# The ETYFish Project

COMMENTS: **\*** v. 7.0 - 9 Feb. 2024

# Order CARANGIFORMES (part 4 of 4)

Suborder Pleuronectoidei (cont.)

## Family SOLEIDAE Soles

30 genera · 182 species

#### Achiroides Bleeker 1851

-oides, having the form of: presumed to be intermediate in form between Achirus (Achiridae) and Plagusia (=Symphurus, Cynoglossidae)

#### Achiroides leucorhynchos Bleeker 1851

leukos, white; rhynchos, snout, referring to white area around mouth on blind side

## Achiroides melanorhynchus (Bleeker 1850)

melano-, black; rhynchus, referring to black area around mouth on blind side

## Aesopia Kaup 1858

-ia, belonging to: Aesop (ca. 620-564 BCE), Greek author of classic fables, who, as a slave, wore a striped garment, alluding to dark-brown stripes of *A. cornuta* 

#### Aesopia cornuta Kaup 1858

horned, referring to elongate first ray of dorsal fin, like a horn on top of forehead

#### Aseraggodes Kaup 1858

a-, without; seraggodes, possibly a misspelling of serangodes, porous or full of pores, referring to absence of pores at base of dorsal-, and anal-fin rays, unlike pores (which exude toxin, unknown to Kaup) on species now placed in Pardachirus

# Aseraggodes albidus Randall & Desoutter-Meniger 2007

white, referring to "unusual" overall white color of eyed side in life

## Aseraggodes andersoni Randall & Bogorodsky 2013

in honor of marine biologist R. Charles Anderson, who helped collect type and who assisted the senior author during the latter's visits to the Republic of Maldives

#### Aseraggodes auroculus Randall 2005

aurum, gold; oculus, eye, referring to bright golden color of the eyes

# Aseraggodes bahamondei Randall & Meléndez C. 1987

in honor of Nibaldo Bahamonde Navarro (b. 1924), first director of the Division of Hydrobiology of the Museo Nacional de Historia Natural and a "pioneer" in Chilean marine sciences

## Aseraggodes beauforti Chabanaud 1930

in honor of Lieven Ferdinand de Beaufort (1879-1968), University of Amsterdam, who reported this flatfish (with Max Weber) as *A. cyaneus* in 1929

# Aseraggodes borehami Randall 1996

in honor of American businessman Ronald S. Boreham (1924-2006), CEO of Baldor Electric, for his support of Randall's ichthyological research

#### Aseraggodes brevirostris Randall & Gon 2006

brevis, short; rostris, snout, referring to short snout, 2.95-3.15 in head length

## Aseraggodes chapleaui Randall & Desoutter-Meniger 2007

in honor of François Chapleau (b. 1955), University of Ottawa (Canada), for his research on soleid fishes

# Aseraggodes cheni Randall & Senou 2007

in honor of Jeng-Ping Chen, National Museum of Marine Biology and Aquarium in Taiwan, who collected and photographed type

#### Aseraggodes corymbus Randall & Bartsch 2007

Latin for cluster, referring to groups of dark markings on eyed side of body

## Aseraggodes crypticus Randall & Allen 2007

hidden or concealed, referring to mottled color pattern on eyed side of body in life, which effectively conceals it in its natural habitat

#### Aseraggodes cyaneus (Alcock 1890)

blue, referring to "dull blue-black" color of both sides of body in spirits, the blind side being lighter

## Aseraggodes cyclurus Randall 2005

cyclo-, circle; ouros, tail, referring to nearly circular caudal fin

## Aseraggodes diringeri (Quéro 1997)

in honor of underwater photographer Alain Diringer, who collected type

## Aseraggodes dubius Weber 1913

doubtful, allusion not explained, but Weber did say it differs from A. texturatus "only insignificantly" in shape and fin formulae

## Aseraggodes filiger Weber 1913

filum, thread; gero, to bear, referring to filamentous first ray of dorsal fin, half length of head

## Aseraggodes firmisquamis Randall & Bartsch 2005

firmus, strong; squamis, scale, referring to its "firmly adhering" scales, which "alone differentiates it from the known species of the genus"

## Aseraggodes guttulatus Kaup 1858

diminutive of *guttata*, dotted, presumably referring to what Kaup described as dark flecks and streaks on gray eyed side of body, especially on lateral line and basal half of caudal fin

## Aseraggodes haackeanus (Steindachner 1883)

-anus, belonging to: German zoologist Johann Wilhelm Haacke (1855-1912), who collected many fishes from St. Vincent Gulf, South Australia, including type of this one

# Aseraggodes heemstrai Randall & Gon 2006

in honor of ichthyologist Phillip C. Heemstra (1941-2019), South African Institute for Aquatic Biodiversity, who collected holotype, many of the paratypes, and provided photographs

# Aseraggodes heraldi Randall & Bartsch 2005

in honor of Earl S. Herald (1914-1973), ichthyologist and Director of the Steinhart Aquarium in San Francisco (1952-1966), who collected the first specimen (paratype) in 1946

# Aseraggodes herrei Seale 1940

in honor of ichthyologist-lichenologist Albert W. Herre (1868-1962)

# Aseraggodes holcomi Randall 2002

in honor of Ronald R. Holcom, diver and underwater photographer, who collected four of the six type specimens and was the first to recognize this species as different from the other Hawaiian species of *Aseraggodes* 

# Aseraggodes jenny Randall & Gon 2006

in honor of the junior author's wife, Jenny [a noun in apposition, without the matronymic "ae"]

# Aseraggodes kaianus (Günther 1880)

-ana, belonging to: Kai Islands, Indonesia, in the Arafura Sea, type locality (also known from Kochi, Japan)

# Aseraggodes kimurai Randall & Desoutter-Meniger 2007

in honor of ichthyologist Seishi Kimura (b. 1953), Fisheries Research Laboratory, Mie University (Japan), for his assistance in the authors' study

#### Aseraggodes kobensis (Steindachner 1896)

-ensis, suffix denoting place: Kobe, Japan, type locality (occurs in eastern Pacific from Gulf of Thailand east to Philippines, north to Korea and Japan)

# Aseraggodes kruppi Randall & Bogorodsky 2013

in honor of ichthyologist Friedhelm (Fareed) Krupp, Qatar Natural History Museum (Doha), for his research on fishes, especially in the Red Sea, and for his support of the junior author's fieldwork in the Red Sea

#### Aseraggodes lateralis Randall 2005

lateral, referring to distinct pigmented lateral line, "clearly evident as a broken black line," in life

## Aseraggodes lenisquamis Randall 2005

*lenis*, soft or smooth; *squama*, scale, referring to cteni of scales nearly covered by soft epidermal tissue, with only the tips exposed at the scale margin

## Aseraggodes longipinnis Randall & Desoutter-Meniger 2007

longus, long; pinnis, fin, referring to its "very long" median fins

## Aseraggodes macronasus Randall & Bogorodsky 2013

macro-, long; nasus, nose, referring to "unusually" long anterior nostril

#### Aseraggodes magnoculus Randall 2005

magnus, large; oculus, eye, referring to having the largest eyes, relative to head length, of any congener examined by Randall

## Aseraggodes martine Randall & Bogorodsky 2013

in honor of Martine Desoutter-Méniger, Muséum national d'Histoire naturelle (Paris), for her research on soleid fishes [a noun in apposition, without the matronymic "ae"]

## Aseraggodes matsuurai Randall & Desoutter-Meniger 2007

in honor of Keiichi Matsuura, National Museum of Nature and Science of Tokyo, who collected and photographed holotype

## Aseraggodes melanostictus (Peters 1877)

melanos, black; stiktos, spotted, referring to small, dark patches forming indistinct crossrows on grayish-brown eyed side of body

## Aseraggodes microlepidotus Weber 1913

micro-, small; lepidotus, scaled, referring to small scales, 102 along lateral line

# Aseraggodes nigrocirratus Randall 2005

nigro-, black; cirratus, curly or fringed, referring to black cirri on dorsal and anal rays of eyed side of body

