naturelle des poissons, v. 6.

Eastern Atlantic in coastal and open water, near rocky bottoms; monotypic.

***Oblada melanura*** (Linnaeus 1758)

*Sparus melanurus* Linnaeus 1758:278, Systema Naturae, Ed. X, v. 1 (type locality, Mediterranean Sea).

*Sparus oblada* Lacepède 1802:27 *nomen novum* for *Sparus melanurus* Linnaeus 1758.

*Sparus ophthalmicus* Rafinesque 1810:48, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy).

**Distribution:** Mediterranean and Black Sea; eastern Atlantic from Portugal to Angola, including Canary Islands, Cape Verde Islands, and Madeira.

**Comments:** *Sparus oblada* Lacepède 1802 and *Sparus ophthalmicus* Rafinesque 1810 are new synonyms.

**Genus Pachymetopon** Günther

*Pachymetopon* Günther 1859:413, 424, Catalogue of the fishes in the British Museum, v. 1. Neuter. (Type species *Pachymetopon grande* Günther 1859 by monotypy).

*Pagrlichthys* Bleeker 1859:60, Natuurkundig Tijdschrift voor Nederlandsch Indië, v. 21. Masculine. (Type species *Pagrlichthys castelnauii* Bleeker 1859 by monotypy).

*Simocantharus* Fowler 1933:182, 185, Bulletin of the United States National Museum No. 100, v. 12. Masculine. (Type species *Cantharus aeneus* Gilchrist & Thompson 1908 by original designation).

Namibia to South Africa in shallow waters over rocky bottoms; three species.

***Pachymetopon aeneum*** (Gilchrist & Thompson 1908)

*Cantharus aeneus* Gilchrist & Thompson 1908:166, Annals of the South African Museum, v. 6 (pt 2) (type locality, KwaZulu-Natal, South Africa).

*Cantharus natalensis* Gilchrist & Thompson 1908:168, Annals of the South African Museum, v. 6 (pt 2) (type locality, KwaZulu-Natal, South Africa).

*Cantharus simus* Gilchrist & Thompson 1909:231, Annals of the South African Museum, v. 6 (pt 3, no. 5) (type locality, Fish market, Durban, KwaZulu-Natal, South Africa).

**Distribution:** Cape of Good Hope to Sodwana Bay.

***Pachymetopon blochii*** (Valenciennes 1830)

*Cantharus blochii* Valenciennes in Cuvier & Valenciennes 1830:339, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

*Cantharus castelnauui* Bleeker 1859:59, Natuurkundig Tijdschrift voor Nederlandsch Indië, v. 21 (type locality, Cape of Good Hope, South Africa).

*Pagrichthys castelnauui* Bleeker 1859:61, Natuurkundig Tijdschrift voor Nederlandsch Indië, v. 21 (type locality, Cape of Good Hope, South Africa).

*Pachymetopon canescens* Norman 1935:14, Pl. 2, Annals of the South African Museum, v. 32 (pt 1, no. 2) (type locality, Believed to be False Bay, South Africa).

**Distribution:** Namibia to Cape Agulhas, South Africa.

***Pachymetopon grande*** Günther 1859

*Pachymetopon grande* Günther 1859:424, Catalogue of the fishes in the British Museum, v. 1 (type locality, Cape of Good Hope, South Africa).

*Pachymetopon guentheri* Steindachner 1869:126, Anzeiger der Kaiserlichen Akademie der Wissenschaften, Wien, Mathematisch-Naturwissenschaftliche Classe, v. 6 (no. 16).

*Pachymetopon glaucum* Norman 1935:20, Fig. 6, Annals of the South African Museum, v. 32 (pt 1, no. 2) (type locality, East London, South Africa).

**Distribution:** Cape of Good Hope to Madagascar.

**Genus *Polyamblyodon*** Norman

*Polyamblyodon* Norman 1935:21, Annals of the South African Museum, v. 32 (pt 1, no. 2). Masculine. (Type species *Pachymetopon germanum* Barnard 1934 by original designation).

South Africa and southwestern Indian Ocean; two species.

***Polyamblyodon germanus*** (Barnard 1934)

*Pachymetopon germanum* Barnard 1934:230, Fig. 2, Annals and Magazine of Natural History (Series 10), v. 13 (no. 74) (art. 16) (type locality, Durban, KwaZulu-Natal, South Africa).

**Distribution:** East London to Delagoa Bay.

***Polyamblyodon gibbosus*** (Pellegrin 1914)

*Pachymetopon gibbosus* Pellegrin 1914:264, Bulletin de la Société Zoologique de France, v. 39 (type locality, Fort Dauphin, Madagascar).

*Polyamblyodon (Leptometopon) cristiceps* Smith 1940:178, Figs. 1–2, Transactions of the Royal Society of South Africa, v. 28 (pt 2) (type locality, Delagoa Bay, Mozambique).

**Distribution:** Natal to Beira and Madagascar.

### **Genus *Sarpa* Bonaparte**

*Sarpa* Bonaparte 1831:171, Saggio di una distribuzione metodica degli animali vertebrati. Feminine. (Type species *Sparus salpa* Linnaeus 1758).

*Eusalpa* Fowler 1925:4, American Museum Novitates No. 162 Feminine. (Type species *Sparus salpa* Linnaeus 1758 by original designation).

*Labeo* Bowdich 1825:xii, 122, Fishes of Madeira. Masculine. (Type species *Labeo sparoides* Bowdich 1825 by monotypy). Objectively invalid; preoccupied by *Labeo* Cuvier 1816 in fishes.

*Labeova* Whitley 1950:44, Proceedings of the Royal Zoological Society of New South Wales, v. for 1948–49. Feminine. (Type species *Labeo sparoides* Bowdich 1825 by being a replacement name). Replacement for *Labeo* Bowdich 1825, preoccupied by *Labeo* Cuvier 1816 in fishes.

Eastern Atlantic over rocky and sandy bottoms covered with seagrass; monotypic.

**Comments:** *Labeova* Whitley 1950 is a new synonym.

### ***Sarpa salpa* (Linnaeus 1758)**

*Sparus salpa* Linnaeus 1758:280, Systema Naturae, Ed. X, v. 1 (type locality, Mediterranean Sea).

*Sparus savla* Osbeck 1770:100, Nova Acta Physico-Medica Academiae Caesareae Leopoldina-Carolinae Naturae Curiosorum, v. 4 (type locality, Spain).

?*Sparus strongilus* Forsskål 1775: xv, Descriptiones animalium (Forsskål) [type localities, Izmir, Turkey, Aegean Sea (Mediterranean Sea); Istanbul, Turkey, Sea of Marmara (Mediterranean Sea)]. Spelled *strongylus* in Bloch & Schneider 1801:285.

*Labeo sparoides* Bowdich 1825:122, Fig. 29, Fishes of Madeira (type locality, Madeira).

*Box goreensis* Valenciennes in Cuvier & Valenciennes 1830:364, Histoire naturelle des poissons, v. 6 (type locality, Gorée, Sénégal).

*Box salpoides* Valenciennes in Cuvier & Valenciennes 1830:365, Histoire naturelle des poissons, v. 6 (type locality, Indian Seas).

*Cynaedus onias* Gronow in Gray 1854:55, Catalogue of fish collected and described by Laurence Theodore Gronow (type locality, Mediterranean Sea).

**Distribution:** Mediterranean, eastern Atlantic from Bay of Biscay to Sierra Leone, including Madeira, Canary and Cape Verde Islands and southward to South Africa, including Natal.

**Comments:** taxonomic decision of Bauchot and Daget (1972:36); The two syntypes of *Box salpoides* located at the Muséum de Histoire Naturelle at Paris have been identified as specimens of *Sarpa salpa*; the type locality indicated by Valenciennes is probably erroneous (Bauchot & Daget 1972:36). *Sparus savla* Osbeck 1770 and *Labeo sparoides* Bowdich 1825 are new synonyms (Parenti, 2019). *Sparus strongilus* Forsskal 1775 is a probable synonym.

### **Genus *Spicara* Rafinesque**

*Spicara* Rafinesque 1810:51, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia. Neuter. (Type species *Spicara flexuosa* Rafinesque 1810 by monotypy).

*Merolespis* Rafinesque 1810:25, Indice d'ittiologia siciliana. Feminine. (Type species *Sparus massiliensis* Lacepède 1802 by monotypy).

*Maena* Cuvier 1829:186, Le Règne Animal (Edition 2), v. 2. Feminine. (Type species *Sparus maena* Linnaeus 1758 by absolute tautonymy).

*Mena* Swainson 1839:170, The natural history and classification, v. 2 (misspelling or emendation).

*Maenas* Bleeker (ex Klein) 1875:273, Archives néerlandaises des sciences exactes et naturelles, v. 11. Feminine. (Type species *Sparus maena* Linnaeus 1758 by original designation).

*Pterosmaris* Fowler 1925:4, American Museum Novitates No. 162. Feminine. (Type species *Smaris melanurus* Valenciennes 1830 by original designation).

*Marsis* Barnard 1927:682, Annals of the South African Museum v. 21 (pt 2). Masculine. (Type species *Sparus smaris* Linnaeus 1758 by being a replacement name).

*Coleosmaris* Norman 1931:359, Annals and Magazine of Natural History (Series 10), v. 7 (no. 40). Feminine. (Type species *Coleosmaris nigricauda* Norman 1931 by original designation).

Mediterranean and eastern Atlantic southward to Natal, South Africa and one species in western tropical Atlantic; nine species.

#### ***Spicara alta* (Osório 1917)**

*Smaris altus* Osório 1917:125, Pl. 7, Arquivo da Universidade de Lisboa, v. 4 (type locality, Coast of Morocco, eastern Atlantic).

*Smaris macrophthalmus* Cadenat 1937:471, Figs. 23–23bis, Revue des Travaux de l'Institut des Pêches Maritimes, v. 10 (fasc. 4, no. 40) (type locality, West Africa).

**Distribution:** eastern Atlantic.

#### ***Spicara australis* (Regan 1921)**

*Smaris australis* Regan 1921:416, Annals and Magazine of Natural History (Series 9), v. 7 (no. 41) (type locality, 15-20 miles off Umvoti River, KwaZulu-Natal, South Africa).

**Distribution:** off Natal, South Africa.

#### ***Spicara axillaris* (Boulenger 1900)**

*Caesio axillaris* Boulenger 1900:10, Pl. 1, Marine Investigations in South Africa No. 8 (type locality, Buffalo Bay, in False Bay, South Africa).

*Caesio algoae* Smith 1935:195, Records of the Albany Museum Grahamstown, v. 4 (type locality, Off Algoa Bay, South Africa).

**Distribution:** Cape Town to Natal, South Africa.

#### ***Spicara flexuosa* Rafinesque 1810**

*Spicara flexuosa* Rafinesque 1810:51, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily).

*Sciaena gymnodon* Pallas 1814:252, Zoographia Rosso-Asiatica, v. 3 (type locality, Shores of the Crimea, Ukraine (Black Sea)).

*Smaris chryselis* Valenciennes in Cuvier & Valenciennes 1830:419, Pl. 165, Histoire naturelle des poissons, v. 6 (type locality, Naples, Italy; Nice, Corsica, France; Sicily, Italy; Malaga, Spain, western Mediterranean Sea).

**Comments:** previously regarded as a synonym of *S. maena* (Linnaeus) but a valid subspecies (Tortonese et al. 1973:418), *Spicara flexuosa* Rafinesque is a valid species according to Vasil'eva and Salekhova (1983), Lythgoe and Lythgoe (1992), Whitehead et al. (1986), Batjakas and Economakis (1995), and Debelius (1977); synonym of *S. maena* according to Daget et al. (1986).

**Distribution:** Mediterranean Sea, Black Sea, and Atlantic coast of Portugal.

***Spicara maena* (Linnaeus 1758)**

*Sparus maena* Linnaeus 1758:278, *Systema Naturae*, Ed. X, v. 1 (type locality, Mediterranean Sea).

*Sparus lineatus* Osbeck 1770:100, *Nova Acta Physico-Medica Academiae Caesareae Leopoldina-Carolinae Naturae Curiosorum*, v. 4 (type locality, Spain).

*Sparus zebra* Brünnich 1768:47, *Ichthyologia Massiliensis, sistens piscium descriptiones eorumque apud incolas nomina* (type locality, Marseille, France).

*Sparus mendola* Lacépède 1802:27, 85, *Histoire naturelle des poissons* (Lacépède), v. 4 (type locality, Mediterranean Sea).

*Sparus massiliensis* Lacépède 1802:33, 108, *Histoire naturelle des poissons* (Lacépède), v. 4 (type locality, Mediterranean Sea); *nomen novum* for *Sparus zebra* Brünnich.

*Sparus osbeck* Lacépède 1802:33, 108, *Histoire naturelle des poissons* (Lacépède), v. 4 (type locality, Mediterranean Sea).

*Sparus tricuspidatus* Spinola 1807:367, Pl. 28 (figs 1a-b), *Annales du Muséum d'Histoire Naturelle*, Paris, v. 10 (type locality, Gulf of Genoa, Italy, Mediterranean Sea).

*Labrus ciavolus* Rafinesque 1810:40, *Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia* (type locality, Sicily, Italy, Mediterranean Sea).

*Smaris gora* Risso 1827:347, *Histoire naturelle des principales productions de l'Europe méridionale*, v. 3 (type locality, Nice, France).

*Maena juscolum* Cuvier 1829:186, *Le Règne Animal* (Edition 2), v. 2 (type locality, Mediterranean Sea).

*Smaris cagarella* Cuvier 1829:187, *Le Règne Animal* (Edition 2), v. 2 (type locality, Mediterranean Sea).

*Maena osbeckii* Valenciennes in Cuvier & Valenciennes 1830:397, *Histoire naturelle des poissons*, v. 6 (type locality, Provence, Nice, Naples, Sicily; Corsica and France).

*Maena vulgaris* Valenciennes in Cuvier & Valenciennes 1830:390, *Histoire naturelle des poissons*, v. 6 (type locality, Toulon, France; Naples, Italy; Iviça] Ibiza, Balearic Islands, Mediterranean Sea).

*Maena vomerina* Valenciennes in Cuvier & Valenciennes 1830:400, Pl. 164, *Histoire naturelle des poissons*, v. 6 (type locality, Marseille, France, western Mediterranean Sea.; Malta, Mediterranean Sea).

*Smaris gagarella* Valenciennes in Cuvier & Valenciennes 1830:420, *Histoire naturelle des poissons*, v. 6 (type locality, Marseille, France, western Mediterranean Sea).

*Moena saura* Sarato 1889:2-3, *Moniteur des Étrangers à Nice* (type locality, Nice, France).

**Distribution:** Mediterranean Sea, Black Sea, and eastern Atlantic from Portugal to Mauritania.

**Comments:** *Labrus ciavolus* Rafinesque is a new synonym of *Maena osbeckii* Valenciennes following the opinion of Cocco (*Indice Ittiologico* 1884-86) and Döderlein (1891). *Sparus lineatus* Osbeck is a possible synonym according to Günther (1859:387).

***Spicara martinicus* (Valenciennes 1830)**

*Smaris martinicus* Valenciennes in Cuvier & Valenciennes 1830:424, *Histoire naturelle des poissons*, v. 6 (type locality, Martinique Island, West Indies).

**Distribution:** West Indies.

***Spicara melanura* (Valenciennes 1830)**

*Smaris melanurus* Valenciennes in Cuvier & Valenciennes 1830:422, *Histoire naturelle des poissons*, v. 6 (type locality, Gorée, Senegal, eastern Atlantic).

**Distribution:** eastern Atlantic from Madeira to Angola.

***Spicara nigricauda* (Norman 1931)**

*Coleosmaris nigricauda* Norman 1931:359, Fig. 4, Annals and Magazine of Natural History (Series 10), v. 7 (no. 40) (type locality, Accra, Ghana, eastern Atlantic).

**Distribution:** southern Angola.

***Spicara smaris* (Linnaeus 1758)**

*Sparus smaris* Linnaeus 1758:278, Systema Naturae, Ed. X, v. 1 (type locality, Southern Europe (Mediterranean Sea)).

*Sparus maruda* Walbaum 1792:277, Petri Artedi sueci genera piscium Part 3 (type locality, Adriatic Sea (Mediterranean Sea)).

*Sparus polynymus* Rafinesque 1810:49, Pl. 12 (fig. 2), Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily (Mediterranean Sea)).

*Sparus alcedo* Risso 1810:258, Ichthyologie de Nice (type locality, Nice, France).

*Smaris italicus* Risso 1827:346, Pl. 12 (fig. 30), Histoire naturelle des principales productions de l'Europe méridionale, v. 3 (type locality, Nice, France).

*Smaris vulgaris* Valenciennes in Cuvier & Valenciennes 1830:407, Histoire naturelle des poissons, v. 6 (type locality, Mediterranean Sea).

*Smaris gracilis* Bonaparte 1836, fasc. 15-17, punt.80, Pl. 90 (fig. 1), Iconografia della fauna italica (type locality, Italy, Mediterranean Sea).

*Smaris maurii* Bonaparte 1836:fasc. 15-17, punt.80, Pl. 90 bis (fig. 3), Iconografia della fauna italica (type locality, Italy).

**Distribution:** Mediterranean and Black Seas, eastern Atlantic from Portugal to Morocco and Canary Islands.

**Genus *Spondyliosoma* Cantor**

*Cantharus* Cuvier 1816:278, Le Règne Animal, v. 2. Masculine. (Type species *Sparus cantharus* Linnaeus 1758 by absolute tautonymy. Objectively invalid; preoccupied by *Cantharus* Bolton 1798 in Mollusca and by *Cantharus* Monfort 1808 in Foraminifera).

? *Scatharus* Valenciennes in Cuvier & Valenciennes 1830:375, Histoire naturelle des poissons, v. 6. Masculine. (Type species *Scatharus graecus* Valenciennes 1830 by monotypy).

*Spondyliosoma* Cantor 1849:1032, 50], Journal of the Asiatic Society of Bengal, v. 18 (pt 2). Neuter. (Type species *Sparus cantharus* Linnaeus 1758 by being a replacement name. Replacement for *Cantharus* Cuvier 1816).