## Aseraggodes normani Chabanaud 1930

in honor of ichthyologist (and fellow flatfish specialist) J. R. (John Roxborough) Norman (1898-1944), British Museum, in "tribute" (translation) of their friendship (in addition, Norman, whose museum housed type, reported this species as *A. melanostictus* in 1926)

## Aseraggodes orientalis Randall & Senou 2007

eastern, referring to its distribution in Japan and Taiwan

#### Aseraggodes pelvicus Randall 2005

pelvic, referring to long pelvic fins, longest among congeners known at the time, 1.6 in HL, the tip of longest ray reaching base of fifth anal-fin ray

## Aseraggodes ramsaii (Ogilby 1889)

patronym not identified but certainly in honor of Edward Pearson Ramsay (1842-1916), Curator, Australian Museum (Sydney), who described *Synclidopus macleayanus* in 1881 ["y" latinized as "i"]

## Aseraggodes satapoomini Randall & Desoutter-Meniger 2007

in honor of ichthyologist Ukkrit Satapoomin, Phuket Marine Biological Center, who helped collect type, for his research on the fishes of Thailand

# Aseraggodes senoui Randall & Desoutter-Meniger 2007

in honor of Hiroshi Senou, Kanagawa Prefectural Museum of Natural History, who collected and photographed holotype

#### Aseraggodes sinusarabici Chabanaud 1931

sinus, gulf; arabici, of Arabia, i.e., Gulf of Arabia, ancient name for the Red Sea, type locality (also occurs in Gulf of Aden)

## Aseraggodes steinitzi Joglekar 1971

in honor of Heinz Steinitz (1909-1971), marine biologist, herpetologist, and founder of the marine laboratory that bears his name, in Eilat, Israel, on the Gulf of Aqaba, who sent specimens from the Red Sea and information about type locality

# Aseraggodes suzumotoi Randall & Desoutter-Meniger 2007

in honor of Arnold Y. Suzumoto, fish-collection manager at the Bishop Museum (Honolulu), who helped collect holotype

# Aseraggodes texturatus Weber 1913

woven, allusion not explained, possibly referring to black hindborder on many scales of eyed side of body, giving it a marbled appearance

#### Aseraggodes therese Randall 1996

in honor of Therese Hayes, Bishop Museum (Honolulu), who helped collect type [a noun in apposition, without the matronymic "ae"]

# Aseraggodes umbratilis (Alcock 1894)

shady, presumably referring to color of eyed side in spirits, "warm olive brown with numerous large black blotches," and/or "smoky" posterior half of blind side

# Aseraggodes whitakeri Woods 1966

in honor of biologist Douglas M. Whitaker (1904-1973), Stanford University; in 1947, he studied the effects of radiation fallout on marine life in the Pacific following the experimental atomic-bomb explosions on Bikini Atoll

## Aseraggodes winterbottomi Randall & Desoutter-Meniger 2007

in honor of ichthyologist Richard Winterbottom (b. 1944), Royal Ontario Museum, who collected and photographed holotype

## Aseraggodes xenicus (Matsubara & Ochiai 1963)

strange, foreign or exotic (i.e., different), allusion not explained, perhaps reflecting the authors' opinion that this flatfish was sufficiently different to warrant a new genus (*Parachirus*)

## Aseraggodes zizette Randall & Desoutter-Meniger 2007

in honor of "esteemed colleague and good friend" Marie-Louise Bauchot (b. 1928), nicknamed Zizette, ichthyologist and assistant manager, Muséum national d'Histoire naturelle (Paris), in recognition of her ichthyological research [a noun in apposition without the matronymic "ae"]

#### Austroglossus Regan 1920

austro-, south, referring to South African distribution of both species; glossa, tongue, referring to their tongue-like shape

#### Austroglossus microlepis (Bleeker 1863)

micro-, small; lepis, scale, referring to smaller, more numerous scales compared to A. pectoralis

# Austroglossus pectoralis (Kaup 1858)

pectoral, referring to well-developed pectoral fin, longer than head, on eyed side of body

#### Barbourichthys Chabanaud 1934

in honor of Harvard herpetologist Thomas Barbour (1884-1946), who told Chabanaud about this "extremely interesting form" (translation); *ichthys*, fish

## Barbourichthys zanzibaricus Chabanaud 1934

-icus, belonging to: Zanzibar, Tanzania, East Africa, type locality

#### Barnardichthys Chabanaud 1927

in honor of ichthyologist Keppel Harcourt Barnard (1887-1964), South African Museum, through whose "kindness" (translation) Chabanaud was able to study a specimen of *B. fulvomarginata* 

## Barnardichthys fulvomarginata (Gilchrist 1904)

*fulvus*, brownish yellow (but often used to mean yellow in general); *marginata*, bordered or edged, referring to lemon-yellow margin of all fins (except for colorless pectoral) on both sides of body, with dorsal, anal and caudal fins on blind side "strikingly colored" with "bright lemon yellow" (yellow color disappears in alcohol)

## Bathysolea Roule 1916

proposed as a subgenus of *Solea* that occurs in *bathys*, deep, water, "biologically characterized by living at the extreme edge of flatfishes' habitat zone towards the abyssal regions" (translation)

# Bathysolea lactea Roule 1916

milky, allusion not explained, perhaps referring to uniform light yellowish-white color on both sides of body

# Bathysolea lagarderae Quéro & Desoutter 1990

in honor of Françoise Lagardère, senior author's colleague at CREMA (Marine Ecology and Aquaculture Research Center), L'Houmeau (France), and a specialist in soleid fishes

## Bathysolea polli (Chabanaud 1950)

in honor of Belgian ichthyologist Max Poll (1908-1991), curator at the Musée du Congo Belge (Tervuren, Belgium) and member of South Atlantic expedition during which type was collected

# Bathysolea profundicola (Vaillant 1888)

profundus, deep; cola, dweller or inhabitant, type collected at 1290 meters

# **Brachirus Swainson 1839**

etymology not explained, probably *brachys*, short and *ouros*, tail, referring to short caudal fin (fused with dorsal and anal fins)

## Brachirus annularis Fowler 1934

ringed, referring to large ring-shaped markings, enclosing darker areas, on eyed side of body [placed in Zebrias by some workers]

# Brachirus aspilos (Bleeker 1852)

unspotted or spotless, referring to uniformly brownish and unspotted body compared to the spotted but otherwise similar *B. pan* 

## Brachirus breviceps Ogilby 1910

brevis, short; ceps, head, presumably referring to shorter head compared to B. salinarum, described in the same paper

# Brachirus fitzroiensis (De Vis 1882)

-ensis, suffix denoting place: mouth of Fitzroy River, Queensland, Australia, type locality

## Brachirus harmandi (Sauvage 1878)

in honor of François-Jules Harmand (1845-1921), physician, explorer and diplomat, who collected type

## Brachirus macrolepis (Bleeker 1858)

macro-, large; lepis, scale, referring to large and conspicuous ctenoid scales on both sides of body [placed in Dexillus by some workers]

## Brachirus megalepidoura Fowler 1934

mega-, large; lepis, scale; ouros, tail, presumably referring to large scales on eyed side of body just behind the middle [placed in Dexillus by some workers]

# Brachirus nigra (Macleay 1880)

black, referring to color of eyed side, the "glassy-looking apex of the scales giving it a greyish hue"

# Brachirus orientalis (Bloch & Schneider 1801)

eastern, presumably referring to type locality, Tranquebar (now Tharangambadi), India, relative to western (i.e., European) congeners then placed in the catch-all *Pleuronectes* 

#### Brachirus pan (Hamilton 1822)

etymology not explained, presumably a local name for this flatfish, where it "abounds in the eastern estuaries of the Ganges [River] from Dhaka downwards" in India

## Brachirus panoides (Bleeker 1851)

-oides, having the form of: referring to similarity to B. pan

## Brachirus salinarum Ogilby 1910

of saltworks, referring to salt pans at Kimberly, northern Queensland, Australia, type locality

#### Brachirus sayaensis Voronina 2019

-ensis, suffix denoting place: Saya de Malha Bank, Indian Ocean, only known area of occurrence

## Brachirus selheimi (Macleay 1882)

in honor of "Mr. Selheim" (forename not given), a German naturalist living in the Palmer District of Queensland, Australia, who collected type; possibly Philip Frederic Sellheim (note spelling, 1832-1899), a pastoralist and mining official who was in charge of the Palmer River goldfields

# Brachirus siamensis (Sauvage 1878)

-ensis, suffix denoting place: Siam (or Thailand), where it occurs, but Sauvage only noted that it occurs in Laos (also occurs in Cambodia and Viêt Nam)

## Brachirus swinhonis (Steindachner 1867)

-is, genitive singular of: patronym not identified, probably in honor of Robert Swinhoe (1836-1877), British consul and naturalist at Shanghai, China, who may have collected or supplied type

#### Brachirus villosus (Weber 1907)

villous, referring to villi, "delicate, short-haired figures" (translation) on body and fins of eyed side, and head of blind side

#### Buglossidium Chabanaud 1930

bous, ox and glossa, tongue, perhaps referring to Buglossa Bertrand 1763, a rejected name for a sole, or to Solea buglossa Rafinesque 1810 (=Pleuronectes solea); -idium, diminutive connoting resemblance

#### Buglossidium luteum (Risso 1810)

yellow, referring to golden-yellow color of eyed side in life, turning to yellowish gray after death

# Dagetichthys Stauch & Blanc 1964

in honor of Jacques Daget (1919-2009), Director of Research, ORSTOM (Office de la Recherche Scientifique et Technique d'Outre Mer), and a specialist in African freshwater fishes; *ichthys*, fish

#### Dagetichthys albomaculatus (Kaup 1858)

albus, white; maculatus, spotted, referring to five rows of yellowish-white spots on eyed side of body

# Dagetichthys cadenati (Chabanaud 1948)

in honor of ichthyologist Jean Cadenat (1908-1992), Director, Marine Biological Section of the Institut Français d'Afrique Noire (Gorée, Senegal), who discovered this species

#### Dagetichthys commersonnii (Lacepède 1802)

in honor of French naturalist Philibert Commerçon (also spelled Commerson, 1727-1773), whose notes and illustration provided the descriptive material for Lacepède

## Dagetichthys lakdoensis Stauch & Blanc 1964

-ensis, suffix denoting place: Lakdo (also spelled Lagdo), Cameroon, type locality

# Dagetichthys Iusitanicus (de Brito Capello 1868)

-ica, belonging to: Lusitania, ancient name of Portugal, type locality (occurs in Mediterranean Sea and eastern

Atlantic from Portugal south to Angola)

# Dagetichthys marginatus (Boulenger 1900)

edged or bordered, referring to black pectoral and vertical fins on eyed side, "edged with white"

#### Dexillus Chabanaud 1930

dexios, on the right; illos, squint, i.e., cross-eyed, referring to protruding, stalked eyes encased in a thin, translucent membrane

## Dexillus muelleri (Steindachner 1879)

in honor of physician, geographer and botanist Ferdinand von Mueller (1825-1896), who donated his extensive collection of Australian plant and animal specimens, including type of this species, to what is now the Staatliches Museum für Naturkunde in Stuttgart (Baden-Württemberg, Germany)

## Dicologlossa Chabanaud 1927

dicholo [gos], advocate or lawyer; glossa, tongue, transliteration of "langue d'avocat," local name for this sole in Arachon, France, as reported in original description of *D. cuneata*, possibly referring to its "pointed tongue" shape and/or resemblance to pointed tongue-shaped leaves of the succulent Gasteria bicolor, known in English as "Lawyer's Tongue" [Chabanaud changed spelling to Dicologoglossa in 1930 but original spelling stands]

## Dicologlossa cuneata (Moreau 1881)

wedge-shaped, referring to cuneiform body shape

## Heteromycteris Kaup 1858

hetero-, different; mycteris, pertaining to the nose, presumably referring to hooked or "sickle-shaped" (translation) snout of H. capensis

#### Heteromycteris capensis Kaup 1858

-ensis, suffix denoting place: Cape Province, South Africa, type locality

## Heteromycteris hartzfeldii (Bleeker 1853)

in honor of German physician Joseph Hartzfeld (1815-1885), Principal Medical Officer of the Royal Dutch East Indies Army, who collected type, and whose collections, Bleeker said in 1852, improved the scientific knowledge of Ambon Island's fish fauna

# Heteromycteris japonicus (Temminck & Schlegel 1846)

Japanese, described from the "seas of Japan" (translation)

# Heteromycteris matsubarai Ochiai 1963

in honor of ichthyologist-herpetologist Kiyomatsu Matsubara (1907-1968), Kyoto University, whose "appropriate guidance" made Ochiai's research possible

#### Heteromycteris oculus (Alcock 1889)

eye, referring to "five large, perfect, and complicated ocelli [eyespots] with light-green centre, brown irides, and light green margins" along dorsal curve, four similar ocelli along ventral curve, another smaller one at base of caudal fin, and a few small incomplete ocelli along lateral line on eyed side of body

# Heteromycteris proboscideus (Chabanaud 1925)

having a proboscis, referring to snout "curved inferiorly into an excessively long, unciform appendix, covering the mandible and the entire isthmus" (translation)

## Leptachirus Randall 2007

*leptos*, thin, referring to very thin and slender body; *Achirus* (Achiridae), a genus of soles and a common suffix (*a*-, without; *cheiros*, hand) for soles lacking pectoral fins

# Leptachirus alleni Randall 2007

in honor of ichthyologist Gerald R. Allen (b. 1942), Western Australia Museum (Perth), who collected type and many other specimens of *Leptachirus* 

## Leptachirus bensbach Randall 2007

named for Bensbach River at southwestern corner of Papua New Guinea, type locality

#### Leptachirus darwinensis Randall 2007

-ensis, suffix denoting place: Darwin, Northern Territory, Australia, near three rivers from which specimens were collected

#### Leptachirus kikori Randall 2007

named for Kikori River, southern Papua New Guinea, type locality

# Leptachirus klunzingeri (Weber 1907)

in honor of German physician and zoologist Carl Benjamin Klunzinger (1834-1914), who reported this species as *Solea* (now *Pardachirus*) poropterus in 1880

## Leptachirus Iorentz Randall 2007

named for Lorentz River, Papua Province, southern New Guinea, only known area of occurrence

# Leptachirus robertsi Randall 2007

in honor of ichthyologist Tyson R. Roberts (b. 1940), who collected type and most of paratypes in 1975

# Leptachirus triramus Randall 2007

tri-, three; ramus, branch, referring to three branches of lateral line on eyed side of head

## Liachirus Günther 1862

etymology not explained, possibly *leios*, smooth, referring to scaleless dorsal and anal fins of *L. nitidus* (=melanospilos); a-, without and *cheiros*, hand, referring to lack of pectoral fins

#### Liachirus melanospilos (Bleeker 1854)

melano-, black; spilos, mark or spot, referring to "ink-colored" (translation) spots on eyed side of body

## Liachirus whitleyi Chabanaud 1950

in honor of Australian ichthyologist-malacologist Gilbert Percy Whitley (1903-1975), who entrusted Chabanaud with the study and description of this Australian species

#### Microchirus Bonaparte 1833

tautonymous with *Pleuronectes microchirus* Delaroche 1809 (=*M. variegatus*), referring to small pectoral fins (*micro*-, small; *cheirus*, hand), the one on the blind side minute or "barely visible" (translation) per Delaroche

## Microchirus azevia (de Brito Capello 1867)

local name for this sole in Lisbon, Portugal

## Microchirus boscanion (Chabanaud 1926)

presumably derived from a Greek word meaning amulet, referring to *Talisman*, French ship that collected type (reported as *M. variegatus*) in 1883

## Microchirus frechkopi Chabanaud 1952

patronym not identified, possibly in honor of Serge Isaacovich Frechkop (1894-1987), Russian-born Belgian mammalogist, director of Laboratoire à Institut Royal des Sciences Naturelles de Belgique, which sponsored expedition that collected type

# Microchirus hexophthalmus (Bennett 1831)

hexa-, six; ophthalmus, eye, referring to six dark-brown ocellated spots on eyed side of body, three each along body near bases of dorsal and anal fins [placed in Dicologlossa by some workers]

## Microchirus ocellatus (Linnaeus 1758)

with eye-like spots, referring to four white-edged black ocelli on eyed side of body

#### Microchirus variegatus (Donovan 1808)

variegated, i.e., of different colors, presumably referring to eyed side of body, "pale, clouded or marbled with fuscous," forming "as it were a series of interrupted bands"



Microchirus variegatus. From: Donovan, E. 1808. The natural history of British fishes, including scientific and general descriptions of the most interesting species, and an extensive selection of accurately finished coloured plates. Vol. 5. London: F. C. and J. Rivington. 407-516 unnumbered pp., plates 97-120.