*Caranthus* Barnard 1927:720, Annals of the South African Museum, v. 21 (pt 2). Masculine. (Type species *Sparus cantharus* Linnaeus 1758 by being a replacement name.)

*Cantharusa* Strand 1928:54, Archiv für Naturgeschichte, v. 92 (Abt. A) (no. 8). Feminine. (Type species *Sparus cantharus* Linnaeus 1758 by being a replacement name).

Eastern Atlantic; benthopelagic over seagrass beds and rocky and sandy bottoms to about 300 m; two species.

***Spondyliosoma cantharus* (Linnaeus 1758)**

*Sparus cantharus* Linnaeus 1758:280, Systema Naturae, Ed. X, v. 1 (type locality, Mediterranean Sea).

*Sparus brama* Bloch 1791:77, 269, Naturgeschichte der ausländischen Fische, v. 5 (type locality, Channel between France and British Isles); preoccupied by *Sparus brama* Bonnaterre 1788 (apparently not replaced).

*Sparus mauropsaro* Bloch & Schneider 1801:279, M. E. Blochii, Systema Ichthyologiae (type locality, Istanbul or Izmir, Turkey, Mediterranean Sea).

*Sparus zipolus* Rafinesque 1810:50, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy) Also appeared in Rafinesque 1810:26, Indice d'ittiologia Siciliana, ossia, Catalogo metodico dei nomi Latini, Italiani, e Siciliani dei pesci, che si rinvengono in Sicilia as *Sparus zippolus*.

*Cantharus lineatus* Montagu 1818:451, Pl. 23, Memoirs of the Wernerian Natural History Society, Edinburgh, v. 2 (Pt. 2, art. 27) (type locality, South coast of Devonshire, England); preoccupied by *Sparus lineatus* Osbeck 1770 [= *Spicara maena* (Linnaeus 1758)].

*Cantharus sciandra* Rosenthal 1822:5-6, Pl. 14, fig. 1, Ichthyotomische Tafeln. Berlin (no locality stated).

*Cantharus vulgaris* Schinz 1822:451, Das Thierreich, v. 2 (unneeded new name for and objective synonym of *Sparus cantharus* Linnaeus 1758).

*Sparus vetula* Couch 1823:79, The Transactions of the Linnean Society of London, v. 14 (pt 1, art. 4)(for 1822) (type locality, Cornwall, England).

*Cantharus tanuda* Risso 1827:366, Histoire naturelle des principales productions de l'Europe méridionale, v. 3 (type locality, Nice, France).

*Cantharus brama* Valenciennes in Cuvier & Valenciennes 1830:328, Histoire naturelle des poissons, v. 6 (type locality, Mediterranean Sea).

*Cantharus griseus* Valenciennes in Cuvier & Valenciennes 1830:333, Histoire naturelle des poissons, v. 6 (type locality, Dieppe; Abbeville; Boulogne; Calais, France).

*Cantharus orbicularis* Valenciennes, in Cuvier & Valenciennes 1830:331, Histoire naturelle des poissons, v. 6 (type locality, Corsica, near Ajaccio, France, western Mediterranean Sea; Spain).

*Cantharus senegalensis* Valenciennes in Cuvier & Valenciennes 1830:337, Histoire naturelle des poissons, v. 6 (type locality, Gorée, Senegal).

*Cantharus vulgaris* Valenciennes in Cuvier & Valenciennes 1830:319, Pl. 160, Histoire naturelle des poissons, v. 6 (type locality, Provence, Naples, Rome, Malta, Ibiza, Baleares Islands, Mediterranean Sea).

?*Scatharus graecus* Valenciennes in Cuvier & Valenciennes 1830:376, Pl. 162 ter., Histoire naturelle des poissons, v. 6 (type locality, Moree, Greece, Mediterranean Sea).

*Cantharus linnei* Malm 1877:97, Göteborgs och Bohusläns fauna, ryggradsdjur (type locality, Sweden).

**Distribution:** Mediterranean Sea, Black Sea and Scandinavia to Angola, including Madeira, Canary Islands and Cape Verde Islands.

**Comments:** the territorial males from Mediterranean and Atlantic populations show very different colour pattern and could represent different species (Debelius 1997:180). *Scatharus graecus* was described from South Greece by Valenciennes and after him by Döderlein (1891:231). It was not found again and the type (MNHN no.4912) is now lost. It might represent a junior synonym of *S. cantharus*. No other species of the genus *Scatharus* is known. *Cantharus linnei* is tentatively regarded as an unneeded replacement name for *Sparus cantharus* Linnaeus 1758 (to avoid "Strickland tautonomy").

#### *Spondyliosoma emarginatum* (Valenciennes 1830)

*Cantharus emarginatus* Valenciennes in Cuvier & Valenciennes 1830:338, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

*Cantharus microlepis* Gilchrist & Thompson 1909:231, Annals of the South African Museum, v. 6 (pt 3, no. 5) (type locality, Durban, KwaZulu-Natal, South Africa).

*Pagellus microlepis* Regan 1921:419, Annals and Magazine of Natural History (Ser. 9), v. 7 (no. 41) (type locality, 15–20 mi. off Umvoti R., Natal, South Africa, 25 fms).

**Distribution:** Saldanha Bay to Natal.

**Comments:** *Pagellus microlepis* Regan 1921 is a new synonym.

**Subfamily Denticinae** Bonaparte 1831

Denticini Bonaparte 1831: 105, Saggio di una distribuzione metodica degli animali vertebrati.

No molars; jaws with enlarged canines in front, smaller conical teeth behind. Piscivorous; 27 species.

**Genus Amamiichthys** Tanaka & Iwatsuki

*Amamiichthys* Tanaka & Iwatsuki 2015:196, Zootaxa 4007 (no. 2). Masculine. (Type species, *Cheimerius matsubarai* Akazaki 1962, by original designation).

Japan; monotypic.

***Amamiichthys matsubarai* (Akazaki 1962)**

*Cheimerius matsubarai* Akazaki 1962:132, 347, Fig. 31, Studies on the spariform fishes (type locality, Off Naze, Amami-oshima Island, Ryukyu Islands, Japan).

**Distribution:** Ryukyu Islands, Japan.

**Genus Argyrozona** Smith

*Argyrozona* Smith 1938:300, Transactions of the Royal Society of South Africa, v. 26 (pt 3). Feminine. (Type species *Dentex argyrozona* Valenciennes 1830 by monotypy).

South Africa; monotypic.

***Argyrozona argyrozona* (Valenciennes 1830)**

*Dentex argyrozona* Valenciennes in Cuvier & Valenciennes 1830:235, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

*Cynaedus lupus* Gronow in Gray 1854:54, Catalogue of fish collected and described by Laurence Theodore Gronow (type locality, several localities).

*Dentex macrodens* Castelnau 1861:30, Mémoire sur les poissons de l'Afrique australe (type locality, Algoa Bay, South Africa).

**Distribution:** Table Bay to Natal.

**Comments:** taxonomic decision of Wheeler (1958).

**Genus Cheimerius** Smith

*Cheimerius* Smith 1938:292, Transactions of the Royal Society of South Africa, v. 26 (pt 3), masculine. (Type species *Dentex nufar* Valenciennes 1830, by original designation).

Red Sea and Indian Ocean; monotypic.

***Cheimerius nufar* (Valenciennes 1830)**

*Dentex nufar* Valenciennes (ex Ehrenberg) in Cuvier & Valenciennes 1830:240, Histoire naturelle des poissons, v. 6 (type locality, Egypt, Red Sea; Massawa, Eritrea, Red Sea).

*Dentex variabilis* Valenciennes (ex Ehrenberg) in Cuvier & Valenciennes 1830:241 Histoire naturelle des poissons, v. 6 (type locality, Red Sea).

*Dentex fasciolatus* Valenciennes (ex Ehrenberg) in Cuvier & Valenciennes 1830:242 Histoire naturelle des poissons, v. 6 (type locality, Red Sea).

*Dentex miles* Gilchrist & Thompson 1908:155, Annals of the South African Museum, v. 6 (pt 2) (type locality, KwaZulu-Natal, South Africa).

*Dentex albus* Gilchrist 1914:128, Fig., Marine biological report: for the year ended ... and for the half year

ending ...; to be presented to the Provincial Council; Union of South Africa, Province of the Cape of Good Hope. No. 2 (VII) (type locality, KwaZulu-Natal coast, South Africa).

**Distribution:** tropical Indo-Pacific southward to Cape of Good Hope: Red Sea and East Africa south to Cape Province (South Africa), east to Madagascar and western Mascarenes (Réunion, Mauritius) to Pakistan.

### **Genus Dentex** Cuvier

*Dentex* Cuvier 1814:92, Bulletin des Sciences, par la Société Philomathique de Paris, Sér. 3, v. 1. Masculine. (Type species *Sparus dentex* Linnaeus 1758 by absolute tautomy).

*Taius* Jordan & Thompson 1912:570, Proceedings of the United States National Museum v. 41 (no. 1875). Masculine. (Type species *Chrysophris tumifrons* Temminck & Schlegel 1843 by original designation).

*Synagris* Bleeker, (ex Klein) 1876:278, Archives néerlandaises des sciences exactes et naturelles, v. 11. Feminine. (Type species *Dentex vulgaris* Valenciennes 1830 by original designation).

*Opsodentex* Fowler 1925:4, American Museum Novitates No. 162. Masculine. (Type species *Sparus macrophthalmus* Bloch 1791 by original designation).

*Allotaius* Whitley 1937:139, Memoirs of the Queensland Museum, v. 11 (pt 2). Masculine. (Type species *Dentex spariformis* Ogilby 1910 by original designation).

Eastern Atlantic and Indo-Pacific on the continental shelf over various types of bottoms. *Cheimerius* and *Polysteganus*, regarded as subgenera by Bauchot & Hureau (Quero et al. 1991), are here considered as valid genera following the opinion of Smith and Smith (1986:590) and Iwatsuki and Heemstra (2011:16); 14 species.

### ***Dentex abei*** Iwatsuki, Akazaki & Taniguchi 2007

*Dentex abei* Iwatsuki, Akazaki and Taniguchi 2007:30, Figs. 1A, 2A, Bulletin of the National Museum of Nature and Science (Ser. A) Supplement No. 1 (type locality, Off Okinawa Island, Ryukyu Islands, Japan).

**Distribution:** Ryukyu Islands and Ogasawara Islands, Japan, Taiwan and Philippines.

### ***Dentex angolensis*** Poll & Maul 1953

*Dentex angolensis* Poll & Maul 1953:1, Fig., Bulletin de l'Institut Royal des Sciences Naturelles de Belgique, v. 29 (no. 49) (type locality, Atlantic, 45 miles northeastern of Port Gentil, Gabon).

*Dentex polli* Roux 1954:468, Fig. 1, Bulletin du Muséum National d'Histoire Naturelle (Série 2), v. 26 (no. 4) (type locality, Marine station at Pointe-Noire, Republic of the Congo).

**Distribution:** Morocco to Angola.

### ***Dentex barnardi*** Cadenat 1970

*Dentex barnardi* Cadenat, in Blache, Cadenat & Stauch 1970:325, Fig. 843, Clés de détermination des poissons de mer signalés dans l'Atlantique oriental, v. 18 (type locality, Southeastern Atlantic, 9°20'S, 13°04'E).

**Distribution:** Gabon to Angola.

### ***Dentex canariensis*** Steindachner 1881

*Dentex canariensis* Steindachner 1881:99, Anzeiger der Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Classe, v. 18 (no. 11) (for 5 May 1881) (type locality, Canary Islands).

**Distribution:** eastern Atlantic from Cape Bojador, Western Sahara to Angola.

### ***Dentex carpenteri*** Iwatsuki, Newman & Russell 2015

*Dentex carpenteri* Iwatsuki, Newman & Russell 2015:111, Figs. 1A–B, 2, 5A, Zootaxa 3957 (no. 1) (type

locality, Off Ningaloo Reef near Exmouth, Western Australia)

**Distribution:** Western Australia.

***Dentex congoensis* Poll 1954**

*Dentex congoensis* Poll 1954:310, Fig. 89, Résultats Scientifiques. Expédition Océanographique Belge dans les Eaux Côtières Africaines de l'Atlantique Sud (1948–1949). Bruxelles., v. 4 (no. 3A) (type locality, Atlantic, 40 miles southwest of Moita Seca, 6°20'S, 11°35'E).

**Distribution:** Senegal to Angola.

***Dentex dentex* (Linnaeus 1758)**

*Sparus dentex* Linnaeus 1758:281, Systema Naturae, Ed. X, v. 1 (type locality, Atlantic and Mediterranean Sea).

*Sparus pseudodentex* Walbaum 1792:276, Petri Artedi sueci genera piscium Part 3 (type locality, Genoa, Italy, Mediterranean Sea).

*Sparus dentex* var. *pseudodentex* Bloch & Schneider 1801:272, M. E. Blochii, Systema Ichthyologiae (type locality, Genoa, Italy, Mediterranean Sea).

*Sparus cetti* Risso 1810:256, Ichthyologie de Nice (type locality, Nice, France).

*Dentex vulgaris* Risso 1827:364, Histoire naturelle des principales productions de l'Europe méridionale, v. 3 (type locality, Nice, France, northwestern Mediterranean Sea).

*Dentex vulgaris* Valenciennes in Cuvier & Valenciennes 1830:220, Pl. 153, Histoire naturelle des poissons, v. 6 (type locality, Mediterranean Sea); preoccupied by *Dentex vulgaris* Risso 1827.

*Dentex rivulatus* Bennett 1835:91, Proceedings of the Zoological Society of London 1835 (pt 3) (type locality, Near Trabzon, Turkey, Black Sea).

**Distribution:** Bay of Biscay to Senegal, Canary and Madeira Islands; Mediterranean.

**Comments:** *Dentex rivulatus* Bennett 1835 is a new synonym.

***Dentex fourmanoiri* Akazaki & Seret 1999**

*Dentex* sp. nov. Rivaton et al. 1990:72, Catalogue des poissons de Nouvelle-Calédonie.

*Dentex fourmanoiri* Akazaki & Seret 1999, Proc. 5<sup>th</sup> Indo-Pac. Fish Conf., Nouméa 1997: 179, Figs. 1,2 (type locality, east of Chesterfield Islands, 217 m depth).

**Distribution:** Chesterfield Islands and New Caledonia.

***Dentex gibbosus* (Rafinesque 1810)**

*Sparus gibbosus* Rafinesque 1810:47, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy).

*Dentex synodon* Risso 1840:382, Archiv für Naturgeschichte, v. 6 (pt. 1) (type locality, Nice, France).

*Dentex filosus* Valenciennes 1841:[37], Pl. 6, Ichthyologie des îles Canaries, v. 2 (pt 2) (type locality, Canary Islands).

**Distribution:** Mediterranean and Portugal to Angola, arounds Canary Islands.

**Comments:** *Dentex synodon* Risso 1840 is a new synonym.

***Dentex hypselosomus* Bleeker 1854**

*Dentex hypselosoma* Bleeker 1854:402, Natuurkundig Tijdschrift voor Nederlandsch Indië, v. 6 (no. 2) (type locality, Nagasaki, Japan).

**Distribution:** Northwest Pacific: Japan, southern Korea, China and Taiwan.

***Dentex macropthalmus* (Bloch 1791)**

*Sparus macropthalmus* Bloch 1791:93, Pl. 272, Naturgeschichte der ausländischen Fische, v. 5 (no locality stated).

*Dentex erytrostoma* Risso 1827:364, Pl. 12 (fig. 31), Histoire naturelle des principales productions de l'Europe méridionale, v. 3 (type locality, Nice, France).

?*Pagellus armatus* Castelnau 1861:27, Mémoire sur les poissons de l'Afrique australe. (Type locality, Market at Cape of Good Hope, South Africa).

*Dentex macropthalmus opsophthalmus* Ananiades 1950:9, Fig. 1, Praktika toy Ellenikou ydrobiologikou institoutou = Praktika of the Hellenic Hydrobiological Institute., v. 4 (no. 1) (type locality, Aegean Sea, Mediterranean Sea).

**Distribution:** Mediterranean and from Portugal to Namibia and occasionally to South Africa.

**Comments:** *Dentex erytrostoma* is a synonym according to Cocco (Facciola 1884:68). Description and illustration of *Dentex erytrostoma* Risso 1827 fit with that of *D. macropthalmus* and it is regarded as a new synonym. *Pagellus armatus* Castelnau 1861 is a probable synonym.

***Dentex maroccanus* Valenciennes 1830**

*Dentex maroccanus* Valenciennes in Cuvier & Valenciennes 1830:234, Histoire naturelle des poissons, v. 6 (type locality, Coast of Africa near Morocco).

*Dentex parvulus* de Brito Capello 1867:250, Jornal do Sciências Mathemáticas, Physicas e Naturaes, Lisboa, v. 1 (no. 3) (type locality, Portugal).

**Distribution:** Bay of Biscay to Gulf of Guinea and southwestern Mediterranean.

***Dentex multidens* Valenciennes 1830**

*Dentex multidens* Valenciennes in Cuvier & Valenciennes 1830:238, Histoire naturelle des poissons, v. 6 (type locality, Al-Luhayya, Yemen, Red Sea).

**Distribution:** Red Sea.

***Dentex spariformis* Ogilby 1910**

*Dentex spariformis* Ogilby 1910:91, On some new fishes from the Queensland coast (type locality, 36 miles south 12°West from Moreton Island, Queensland, Australia).

**Distribution:** Australia and Queensland.

**Genus Petrus Smith**

*Petrus* Smith 1938:302, Transactions of the Royal Society of South Africa v. 26 (pt 3). Masculine. (Type species *Dentex rupestris* Valenciennes 1830 by original designation).

South Africa; monotypic.

***Petrus rupestris* (Valenciennes 1830)**

*Dentex rupestris* Valenciennes in Cuvier & Valenciennes 1830:231, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

*Dentex brevis* Kner 1865:63, Fische Frigatte "Novara", v. 1 (pt 1) (type locality, Cape of Good Hope, South Africa).

**Distribution:** Mossel Bay to Natal.

### **Genus *Polysteganus* Klunzinger**

*Polysteganus* Klunzinger 1870:763, Verhandlungen der K.-K. zoologisch-botanischen Gesellschaft in Wien, v. 20 (type species, *Dentex (Polysteganus) coeruleopunctatus* Klunzinger 1870, by subsequent designation of Jordan 1919:359, The genera of fishes, part III, from Guenther to Gill).