## Microchirus wittei Chabanaud 1950

in honor of herpetologist Gaston François De Witte (1897-1980), in charge of the ichthyological and herpetological collections at the Musée du Congo Belge (Tervuren, Belgium)

#### Monochirus Rafinesque 1814

mono-, one; cheiros, hand, referring to pectoral fin only on eyed side

## Monochirus atlanticus Chabanaud 1940

Atlantic, proposed as an eastern Atlantic subspecies of *M. hispidus*, which occurs in the Mediterranean and Strait of Gibraltar (but also in the eastern Atlantic)

# Monochirus hispidus Rafinesque 1814

bristly, referring to its very rough trapezoid scales

#### Monochirus trichodactylus (Linnaeus 1758)

trichos, hair; dactylus, finger, referring to thread-like pectoral fin rays

## Paradicula Whitley 1931

-ula, diminutive ending: in honor of "late friend and collaborator" William E. J. Paradice (1897-1927), Surgeon Lieutenant-Commander, Royal Australian Navy and amateur naturalist, who described (with Whitley's help) S. setifer in 1927 (Paradice was killed in a ferry collision on Sydney Harbour) [replacement name for Whitleyia Chabanaud 1930, named for Whitley, preoccupied (by a few months) by Whitleyia Fowler & Bean 1930, also named for Whitley (now a junior synonym of Parambassis in Ambassidae)]

## Paradicula setifer (Paradice 1927)

seti, setae (hair-like structures); fero, to bear, referring to "tufts of cirri" on scales on both sides of body

#### Pardachirus Günther 1862

pardos, leopard, probably referring to "numerous brown dots" on eyed side of body, head and fins of *P. marmoratus*, "with scattered white ocelli edged with brown and with a brown spot in the centre" (i.e., like the spots of a leopard); a-, without and cheiros, hand, referring to lack of pectoral fins

# Pardachirus balius Randall & Mee 1994

balios, Greek for spotted or piebald, referring to "striking" dark-spotted color pattern on eyed side

# Pardachirus hedleyi Ogilby 1916

in honor of friend Charles Hedley (1862-1926), the "premier conchologist of Australia"

## Pardachirus marmoratus (Lacepède 1802)

marbled, referring to brown eyed side of body marbled with milky white spots

## Pardachirus morrowi (Chabanaud 1954)

in honor of ichthyologist James E. Morrow (Bingham Oceanographic Laboratory), Yale University, who collected type and asked Chabanaud to describe it (description of which appeared in Morrow's paper on East African fishes)

# Pardachirus pavoninus (Lacepède 1802)

peacock-like, referring to peacock-like ocelli or eyespots on eyed side of body

## Pardachirus poropterus (Bleeker 1851)

*poro*, hole; *pterus*, fin, allusion not explained but clearly referring to prominent pores on dorsal- and anal-fin rays of both sexes (a characteristic of the genus), which exude a toxin (unknown to Bleeker)

# Pardachirus rautheri (Chabanaud 1931)

in honor of zoologist Max Rauther (1879-1951), Director, Württemberg Natural History Collection (now Staatliches Museum für Naturkunde, Stuttgart, Germany), who made type specimen available and translated Chabanaud's description into German (Rauter later protected the collections by organizing their evacuation during World War II)

# Pegusa Günther 1862

apparently a latinization of *pégouse*, name used by Rondelet (1554) for a Mediterranean sole, later applied to *Pleuronectes pegusa* Lacepède 1802 (=*Microchirus ocellatus*), which was then confused with *Solea aurantiaca* (=*P. lascaris*), type species of this genus

#### Pegusa bleekeri (Boulenger 1898)

in honor of Dutch medical doctor and ichthyologist Pieter Bleeker (1819-1878), who reported this species as *P. impar* in 1863

# Pegusa cadenati Chabanaud 1954

in honor of French ichthyologist Jean Cadenat (1908-1992), Director, Marine Biological Section of the Institut Français d'Afrique Noire (Gorée, Senegal), who discovered this "interesting" (translation) species

#### Pegusa impar (Bennett 1831)

odd or unequal, allusion not explained, perhaps referring to different shape and coloration compared to Microchirus

hexophthalmus, presumed congener described in same publication

# Pegusa lascaris (Risso 1810)

in honor of Paul Lascàris (1774-1815) of Nice, France (type locality), a French traveller in the service of Napoleon Bonaparte, "who deserved, by his virtues and his knowledge, to be elected Grand Master of Malta" (translation) [presumably a noun in apposition without the patronymic "i"]

#### Pegusa nasuta (Pallas 1814)

large-nosed, referring to well-developed fleshy lobe on snout

# Pegusa triophthalma (Bleeker 1863)

tri-, three; ophthalmus, eye, referring to three eye-like spots or ocelli, arranged at a nearly equal distance on a longitudinal row along lateral line on eyed side

#### Phyllichthys McCulloch 1916

phyllon, leaf, allusion not explained nor evident; ichthys, fish

# Phyllichthys punctatus McCulloch 1916

spotted, allusion not explained, perhaps referring to "dark blotches" on light-brown eyed side of body

## Phyllichthys sclerolepis (Macleay 1878)

sclero-, hard; lepis, scale, presumably referring to "very rough" ctenoid scales on both sides of body

## Phyllichthys sejunctus Whitley 1935

disjoined or separated, allusion not explained, perhaps referring to upper eye more forward than lower, separated by a patch of scales (a characteristic of the genus)

#### Rendahlia Chabanaud 1930

-ia, belonging to: Swedish zoologist and artist Hialmar Rendahl (1891-1969), who described type species, *H. jaubertensis*, in 1921

# Rendahlia jaubertensis (Rendahl 1921)

-ensis, suffix denoting place: Cape Jaubert, northwestern Australia, type locality

#### Rhinosolea Fowler 1946

rhino-, snout, allusion not explained, presumably referring to pointed snout; Solea, type genus of family

## Rhinosolea microlepidota Fowler 1946

micro-, small; lepidota, scaled, referring to "very minute" scales

#### Solea Quensel 1806

tautonymous with *Pleuronectes solea* (which Quensel unnecessarily renamed *S. vulgaris*), ancient Greek name for some flatfishes, from *solea*, sole or sandal, referring to their resemblance to a flat shoe

# Solea aegyptiaca Chabanaud 1927

Egyptian, proposed as a subspecies of *S. vulgaris* occurring in Egyptian waters of the Mediterranean Sea (also occurs in the Gulf of Suez and as an anti-Lessepsian immigrant in the Red Sea)

## Solea capensis Gilchrist 1902

-ensis, suffix denoting place: presumably referring to Cape Peninsula, South Africa, where False Bay (type locality) is situated

## Solea elongata Day 1877

referring to more elongate body compared to S. ovata

## Solea heinii Steindachner 1903

in honor of William Hein (1861-1903), Austrian ethnographer, Vienna Natural History Museum, who, with his wife, collected type

#### Solea ovata Richardson 1846

egg-shaped, referring to its "ovate" shape

# Solea senegalensis Kaup 1858

-ensis, suffix denoting place: St. Louis, Senegal, type locality (occurs in Mediterranean Sea and eastern Atlantic from Bay of Biscay south to Angola)

#### Solea solea (Linnaeus 1758)

ancient Greek name for some flatfishes, from solea, sole or sandal, referring to their resemblance to a flat shoe

## Solea stanalandi Randall & McCarthy 1989

in honor of Brock E. Stanaland (b. 1951), the junior author's husband, who collected fishes with the authors in the Persian Gulf and captured paratype

## Solea turbynei Gilchrist 1904

in honor of Alexander Turbyne (d. 1905), captain of the South African Government Fisheries steamer that obtained

numerous specimens of this sole

## Soleichthys Bleeker 1860

Solea, referring to resemblance to and/or previous placement of S. heterorhinos in that genus; ichthys, fish

#### Soleichthys dori Randall & Munroe 2008

in honor of the late Menahem Dor (1901-1998), for his "major" contribution to our knowledge of the fishes of the Red Sea, and who recorded the first Red Sea specimen of this species

## Soleichthys heterorhinos (Bleeker 1856)

hetero-, different; rhinos, snout, referring to very long tubular anterior nostril, a characteristic of the genus

## Soleichthys maculosus Muchhala & Munroe 2004

spotted, referring to conspicuous white spots and blotches on eyed side of body

## Soleichthys microcephalus (Günther 1862)

micro-, small; cephalus, head, referring to small head compared to presumed congeners in Solea, nearly six times in SL

## Soleichthys multifasciatus (Kaup 1858)

multi-, many; fasciatus, banded, referring to 27 narrow bands across eyed side of head and body

# Soleichthys nigrostriolatus (Steindachner & Kner 1870)

nigro-, black; striolatus, striated or furrowed, referring to 28-30 narrow black lines or stripes, some wavy, some broken, on eyed side of body

## Soleichthys oculofasciatus Munroe & Menke 2004

oculatus, eyed; fasciatus, banded, referring to band on head passing immediately posterior to eyes

#### Soleichthys serpenpellis Munroe & Menke 2004

serpen, snake; pellis, skin, referring to distinctive snake-like color pattern on eyed-side of body

## Soleichthys siammakuti Wongratana 1975

in honor of Siammakut (abbreviation of Siammakutrajakumarn), Royal Title of His Royal Highness Prince Vajiralongkorn (b. 1952), in commemoration of his Investiture Ceremony as the Crown Prince of Thailand on 28 December 1972, during the period when work was undertaken on this species (endemic to the Gulf of Thailand); he became King of Thailand in 2016

#### Soleichthys tubiferus (Peters 1876)

tubus, tube; fero, to bear, referring to long tubular anterior nostril, a characteristic of the genus

# Synapturichthys Chabanaud 1927

Synaptura Cantor 1849 (unneeded replacement name for Brachirus), referring to similarity to that genus and/or previous placement of S. kleinii in it; ichthys, fish

#### Synapturichthys kleinii (Risso 1827)

patronym not identified but almost certainly in honor of Jacob Theodor Klein (1685-1759), German jurist, historian, botanist, zoologist and mathematician, who wrote a 5-volume history of fishes (1740-1749)

# Synclidopus Chabanaud 1943

syn, with; chleis, isthmus (i.e., cleithrum); pous, foot (pelvic fin), referring to how "ischial basipterygium [of S. macleayanus] does not deviate distally from the cleithrum; its actinophore process develops considerably forward to the immediate vicinity of the ischial branch of the clidost" (translation)

# Synclidopus hogani Johnson & Randall 2008

in honor of Alf Hogan, Fisheries Biologist, Queensland Department of Primary Industries and Fisheries Research Station, at Walkamin, Queensland, Australia, who has made a "major contribution to the understanding of freshwater fishes of north Queensland over the last 30 years," adding "many rare and poorly-known fishes to museum collections"; his "electrofishing skills were invaluable" in the capture of this species

## Synclidopus macleayanus (Ramsay 1881)

-ana, belonging to: "esteemed friend" William John Macleay (1820-1891), Scotland-born Australian politician and zoologist, author of the two-volume Descriptive Catalogue of Australian Fishes (1881)

## Typhlachirus Hardenberg 1931

typhla, blind, referring to absence of eyes or rudimentary lower eye only; a-, without and cheiros, hand, presumably referring to "minute" pectoral fin on eyed side and "short" pectoral fin on blind side of T. caecus

## Typhlachirus caecus Hardenberg 1931

blind, referring to absence of eyes or rudimentary lower eye only

## Typhlachirus elongatus Pellegrin & Chevey 1940

referring to more elongate body (shaped like a willow leaf) compared to T. caecus

## Typhlachirus lipophthalmus (Károli 1882)

lipo-, wanting; opthalmus, eye, referring to absence of eyes

## Vanstraelenia Chabanaud 1950

-ia, belonging to: paleontologist-carcinologist Victor van Straelen (1889-1964), Director, Royal Belgian Institute of Natural Sciences

#### Vanstraelenia chirophthalma (Regan 1915)

cheiros, hand; ophthalmus, eye, referring to blackish eyespot on pectoral fin of eyed side of body

## Zebrias Jordan & Snyder 1900

adjectival form of zebra, referring to wide, dark vertical stripes on eyed side of Z. zebrinus

#### Zebrias altipinnis (Alcock 1890)

altus, high; pinnis, fin, presumably referring to dorsal-fin rays, which gradually increase in length from front to back, the "hindermost measuring more than one third of the greatest body-height and a little more than the corresponding anal rays"

## Zebrias annandalei Talwar & Chakrapany 1967

in honor of zoologist-anthropologist Thomas Nelson Annandale (1876-1924), first Director of the Zoological Survey of India, who collected type in 1909 [possibly a junior synonym of *Z. japonicus*]

## Zebrias callizona (Regan 1903)

calli-, beautiful; zona, band, presumably referring to "brownish transverse bands with dark marginal lines" on head and body of eyed side [sometimes placed in *Pseudaesopia*, treated here as a synonym of *Zebrias*]

## Zebrias cancellatus (McCulloch 1916)

latticed or cross-barred, referring to 15 cross-bars on eyed side of body

#### Zebrias captivus Randall 1995

Latin for prisoner, referring to "convict-like" dark bars on eyed side of body

# Zebrias cochinensis Rama-Rao 1967

-ensis, suffix denoting place: Cochin, India, where type locality (off Vypeen Island) is situated [sometimes placed in *Pseudaesopia*, treated here as a synonym of *Zebrias*]

## Zebrias craticulus (McCulloch 1916)

latticed, presumably referring to 20-24 cross-bands across eyed side of body

# Zebrias crossolepis Zheng & Chang 1965

crosso-, fringe or tassel; lepis, scale, referring to long marginal spinules on scales (except those along lateral line) of eyed side of body [possibly a junior synonym of Z. synapturoides]

#### Zebrias japonicus (Bleeker 1860)

Japanese, referring to type locality off Nagasaki, Japan (also occurs off Korea, Taiwan, New Caledonia and Taipei, China, and in the Gulf of Carpentaria and Bay of Bengal) [sometimes placed in *Pseudaesopia*, treated here as a synonym of *Zebrias*]

## Zebrias keralensis Joglekar 1976

-ensis, suffix denoting place: Kerala coast of India, Arabian Sea, type locality [possibly a junior synonym of Z. cochinensis]

#### Zebrias lucapensis Seigel & Adamson 1985

-ensis, suffix denoting place, but in this case "in honor of the people of the coastal village of Lucap, Pangasinan, Province, Philippines," where type locality (Lucap Bay, Lingayen Gulf) is situated (also occur in western Pacific off Viêt Nam)

# Zebrias maculosus Oommen 1977

spotted, referring to dark patches and spots on eyed side of body of living specimens

## Zebrias munroi (Whitley 1966)

in honor of Australian ichthyologist Ian S. R. Munro (1919-1994), Project Leader of the Gulf of Carpentaria Prawn Survey, most of whose collections are now housed in the Australian Museum (Sydney) [placed in *Phyllichthys* by some workers]

#### Zebrias penescalaris Gomon 1987

pene, almost or near, referring to close relationship with Z. scalaris

# Zebrias quagga (Kaup 1858)

zebra, referring to 12 wide bands on eyed side of body, like the stripes of the zebra, Equus quagga

# Zebrias regani (Gilchrist 1906)

in honor of ichthyologist Charles Tate Regan (1878-1943), Natural History Museum (London), "who has described allied forms and has kindly given the benefit of his judgment on the validity of this new species"