*Axiniceps* Smith 1938:301, Transactions of the Royal Society of South Africa, v. 26 (pt 3). Neuter. (Type species *Dentex praeorbitalis* Günther 1859 by monotypy).

Indian Ocean; eight species.

#### ***Polysteganus baissaci* Smith 1978**

*Polysteganus baissaci* Smith 1978:563, Fig. 1, Proceedings of the Biological Society of Washington, v. 91 (no. 3) (type locality, Northwest of Gunner's Coin, Guoin] 19°56'30"S, 57°37"E, Mauritius, Mascarenes).

**Distribution:** Mauritius.

#### ***Polysteganus cerasinus* Iwatsuki & Heemstra 2015**

*Polysteganus cerasinus* Iwatsuki & Heemstra 2015:144, Fig. 4, Zootaxa 4059 (no. 1) (type locality, Saya de Malha Bank, Mascarene Plateau 19.10°54.75"S, 60°58.17"E).

**Distribution:** known only from Saya de Malha Bank, western Indian Ocean.

#### ***Polysteganus coeruleopunctatus* (Klunzinger 1870)**

*Dentex (Polysteganus) coeruleopunctatus* Klunzinger 1870:763, Verhandlungen der K.-K. zoologisch-botanischen Gesellschaft in Wien, v. 20 (type locality, Al-Qusair, Red Sea).

**Distribution:** Red Sea to Natal.

#### ***Polysteganus flavodorsalis* Iwatsuki & Heemstra 2015**

*Polysteganus flavodorsalis* Iwatsuki & Heemstra 2015:141, Figs. 3A–C, Zootaxa 4059 (no. 1) (type locality, Nazareth Bank, Mascarene Plateau, 11.15°41.11"S, 61°04.54"E).

**Distribution:** Western Indian Ocean, Cargados Carajos and Nazareth Bank, Mascarene Plateau.

#### ***Polysteganus lineopunctatus* (Boulenger 1903)**

*Dentex lineopunctatus* Boulenger 1903:66, Pl. 6, Annals of the South African Museum, v. 3 (pt 3) (type locality, KwaZulu-Natal coast, South Africa).

*Dentex natalensis* Gilchrist & Thompson 1908:156, Annals of the South African Museum, v. 6 (pt 2) (type locality, KwaZulu-Natal, South Africa).

**Distribution:** South Africa and Mozambique.

#### ***Polysteganus mascarenensis* Iwatsuki & Heemstra 2011**

*Polysteganus mascarenensis* Iwatsuki & Heemstra 2011:14, Fig. 1, Zootaxa No. 3018 (type locality, Mascarene Plateau, Mascarene Islands, 15°23.32"S, 61°13.41).

**Distribution:** Seychelles (Saya de Malha Bank), Mascarene Plateau and Mascarene Islands.

#### ***Polysteganus praeorbitalis* (Günther 1859)**

*Dentex praeorbitalis* Günther 1859:368, Catalogue of the fishes in the British Museum, v. 1 (type locality, Cape seas, South Africa).

**Distribution:** Algoa Bay to Beira, southern Africa.

***Polysteganus undulosus* (Regan 1908)**

*Dentex undulosus* Regan 1908:252, Pl. 40, Annals of the Natal Museum, v. 1 (pt 3) (type locality, 16 miles northeast of Bird Island, KwaZulu-Natal and Table Bay, Cape Colony, South Africa).

**Distribution:** Cape of Good Hope to Delagoa Bay.

**Genus Virididentex Poll**

*Virididentex* Poll 1971:9, Mémorie de la Classe des Sciences / Académie Royale de Belgique. Series: Collection in 8°, Sér. 2, v. 40 (no. 1). Masculine. (Type species *Dentex acromegalus* Osório 1911 by original designation).

Eastern Atlantic over hard bottoms; monotypic.

***Virididentex acromegalus* (Osório 1911)**

*Dentex multidens* (nec Valenciennes 1830) Troschel 1866:213, Archiv für Naturgeschichte, v. 32 (pt. 1) (misidentification).

*Dentex acromegalus* Osório 1911:61, Pl. 1 (fig. 1), Memorias do Museu Bocage, Lisboa, v. 2 (type locality, Ilha de Santo Antão, Cape Verde Islands).

**Distribution:** endemic to the Cape Verde Islands.

**Subfamily Pagellinae Smith 1938**

Pagellinae Smith 1938:232, Transactions of the Royal Society of South Africa v. 26 (pt 3).

Teeth in front of jaw short and sharp; those behind small molariform. Carnivorous feeding on small invertebrates; 13 species.

**Genus Boopsoidea Castelnau**

*Boopsoidea* Castelnau 1861:25, Mémoire sur les poissons de l'Afrique australe. Feminine. (Type species *Boopsoidea inornata* Castelnau 1861 by monotypy).

South Africa; monotypic.

***Boopsoidea inornata* Castelnau 1861**

*Boopsoidea inornata* Castelnau 1861:26, Mémoire sur les poissons de l'Afrique australe (type locality, Kalk Bay and Algoa Bay, South Africa).

*Pagrus (Chrysophrys) holubi* Steindachner 1881:203, 25, Pl. 2, Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe, v. 83 (1. Abth.) (type locality, Algoa Bay, South Africa).

**Distribution:** Cape of Good Hope to Natal.

**Genus Lithognathus Swainson**

*Lithognathus* Swainson 1839:172, 222, The natural history and classification, v. 2. Masculine. (Type species *Lithognathus capensis* Swainson 1839 (= *Pagellus lithognathus* Cuvier 1830) by monotypy).

Eastern Atlantic and South Africa, in schools on soft bottoms and sea-grass beds; four species.

***Lithognathus aureti* Smith 1962**

*Lithognathus aureti* Smith 1962:113, Pl. 2, South African Journal of Science, v. 58 (no. 4) (type locality, Walvis Bay, Namibia).

**Distribution:** Namibia to Cape Town, South Africa.

***Lithognathus lithognathus* (Cuvier 1829)**

*Pagrus lithognathus* Cuvier 1829:183, Le Règne Animal (Edition 2), v. 2 (type locality, Cape of Good Hope, South Africa).

*Pagellus lithognathus* Valenciennes in Cuvier & Valenciennes 1830:204, Pl. 151, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

*Pagellus (Lithognathus) capensis* Swainson 1839:222, Pl. 114, The natural history and classification, v. 2 (type locality, based on Cuvier, Pl. 141, which is Cuvier & Valenciennes 1830:Pl. 141)

**Distribution:** Orange River mouth to Natal.

***Lithognathus mormyrus* (Linnaeus 1758)**

*Sparus mormyrus* Linnaeus 1758:281, Systema Naturae, Ed. X, v. 1 (type locality, Mediterranean Sea).

*Sparus hurtus* Linnaeus 1758:279, Systema Naturae, Ed. X, v. 1 (type locality, Mediterranean Sea).

*Pagellus goreensis* Valenciennes in Cuvier & Valenciennes 1830: 203, Histoire naturelle des poissons, v. 6 (type locality, Gorée, Senegal).

*Sparus gaiolus* Rafinesque, 1810:47, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia, has been overlooked. This a new synonym of *Lithognathus mormyrus*. Placement in Leiognathidae by Fricke et al., 2019 is erroneous.

*Pagellus pernambucensis* Valenciennes (ex Bloch) in Cuvier & Valenciennes 1830:210, Histoire naturelle des poissons, v. 6 (type locality, Pernambuco, Brazil [type locality erroneous]).

**Distribution:** Mediterranean, eastern Atlantic from Bay of Biscay to Cape of Good Hope around Madeira, Canary, and Cape Verde Islands; South Africa northward to Mozambique channel; also found in the Red Sea.

**Comments:** taxonomic decision of Bauchot and Daget (1972) and Ferholm and Wheeler (1983).

***Lithognathus olivieri* Penrith & Penrith 1969**

*Lithognathus olivieri* Penrith & Penrith 1969:100, Pl. 1, Cimbebasia (Series A, Naturwetenskappe), v. 1 (no. 5) (type locality, Angra Fria, off Southwest Africa).

**Distribution:** Namibia.

**Comments:** A synonym of *L. aureti* according to Smith and Smith (1986); listed as valid but could represent a subspecies of *L. aureti* by Bauchot and Hureau (Quero et al. 1990).

**Genus *Pagellus* Valenciennes**

*Pagellus* Valenciennes in Cuvier & Valenciennes 1830:169, Histoire naturelle des poissons, v. 6. Masculine. (Type species *Sparus erythrinus* Linnaeus 1758 by subsequent designation).

*Nudipagellus* Fowler 1925:4, American Museum Novitates No. 162. Masculine. (Type species *Sparus centrodontus* Delaroche 1809 by original designation).

Eastern Atlantic; found on various type of bottom (rock, sand, mud, and sea-grass) to depth of about 700 m; five species.

***Pagellus acarne* (Risso 1827)**

*Sparus berda* Risso 1810 (nec Forsskål, 1775) (type locality, Nice, France).

*Sparus axilaris* Perez 1820:97, Pl. (unnumbered), Periódico de la Sociedad Médico-Quirúrgica de Cadiz, v. 1 (type locality, Mare Baeticum, off Andalusia, southern Spain)

*Pagrus acarne* Risso 1827:361, Histoire naturelle des principales productions de l'Europe méridionale, v. 3 (type locality, Nice, France).

*Pagrus vulgaris* Fleming 1828:211, A history of British animals (type locality, Britain).

*Pagellus owenii* Günther 1859:478, Catalogue of the fishes in the British Museum, v. 1 (type locality, British Isles).

**Distribution:** Mediterranean, British Isles and Denmark to northern Senegal, including Madeira, Canary, and Cape Verde Islands.

**Comments:** Parenti and Poly (2004:171) suggest continued use of *acarne* Risso 1827 based on invalidation of *axilaris* by reversal of precedence (Art. 23.9). *Pagrus vulgaris* Fleming 1828 is a new synonym.

#### ***Pagellus affinis* Boulenger 1888**

*Pagellus affinis* Boulenger 1888:659, Proceedings of the Zoological Society of London 1887 (pt 4) (type locality, Muscat, Oman, Gulf of Oman, Arabian Sea, northwestern Indian Ocean).

**Distribution:** Arabian Gulf to the Gulf of Aden.

#### ***Pagellus bellottii* Steindachner 1882**

*Pagellus bellottii* Steindachner 1882:41, Anzeiger der Kaiserlichen Akademie der Wissenschaften, Wien, Mathematisch-Naturwissenschaftliche Classe, v. 19 (no. 5) (for 9 Feb. 1882) (type locality, Arglim Bank, Canary Islands; Gorée, Senegal).

? *Pagellus lippei* Steindachner 1894:137, Anzeiger der Kaiserlichen Akademie der Wissenschaften, Wien, Mathematisch-Naturwissenschaftliche Classe, v. 31 (no. 14) (for 25 May 1894) (type locality, Fernando Póo Island, Bioco Island], Equatorial Guinea, Gulf of Guinea).

*Dentex cuninghamii* Regan 1905:325, Annals and Magazine of Natural History (Series 7), v. 15 (no. 87) (art. 41) (type locality, Coast of Angola).

*Pagellus coupei* Dieuzeide 1960:109, Figs. 1, 2, 5, Bulletin des Travaux, Station d'Agriculture et de Pêche de Castiglione (Nouv. sér.) No. 10 (for 1958–1959) (type locality, Mediterranean Sea).

**Distribution:** Straits of Gibraltar to Angola and Canary Islands (subspecies *bellottii*) and Mossel Bay to Madagascar (subspecies *natalensis*). Taxonomic decisions of Bauchot & Hureau (1990); *Pagellus coupei* was regarded as valid by Tortonese (1973:412).

#### ***Pagellus bogaraveo* (Brünnich 1768)**

*Sparus bogaraveo* Brünnich 1768:49, Ichthyologia Massiliensis, sistens piscium descriptiones eorumque apud incolas nomina (type locality, Marseille, France).

*Sparus cantabricus* Asso y del Rio 1801:35, Pl. 34 (fig. 2), Anales de Ciencias Naturales, Madrid., v. 4 (no. 10) (type locality, Eastern Spain, western Mediterranean Sea).

*Labrus calops* Lacepède 1801:451, 522, Histoire naturelle des poissons (Lacepède), v. 3 (type locality, Normandy, France).

*Sparus brunnichii* Shaw 1803:424, General zoology or systematic natural history, v. 4 (type locality, Mediterranean Sea).

*Sparus centrodonthus* Delaroche 1809:345, 59], Pl. 23 (fig. 11), Annales du Muséum d'Histoire Naturelle, Paris, v. 13 (type locality, Ibiza, Baleares Islands, Spain).

? *Sparus mupa* Rafinesque 1810:48, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy).

*Aurata bilunulata* Risso 1827:356, Pl. 12 (fig. 29), Histoire naturelle des principales productions de l'Europe méridionale, v. 3 (type locality, Nice, France)

*Pagrus bugaravella* Risso 1827:359, Histoire naturelle des principales productions de l'Europe méridionale,

v. 3 (type locality, Nice, France).

*Pagellus breviceps* Valenciennes in Cuvier & Valenciennes 1830:199, Histoire naturelle des poissons, v. 6 (type locality, Marseille, France, western Mediterranean Sea).

*Pagellus curtus* Couch 1844:394, Fig., The Zoologist: a Popular Miscellany of Natural History, v. 2 (type locality, England).

**Distribution:** Norway and Ireland to Cape Blanc, Madeira and Canary Islands; Mediterranean Sea.

**Comments:** *Sparus brunnichii* Shaw is a synonym according to Swain (1883:305); however Shaw described two separate species with this name; the first (p. 424) based on *Sparus bogaraveo* Lacepède and the second (p. 462) on *Labrus fuscus* Gmelin [= *Syphodus mediterraneus* (Linnaeus), Labridae]. *Labrus calops* Lacepède 1801 is a synonym of *Pagellus centrodontus* according to Valenciennes in Cuvier & Valenciennes (1839:9, footnote). *Sparus mupa* Rafinesque 1810 is a doubtful synonym of *centrodontus* according to Cocco in Facciola (1884:69). *Pagellus curtus* Couch 1844 is a new synonym.

#### ***Pagellus erythrinus* (Linnaeus 1758)**

*Sparus erythrinus* Linnaeus 1758:279, Systema Naturae, Ed. X, v. 1 (type locality, Mediterranean Sea; America).

*Sparus rubellio* Olafsen & Povelsen 1775:208, Reise Island 1774–75, v. 1 (pts 1–2) (type locality, Iceland).

*Sparus pagel* Lacepède 1802:28, 86, Histoire naturelle des poissons (Lacepède), v. 4 (type locality, Mediterranean Sea (including France; Spain; Sardinia; Malta; Rome and Venice, Italy); Atlantic (including Germany, Netherlands, Antilles); *nomen novum* for *Sparus erythrinus* Linnaeus.

*Pagellus rostratus* Lowe 1838:177, Transactions of the Zoological Society of London, v. 2 (pt 3, art. 14) (type locality, Off Madeira).

*Pagellus canariensis* Valenciennes 1838:[35], Pl. 10, Ichthyologie des îles Canaries, v. 2 (pt 2) (type locality, Canary Islands).

?*Pagellus guentherii* de Brito Capello 1867:253, Pl. 4 (fig. 3), Jornal do Sciências Mathemáticas, Physicas e Naturaes, Lisboa, v. 1 (no. 3) (type locality, Portugal).

**Distribution:** Norway to Angola, including Madeira and Canary Islands and Mediterranean.

#### ***Pagellus natalensis* Steindachner 1903**

*Pagellus natalensis* Steindachner 1903:134, Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Classe., v. 71 (type locality, Durban, KwaZulu-Natal, South Africa).

**Distribution:** South Africa to Madagascar.

**Comments:** previously regarded as synonym of as *Pagellus bellottii* Steindachner 1882, but a valid subspecies, it is elevated to species level by Leis (2002:367) and Fricke et al. (2014:1 and 2018:220).

#### **Genus *Stenotomus* Gill**

*Stenotomus* Gill 1865:266, Canadian Naturalist, v. 2. Masculine. (Type species *Sparus argyrops* Linnaeus 1766 by monotypy).

*Otrynter* Jordan & Evermann 1896:388, United States Commission of Fish and Fisheries, Report of the Commissioner, v. 21 (for 1895) Appendix 5. Masculine. (Type species *Stenotomus caprinus* Jordan & Gilbert 1882 by original designation).

*Stenestes* Jordan 1917:87, Copeia No. 49. Feminine. (Type species *Sparus argyrops* Linnaeus 1766 by being a replacement name. Unneeded replacement for and synonym of *Stenotomus* Gill 1865, not preoccupied by *Stenotoma* Rafinesque 1818 in Mollusca.

*Mimocubiceps* Fowler 1944:1, Notulae Naturae (Philadelphia) No. 130. Neutral. (Type species *Mimocubiceps virginiae* Fowler 1944 by original designation).

Western Atlantic; two species.

***Stenotomus caprinus*** Jordan & Gilbert 1882

*Stenotomus caprinus* Jordan & Gilbert (ex Bean) 1882:278, Proceedings of the United States National Museum, v. 5 (no. 282) (type locality, Pensacola, Florida, U.S.A. (stomach contents).

**Distribution:** North Carolina and Gulf of Mexico to Yucatan.

***Stenotomus chrysops*** (Linnaeus 1766)

*Sparus chrysops* Linnaeus 1766:471, Systema naturae sive regna tria naturae, v. 1 (pt 1) (type locality, Carolina, South Carolina, U.S.A.).

*Sparus argyrops* Linnaeus 1766:471, Systema naturae sive regna tria naturae, v. 1 (pt 1) (type locality, Carolina, U.S.A. and Jamaica).

*Sparus zanturus* Lacepède 1802:38, Histoire naturelle des poissons (Lacepède), v. 4 (type locality, Seas near Carolina, U.S.A. and Jamaica) [spelled *zanthurus* on p.121].

*Sparus violaceus* Shaw 1803:410, Pl. 59, General zoology or systematic natural history, v. 4 (type locality, no locality stated). *Nomen novum* for *Sparus chrysops* Bloch 1801:277.