#### Zebrias scalaris Gomon 1987

of a ladder, referring to rung-like bands traversing eyed side of body

## Zebrias synapturoides (Jenkins 1910)

-oides, having the form of: referring to its original provisional placement in and similarity to *Synaptura* Cantor 1849 (unneeded replacement name for *Brachirus*) [sometimes placed in *Pseudaesopia*, treated here as a synonym of *Zebrias*]

## Zebrias zebra (Bloch 1787)

referring to zebra-like vertical stripes on eyed side of body

# Zebrias zebrinus (Temminck & Schlegel 1846)

zebra-like, referring to wide, dark vertical stripes on eyed side of body

## Family CYNOGLOSSIDAE Tonguefishes

4 genera · 171 species

#### **Subfamily Symphurinae**

#### Symphurus Rafinesque 1810

sym[physis], grown together; ouros, tail, referring to dorsal and anal fins united with caudal fin

#### Symphurus arabicus Chabanaud 1954

Arabian, referring to south coast of Arabia, Indian Ocean, type locality

#### Symphurus arawak Robins & Randall 1965

Arawak, group of indigenous people who colonized the Caribbean islands, alluding to its distribution (including Curaçao, the Virgin Islands, Puerto Rico, Haiti, and the Cayman Islands)

## Symphurus atramentatus Jordan & Bollman 1890

inked, referring to 3-6 "roundish inky-black spots" on dorsal and anal fins (rear blotches particularly intense) on eyed side of body

#### Symphurus atricauda (Jordan & Gilbert 1880)

ater, black; cauda, tail, presumably referring to black margins on posterior dorsal and anal fins of eyed side of body, confluent with pointed caudal fin

# Symphurus australis McCulloch 1907

southern, proposed as a "variety" of *S. strictus* then known only from the Tasman Sea between Australia and New Zealand

#### Symphurus bathyspilus Krabbenhoft & Munroe 2003

bathys, deep, referring to deepwater habitat (248-500 m); spilos, spot, referring to numerous small, reddish speckles on blind side of body, especially on and around fins and in skin overlying the pterygiophores

# Symphurus billykrietei Munroe 1998

in honor of William H. "Billy" Kriete, Jr., former marine scientist at the Virginia Institute of Marine Science, College of William & Mary (Williamsburg, Virginia, USA), a "friend whose great sense of humor and friendship are sadly missed"

# Symphurus brachycephalus Lee & Munroe 2021

brachy, short; cephalus, head, referring to relatively shorter head compared with those of similar shallow-water tonguefishes

#### Symphurus callopterus Munroe & Mahadeva 1989

kallos, beauty; pterus, fin, referring to "striking" black blotches on median fins in an "otherwise mundanely pigmented group of fishes"

#### Symphurus caribbeanus Munroe 1991

Caribbean, referring to its "common but apparently restricted distribution to habitats within the Caribbean Sea"

# Symphurus chabanaudi Mahadeva & Munroe 1990

in honor of ichthyologist Paul Chabanaud (1876-1959), who "contributed greatly to our knowledge of flatfishes, especially of the genus *Symphurus*"

## Symphurus civitatum Ginsburg 1951

of the states (not "of the citizenry" as suggested by Munroe [1991]), allusion not explained but almost certainly referring to its distribution along the coast of the southeastern United States compared to distribution (West Indies and Central America) of the closely related *S. plagusia* (often and incorrectly spelled *civitatium* and *civitatus*)

## Symphurus diabolicus Mahadeva & Munroe 1990

devilish, referring to its large, "grotesque" eyes, an apparent adaptation to its deepwater habitat

#### Symphurus diomedeanus (Goode & Bean 1885)

-anus, belonging to: Diomedia, genus name of the albatross, referring to U.S. Fish Commission steamer Albatross, from which type was collected

## Symphurus elongatus (Günther 1868)

elongate, proposed as a more elongate subspecies of Aphoristia ornata (=S. plagusia)

## Symphurus fallax Chabanaud 1957

false or misleading, referring to resemblance to and previous identification as S. gilesii

# Symphurus fasciolaris Gilbert 1892

with narrow bands, allusion not explained, perhaps referring to "dusky crossbars" on eyed side

# Symphurus fuscus Brauer 1906

dusky, dark or swarthy, referring to uniform brown or blackish color of eyed side of body

#### Symphurus gilesii (Alcock 1889)

in honor of George M. Giles (1853-1916), surgeon-naturalist on board the Royal Indian Marine Survey steamer *Investigator*, "who has added so many deep-sea fishes to the Indian collection," including type of this one

## Symphurus ginsburgi Menezes & Benvegnú 1976

in honor of ichthyologist Isaac Ginsburg (1886-1975), U.S. National Museum, for his contribution to the knowledge of the genus *Symphurus* 

## Symphurus gorgonae Chabanaud 1948

of Gorgona Island, Colombia, type locality

# Symphurus hernandezi Saavedra-Díaz, Munroe & Acero P. 2003

in honor of Colombian biologist Jorge ("Mono") Hernández-Camacho (1935-2001), "Known for his generosity and wisdom, extensive knowledge of biodiversity, and his willingness to share his time, energy and information with students. His spirit will live on in the minds and hearts of Colombian biologists who were fortunate enough to know him."

## Symphurus holothuriae Chabanaud 1948

of Holothuria Bank, northwestern Australia, type locality

# Symphurus hondoensis Hubbs 1915

-ensis, suffix denoting place: Hondo, Kumamoto Prefecture, Japan, where type locality (Suruga Gulf) is situated

# Symphurus hongae Lee & Munroe 2021

in memory of Y.-S. Hong, the senior author's mother, who died in an automobile accident while this study was in progress, for her financial and moral support of her son's research

#### Symphurus insularis Munroe, Brito & Hernández 2000

of islands, referring to endemic distribution among the Madeira, Canary and Cape Verde island groups of the eastern Atlantic

# Symphurus jenynsi Evermann & Kendall 1906

in honor of English clergyman Leonard Jenyns (1800-1893), "an excellent naturalist, who wrote the report on the fishes collected by Charles Darwin during the memorable voyage of the *Beagle* around the world" (Jenyns briefly described but did not name this species in 1842)

# Symphurus kyaropterygium Menezes & Benvegnú 1976

kyaros, eye of a needle; pterygion, diminutive of pteryx, i.e., little fin, referring to orifice at basal part of interradial membranes of dorsal and anal fins

## Symphurus leeorum Jordan & Bollman 1890

-orum, commemorative suffix plural: in honor of Leslie Alexander Lee (1852-1908), geologist, palaeontologist and zoological collector, and naturalist Thomas Lee, both on board the U.S. Bureau of Fisheries steamer *Albatross*, from which type was collected (it is not known whether the Lees were related) [originally spelled "leei"; since name honors more than one person, emendment to "leeorum" is necessary]

## Symphurus leptosomus Lee & Munroe 2021

*lepto*, slender; *somus*, body, referring to relatively slender, elongate body compared with that of other similar species of shallow-water tonguefishes

# Symphurus leucochilus Lee, Munroe & Shao 2014

*leuco*-, white; *chilus*, border, referring to whitish border without dermal spots along bases of anteriormost dorsal-fin rays and absence of pigmented spots on isthmus

# Symphurus ligulatus (Cocco 1844)

tongue-shaped, referring to its shape ("Corpa a forma di linguetta")

#### Symphurus longirostris Lee, Munroe & Kai 2016

*longus*, long; *rostris*, snout, referring to its relatively long snout, especially when compared to the morphologically similar *S. microrhynchus* 

## Symphurus lubbocki Munroe 1990

in honor of marine biologist Hugh Roger Lubbock (1951-1981), for his "keen interest and contribution to the knowledge of Ascension Island [type locality] fishes, cut short by his untimely death" (Lubbock died in a car crash in Rio de Janeiro just shy of his 30th birthday); Lubbock also briefly described this species in 1980 and suspected it was new but did not name it for lack of adequate comparative material

#### Symphurus luzonensis Chabanaud 1955

-ensis, suffix denoting place: near Luzon Island, Philippines, type locality

#### Symphurus macrophthalmus Norman 1939

macro-, large; ophthalmus, eye, referring to larger eye compared to congeners known at the time except S. fuscus