*Labrus versicolor* Mitchell 1815:404, Pl. 3 (fig. 7), Transactions of the Literary and Philosophical Society of New-York, v. 1 (art. 5) (for 1814) (type locality, New York, U.S.A.).

*Chrysophrys aculeata* Valenciennes in Cuvier & Valenciennes 1830:137, Histoire naturelle des poissons, v. 6 (type locality, America; Charleston, South Carolina, U.S.A.).

*Sargus arenosus* DeKay 1842:91, Pl. 22 (fig. 67). South side of Long Island, New York, U.S.A.;

*Cynaedus brama* Gronow in Gray 1854:56, Catalogue of fish collected and described by Laurence Theodore Gronow (type locality, Jamaica and Carolina, U.S.A.).

*Sargus ambassis* Günther 1859:449, Catalogue of the fishes in the British Museum, v. 1 (type locality, New York, U.S.A.; North America).

*Mimocubiceps virginiae* Fowler 1944:2 Fig., Notulae Naturae (Philadelphia) No. 130 (type locality, Ventnor Beach, New Jersey, U.S.A.).

**Distribution:** Nova Scotia south to Florida.

### **Subfamily Sparinae** Rafinesque 1818

*Sparides* Rafinesque 1818:417, Journal of the Academy of Natural Sciences, Philadelphia, v. 1 (pt 2).

*Pagrinae* Gunther 1859:453, Catalogue of the fishes in the British Museum, v.1.

*Diplodinae* Akazaki 1962:8, Studies on the spariform fishes - anatomy, phylogeny, ecology and taxonomy.

Jaws with blunt rounded teeth posteriorly; front teeth with 4-9 enlarged conical canines or compressed incisors. Carnivores, eating crustacean, molluscs and small fishes; 100 species.

### **Genus Acanthopagrus** Peters

*Mylio* Commerson in Lacepède 1802:131 (foot note) [Histoire naturelle des poissons (Lacepède), v. 4. Masculine. (Type species *Chaetodon bifasciatus* Forsskål 1775 by monotypy)].

*Acanthopagrus* Peters 1852:242, Archiv für Naturgeschichte, v. 21 (pts 2–3). Masculine. (Type species *Chrysophrys vagus* Peters 1852 by monotypy).

*Mylio* Munro 1949:185, Memoirs of the Queensland Museum, v. 12 (pt 4). Masculine. (Type species *Sparus mylio* Lacepède 1802 by original designation).

*Neosparus* Akazaki 1994:327, 336, Proceedings of the Fourth Indo-Pac. Fish Conference, Bangkok, Thailand. Masculine. (Type species *Chaetodon bifasciatus* Forsskål 1775 by original designation).

Indo-West Pacific in shallow waters around coral reefs; also in freshwaters and estuaries; 21 species. Iwatsuki and Heemstra (2010) revised the species of the western Indian Ocean.

**Comments:** *Mylio* Commerson in Lacepède 1802 is regarded as not available (Fricke et al. 2019; Kottelat 2013:352). However Commerson's names mentioned in footnotes of Lacepède's *Histoire naturelle des Poissons* and declared as ineligible have been restricted to 1803 [see for more details Opinion 89 as reported in the Catalog of Fishes, Vol. 3, p.2886 (Eschmeyer 1998)].

***Acanthopagrus akazakii*** Iwatsuki, Kimura & Yoshino 2006

*Acanthopagrus akazakii* Iwatsuki, Kimura & Yoshino 2006:409, Figs. 1A, 2A–B, 3, Ichthyological Research, v. 53 (no. 4) (type locality, Pecheus Bay yacht harbor, Nouméa, Grande Terre, Province Sud, New Caledonia, Coral Sea).

**Distribution:** New Caledonia.

***Acanthopagrus arabicus*** Iwatsuki 2013

*Acanthopagrus arabicus* Iwatsuki 2013:83, Fig. 4 (b), Journal of Fish Biology, v. 83 (no. 1) (type locality, Western Coast of Qatar (market specimen)).

**Distribution:** Northwestern Indian Ocean: Persian Gulf and Oman east to Pakistan and India.

***Acanthopagrus australis*** (Günther 1859)

*Chrysophrys australis* Günther 1859:494, Catalogue of the fishes in the British Museum, v. 1 (type locality, Australian seas and rivers).

**Distribution:** Indo-Australians Archipelago and eastern Australia to Taiwan and Japan.

**Comments:** reported by Kuiter (1993) with Owen 1853 as authorship.

***Acanthopagrus berda*** (Forsskål 1775)

*Sparus berda* Forsskål 1775:32, xi, Descriptiones animalium (Forsskål) (type locality, Al-Luhayya, Luhaiya], Yemen, Red Sea, approximately 15°41'52"N, 41°41'07"E).

*Sparus hasta* Bloch & Schneider 1801:275, M. E. Blochii, Systema Ichthyologiae (type locality, Coromandel Coast, India).

*Sparus calamara* Cuvier 1829:182, Le Règne Animal (Edition 2), v. 2 (type locality, Vizagapatam, India).

*Chrysophrys calamara* Valenciennes in Cuvier & Valenciennes 1830:117, Histoire naturelle des poissons, v. 6 (type locality, Malabar, India).

*Chrysophrys madagascariensis* Valenciennes in Cuvier & Valenciennes 1830:135, Histoire naturelle des poissons, v. 6 (type locality, Fort Dauphin, Madagascar).

*Chrysophrys robinsoni* Gilchrist & Thompson 1908:170, Annals of the South African Museum, v. 6 (pt 2) (type locality, KwaZulu-Natal, South Africa).

**Distribution:** continental shelf of the western Indian Ocean, including the Red Sea to Singapore and Malaysia.

***Acanthopagrus bifasciatus*** (Forsskål 1775)

*Chaetodon bifasciatus* Forsskål 1775:64, xiii, Descriptiones animalium (Forsskål) (type locality, Jeddah, Saudi Arabia, Red Sea).

*Holocentrus rabaji* Lacepède 1802:724, 725, Histoire naturelle des poissons (Lacepède), v. 4 (type locality, Jeddah, Saudi Arabia, Red Sea).

**Distribution:** Red Sea, Persian Gulf, western Indian Ocean to Natal.

***Acanthopagrus butcheri* (Munro 1949)**

*Mylio butcheri* Munro 1949:191, Pl. 17, Memoirs of the Queensland Museum, v. 12 (pt 4) (type locality, Gippsland Lakes, Victoria, Australia).

**Distribution:** southern Australia from Victoria to Shark Bay.

***Acanthopagrus catenula* (Lacepède 1801)**

*Labrus catenula* Lacepède 1801:426, 468, Pl. 3 (fig. 3), Histoire naturelle des poissons (Lacepède), v. 3 (type locality, Grand Gulf of India and seas near gulf [Mauritius]).

*Sparus mylio* Lacepède 1802:41, 131, Histoire naturelle des poissons (Lacepède), v. 4 (type locality, Mauritius).

**Distribution:** Western Indian Ocean: Southern Oman to South Africa, Madagascar, Mauritius and Rodriguez; Persian Gulf.

**Comments:** removed from synonymy with *A. bifasciatus* by Iwatsuki and Heemstra (2011:45).

***Acanthopagrus chinshira* Kume & Yoshino 2008**

*Acanthopagrus chinshira* Kume & Yoshino 2008:47, Figs. 1-3, Bulletin of the National Museum of Nature and Science (Ser. A) Supplement No. 2 (type locality, Nakagusuku Hama Fish Market, Nakagusuku Bay, Okinawa Island, Japan).

**Distribution:** Okinawa, Taiwan, and Hong Kong.

***Acanthopagrus estuarius* (Gilchrist & Thompson 1908)**

*Chrysophrys estuarius* Gilchrist & Thompson 1908:170, Annals of the South African Museum, v. 6 (pt 2) (type locality, KwaZulu-Natal, South Africa).

**Distribution:** South Africa and Mozambique.

***Acanthopagrus latus* (Houttuyn 1782)**

*Sparus latus* Houttuyn 1782: 322, Verhandelingen der Hollandsche Maatschappij der Wetenschappen, Haarlem, v. 20 (pt 2) (type locality, Hirado Bay, Nagasaki, Japan (new locality)).

*Sparus altus* Lacepède 1802:30, 104, Histoire naturelle des poissons (Lacepède), v. 4 (type locality, Japan).

*Chrysophrys auripes* Richardson 1846:241, Report of the British Association for the Advancement of Science 15th meeting 1845] (type locality, Canton, Chinese Seas, China).

*Chrysophrys xanthopoda* Richardson 1846:241, Report of the British Association for the Advancement of Science 15th meeting 1845] (type locality, Canton, Chinese Seas, China).

*Chrysophrys novaecaledoniae* Castelnau 1873:110, Proceedings of the Zoological and Acclimatisation Society of Victoria, Melbourne, v. 2 (type locality, Nouméa, New Caledonia).

*Chrysophrys rubroptera* Tirant 1883:14, Bulletin de la Société des Études Indo-chinoises. Saigon. 1883 (type locality, Hué, Vietnam).

*Sparus chrysopterus* Kishinouye 1907:327, Dobutsugaku Zasshi = Zoological Magazine Tokyo, v. 19 (no. 229) (type locality, Kiusiu; Shikoku; Inland Sea; Pacific coast of Hondo, Japan).

**Distribution:** Northwest Pacific: limited to the east Asia Shelf, recorded only from the coasts of Honshu

(including Seto Inland Sea), Shikoku and Kyushu Island, Japan (not Ryukyu and Ogasawara Islands or Sea of Japan), southern Korea, Taiwan, China (from around Shanghai to southern China) and northern Vietnam (south to Hué). Previous reports from other areas of the Indo-Pacific are misidentifications of species within the *A. latus* species complex.

**Comments:** *Sparus altus* Lacepède 1802 is a new synonym.

***Acanthopagrus longispinnis* (Valenciennes 1830)**

*Chrysophrys longispinnis* Valenciennes in Cuvier & Valenciennes 1830:116, Histoire naturelle des poissons, v. 6 (type locality, Bengal, India).

**Distribution:** India.

***Acanthopagrus morrisoni* Iwatsuki 2013**

*Acanthopagrus morrisoni* Iwatsuki 2013:79, Fig. 4 (a), Journal of Fish Biology, v. 83 (no. 1) (type locality, Hooley Creek, Ashburton River, Western Australia, Australia).

**Distribution:** Northwest Australia.

***Acanthopagrus omanensis* Iwatsuki & Heemstra 2010**

*Acanthopagrus omanensis* Iwatsuki & Heemstra 2010:130, Figs. 1B, 3B, 4B, 5C–D, Copeia 2010 (no. 1) (type locality, Duqm 19°39'44"N, 57°42'22"E, Oman).

**Distribution:** Oman.

***Acanthopagrus pacificus* Iwatsuki, Kume & Yoshino 2010**

*Acanthopagrus pacificus* Iwatsuki, Kume & Yoshino 2010:116, Figs. 1, 2A, 3A–D, 4A, Bulletin of the National Museum of Nature and Science (Ser. A), v. 36 (no. 4) (type locality, Iriomote Island, 24°21'32.4"N, 123°44'52.4"E, Yaeyama Group, Ryukyu Islands, Japan).

**Distribution:** Japan to Australia.

***Acanthopagrus palmaris* (Whitley 1935)**

*Roughleyia palmaris* Whitley 1935:234, Fig. 7, Records of the Australian Museum, v. 19 (no. 4) (type locality, Port Hedland, Western Australia).

**Distribution:** western Australia.

***Acanthopagrus randalli* Iwatsuki & Carpenter 2009**

*Acanthopagrus randalli* Iwatsuki & Carpenter 2009:44, Fig. 1, 2A, 3A, Zootaxa No. 2267 (type locality, Off Bahrain, from fish market in Kuwait City, Persian Gulf).

**Distribution:** Persian Gulf.

***Acanthopagrus schlegelii* (Bleeker 1854)**

*Chrysophrys schlegelii* Bleeker 1854:400, Natuurkundig Tijdschrift voor Nederlandsch Indië, v. 6 (no. 2) (type locality, Nagasaki, Japan).

*Pagrurus macrocephalus* Basilewsky 1855:222, Pl. 1 (fig. 3), not Pl. 3 (fig. 1), Nouveaux mémoires de la Société impériale des naturalistes de Moscou, v. 10 (type locality, Gulf of Pechili; Oriental Sea, Beijing, China).

*Chrysophrys swinhonis* Günther 1874:155, Annals and Magazine of Natural History (Series 4), v. 13 (no. 74) (art. 23) (type locality, Chefoo, Yellow Sea, Shantung Province, China).

*Lutianus hudsoni* Evermann & Shaw 1927:116, Proceedings of the California Academy of Sciences (Series 4), v. 16 (no. 4) (type locality, Nanking, China).

*Sparus swinhonis czerskii* Berg 1915:558, Fig., Ezhegodnik, Zoologicheskago Muzeya Imperatorskoi Akademii Nauk, v. 19 (no. 4) (for 1914) (type locality, Mouth of Tumen River, North Korea).

**Distribution:** Japan, Taiwan, and China.

**Comments:** taxonomic decision about *Lutianus hudsoni* of Allen and Talbot (1985:48).

***Acanthopagrus sheim*** Iwatsuki 2013

*Acanthopagrus sheim* Iwatsuki 2013:85, Fig. 4 (c), Journal of Fish Biology, v. 83 (no. 1) (type locality, Off Hawar Island, Qatar).

**Distribution:** Western Indian Ocean: Persian Gulf to Pakistan and western India.

***Acanthopagrus sivicolus*** Akazaki 1962

*Acanthopagrus sivicolus* Akazaki 1962:187, 355, Fig. 36, Studies on the spariform fishes (type locality, Oshima, northern Ryukyu Islands, Japan).

**Distribution:** Ryukyu and Amami Islands.

***Acanthopagrus taiwanensis*** Iwatsuki & Carpenter 2006

*Acanthopagrus taiwanensis* Iwatsuki & Carpenter 2006:4, Figs. 1A, 2D–E, 3A–4A, 5A–B, Zootaxa No. 1202 (type locality, Estuary basin of Tung-kang river (purchased at Tung-kang fish market), southwestern Taiwan).

**Distribution:** Taiwan.

***Acanthopagrus vagus*** (Peters 1852)

*Chrysophrys vagus* Peters 1852:681, Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin 1852 (type locality, Sena, Zambezi River, Mozambique).

*Pagrus caffer* Castelnau 1861:30, Mémoire sur les poissons de l'Afrique australe (type locality, Durban, KwaZulu-Natal, South Africa).

**Distribution:** South Africa and Mozambique.

**Genus *Archosargus*** Gill

*Archosargus* Gill 1865:266, Canadian Naturalist, v. 2. Masculine. (Type species *Sparus probatocephalus* Walbaum 1792 by monotypy).

*Salema* Jordan & Evermann 1896:390, United States Commission of Fish and Fisheries, Report of the Commissioner, v. 21, Appendix 5. Feminine. (Type species *Perca unimaculata* Bloch 1792 by original designation).

Western Atlantic and eastern pacific; four species.

***Archosargus aries*** (Valenciennes 1830)

*Sargus aries* Valenciennes in Cuvier & Valenciennes 1830:58, Histoire naturelle des poissons, v. 6 (type locality, Rio de Janeiro, Brazil; Lake Maracaibo, Venezuela).

**Distribution:** southwestern Atlantic.

***Archosargus pourtalesii*** (Steindachner 1881)

*Sargus pourtalesii* Steindachner 1881:160, Anzeiger der Akademie der Wissenschaften in Wien, Mathematisch-

Naturwissenschaftliche Classe, v. 18 (no. 16) (for 23 June 1881) (type locality, Galápagos Islands).

**Distribution:** Galápagos Islands.

***Archosargus probatocephalus* (Walbaum 1792)**

*Sparus probatocephalus* Walbaum, (ex Schöpf) 1792:295, Petri Artedi sueci genera piscium Part 3 (no locality stated).

*Sparus pokis* Walbaum, (ex Schöpf) 1792:296, Petri Artedi sueci genera piscium Part 3 (no locality stated, New York, U.S.A.).

*Sparus porgee* Walbaum, (ex Schöpf) 1792:296, Petri Artedi sueci genera piscium Part 3 (no locality stated, New York, U.S.A.).

*Sparus oviccephalus* Bloch & Schneider 1801:280, M. E. Blochii, Systema Ichthyologiae (type locality, New York, U.S.A.).

*Sparus oviccephalus* var. *poki* Bloch & Schneider 1801:280, M. E. Blochii, Systema Ichthyologiae (type locality, Carolinas, U.S.A.).

*Sparus oviccephalus* var. *porghee* Bloch & Schneider 1801:280, M. E. Blochii, Systema Ichthyologiae (type locality, Carolinas, U.S.A.).

*Sparus porgy* Lacepède 1802:38, 120, Histoire naturelle des poissons (Lacepède), v. 4 (type locality, Carolina, U.S.A.).

*Sparus ovis* Mitchell 1815:392, Pl. 2 (fig. 5), Transactions of the Literary and Philosophical Society of New-York, v. 1 (art. 5) (for 1814) (type locality, Various localities, New York and New Jersey, U.S.A.).

*Perca leonina* Gronow in Gray 1854:113, Catalogue of fish collected and described by Laurence Theodore Gronow (type locality, Near Cape of Good Hope, South Africa).

*Archosargus oviceps* Ginsburg 1952:94, Fig. 7, Journal of the Washington Academy of Sciences, v. 42 (no. 3) (type locality, Barataria Bay, Louisiana, U.S.A.).

**Distribution:** Nova Scotia to Brazil, including Gulf of Mexico except West Indies and Bahamas; *Archosargus probatocephalus oviceps* from Louisiana is a valid subspecies (Lee et al. 1980:754).

***Archosargus rhomboidalis* (Linnaeus 1758)**

*Perca rhomboidalis* Linnaeus 1758:293, Systema Naturae, Ed. X, v. 1 (type locality, America, Jamaica).

*Perca unimaculata* Bloch 1792:75, Pl. 308 (fig. 1), Naturgeschichte der ausländischen Fische, v. 6 (type locality, Brazil).

*Sparus salin* Lacepède 1802:43, 137, Histoire naturelle des poissons (Lacepède), v. 4 (type locality, Brazil).