## Symphurus maculopinnis Munroe, Tyler & Tunnicliffe 2011

macula-, spot; pinnis, fin, referring to conspicuous spots on dorsal and anal fins

## Symphurus maldivensis Chabanaud 1955

-ensis, suffix denoting place: Maldives, Indian Ocean, type locality

#### Symphurus marginatus (Goode & Bean 1886)

margined, presumably referring to color in alcohol, with a "dark brown line marking margin between the body and the base of the vertical fins, with a lighter line or stripe, as wide as eye, inside"

## Symphurus marmoratus Fowler 1934

marbled, referring to light-brown eyed side of body "mottled and specked with darker brown," a "handsome species, known [in part] by its contrasted or marbled coloration"

#### Symphurus megasomus Lee, Chen & Shao 2009

mega-, large; somus, body, referring to large size (up to 146.7 mm SL) and deep body without obvious tapering in posterior half

## Symphurus melanurus Clark 1936

melanos, black; ouros, tail, referring to black caudal fin

## Symphurus melasmatotheca Munroe & Nizinski 1990

melasma, black spot; theke, case or covering, referring to black peritoneum, unique among congeners then known

#### Symphurus microlepis Garman 1899

micro-, small; lepis, scale, referring to "very small" ctenoid scales

#### Symphurus microrhynchus (Weber 1913)

micro-, small; rhynchus, snout, referring to short snout compared to Aphoristia elongata (preoccupied, now known as S. regani), described in same paper

# Symphurus minor Ginsburg 1951

small or less, allusion not explained, perhaps referring to lower dorsal- and anal-fin counts compared to western Atlantic congeners examined by Ginsburg, and/or to smaller average size (based on few samples examined) compared with *S. parvus* 

#### Symphurus monostigmus Munroe 2006

mono-, one; stigmus, spot, referring to single, conspicuous black spot on anteroventral region of eyed side of abdomen

# Symphurus multimaculatus Lee, Munroe & Chen 2009

multi-, many; maculatus, spotted, referring to numerous blackish-brown speckles on fins and body of blind side

## Symphurus nebulosus (Goode & Bean 1883)

cloudy, referring to grayish color, "everywhere mottled with brown"

#### Symphurus nigrescens Rafinesque 1810

blackish, referring to color of eyed side

## Symphurus normani Chabanaud 1950

in honor of ichthyologist J. R. (John Roxborough) Norman (1898-1944), British Museum, who reported this species as *S. nigrescens* in 1930

## Symphurus ocellaris Munroe & Robertson 2005

having an eye-like spot, referring to distinct ocellated spot on caudal fin

## Symphurus ocellatus von Bonde 1922

having eye-like spots, presumably referring to black spot on posterior ends of dorsal and anal fins (but spots do not appear to be ocelli or eyespots, i.e., round spot surrounded by a ring of lighter color)

#### Symphurus oculellus Munroe 1991

oculus, eye; -ella, a diminutive, referring to relatively small eyes compared with those of similar and largely sympatric S. tessellatus

# Symphurus oligomerus Mahadeva & Munroe 1990

oligos, few; meros, part of segment, referring to relatively low number of vertebrae and dorsal- and anal-fin rays compared to most other eastern Pacific congeners

## Symphurus ommaspilus Böhlke 1961

omma, eye; spilus, spot, referring to "large and distinct spot, apparently surrounded by a ring of lighter color and therefore ocellated" on dorsal and anal fins near end of tail

## Symphurus orientalis (Bleeker 1879)

eastern, a Japanese species similar to *Aphoristia ornata* (=*S. plagusia*) of the Antilles (occurs in western North Pacific along Korea, Japan and Taiwan, and in East and South China Seas)

#### Symphurus oxyrhynchus Lee 2022

oxy, sharp; rhynchus, snout, referring to its relatively sharp, pointed snout compared with those of congeners

# Symphurus parvus Ginsburg 1951

small, presumably referring to its size, described at 44-78 mm SL

## Symphurus pelicanus Ginsburg 1951

-anus, belonging to: U.S. Fish and Wildlife Service research boat *Pelican*, "which brought together a very valuable collection of specimens from the southeast coast" of Texas (USA)

## Symphurus piger (Goode & Bean 1886)

sluggish, allusion not explained, perhaps referring to lack of pectoral fins (in adults)

## Symphurus plagiusa (Linnaeus 1766)

manuscript name proposed by Scottish physician-naturalist Alexander Garden (1730-1791), Charleston, South Carolina (USA), who sent fish skins to Linnaeus, probably a misspelling of *Plagusia*, a non-binominal name proposed by Browne (1756); etymology unknown but two explanations have been proposed: (1) from *plagusius*, from Plautus (*Rudens, or The Fisherman's Rope*, ca. 200 BC), meaning unknown, perhaps a shellfish or an alternate spelling of *pélagos* (Gr.  $\pi k \alpha \gamma \sigma c$ ), sea, simply denoting a marine animal; and (2) from *plágios* (Gr.  $\pi k \alpha c c$ ), oblique, slanting or sideways, referring to how the fish's body tapers towards tail and/or how it swims on its side (not to be confused with *S. plagusia*, an allopatric species also from the western Atlantic)

# Symphurus plagusia (Bloch & Schneider 1801)

based on *Plagusia*, a non-binominal name proposed by Browne (1756); see *S. plagiusa* for explanation [misses being a junior homonym by the different order of the fifth, sixth and seventh letters]

#### Symphurus polylepis Lee & Munroe 2021

poly, many; lepis, scale, referring to greater number of longitudinal scale rows compared with that of similar species of shallow-water tonguefishes

# Symphurus prolatinaris Munroe, Nizinski & Mahadeva 1991

prolatus, elongated; naris, nostril, referring to elongate anterior nostril on blind side

## Symphurus pusillus (Goode & Bean 1885)

puny or insignificant, allusion not explained, perhaps referring its "slender, lanceolate" body and/or small size (known to reach  $7.5~{\rm cm}$  TL)

## Symphurus regani Weber & de Beaufort 1929

in honor of ichthyologist Charles Tate Regan (1878-1943), Natural History Museum (London) [replacement name for *Aphoristia elongata* Weber 1913, preoccupied by *Aphoristia ornata elongata* Günther 1862]

# Symphurus reticulatus Munroe 1990

net-like, referring to interconnected X- and Y-shaped markings on eyed side of body

## Symphurus rhytisma Böhlke 1961

Greek for patch, referring to "dark segment of the tail"

# Symphurus robustus Lee & Munroe 2021

robust or stout, referring to relatively massive, and much thicker body compared with that of other similar shallow-water tonguefishes

# Symphurus sayademalhensis Chabanaud 1955

-ensis, suffix denoting place: Saya de Malha Bank, Indian Ocean, type locality

# Symphurus schultzi Chabanaud 1955

in honor of Leonard P. Schultz (1901-1986), Curator of Fishes, U. S. National Museum, entrusted Chabanaud with the task of studying *Symphurus* fishes collected by the U.S. Bureau Fisheries steamer *Albatross* (1907-1910), "material of exceptional scientific value and interest"

#### Symphurus septemstriatus (Alcock 1891)

septem, seven; striata, striped, referring to seven "complete rather broad" crossbands on eyed side in life

# Symphurus stigmosus Munroe 1998

full of marks, referring to distinctive blotches on dorsal and anal fins

# Symphurus strictus Gilbert 1905

straight, allusion not explained, perhaps referring to "narrow dark lines" following rows of scales on eyed side, compared to wavy pattern of *S. undatus*, also described from Oahu (Hawaiian Islands) in the same publication

## Symphurus tessellatus (Quoy & Gaimard 1824)

tessellated, i.e., inlaid with small square stones, allusion not explained (authors mentioned only brown transverse streaks on eyed side)

#### Symphurus thermophilus Munroe & Hashimoto 2008

thermos, heat; philo, to love, referring to preferred habitat at active hydrothermal vent areas

## Symphurus trewavasae Chabanaud 1948

in honor of Ethelwynn Trewavas (1900-1993), British Museum (Natural History), where Chabanaud found this tonguefish and two others, S. gorgonae and S. holothuriae, in their collection