*Sargus humerimaculatus* Quoy & Gaimard 1824:297, Voyage autour du monde (type locality, Rio de Janeiro, Brazil).

*Sargus flavolineatus* Valenciennes in Cuvier & Valenciennes 1830:60, Histoire naturelle des poissons, v. 6 (type locality, Cuba).

*Sargus caribaeus* Poey 1860:197 Memorias sobre la historia natural de la Isla de Cuba, v. 2 (type locality, Cuba).

*Sargus tridens* Poey 1875:131, Anales de la Sociedad Española de Historia Natural, Madrid v. 4 (type locality, Cuba).

**Distribution:** New Jersey and northeastern Gulf of Mexico to Brazil.

**Genus *Argyrops* Swainson**

*Argyrops* Swainson 1839:171, 221, The natural history and classification v. 2. Masculine. (Type species *Sparus*

*spinifer* Forsskål 1775 by monotypy).

*Dulosparus* Fowler 1933:148, 168, Bulletin of the United States National Museum No. 100, v. 12. Masculine.  
(Type species *Pagrus filamentosus* Valenciennes 1830 by original designation).

Red Sea and Indo-West Pacific; genus revised by Iwatsuki and Heemstra (2018); seven species.

***Argyrops bleekeri* Oshima 1927**

*Argyrops longifilis* (nec Valenciennes 1830) Jordan & Richardson 1909:189, Memoirs of the Carnegie Museum v. 4 (no. 4) (misidentification).

*Argyrops spinifer* (nec Forsskål) Jordan & Thompson 1912: 575, Proceedings of the United States National Museum v. 41 (no. 1875) (misidentification).

*Argyrops bleekeri* Oshima 1927:141, Japanese Journal of Zoology, v. 1 (no. 5) (type locality, Meitsu, Nago, Miyazaki, Japan).

**Distribution:** widely distributed in the northwestern Pacific.

***Argyrops caeruleops* Iwatsuki and Heemstra 2018**

*Argyrops caeruleops* Iwatsuki and Heemstra 2018:413, Figs. 8A, 9A–B, Zootaxa 4438 (no. 3) (type locality, Off southern Oman, purchased in Chagaruchi fish market, Pusan, South Korea).

**Distribution:** Gulf of Oman to probably western Pakistan, northern Indian Ocean.

***Argyrops filamentosus* (Valenciennes 1830)**

*Pagrus filamentosus* Valenciennes in Cuvier & Valenciennes 1830:158, Histoire naturelle des poissons, v. 6 (type locality, Saint-Denis, Réunion).

**Distribution:** Red Sea and western Indian Ocean including Persian Gulf to Natal.

***Argyrops flavops* Iwatsuki and Heemstra 2018**

*Argyrops flavops* Iwatsuki and Heemstra 2018:422, Figs. 11A, 12A–C, Zootaxa 4438 (no. 3) (type locality, Mutrah Fish Market, Oman).

**Distribution:** Gulf of Oman to Pakistan, northern Indian Ocean.

***Argyrops megalommatus* (Klunzinger 1870)**

*Pagrus megalommatus* Klunzinger 1870:762, Verhandlungen der K.-K. zoologisch-botanischen Gesellschaft in Wien, v. 20 (type locality, Al-Qusair, Red Sea Governorate, Egypt, Red Sea).

**Distribution:** Red Sea.

***Argyrops notialis* Iwatsuki and Heemstra 2018**

*Argyrops notialis* Iwatsuki and Heemstra 2018:412, Figs. 2B, 3B, 4B, Zootaxa 4438 (no. 3) (type locality, Off Carnarvon, near mouth of Shark Bay, Western Australia).

**Distribution:** Perth to north of Port Hedland, Western Australia.

***Argyrops spinifer* (Forsskål 1775)**

*Sparus spinifer* Forsskål 1775:32, xi, Descriptiones animalium (Forsskål) (type locality, Jeddah, Saudi Arabia, Red Sea).

*Pagrus longifilis* Valenciennes in Cuvier & Valenciennes 1830:159, Histoire naturelle des poissons, v. 6 (type locality, Trincomalee, Sri Lanka).

*Pagrus ruber* Boulenger 1888:658, Proceedings of the Zoological Society of London 1887 (pt 4) (type locality, Muscat, Oman, Gulf of Oman, Arabian Sea). Preoccupied by *Pagrus ruber* Steindachner 1883 [=*Chrysophrys auratus* (Forster 1801)].

*Pagrus ciliaris* von Bonde 1923:19, Pl. 5, Report Fisheries and Marine Biological Survey, Union of South Africa Rep. 3 (art. 1) (type locality, KwaZulu-Natal, South Africa).

**Distribution:** Red Sea and Indo-West Pacific south to Natal.

### **Genus *Calamus* Swainson**

*Calamus* Swainson 1839:171, 221, The natural history and classification, v. 2. Masculine. (Type species *Calamus megacephalus* Swainson 1839 by monotypy).

*Grammateus* Poey 1872:182, Annals of the Lyceum of Natural History of New York v. 10 (no. 6–7) (art. 10). Masculine. (Type species *Pagellus microps* Guichenot 1853 by subsequent designation. Type designated by Jordan & Fesler 1893:508, United States Commission of Fish and Fisheries, Report of the Commissioner, v. 17, art. 4).

Western Atlantic (11 species) and eastern Pacific (two species); 13 species.

### ***Calamus arctifrons* Goode & Bean 1882**

*Calamus arctifrons* Goode & Bean 1882:425, Proceedings of the United States National Museum, v. 5 (no. 297) (type locality, Pensacola, Florida, U.S.A.).

**Distribution:** South Florida to Louisiana.

### ***Calamus bajonado* (Bloch & Schneider 1801)**

*Sparus bajonado* Bloch & Schneider (ex Parra) 1801:284, M. E. Blochii, Systema Ichthyologiae (type locality, Vicinity of Nassau, Bahamas).

*Sparus bruneus* [sic] Bloch & Schneider 1801:280, M. E. Blochii, Systema Ichthyologiae (type locality, Rhode Island, U.S.A.).

*Pagrus quadrifurcatus* Ranzani 1842:348, Pl. 32 (fig. 1), Novi Commentarii Academiae Scientiarum Instituti Bononiensis, v. 5 (type locality, Brazilian seas).

*Pagellus caninus* Poey 1860:199, Memorias sobre la historia natural de la Isla de Cuba, v. 2 (type locality, Havana, Cuba).

*Calamus plumatula* Guichenot 1868:119, Mémoires de la Société Impériale des Sciences Naturelles de Cherbourg, v. 14 (= Ser. 2, v. 4) (type locality, Martinique Island, West Indies).

*Calamus macrops* Poey 1872:181, Pl. 7 (fig. 3), Annals of the Lyceum of Natural History of New York, v. 10 (no. 6–7) (art. 10) (type locality, Havana, Cuba).

**Distribution:** Bermuda, northern Gulf of Mexico to Brazil.

### ***Calamus brachysomus* (Lockington 1880)**

*Chrysophrys calamus* (nec Valenciennes. 1830) Günther 1859:487, Catalog of Fishes, v. 1 (misidentification).

*Sparus brachysomus* Lockington 1880:284, Proceedings of the United States National Museum, v. 3 (no. 149) (type locality, Magdalena Bay, Baja California, Mexico).

**Distribution:** Baja California to Peru.

### ***Calamus calamus* (Valenciennes 1830)**

*Pagellus calamus* Valenciennes in Cuvier & Valenciennes 1830:206, Pl. 152, Histoire naturelle des poissons, v.

6 (type locality, Martinique Island, West Indies).

*Chrysophris (Calamus) megacephalus* Swainson 1839:222, The natural history and classification, v. 2 (type locality, Martinique Island, West Indies).

*Pagellus orbitarius* Poey 1860:201, Memorias sobre la historia natural de la Isla de Cuba, v. 2 (type locality, Cuba).

**Distribution:** North Carolina, Bermuda, northern Gulf of Mexico to Brazil.

***Calamus campechanus* Randall & Caldwell 1966**

*Calamus campechanus* Randall & Caldwell 1966:18, Fig. 8, Bulletin of the Los Angeles County Museum of Natural History No. 2 (type locality, 11 kilometres northeast of Progresso, Campeche Bank, off northwestern Yucatán Peninsula, Mexico).

**Distribution:** Bay of Campeche.

***Calamus cervigoni* Randall & Caldwell 1966**

*Calamus cervigoni* Randall & Caldwell 1966:14, Fig. 6, Bulletin of the Los Angeles County Museum of Natural History No. 2 (type locality, North of Carúpano, Venezuela).

**Distribution:** Venezuela.

***Calamus leucosteus* Jordan & Gilbert 1885**

*Calamus leucosteus* Jordan & Gilbert in Jordan 1885:879, United States Commission of Fish and Fisheries, Report of the Commissioner, v. 13 (1885) (type locality, Charleston, South Carolina, U.S.A.).

**Distribution:** North Carolina to Florida and Gulf of Mexico.

***Calamus mu* Randall & Caldwell 1966**

*Calamus mu* Randall & Caldwell 1966:11, Fig. 5, Bulletin of the Los Angeles County Museum of Natural History No. 2 (type locality, Apparently from the commercial fishery, Port of Victoria, about 20°S, Brazil).

**Distribution:** Port of Victoria, Brazil.

***Calamus nodosus* Randall & Caldwell 1966**

*Calamus nodosus* Randall & Caldwell 1966:36, Fig. 20, Bulletin of the Los Angeles County Museum of Natural History No. 2 (type locality, About 25 miles south-southwest of Destin, Florida, U.S.A.).

**Distribution:** North Carolina to Florida and Gulf of Mexico.

***Calamus penna* (Valenciennes 1830)**

*Pagellus penna* Valenciennes in Cuvier & Valenciennes 1830:209, Histoire naturelle des poissons, v. 6 (type locality, Brazil).

*Pagellus microps* Guichenot 1853:83, Pl. 3 (fig. 1), Sagra, R. de la, Histoire physique, politique et naturelle de l'Île de Cuba (type locality, Havana, Cuba).

*Pagellus humilis* Poey 1868:308, Repertorio Fisico-Natural de la Isla de Cuba, v. 2 (type locality, Havana, Cuba).

*Grammateus medius* Poey 1872:183, Pl. 7 (fig. 4), Annals of the Lyceum of Natural History of New York, v. 10 (no. 6–7) (art. 10) (type locality, Havana, Cuba).

*Pagellus milneri* Goode & Bean 1879:134, Proceedings of the United States National Museum, v. 2 (no. 74) (type locality, Charlotte Harbor, Florida, U.S.A.).

**Distribution:** Bahamas, Florida and Gulf of Mexico to Brazil.

***Calamus pennatula*** Guichenot 1868

*Calamus pennatula* Guichenot 1868:116, Mémoires de la Société Impériale des Sciences Naturelles de Cherbourg, v. 14 (= Ser. 2, v. 4) (type locality, Martinique Island, West Indies).

*Calamus kendalli* Evermann & Marsh 1899:354, United States Commission of Fish and Fisheries, Report of the Commissioner, v. 25 (for 1899) Appendix 7 (type locality, Mayagüez, Puerto Rico).

**Distribution:** western Atlantic.

***Calamus proridens*** Jordan & Gilbert 1884

*Calamus proridens* Jordan & Gilbert 1884:150, Proceedings of the United States National Museum, v. 7 (no. 417) (type locality, Key West, Florida, U.S.A.).

**Distribution:** Florida and northern Gulf of Mexico to Bay of Campeche.

***Calamus taurinus*** (Jenyns 1840)

*Chrysophrys taurina* Jenyns 1840:56, Pl. 12, The zoology of the voyage of H. M. S. Beagle (type locality, San Cristóbal Island [Chatham Island], Galápagos Islands).

*Chrysophrys cyanopteron* Valenciennes 1846: no p., Pl. 4 (fig. 2), Voyage autour du monde sur la frégate "la Vénus" (type locality, Galápagos Islands). (Corresponding text published in Valenciennes 1855:330, Ichthyologie. Pp. ii–iii + 297–351. In: A. du Petit-Thouars. Voyage autour du monde sur la frégate "la Vénus", pendant les années 1836–39. Zoology. Paris).

**Distribution:** Galapagos Islands.

**Genus *Chrysoblephus*** Swainson

*Chrysoblephus* Swainson 1839:171, 221, The natural history and classification v. 2. Masculine. (Type species *Chrysophrys gibbiceps* Valenciennes 1830 by monotypy).

Southwestern Indian Ocean usually found in deepish waters on rocky ground; 6 species.

***Chrysoblephus anglicus*** (Gilchrist & Thompson 1908)

*Chrysophrys anglicus* Gilchrist & Thompson 1908:172, Annals of the South African Museum, v. 6 (pt 2) (type locality, Durban, KwaZulu-Natal, South Africa).

**Distribution:** Sodwana and Mozambique to Algoa Bay.

***Chrysoblephus cristiceps*** (Valenciennes 1830)

*Chrysophrys cristiceps* Valenciennes in Cuvier & Valenciennes 1830:132, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

**Distribution:** Cape of Good Hope to Natal.

***Chrysoblephus gibbiceps*** (Valenciennes 1830)

*Chrysophrys gibbiceps* Valenciennes in Cuvier & Valenciennes 1830:127, Pl. 147, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

**Distribution:** Cape of Good Hope to Natal; presence in Australian waters need confirmation.

***Chrysoblephus laticeps*** (Valenciennes 1830)

*Chrysophrys laticeps* Valenciennes 1830:122, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

*Cynaedus torvus* Gronow, in Gray 1854:54, Catalogue of fish collected and described by Laurence Theodore Gronow (type locality, several localities).

*Chrysophrys algoensis* Castelnau 1861:22, Mémoire sur les poissons de l'Afrique australe (type locality, Algoa Bay, South Africa, southwestern Indian Ocean).

*Pagellus fascialis* Castelnau 1861:28, Mémoire sur les poissons de l'Afrique australe (type locality, Algoa Bay, South Africa).

*Chrysophrys pugicephalus* Gilchrist & Thompson 1909:234, Annals of the South African Museum, v. 6 (pt 3, no. 5) (type locality, Off Durban, KwaZulu-Natal, South Africa).

**Distribution:** Cape of Good Hope to Mauritius.

**Comments:** *Pagellus fascialis* Castelnau 1861 is here regarded as a new synonym based on fin rays count and colour pattern.

***Chrysoblephus lophus*** (Fowler 1925)

*Sparus lophus* Fowler 1925:234, Fig. 3, Proceedings of the Academy of Natural Sciences of Philadelphia, v. 77 (type locality, KwaZulu-Natal coast, South Africa).

**Distribution:** Natal, southern Africa.

***Chrysoblephus puniceus*** (Gilchrist & Thompson 1908)

*Chrysophrys puniceus* Gilchrist & Thompson 1908:173, Annals of the South African Museum, v. 6 (pt 2) (type locality, KwaZulu-Natal, South Africa).

**Distribution:** Natal and southern Mozambique.

**Genus *Chrysophrys*** Quoy & Gaimard

*Chrysophrys* Quoy & Gaimard 1824:299, Voyage autour du monde. Feminine. (Type species *Chrysophrys unicolor* Quoy & Gaimard 1824 by monotypy).

*Pagrosomus* Gill 1893:97, Memoirs of the National Academy of Sciences, v. 6 (mem. 5). Masculine. (Type species *Labrus auratus* Forster in Bloch & Schneider 1801 by monotypy).

West Pacific; monotypic.

***Chrysophrys auratus*** (Forster 1801)

*Sparus auratus* Houttuyn 1782:318, Verhandelingen der Hollandsche Maatschappij der Wetenschappen, Haarlem, v. 20 (pt 2) (type locality, Japan).

*Labrus auratus* Forster in Bloch & Schneider 1801:266, M. E. Blochii, Systema Ichthyologiae (type locality, Queen Charlotte Sound, Marlborough Sounds, South Island, New Zealand).

*Chrysophrys unicolor* Quoy & Gaimard 1824:299, Voyage autour du monde (type locality, Dick Hartog and Shark Bay, Western Australia).

*Pagrus guttulatus* Valenciennes in Cuvier & Valenciennes 1830:160, Histoire naturelle des poissons, v. 6 (type locality, Australia; King George Sound, Western Australia; Jervis Bay, New Zealand).

*Pagrus micropterus* Valenciennes in Cuvier & Valenciennes 1830:163, Histoire naturelle des poissons, v. 6 (type locality, Tamise River, New Zealand).

*Pagrus latus* Richardson & Solander in Richardson 1842:392, Annals and Magazine of Natural History (New

Series), v. 9 (no. 59) (art. 42) (type locality, Between Opooragi and Owbooragi, New Zealand).

*Pagrus chinensis* Steindachner 1870:625, Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe, v. 61 (1. Abth.) (type locality, China).

*Pagrus ruber* Steindachner 1883:124, Anzeiger der Kaiserlichen Akademie der Wissenschaften, Wien, Mathematisch-Naturwissenschaftliche Classe, v. 20 (no. 15) (for 14 June 1883) (type locality, Tokyo, Japan). Species redescribed with more details in Steindachner and Döderlein 1883, Beiträge zur Kenntniss der Fische Japan's. (II.), Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Classe., v. 48 (1. Abth.): 1–40, Pls. 1–7.

*Pagrus arthurius* Jordan & Starks 1906:517, Fig. 1, Proceedings of the United States National Museum, v. 31 (no. 1493) (type locality, Port Arthur, Manchuria, China).

**Distribution:** Japan, China Sea, Australia, New Zealand

**Comments:** taxonomic decisions in part from Paulin (1990). *Sparus auratus* Houttuyn 1782 reported in the synonymy of *Sparus aurata* Linnaeus 1758 is erroneous because *Sparus aurata* Linnaeus is confined to the Mediterranean Sea and the Atlantic Ocean.

#### **Genus *Cymatoceps* Smith**

*Cymatoceps* Smith 1938:259, Transactions of the Royal Society of South Africa v. 26 (pt 3). Masculine. (Type species *Chrysophrys nasutus* Castelnau 1861 by original designation).

South Africa in shallow waters on rocky bottoms, also entering freshwaters; monotypic.

#### ***Cymatoceps nasutus* (Castelnau 1861)**

*Chrysophrys nasutus* Castelnau 1861:24, Mémoire sur les poissons de l'Afrique australe (type locality, Table Bay, Cape Town, South Africa, southeastern Atlantic).

*Pagrus nigripinnis* Boulenger 1903:67, Pl. 7, Annals of the South African Museum, v. 3 (pt 3) (type locality, KwaZulu-Natal coast, South Africa).

**Distribution:** Cape of Good Hope to Natal.

#### **Genus *Diplodus* Rafinesque**

*Diplodus* Rafinesque 1810:26, 54, Indice d'ittiologia siciliana. Masculine. (Type species *Sparus annularis* Linnaeus 1758 by monotypy).

*Sargus* Cuvier 1816:272, Le Règne Animal, v. 2. Masculine. (Type species *Sparus sargus* Linnaeus 1758 by absolute tautonomy). Objectively invalid; preoccupied by *Sargus* Fabricius 1798 in Diptera.

*Charax* Risso 1827:353, Histoire naturelle des principales productions de l'Europe méridionale v. 3. Masculine. (Type species *Charax acutirostris* Delaroche 1809 by monotypy). Objectively invalid; preoccupied by *Charax* Scopoli 1777 in fishes.

*Denius* Gistel 1848:X, Naturgeschichte des Thierreichs. Masculine. (Type species *Sparus sargus* Linnaeus 1758 by being a replacement name).

*Puntazzo* Bleeker 1876:284, Archives néerlandaises des sciences exactes et naturelles v. 11. Masculine. [type species *Sparus acutirostris* Delaroche 1809 (= *Sparus puntazzo* Cetti 1784) by being a replacement name].

North Atlantic to southwestern Indian Ocean on rocky and sandy bottoms of coastal waters and lagoons; 23 species.

#### ***Diplodus annularis* (Linnaeus 1758)**

*Sparus annularis* Linnaeus 1758:278, Systema Naturae, Ed. X, v. 1 (type locality, Adriatic Sea (Mediterranean

Sea).

*Sparus sparulus* Lacepède 1802:26, 76, not Pl. 2 (fig. 1), Histoire naturelle des poissons (Lacepède), v. 4 (type locality, Mediterranean Sea); *nomen novum* for *Sparus annularis* Linnaeus.

*Sparus sparulus* Rafinesque 1810:48, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy).

*Sparus sparlotus* Rafinesque 1810:49, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy).

?*Sparus dubius* Rafinesque 1810:68, Indice d'ittiologia siciliana (type locality, Sicily, Italy).

*Sciaena melanura* Pallas 1814:254, Zoographia Rosso-Asiatica, v. 3 (type locality, Evpatoria, Black Sea).

**Distribution:** Mediterranean to Black Sea and Bay of Biscay to Senegal.

**Comments:** see Valenciennes (1830:44) for a discussion of the status of *Sparus sparulus* Rafinesque; others taxonomic decision of Günther (1859:445).

#### *Diplodus argenteus* (Valenciennes 1830)

*Sargus argenteus* Valenciennes in Cuvier & Valenciennes 1830:60, Histoire naturelle des poissons, v. 6 (type locality, Brazil).

*Sparus anularis* Larrañaga 1923:383, Escritos de Don Dámaso Antonio Larrañaga, v. 2 (type locality, Uruguay). Objectively invalid; preoccupied by *Sparus annularis* Linnaeus 1758.

*Sparus sargo* Larrañaga 1923:379, Escritos de Don Dámaso Antonio Larrañaga, v. 2 (type locality, Uruguay).

**Distribution:** Florida and Bahamas to Argentina; the southern population from southern Brazil to Argentina is recognized as a different subspecies (Devincenzi 1925).

#### *Diplodus ascensionis* (Valenciennes 1830)

*Sargus ascensionis* Valenciennes in Cuvier & Valenciennes 1830:61, Histoire naturelle des poissons, v. 6 (type locality, Ascension Island).

**Distribution:** Ascension Island.

#### *Diplodus bellottii* (Steindachner 1882)

*Sargus bellottii* Steindachner 1882:41, Anzeiger der Kaiserlichen Akademie der Wissenschaften, Wien, Mathematisch-Naturwissenschaftliche Classe, v. 19 (no. 5) (for 9 Feb. 1882) (type locality, Arglim Bank, Canary Islands).

*Diplodus senegalensis* Cadenat 1964:968, Figs. 6, 7, 25, Bulletin de l'Institut Français d'Afrique Noire (Sér A) Sciences Naturelles, v. 26 (no. 3) (type locality, Port-Étienne, Mauritania; coasts of Senegal).

**Distribution:** Straits of Gibraltar to Cape Verde; absent from the Canary and Cape Verde Islands.

#### *Diplodus bermudensis* Caldwell 1965

*Diplodus bermudensis* Caldwell 1965:217, Fig. 1, Fieldiana Zoology, v. 44 (no. 23) (type locality, Whalebone Bay, St. George's Island, Bermuda).

**Distribution:** Bermudas.

#### *Diplodus cadenati* de la Paz, Bauchot & Daget 1974

*Diplodus sargus cadenati* de la Paz, Bauchot & Daget 1974:113, Figs. 2, 3A–B, Ichthyologia, v. 5 (no. 1) (type locality, Puerto de la Cruz, Tenerife, Canary Islands).

*Diplodus sargus typicus* Cadenat 1964:960, Figs. 4, 11, 23, Bulletin de l'Institut Français d'Afrique Noire

(Sér A) Sciences Naturelles, v. 26 (no. 3) (type locality, Mediterranean Sea; African Atlantic coasts).

**Distribution:** Senegal north to Madeira, Azores and Bay of Biscay.

***Diplodus capensis* (Smith 1844)**

*Sargus capensis* Smith 1844: no page, Pl. 23 (fig. 2), Illustrations of the zoology of South Africa, v. 4 (type locality, Southeastern coast of South Africa).

**Distribution:** Southeastern Atlantic: Angola to South Africa; southwestern Indian Ocean: South Africa, Madagascar, Mauritius (Mascarenes). Not Oman, India and Pakistan.

***Diplodus caudimacula* (Poey 1860)**

*Sargus caudimacula* Poey 1860: 198, Memorias sobre la historia natural de la Isla de Cuba, v. 2 (type locality, Cuba).

**Distribution:** Caribbean Sea to southern Florida.

***Diplodus cervinus* (Lowe 1838)**

?*Sargus trifasciatus* Rafinesque 1810: 50, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy).

*Charax cervinus* Lowe 1838: 177, Transactions of the Zoological Society of London, v. 2 (pt 3, art. 14) (type locality, Lanzarote, Canary Islands, eastern Atlantic).

**Distribution:** Bay of Biscay to South Africa and Mediterranean. The previously recognized subspecies (*Diplodus cervinus cervinus* Valenciennes from eastern Atlantic and Mediterranean; *Diplodus cervinus hottentotus* Smith from South Africa; *Diplodus cervinus omanensis* Bauchot & Bianchi from southern Oman) are presently elevated to species level.

**Comments:** *Sargus trifasciatus* Rafinesque is a doubtful synonym (Tortonese 1975: 110).

***Diplodus fasciatus* (Valenciennes 1830)**

*Sargus fasciatus* Valenciennes in Cuvier & Valenciennes 1830: 59, Histoire naturelle des poissons, v. 6 (type locality, Cape Verde Islands).

**Distribution:** Cape Verde Islands, eastern Atlantic.

***Diplodus heleneae* (Sauvage 1879)**

*Sargus heleneae* Sauvage 1879: 204, Bulletin de la Société philomathique de Paris (7th Série), v. 3 (type locality, St. Helena Island, South Atlantic).

**Distribution:** endemic to St. Helena Island.

***Diplodus holbrookii* (Bean 1878)**

*Sargus holbrookii* Bean 1878: 198, Proceedings of the United States National Museum, v. 1 (no. 28) (type locality, Savannah Bank, Charleston, South Carolina, U.S.A.).

**Distribution:** Chesapeake Bay to Florida and northwestern Gulf of Mexico.

***Diplodus hottentotus* (Smith 1844)**

*Sargus hottentotus* Smith 1844: no page, Pl. 23 (fig. 1), Illustrations of the zoology of South Africa, v. 4 (type locality, Southeastern coast of South Africa).

*Charax capensis* Castelnau 1861: 19, Mémoire sur les poissons de l'Afrique australe. (Cape of Good Hope,

South Africa).

**Distribution:** Southeastern Atlantic to southwestern Indian Ocean: Mozambique and southern Africa.

**Comments:** *Charax capensis* Castelnau 1861 is a new synonym.

***Diplodus kotschy*** (Steindachner 1876)

*Sargus kotschy* Steindachner 1876:203, Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe, v. 74 (1. Abth.) (type locality, Persian Gulf; Madagascar).

**Distribution:** Persian Gulf and Oman east to India.

***Diplodus levantinus*** Fricke, Golani & Appelbaum-Golani 2016

*Diplodus levantinus* Fricke Golani & Appelbaum-Golani 2016:3, Figs. 1–4, Scientia Marina, v. 80 (no. 3) (type locality, Israel, off Jaffa, eastern Mediterranean Sea).

**Distribution:** Mediterranean coast of Israel.

***Diplodus lineatus*** (Valenciennes 1830)

*Sargus lineatus* Valenciennes in Cuvier & Valenciennes 1830:59, Histoire naturelle des poissons, v. 6 (no locality stated).

*Diplodus sargus insularum* Cadenat 1964:962, Figs. 5, 12, 24, Bulletin de l'Institut Français d'Afrique Noire (Sér A) Sciences Naturelles, v. 26 (no. 3) (type locality, Cape Verde Islands).

**Distribution:** endemic to Cape Verde Islands.

***Diplodus noct*** (Valenciennes 1830)

*Sargus noct* Valenciennes (ex Ehrenberg) in Cuvier & Valenciennes 1830:51, Histoire naturelle des poissons, v. 6 (type locality, Egypt, Red Sea; Suez, Egypt, Gulf of Suez, Red Sea).

**Distribution:** Red Sea; record from Algeria is doubtful (Tortonese 1973:415).

***Diplodus omanensis*** Bauchot & Bianchi 1984

*Diplodus cervinus omanensis* Bauchot & Bianchi 1984:103, Fig. A, Cybium, v. 8 (no. 3) (type locality, Kuria Muria Bay [Oman], Arabian Sea).

**Distribution:** Oman and Pakistan.

***Diplodus prayensis*** Cadenat 1964

*Sargus vulgaris* (nec Geoffroy St. Hilaire 1817) Rochebrune 1883:78, Actes de la Société Linnéenne de Bordeaux v. 36 (no. 6) (misidentification).

*Diplodus vulgaris* (nec Geoffroy St. Hilaire 1817) Fowler 1936:1298, Bulletin of the American Museum of Natural History v. 70 (pt 2) (misidentification).

*Diplodus prayensis* Cadenat 1964:955, 965, Figs. 8, 14, 20, Bulletin de l'Institut Français d'Afrique Noire (Sér A) Sciences Naturelles, v. 26 (no. 3) (type locality, Port of Praia, São Thiago Island, Cape Verde Islands).

**Distribution:** Cape Verde Islands (eastern Atlantic).

***Diplodus puntazzo*** Gmelin 1789

*Sparus puntazzo* Gmelin 1789, Caroli a Linné ... Systema Naturae per regna tria naturae, secundum classes, ordines, genera, species (type locality, Sardinia, Italy).

*Sparus acutirostris* Delaroche 1809:348, Pl. 24 (fig. 12), Annales du Muséum d'Histoire Naturelle, Paris, v.

13 (type locality, Ibiza, Balearic Islands, Spain).

*Sparus oxyrhyncus* Nardo 1827:31, 38 (no. 118), Giornale di Fisica, Chimica e Storia Naturale Medicina e Arti, Pavia Dec. II, v. 10; 3146 (type locality, Adriatic Sea). Also in Nardo 1827:col. 480, 486 Isis (Oken), v. 20 (no. 6) where it is spelled *oxyrynchus*.

*Charax puntazzo ponticus* Nordmann 1840:387, Pl. 4 (fig. 2), Voyage dans la Russie méridionale et la Crimée (type locality, Sevastopol in Crimea, Ukraine, Black Sea).

*Puntazzo annularis* Bleeker 1876:284, Archives néerlandaises des sciences exactes et naturelles, v. 11 (type locality, Based on *Charax puntazzo* of Cuvier & Valenciennes = *Sparus puntazzo* Walbaum 1792); unneeded replacement for *Charax puntazzo* Cuvier & Valenciennes.

**Distribution:** Mediterranean to Black Sea; Bay of Biscay to Congo, including Canary and Cape Verde Islands; record from South Africa erroneous (Smith & Smith 1986).

**Comments:** Tortonese (1973:413) listed *Puntazzo puntazzo* (Gmelin 1789) as the valid name for this species, but as reported by Valenciennes (1830:76) "Cetti est le premier auteur récent qui paraisse en avoir parlé." Attributed to Cetti 1777 (described on p. 115 of *Anfibi e pesci di Sardegna*) by many authors (e.g. Bauchot and Hureau 1990:798, Bilecenoglu et al. 2002:92, Fricke et al. 2007:87, Vasil'eva 2007:99, Parin et al. 2014:368), however the name is regarded as a vernacular name and not available. Dated to Walbaum 1792 in literature.

#### *Diplodus sargus* (Linnaeus 1758)

*Sparus sargus* Linnaeus 1758:278, Systema Naturae, Ed. X, v. 1 (type locality, Mediterranean Sea).

*Sparus variegatus* Bonnaterre 1788:98, Tableau encyclopédique et méthodique des trois règnes de la nature... Ichthyologie (type locality, Marseille, France).

*Sparus cinctus* Walbaum 1792:282, Petri Artedi sueci genera piscium Part 3 (type locality, Marseille, France).

*Sargus rarus* Geoffroy St. Hilaire 1808–09, Pl. 18 (fig. 1), Poissons du Nil, v. 1 (part 1) (type locality, Neotype locality: Bardawil Lagoon, northern Sinai, Egypt).

*Sparus varatulus* Rafinesque 1810:48, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy, Mediterranean Sea).

*Sargus rondeletii* Valenciennes in Cuvier & Valenciennes 1830:14, Pl. 141, Histoire naturelle des poissons, v. 6 (type locality, Naples; Marseille; Toulouse; Malta; Alexandria, Egypt, Mediterranean Sea; Lac de Bizerte, Tunisia).

*Sargus vetula* Valenciennes in Cuvier & Valenciennes 1830:48, Histoire naturelle des poissons, v. 6 (type locality, Mediterranean Sea).

*Demius rondeletii* Gistel 1848, index, Pl. 19, Fig. 1 (no locality stated).

*Diplodus sargus typicus* Cadenat 1964:960, Figs. 4, 11, 23 [Bulletin de l'Institut Français d'Afrique Noire (Sér A) Sciences Naturelles, v. 26 (no. 3) (type locality, Mediterranean Sea; African Atlantic coasts)].

**Distribution:** eastern Atlantic, Mediterranean, and western Indian Ocean.

**Comments:** *Sparus variegatus* Bonnaterre 1788 is based on *Sparus* n.58 of Brünnich, which represents the *Sargus rondeletii* described by Valenciennes. Erroneously reported as a synonym of *Spicara melanurus* (Valenciennes 1830) a species which is absent from the Mediterranean Sea. Valenciennes (1830:34) erroneously recognizes *Sparus varatulus* Rafinesque 1810 as a synonym of his *Sargus salviani* [= *Diplodus vulgaris* (Geoffroy Saint Hilaire 1817)].

#### *Diplodus striatus* (Bliss 1883)

*Sargus striatus* Bliss 1883:50, Transactions of the Royal Society of Arts and Sciences of Mauritius (N. S.), v. 13 (type locality, Mauritius, Mascarenes).

**Distribution:** Mauritius and Rodrigues Island (Mascarenes endemic).

***Diplodus vulgaris*** (Geoffroy Saint Hilaire 1817)

*Sargus vulgaris* Geoffroy Saint Hilaire 1817:342, Pl.18 (fig. 2), Poissons du Nil, v. 1 (part 1) (type locality, Egypt, eastern Mediterranean Sea).

*Sparus aldrovandi* Nardo 1827, 31 38 (no. 117), Giornale di fisica, chimica e storia naturale, medicina, ed arti. (series 2) Dec. II, v. 10 (type locality, Adriatic Sea).

*Sargus salviani* Valenciennes in Cuvier & Valenciennes 1830:28, Histoire naturelle des poissons, v. 6 (type locality, Mediterranean Sea).

*Sargus auricularis* Gunther 1859:438, Catalogue of the fishes in the British Museum, v. 1. No locality.

**Distribution:** Mediterranean and eastern Atlantic from Bay of Biscay to Angola; not recorded from Cape Verde Islands.

**Comments:** *Sargus auricularis* Gunther 1859 is a new synonym.

**Genus Evynnis** Jordan & Thompson

*Evynnis* Jordan & Thompson 1912:573, Proceedings of the United States National Museum v. 41 (no. 1875).

Masculine. (Type species *Sparus cardinalis* Lacepède 1802 by original designation).

Japan, Taiwan and China; four species.

***Evynnis cardinalis*** (Lacepède 1802)

*Sparus cardinalis* Lacépède 1802:46, 141, Histoire naturelle des poissons (Lacépède), v. 4 (type locality, China and Japan).

**Distribution:** Japan, Taiwan and China.

***Evynnis ehrenbergii*** (Valenciennes 1830)

*Pagrus ehrenbergii* Valenciennes in Cuvier & Valenciennes 1830:155, Histoire naturelle des poissons, v. 6 (type locality, Eastern Mediterranean Sea).

**Distribution:** Mediterranean Sea and West African coast.

**Comments:** *P. ehrenbergii* is listed as a valid species of the genus *Sparus* by Tortonese (1973:406).

***Evynnis mononematos*** Guan, Tang & Wu 2012

*Evynnis mononematos* Guan, Tang, & Wu 2012:217, Figs. 2-5, Acta Zootaxonomica Sinica, v. 37 (no. 1) (type locality, Minaan-Taiwan bank fishing grounds, China).

***Evynnis tumifrons*** (Temminck & Schlegel 1843)

*Chrysophrys tumifrons* Temminck & Schlegel 1843:70, Pl. 34, Fauna Japonica Parts 2–4 (type locality, Japan).

*Evynnis japonica* Tanaka 1931:29, Journal of the Faculty of Science Imperial University of Tokyo. Sec. 4, Zoology, v. 3 (pt 1) (type locality, Japan and China).

**Distribution:** southern Japan, excluding Ryukyu Islands, Korean peninsula, South China Sea and Taiwan.

**Genus Pagrus** Cuvier

*Pagrus* Cuvier 1816:272, Le Règne Animal v. 2. Masculine. (Type species *Sparus pagrus* Linnaeus 1758 by absolute tautonomy).

*Semapagrus* Fowler 1925:4, American Museum Novitates No. 162. Masculine. (Type species *Pagrus auriga*

Valenciennes 1843 by original designation).

Eastern Atlantic and Mediterranean over hard, sandy or muddy bottom; 5 species.

***Pagrus africanus*** Akazaki 1962

*Pagrus orphus* (nec Linnaeus 1758) Günther 1859:467, Catalogue of the fishes in the British Museum, v. 1 (misidentification).

*Pagrus vulgaris* (nec Valenciennes 1830) Günther 1859:466, Catalogue of the fishes in the British Museum, v. 1 (misidentification).

*Pagrus africanus* Akazaki 1962:166, 351, Fig. 35, Studies on the spariform fishes (type locality, Cape Blanc, Mauritania/Spanish Sahara).

*Sparus pagrus miqueli* Bauchot & Hureau 1978:97, Cybium 3e série. Bulletin de la Société Française d'Ichtyologie No. 4 (type locality, Off Abidjan, Ivory Coast).

**Distribution:** eastern Atlantic from Senegal to Angola.

***Pagrus auriga*** Valenciennes 1843

*Pagrus auriga* Valenciennes 1843:34, Ichthyologie des îles Canaries, v. 2 (pt 2) (type locality, Canary Islands, eastern Atlantic).

**Distribution:** Portugal to Angola, including Madeira and Canary Islands, and Mediterranean.

***Pagrus caeruleostictus*** (Valenciennes 1830)

*Chrysophrys caeruleosticta* Valenciennes in Cuvier & Valenciennes 1830:110, Histoire naturelle des poissons, v. 6 (type locality, Gorée, Senegal; Sainte Croix de Tenerife, Canary Islands).

*Pagrus bertheloti* Valenciennes 1843:33, Ichthyologie des îles Canaries, v. 2 (pt 2) (type locality, Canary Islands).

*Pagrus bocagii* Lowe in Günther 1861:391, Pl. 11, Proceedings of the Zoological Society of London 1860 (pt 3, art. 9) (art. 9) (type locality, Lisbon, Portugal).

**Distribution:** Portugal to Angola, including Canary Islands, and Mediterranean.

***Pagrus major*** (Temminck & Schlegel 1843)

*Chrysophrys major* Temminck & Schlegel 1843:71, Pl. 35, Fauna Japonica Parts 2–4 (type locality, All bays of Japan).

**Distribution:** northern Vietnam and China to Korea, Russia and Japan.

***Pagrus pagrus*** (Linnaeus 1758)

*Sparus pagrus* Linnaeus 1758:279, Systema Naturae, Ed. X, v. 1 (type locality, Southern Europe (Mediterranean Sea)).

?*Sparus orphus* Linnaeus 1758:279, Systema Naturae, Ed. X, v. 1 (type locality, No locality).

*Sparus aurata americana* Walbaum 1792:272, Petri Artedi sueci genera piscium Part 3 (type locality, America).

*Sparus argenteus* Bloch & Schneider 1801:271, M. E. Blochii, Systema Ichthyologiae (type locality, Adriatic Sea (Mediterranean Sea)).

*Sparus caissoti* Risso 1810:257, Ichthyologie de Nice (type locality, Nice, France).

*Aurata orphus* (nec Linnaeus) Risso 1827:356, Histoire naturelle des principales productions de l'Europe méridionale, v. 3 (type locality, Nice, France).

*Pagrus vulgaris* Valenciennes in Cuvier & Valenciennes 1830:142, Pl. 148, Histoire naturelle des poissons, v. 6 (type locality, Northern Ocean; Mediterranean Sea).

*Pagrus sedecim* Ginsburg 1952:93, Fig. 6, Journal of the Washington Academy of Sciences, v. 42 (no. 3) (type locality, 25 miles south of Pensacola, Florida, U.S.A.).

**Distribution:** Canary Islands to British Islands and Mediterranean.

**Comments:** the description of *Sparus orphus* [listed as synonym of *Sparus pagrus* by Tortonese (1973:406)] is too short, its habitat is unknown, and type was lost. However the species described by Risso (1827:356) is very well defined and represents a synonym of *Pagrus pagrus* (Linnaeus). *Aurata orphus* Risso was redescribed by Valenciennes (1830:150) as *Pagrus orphus*.

**Genus *Parargyrops* Tanaka**

*Parargyrops* Tanaka 1916:141, Dobutsugaku Zasshi, v. 28 (no. 330). Masculine. (Type species *Parargyrops edita* Tanaka 1916 by monotypy).

Japan and China Sea; monotypic.

***Parargyrops edita* Tanaka 1916**

*Parargyrops edita* Tanaka 1916:141, Dobutsugaku Zasshi (= Zoological Magazine Tokyo), v. 28 (no. 330) (type locality, Tokyo fish market, Japan, but probably came from Shimonoseki or Korea).

**Distribution:** Japan and China Sea.

**Comments:** *P. edita* is a junior synonym of *Evynnis cardinalis* (Lacepède) according to Lindberg and Krasyukova (1969).

**Genus *Porcostoma* Smith**

*Porcostoma* Smith 1938:270, Transactions of the Royal Society of South Africa v. 26 (pt 3). Neuter. (Type species *Chrysophrys dentatus* Gilchrist & Thompson 1908 by original designation).

South Africa; monotypic.

***Porcostoma dentata* (Gilchrist & Thompson 1908)**

*Chrysophrys dentatus* Gilchrist & Thompson 1908:173, Annals of the South African Museum, v. 6 (pt 2) (type locality, KwaZulu-Natal, South Africa).

**Distribution:** Durban to Beira.

**Genus *Pterogymnus* Smith**

*Pterogymnus* Smith 1938:257, Transactions of the Royal Society of South Africa v. 26 (pt 3). Masculine. (Type species *Pagrus laniarius* Valenciennes 1830 by original designation).

South Africa. Monotypic.

***Pterogymnus laniarius* (Valenciennes 1830)**

*Pagrus laniarius* Valenciennes in Cuvier & Valenciennes 1830:163, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

*Pagellus afer* Pappe 1853:20, Synopsis of the edible fishes at the Cape of Good Hope (type locality, Cape of Good Hope, South Africa).

**Distribution:** Cape of Good Hope to East London.

**Genus *Rhabdosargus* Fowler**

*Rhabdosargus* Fowler 1933:175 178, Bulletin of the United States National Museum No. 100, v. 12. Masculine. (Type species *Sargus auriventris* Peters 1855 by original designation).

*Austrosparus* Smith 1938:241, Transactions of the Royal Society of South Africa, v. 26 (pt 3). Masculine. (Type species *Chrysophrys globiceps* Valenciennes 1830 by original designation).

*Prionosparus* Smith 1942:280, 282, Transactions of the Royal Society of South Africa, v. 29 (pt 4). Masculine. [Type species *Austrosparus (Prionosparus) tricuspidens* Smith 1942 by monotypy].

Indo-Pacific, eastern Atlantic and Mediterranean Sea; six species.

***Rhabdosargus globiceps* (Valenciennes 1830)**

*Chrysophrys globiceps* Valenciennes in Cuvier & Valenciennes 1830:100, Histoire naturelle des poissons, v. 6 (type locality, Cape of Good Hope, South Africa).

*Sargus natalensis* Steindachner 1861:180, Verhandlungen der K.-K. zoologisch-botanischen Gesellschaft in Wien, v. 11 (type locality, Durban, KwaZulu-Natal, South Africa, southwestern Indian Ocean).

*Sargus nigrofasciatus* Regan 1908:253, Pl. 41, Annals of the Natal Museum, v. 1 (pt 3) (type locality, 16 miles northeast of Bird Island, Algoa Bay, KwaZulu-Natal, South Africa).

**Distribution:** Angola to Natal.

***Rhabdosargus haffara* (Forsskål 1775)**

*Sparus haffara* Forsskål 1775:33, xi, Descriptiones animalium (Forsskål) [type locality, no locality stated (Red Sea)].

**Distribution:** Red Sea to western Indian Ocean: East Africa and Madagascar to Persian Gulf; Mediterranean Sea (Red Sea immigrant).

***Rhabdosargus holubi* (Steindachner 1881)**

*Sargus holubi* Steindachner 1881:208, Pl. 3, Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Classe, v. 83 (1. Abth.) (type locality, Algoa Bay, South Africa).

*Austrosparus tricuspidens* Smith 1942:282, Transactions of the Royal Society of South Africa, v. 29 (pt 4) (type locality, Knysna, Cape Province, South Africa).

**Distribution:** Cape of Good Hope to Natal.

***Rhabdosargus niger* Tanaka & Iwatsuki 2013**

*Rhabdosargus niger* Tanaka & Iwatsuki 2013:3, Fig. 1a, Ichthyological Research, v. 60 (no. 4) [type locality, Southwestern Kalimantan, Indonesia (according to Korean fisheries company)].

**Distribution:** Indonesia.

***Rhabdosargus sarba* (Forsskål 1775)**

*Sparus sarba* Forsskål 1775:31, xi, Descriptiones animalium (Forsskål) (type locality, Jeddah, Saudi Arabia, Red Sea).

*Sparus maurosparus* Walbaum 1792:301, Petri Artedi sueci genera piscium Part 3 (type locality, Istanbul or Izmir, Turkey, Mediterranean Sea).

*Sparus bufonites* Lacepède 1802:47, 141, Pl. 2 (fig. 3), Histoire naturelle des poissons (Lacepède), v. 4 (type locality, Indo-Pacific).

*Sparus psittacus* Lacepède 1802:47, 141, Histoire naturelle des poissons (Lacepède), v. 4 (type locality,

Indian seas).

*Chrysophris chrysargyra* Cuvier 1829:182, Le Règne Animal (Edition 2), v. 2 (type locality, India).

*Chrysophrys chrysargyra* Valenciennes in Cuvier & Valenciennes 1830:107, Histoire naturelle des poissons, v. 6 (type locality, Vizagapatam, India).

*Chrysophrys aries* Temminck & Schlegel 1843:67, Pl. 31, Fauna Japonica Parts 2–4 (type locality, Nagasaki, Nagasaki Prefecture, Kyūshū, Japan, western North Pacific).

*Sargus auriventris* Peters 1855:435, Bericht über die zur Bekanntmachung geeigneten Verhandlungen der Königlichen Preussischen Akademie der Wissenschaften zu Berlin 1855 (type locality, Mozambique).

*Chrysophrys natalensis* Castelnau 1861:25, Mémoire sur les poissons de l'Afrique australe (type locality, KwaZulu-Natal, South Africa, southwestern Indian Ocean).

*Roughleyia tarwhinei* Whitley 1931:319, Australian Zoologist, v. 6 (pt 4) (type locality, Batchelor, Macleay River, New South Wales, Australia).

**Distribution:** western Indian Ocean, including Red Sea, Arabian Gulf, Madagascar, Mascarenes, Seychelles south to Natal east to Philippines, north to southern Japan, south to northern Australia.

#### ***Rhabdosargus thorpei* Smith 1979**

*Rhabdosargus thorpei* Smith 1979:704, Fig. 1A, Copeia 1979 (no. 4) (type locality, Mabibi Hulley Point, KwaZulu-Natal, South Africa).

**Distribution:** East Africa and South Africa to Europa Island, Madagascar and Réunion; juveniles enter estuaries.

#### **Genus Sparidentex Munro**

*Sparidentex* Munro 1948:276, Copeia 1948 (no. 4). Masculine. (Type species *Dentex hasta* Valenciennes 1830 (= *Chrysophrys cuvieri* Day 1875) by original designation).

Western Indian Ocean; four species.

#### ***Sparidentex belayewi* (Hora & Misra 1943)**

*Petrus belayewi* Hora & Misra 1943:12, Figs. 6–7, Journal of the Asiatic Society of Bengal, v. 9 (no. 1) (type locality, Rivers and Hors, Iraq).

**Comments:** a possible synonym of *Acanthopagrus berda* (Forsskål 1775 according to (Coad 1991:26). In genus *Sparidentex* according to Iwatsuki and Heemstra (2010:132) with uncertain status. Valid as above according to Amir et al. (2014:476) and Ali et al. (2018:329).

**Distribution:** Northwestern Indian Ocean: Persian Gulf.

#### ***Sparidentex datnia* (Hamilton 1822)**

*Coius datnia* Hamilton 1822:88, 369, Pl. 9 (fig. 29), An account of the fishes found in the river Ganges (type locality, Ganges River mouths, India).

*Datnia buchanani* Cuvier 1829:148, Le Règne Animal (Edition 2), v. 2 (type locality, Indian seas). Unneeded replacement name for *Coius datnia* Hamilton 1822.

**Distribution:** Mouth of Ganges River, India.

#### ***Sparidentex hasta* (Valenciennes 1830)**

*Dentex hasta* Valenciennes in Cuvier & Valenciennes 1830:255 Histoire naturelle des poissons, v. 6 (type locality, Malabar, India).

*Chrysophrys cuvieri* Day 1875:141, Pl. 34 (fig. 3), The fishes of India Part 1 (type locality, Seas of India).

**Distribution:** west coast of India to Arabian Gulf.

***Sparidentex jamalensis*** Amir, Siddiqui & Masroor 2014

*Sparidentex jamalensis* Amir, Siddiqui & Masroor 2014:472, Figs. 1, 2a, c, e, Pakistan Journal of Zoology, v. 46 (no. 2) (type locality, West Wharf fish harbour, Karachi, Pakistan).

**Distribution:** Pakistan; also look for it in northern Arabian Sea, India and Persian Gulf.

**Genus Sparodon** Smith

*Sparodon* Smith 1938:249, Transactions of the Royal Society of South Africa v. 26 (pt 3). Masculine. (Type species *Sargus durbanensis* Castelnau 1861 by original designation).

South Africa; monotypic.

***Sparodon durbanensis*** (Castelnau 1861)

*Sargus durbanensis* Castelnau 1861:18, Mémoire sur les poissons de l'Afrique australe (type locality, Durban, Natal, South Africa).

**Distribution:** Cape of Good Hope to Natal.

**Genus Sparus** Linnaeus

*Sparus* Linnaeus (ex Artedi) 1758:277, Systema Naturae, Ed. X v. 1. Masculine. (Type species *Sparus aurata* Linnaeus 1758 by subsequent designation. Type designated by Bleeker 1876:281, Archives néerlandaises des sciences exactes et naturelles, v. 11).

*Aurata* Oken (ex Cuvier) 1817:1183, Isis (Oken), v. 1 (pt 8) (no. 148). Feminine. (Type species *Sparus aurata* Linnaeus 1758).

*Chryseis* Schinz 1822:438, Das Thierreich, v. 2. Masculine. (Type species *Sparus aurata* Linnaeus 1758 by subsequent designation).

*Dorada* Jarocki 1822:200, Zoologiiia zwiérzetopismo ogolne podlug náynowszego systematu ulozone, v. 4. Feminine. (Type species *Sparus aurata* Linnaeus 1758). Unneeded replacement of *Sparus* Linnaeus 1758.

*Daurada* Stark 1828:452, Elements of natural history, v. 1 (Vertebrata). Masculine. (Type species *Sparus aurata* Linnaeus 1758 by subsequent designation. Type first designated by Jordan 1917:123, The genera of fishes, from Linnaeus to Cuvier 1758-1833).

*Chrysophrys* Cuvier 1829:181, Le Règne Animal (Edition 2) v. 2. Feminine. (Type species *Sparus aurata* Linnaeus 1758 by subsequent designation. Type designated by Jordan 1917:128, The genera of fishes, from Linnaeus to Cuvier 1758-1833).

*Caeso* Gistel 1848:VIII, Naturgeschichte des Thierreichs. Masculine. (Type species *Sparus aurata* Linnaeus 1758 by being a replacement name).

*Eudynama* Gistel 1848:XIII, Naturgeschichte des Thierreichs. Neuter. (Type species *Sparus aurata* Linnaeus 1758 by being a replacement name).

*Roughleyia* Whitley 1931:318, Australian Zoologist v. 6 (pt 4). Feminine. (Type species *Chrysophrys australis* Günther 1859 by original designation).

Eastern Atlantic in coastal and brackish waters; monotypic.

***Sparus aurata*** Linnaeus 1758

*Sparus aurata* Linnaeus 1758:277, Systema Naturae, Ed. X, v. 1 (type locality, Mediterranean Sea; Venezuela).

*Sparus mochara* Osbeck 1770:100, Nova Acta Physico-Medica Academiae Caesareae Leopoldina-Carolinae

*Naturae Curiosorum*, v. 4 (type locality, Spain).

*Sparus scriptus* Walbaum 1792:301, Petri Artedi sueci genera piscium Part 3 (type locality, Spain).

*Sparus auratoides* Rafinesque 1810:51, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily, Italy).

*Aurata semilunata* Risso 1827:355, Histoire naturelle des principales productions de l'Europe méridionale, v. 3 (type locality, Nice, France).

*Chrysophrys crassirostris* Valenciennes in Cuvier & Valenciennes 1830:98, Pl. 146, Histoire naturelle des poissons, v. 6 (type locality, Corsica, near Ajaccio, France, western Mediterranean Sea; Peloponese; Spain).

**Distribution:** Mediterranean and Black Sea; Portugal northward to England southward to Cape Verde Islands and Senegal; Red Sea (mediterranean immigrant).

**Comments:** *Sparus auratoides* Rafinesque is a synonym according to Cocco (Facciola 1884:29).

### Subfamily Centracanthinae Gill 1893

*Centracanthinae* Gill 1893:134, Memoirs of the National Academy of Science, v. 6 (no. 6).

Marine, eastern Atlantic and Mediterranean, including Black Sea. Gregarious fishes preferring muddy bottoms or sea-grass beds, feeding on zooplankton. Picarels are characterized by having body oblong, somewhat compressed, covered with weakly ctenoid scales, usually with a rectangular black spot in the center of the flank; upper jaw extremely protrusible; teeth minute; edge of preopercle smooth; dorsal fin long, with XI–XIII spines and 9–18 soft rays; pectoral fin with a well developed axillary process at base. Dimension: 15–20 cm. A single monotypic genus.

### Genus *Centracanthus* Rafinesque

*Centracanthus* Rafinesque 1810:42, Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia. Masculine. (Type species *Centracanthus cirrus* Rafinesque 1810 by monotypy).

Eastern Atlantic and Mediterranean; monotypic.

### Centracanthus cirrus Rafinesque 1810

*Centracanthus cirrus* Rafinesque 1810:43, Pl. 10 (fig. 1), Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia (type locality, Sicily).

*Smaris royerii* Bowdich 1825:123, Fig. 26, Fishes of Madeira (type locality, Madeira).

*Smaris insidiator* Valenciennes in Cuvier & Valenciennes 1830:414, Histoire naturelle des poissons, v. 6 (type locality, Sicily, Italy, Mediterranean Sea).

*Smaris angustatus* Valenciennes (ex Solander) in Cuvier & Valenciennes 1830:421, Histoire naturelle des poissons, v. 6 (type locality, Madeira).

**Distribution:** eastern Atlantic and Mediterranean.

### Species *incertae sedis*

This section includes nominal species that are unidentifiable and that may belong or not to the family of Sparidae

*Box vulgaris* var. *caraibica* Gunther 1859:419. St. Vincent, West Indies. Holotype (unique): BMNH.

*Chrysophrys coracinus* Valenciennes in Cuvier & Valenciennes 1830:133, Histoire naturelle des poissons, v. 6 (type locality, Mauritius). Based on a fish illustrated by Renard (fol. 21, no. 214).

*Dentex elongatus* Marion de Proce 1822:239, Bulletin des Sciences, par la Société Philomathique de Paris, Sér. 3, v. 9. (Type locality, Manila Bay, Philippines).

*Dentex gobiooides* Valenciennes (ex Solander) in Cuvier & Valenciennes 1830:234, Histoire naturelle des

poissons, v. 6 (type locality, Tahiti, Society Islands). Imperfectly described species (Fowler 1928:219).

**Dentex vaigiensis** Quoy & Gaimard 1824:302, Voyage autour du Monde...exécuté sur les corvettes de L. M. "L'Uranie" et "La Physicienne. (Type locality, Waigeo, Indonesia; Rawak I., Bismarck Archipelago).

**Comments:** in the description the presence of palatine teeth are mentioned, a feature not shared by sparid fishes. Correct family undetermined.

**Labrus macrocephalus** Lacepède 1801:432, 480, Pl. 26 (fig. 1), Histoire naturelle des poissons (Lacepède), v. 3. No locality. Redescribed by Valenciennes in Cuvier & Valenciennes (1830:232) as *Dentex macrocephalus*.

**Labrus thunberg** Lacepède 1801:427, 468, Histoire naturelle des poissons (Lacepède), v. 3. (Type locality, Japan). Based on a drawing labelled *Sciaena fusca* by Thunberg. Type catalog: Bauchot 1963:100.

**Sargus analis** Poey 1955:326, Ictiologia Cubana. Posthumous transcription of original unpublished manuscript (1884) by M. Sánchez Roig and F. Gómez de la Maza, Ministerio de Educacion. Havana, v. 1: 1-372.

**Sargus palpebratus** Boddaert 1782:459, Schrift. Gesells. Naturf. Freunde (Berlin), v. 3. Amboin I., Moluccas Islands, Indonesia. No types known.

**Sparus aurata** var. **cochicato** Bloch & Schneider 1801:271, M. E. Blochii, Systema Ichthyologiae (type locality, Cumaná, Venezuela, Caribbean Sea). No types known. Uncertain in genus *Calamus*.

**Sparus bilobatus** Lacepède 1802:45, Histoire naturelle des poissons (Lacepède), v. 3. Indo-Pacific Ocean. Redescribed as *Chrysophrys bilobatus* by Valenciennes in Cuvier & Valenciennes 1830:125.

**Sparus chilensis** Molina 1782:223, Saggio sulla storia naturale del Chile, del Signor Abate Giovanni Ignazio Molina. (Type locality, Chile). No types known.

**Comments:** no sparid fish is recorded from Chile. Description might fit with a fish of the family Cheilodactylidae.

**Sparus (Chrysophrys) heterodus** Peters 1877:833, Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin 1876 (type locality, Congo R, Africa).

**Sparus honoratus** Thunberg 1787:23, Museum naturalium Academiae Upsaliensis. ... Praesidae. (no locality stated).

**Sparus passeroni** Risso 1810:253, Pl. 7 (fig. 24), Ichthyologie de Nice. (Type locality, Nice, France).

**Sparus spicaroides** Rafinesque 1810:68, Indice d'ittiologia siciliana (type locality, Sicily, Italy).

**Sparus tenellus** Pallas 1814:274, Pl. 61 (fig. 2), Zoographia Rosso-Asiatica, v. 3 (type locality, "Inter pisciculos Ponticos").

**Sparus virescens** Pallas 1814:273, Zoographia Rosso-Asiatica, v.3 (type locality, Ad littus meridionale Chersonesi tauricae [=Crimea]).

**Sparus viridiaureus** Lacepède 1802:40, 131, Histoire naturelle des poissons (Lacepède), v. 4. (Type locality, Coasts of New Guinea).

### Unavailable specific names

**Chrysophrys marginata** Gunther 1859:491, Catalogue of the fishes in the British Museum, v. 1. Name based on specimen mentioned under *Chrysophrys hasta*.

**Cynaedus sargus** Meuschen 1778:25, Museum Gronovianum. Published in a rejected work (Opinion 260).

**Dentex marmoratus** Solander in Cuvier & Valenciennes 1850:481, Histoire naturelle des poissons, v. 22. Tahiti, Society Islands *Nomen nudum*. [or No distinguishing features?]

**Dentex (Polysteganus) nuphar** Klunzinger 1870:764. Not available, alternate name for *Dentex nufar* Valenciennes 1831 as "Polysteganus nufar oder nuphar."

**Labrus agon** Nardo (ex Chiereghin) 1847: col.123, Sinonimia moderna delle specie registrate nell'opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati

in figure à chiaro-scuro ed a colori.".

***Labrus garitus*** Nardo (ex Chiereghin) 1847: col.123, Sinonimia moderna delle specie registrate nell'opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati in figure à chiaro-scuro ed a colori.".

***Labrus maridola*** Nardo (ex Chiereghin) 1847: col.123, Sinonimia moderna delle specie registrate nell'opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati in figure à chiaro-scuro ed a colori.".

***Maena slava*** Nardo 1827: col.122, Sinonimia moderna delle specie registrate nell'opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati in figure à chiaro-scuro ed a colori.".

***Maena speciosa*** Cocco in Facciola 1884:17, Indice ittiologico del mar di Messina. Name mentioned in synonymy with *Maena osbeckii*.

***Pagrus calamus*** Cuvier 1829:183, Le Règne Animal (Edition 2), v. 2. No distinguishing features; from the Antilles.

***Pagrus flavipinnis*** Gunther 1859:490, Catalogue of the fishes in the British Museum, v. 1. Name based on specimen from Bay of Bengal mentioned under *Chrysophrys hasta*.

***Pagrus leucophaeus*** Plumier in Lacepède 1802:293, Histoire naturelle des poissons (Lacepède), v. 4. Regarded as name only.

***Sciaena aurata*** Forster in Bloch & Schneider 1801:266, M. E. Blochii, Systema Ichthyologiae. Manuscript name mentioned under *Labrus auratus*.

***Sciaena aurata*** Forster in Richardson 1842:392, Annals and Magazine of Natural History (New Series), v. 9 (no. 59) (art. 42). Forster name mentioned in synonymy of *Pagrus latus*.

***Sciaena lata*** Solander in Richardson 1842:392, Annals and Magazine of Natural History (New Series), v. 9 (no. 59) (art. 42). Manuscript name mentioned in synonymy of *Pagrus latus*.

***Smaris argenteus*** Ehrenberg in Rüppell 1828:13, Atlas zu der Reise im nördlichen Africa. Fische des Rothen Meeres. *Nomen nudum*.

***Smaris elongatus*** Ehrenberg in Rüppell 1828:13, Atlas zu der Reise im nördlichen Africa. Fische des Rothen Meeres. *Nomen nudum*.

***Smaris guttatus*** Ehrenberg in Rüppell 1828:13, Atlas zu der Reise im nördlichen Africa. Fische des Rothen Meeres. *Nomen nudum*.

***Smaris ornatus*** Roux in Cuvier & Valenciennes 1830:417, Histoire Naturelle des Poissons, v. 6. Name mentioned in synonymy with *Smaris alcedo*.

***Sparus argenteus*** Commerson in Lacepède 1802:132, Histoire naturelle des poissons (Lacepède), v. 3 Appeared as "Sparus argenteus, lineis lateralibus ..." in account of *Sparus britannus*; regarded as nonbinomial and not available. See ICZN Opinion 89.

***Sparus bufalus*** Nardo (ex Chierighini) 1847: col.121 Sinonimia moderna delle specie registrate nell' opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati in figure à chiaro-scuro ed a colori.".

***Sparus cantarella*** Nardo (ex Chierighini) 1847:col. 123, Sinonimia moderna delle specie registrate nell' opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati in figure à chiaro-scuro ed a colori.". Chierighini name mentioned in synonymy of *Cantharus vulgaris* Valenciennes 1830.

***Sparus cantharensus*** Nardo (ex Chierighini) 1847:col. 123, Sinonimia moderna delle specie registrate nell' opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati in figure à chiaro-scuro ed a colori.".

in figure à chiaro-scuro ed a colori.". Chiereghini name and brief description mentioned in synonymy.

***Sparus carponemus*** Parkinson in Cuvier & Valenciennes 1830:361, 363, Histoire naturelle des poissons, v. 6. Name on painting, mentioned in passing; Queen Charlotte's Bay.

***Sparus cinereus*** Nardo (ex Chiereghini) 1847:col. 121, Sinonimia moderna delle specie registrate nell' opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati in figure à chiaro-scuro ed a colori.". Chiereghini name mentioned in synonymy.

***Sparus maena*** var. *color* Nardo (ex Chierighini) 1847: col.121, Sinonimia moderna delle specie registrate nell' opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati in figure à chiaro-scuro ed a colori.".

***Sparus orientalis*** Hasselquist 1762:386, Reise nach Palästina (Smirna [İzmir], Turkey). Published in a rejected work (ICZN, Opinion 57).

***Sparus ornatus*** Roux in Döderlein 1891:253, Döderlein 1891:253, Manuale Ittiologico del Mediterraneo ossia sinossi metodica delle varie specie di pesci riscontrate sin qui nel Mediterraneo ossia senossi metodica delle di Sicilia. 5 parts.;

***Sparus oxyrhynchus*** Viviani in Cuvier & Valenciennes 1830:80, Histoire naturelle des poissons, v. 6. Name mentioned in passing in account of *Charax puntazzo* (Gmelin).

***Sparus scombroides*** Gunther 1860:507, Catalogue of the fishes in the British Museum, v. 2. Also as *Chromis scomberoides*. Name on specimens mentioned under *Gazza argentaria*.

***Sparus sheepshead*** Schöpf in Walbaum 1792:296, Petri Artedi sueci genera piscium Part 3. Name mentioned in description of *Sparus probatocephalus*.

***Sparus sparolus*** Nardo (ex Chiereghini) 1847:col. 123, Sinonimia moderna delle specie registrate nell'opera intitolata: "Descrizione de' crostacei, de' testacei e de' pesci che abitano le lagune e golfo veneto rappresentati in figure à chiaro-scuro ed a colori." . Chiereghini name mentioned in synonymy of *Sargus annularis*.

***Sparus striatus*** Forster in Bloch & Schneider 1801:282, M. E. Blochii, Systema Ichthyologiae. Manuscript name mentioned under *Sparus forsteri*.

### Unavailable generic names

***Cynaeus*** Gronow 1763:60, Zoophylacii Gronoviani. Published in a rejected work, on Official Index (Opinion 261).

***Sargus*** Klein 1775 :966, Neuer Schauplatz, v. 1. Masculine. Published in a work that does not conform to the principle of binomial nomenclature

***Sargus*** Walbaum (ex Klein) 1792:586 [Petri Artedi sueci genera piscium Part 3. Masc. Published in a part of work rejected for nomenclatural purposes in Opinion 21 (1938).

***Sargus*** Plumier in Lacepède 1802:167 (footnote) [Histoire naturelle des poissons (Lacepède), v. 4. Masculine. Nonbinominal manuscript name mentioned in passing under *Dipterodon plumieri*.

***Smaris*** Cuvier 1814:92 [Bulletin des Sciences, par la Société Philomathique de Paris (Sér. 3), v. 1. Feminine. (Type species *Sparus smaris* Linnaeus 1758 by absolute tautonymy. Objectively invalid; preoccupied by *Smaris* Latreille 1796 in Arachnida, replaced by *Marsis* Barnard 1927. Placed on Official Index (Opinion 960).

### Identified nominal species not belonging to Sparidae

The following nominal species allocated to the Sparidae by Eschmeyer's Catalog of Fishes belong to different family and represent junior and senior synonyms of well-established species. In these latter cases, the Zoological Code of Nomenclature allows Reversal of Precedence (Art. 23.9) to maintain stability of names, if the following

conditions are both met: the senior synonym has not been used as valid since 1899 (Article 23.9.1.1) and (2) the junior synonym has been used as a valid name in at least 25 works, published by at least 10 authors during the past 50 years, and encompassing a span of not less than ten years (Article 23.9.1.2). *Cantharus elongatus* Castelnau 1861, *Dentex diplodon* Bowdich 1825, and *Dentex unispinosus* Bowdich 1825 are senior synonyms of *Pomadasys olivaceus* (Day 1875), *Pomadasys perotaei* (Cuvier 1830), and *Lethrinus atlanticus* Valenciennes 1830, respectively. Therefore, specific annotations of the publications are given under the nominal species here below.

***Cantharus elongatus*** Castelnau 1861:32, Mémoire sur les poissons de l'Afrique australe. (Type locality, Cape of Good Hope, South Africa). [= *Pomadasys olivaceus* (Day 1875), Haemulidae].

**Comments:** *Pomadasys olivaceum* (Day 1875) is regarded as a valid species, so this name qualifies as a *nomen protectum*, while the name *Cantharus elongatus* Castelnau 1861 is recognized as invalid, qualifying as a *nomen oblitum*. As evidence that the conditions of Article 23.9.1.2 have been met the following list of publications are included: Lasiak 1983, Dor 1984, Marais 1984, Talwar and Kacker 1984, Smith and McKay 1986, Smale 1991, Torres 1991, van der Elst and Adkin 1991, Goren and Dor 1994, Whitfield 1994, Randall 1995, Monkolprasit et al 1997, Bianchi et al. 1999, Smale and Goosen 1999, Wu et al 1999, Manilo and Bogorodsky 2003, Heemstra and Heemstra 2004, Dunlop and Mann 2012, Jawad et al. 2014, Psomadakis et al. 2015, Narasimhaiah et al. 2016, Ali et al. 2018, Fricke et al. 2018, Jawad et al. 2018, Ziyadi et al 2018.

***Cynaedus armatus*** Gronow, in Gray 1854:55, Catalogue of fish collected and described by Laurence Theodore Gronow (type locality, Indian seas. No types known. Sparidae. [= *Scolopsis bilineatus* (Block 1793), Nemipteridae].

***Dentex diplodon*** Bowdich 1825:235, Fig. 46, Fishes of Madeira (type locality, Porto Praya, St. Jago Island. [= *Pomadasys perotaei* (Cuvier 1830), Haemulidae].

**Comments:** the declaration of *Dentex diplodon* as *nomen oblitum* and *Pomadasys perotaei* as *nomen protectum* has been submitted for publication (Parenti 2019).

***Dentex unispinosus*** Bowdich 1825:235, Fig. 42, Fishes of Madeira (type locality, Porto Praya, St. Jago Island, Cape Verde Islands. (= *Lethrinus atlanticus* Valenciennes 1830, Lethrinidae).

**Comments:** The name *Lethrinus atlanticus* Valenciennes 1830 is regarded as a valid name, qualifying as a *nomen protectum*, while the name *Dentex unispinosus* Bowdich 1825 is recognized as invalid, qualifying as a *nomen oblitum*. As evidence that the conditions of Article 23.9.1.2 have been met the following list of publications are included: Bauchot and Blanc 1961; Ricker 1973; Beck 1976; Sato 1978; Maigret and Ly 1986; Ofori-adu 1988; Carpenter and Allen 1989; Roux 1990; Schneider 1990; Grabda and Heese 1991; Hureau 1991; Sanches 1991; Coppola et al. 1994; Vakily 1994; Diouf 1996; Reiner 1996; da Silva Monteiro 1998; Afonso et al. 1999; Wu et al. 1999; Zuev and Boltachev 2000; Sédro 2003; Wirtz et al. 2007; Cheung et al. 2013; Wirtz et al. 2013, Oliveira et al. 2015.

***Oblata muador*** Montrouzier 1857:439 [161] [Ann. Soc. Imp. Agric. Hist. Nat. Lyon, v. 8 (1856); 17789]. Woodlark I., South Pacific. On p. 161 of reprint. A doubtful synonym of *Kyphosus vaigiensis* (Quoy & Gaimard 1825) according to Fowler 1928:221, The Fishes of Oceania. Family Kiphosidae.

***Perca argentata*** Bloch 1792:86, Pl. 311 (fig. 1), Naturgeschichte der ausländischen Fische, v. 6 (type locality, Japan. Also as *Sparus melanotus* Lacepède 1802. [= *Lutjanus argentinaculatus* (Forsskål 1775), Lutjanidae].

***Sparus lividus*** Pallas 1814:274, Zoographia Rosso-Asiatica, v. 3 (type locality, Ponti). *Nomen praecoccupatum* by *Sparus lividus* Lacepède 1802 *nomen novum* for *Labrus livens* Gmelin. [= *Ctenolabrus rupestris* (Linnaeus 1758), Labridae].

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