#### Symphurus trifasciatus (Alcock 1894)

tri-, three; fasciatus, banded, referring to three broad blackish crossbands on eyed side of body

## Symphurus undatus Gilbert 1905

wavy, referring to "wavy streaks" of light olive, "running in all directions" on eyed side

# Symphurus undecimplerus Munroe & Nizinski 1990

undecim, eleven; pleurus, many or most, referring to characteristic 11 caudal-fin rays and high meristic values compared with S. melasmatotheca

## Symphurus urospilus Ginsburg 1951

ouros, tail; spilos, mark or spot, referring to large black spot on caudal fin, closer to distal margin than to base

## Symphurus vanmelleae Chabanaud 1952

matronym not identified, possibly in honor of scientific illustrator M. L. Van Melle (a woman), Institut Royal des Sciences Naturelles de Belgique, which sponsored expedition that collected type

# Symphurus variegatus (Gilchrist 1903)

variegated (exhibiting different colors, especially as irregular patches or streaks), presumably referring to 8-10 "indistinct cross bands of very irregular arrangement" on eyed side

# Symphurus varius Garman 1899

variegated, allusion not explained, perhaps referring to color of eyed side, "Light brown, thickly freckled with brown and with whitish, in part forming transversely elongated spots," one specimen with a "brown spot near the midlength reaching down toward the lateral line opposite another reaching upward from below"

# Symphurus williamsi Jordan & Culver 1895

in honor of Thomas Marion Williams (1871-1947), one of Jordan's students at Stanford University, who collected holotype

#### Symphurus woodmasoni (Alcock 1889)

in honor of James Wood-Mason (1846-1893), lepidopterist and specialist in marine animals aboard the Royal Indian Marine Survey steamer *Investigator*, from which type was collected

# Subfamily Cynoglossinae

## Compsomidiama Chabanaud 1951

compso-, elegant; meidema, smile, allusion not explained, presumably referring to rounded (i.e., smooth) hypertrophied processes of mandibular lip on eyed side compared to ciliated (fringed) processes of Paraplagusia (in other words, lip appears clean-shaven and therefore more elegant) [taxonomic status uncertain]

#### Compsomidiama medium Chabanaud 1951

middle, presumably referring to how this genus (and species) appears to be intermediate between *Cynoglossus* and *Paraplagusia* [taxonomic status uncertain]

# Cynoglossus Hamilton 1822

cyno-, dog; glossus, tongue, referring to body shape, "long, oval, very much flattened," like the tongue of a dog [not tautonymous with C. cynoglossus, which Hamilton described in Achirus]

#### Cynoglossus abbreviatus (Gray 1834)

shortened; name dates to an illustration, given the vernacular name "Short lined Finless Sole," allusion not explained; if one interprets "Short lined" as two separate adjectives (i.e., "Short" is not modifying "lined"), then perhaps referring to shorter body compared to the two paralichthyid flatfishes on same plate, *Platessa chinensis* 

Cynoglossus attenuatus. From: Gilchrist, J. D. F. 1904. Descriptions of new South African fishes. Marine Investigations in South Africa v. 3: 1-16, Pls. 19-36.

(=Tephrinectes sinensis) and P. russellii (=Pseudorhombus arsius) ["lined" may refer to three lateral lines on eye side; "Finless" may refer to single ventral fin united with anal fin]

# Cynoglossus acaudatus Gilchrist 1906

*a*-, not; *caudatus*, tailed, referring to absence of caudal-fin rays, the space where they would normally appear "occupied by a transparent membrane connecting the projecting rays of the dorsal and anal" fins (caudal fin is confluent with dorsal and anal fins, as are all members of the genus) [some authors unnecessarily change spelling to "*ecaudatus*"]

# Cynoglossus acutirostris Norman 1939

acutus, sharp or pointed; rostris, snout, referring to its "acutely pointed" snout

## Cynoglossus arel (Bloch & Schneider 1801)

local Malayalam name for this flatfish at Tranquebar (now Tharangambadi), India, type locality

#### Cynoglossus attenuatus Gilchrist 1904

thin or tapered, presumably referring to body shape

# Cynoglossus bilineatus (Lacepède 1802)

bi-, two; lineatus, lined, referring to two lateral lines (dorsal and medial) on both sides of body

## Cynoglossus brachycephalus Bleeker 1870

brachy, short; cephalus, head, allusion not explained, perhaps referring to rounded or obtusely pointed snout

## Cynoglossus broadhursti Waite 1905

in honor of Florance Constantine Broadhurst (1861-1909), a Western Australian businessman best known for mining guano for fertilizer; he was "jointly instrumental in procuring [by means of a trawl] the collection of fishes dealt with" in Waite's paper

#### Cynoglossus browni Chabanaud 1949

in honor of Dr. Brown (possibly A. P. Brown), Director of the Fisheries Research Institute of British West Africa (named for Brown at the request of Jean Cadenat; see *C. cadenati*, below)

# Cynoglossus cadenati Chabanaud 1947

in honor of its discoverer, ichthyologist Jean Cadenat (1908-1992), Director, Marine Biological Section of the Institut Français d'Afrique Noire (Gorée, Senegal)

#### Cynoglossus canariensis Steindachner 1882

-ensis, suffix denoting place: Canary Islands, eastern central Atlantic, type locality

# Cynoglossus capensis (Kaup 1858)

-ensis, suffix denoting place: etymology not described and type locality not mentioned, presumably Cape of Good Hope, South Africa

## Cynoglossus carpenteri Alcock 1889

in honor of Capt. Alfred Carpenter, Commander of the Royal Indian Marine Survey steamer *Investigator*, from which type was collected, "distinguished officer in charge of the Marine Survey of India" and the "pioneer of scientific hydrography in India"

# Cynoglossus cleopatridis Chabanaud 1949

-idis, genitive singular of: Cleopatris, ancient name of Suez, seaport city at Gulf of Suez, Egypt, Red Sea, type locality

#### Cynoglossus crepida Fricke, Golani & Appelbaum-Golani 2017

Latin for the sole of a slipper or sandal, referring to its sole-like shape

#### Cynoglossus cynoglossus (Hamilton 1822)

cyno-, dog; glossus, tongue, referring to body shape, like the tongue of a dog (apparently based on a local name in

India that Hamilton found "somewhat harsh," so he translated it to Greek)

# Cynoglossus dispar Day 1877

unlike or different, presumably referring to how it differs from *C. brachyrhynchus* (=puncticeps) and *C. borneensis* (=trulla) in having two lateral lines, instead of just one, on blind side

#### Cynoglossus dollfusi (Chabanaud 1931)

in honor of Robert-Philippe Dollfus (1887-1976), ichthyologist and parasitologist, who collected type

## Cynoglossus dubius Day 1873

doubtful or uncertain, allusion unexplained, perhaps referring to Day's comment that it may not belong in *Cynoglossus* due to its cycloid scales (congeners known at the time generally have ctenoid scales)

## Cynoglossus durbanensis Regan 1921

-ensis, suffix denoting place: Durban, KwaZulu-Natal, South Africa, southwestern Indian Ocean, type locality

## Cynoglossus feldmanni (Bleeker 1854)

in honor of Surgeon-Major A. Feldmann, Dutch Colonial Army doctor stationed in Samarang, East Borneo, who discovered this species

## Cynoglossus gilchristi Regan 1920

in honor of Scottish-born South African ichthyologist John Dow Fisher Gilchrist (1866-1926), who reported this species as *C. brachycephalus* in 1905

# Cynoglossus glotta Fricke, Golani & Appelbaum-Golani 2023

Greek for tongue, referring to its tongue-shaped body

# Cynoglossus gracilis Günther 1873

slender, allusion not explained, probably referring to more slender body compared to *C. robustus*, described in the same paper

## Cynoglossus hardenbergi Norman 1931

in honor of Dutch biologist Johann Dietrich Frans Hardenberg (1902-1980), Laboratorium voor het Onderzoek der Zee (Batavia), through whose "kindness" Norman was able to examine an "extensive series" of flatfishes from the Laboratorium's collection, including type of this one (which Hardenberg acquired at a fish market), and who allowed Norman to retain a "large number" of specimens for the British Museum

# Cynoglossus heterolepis Weber 1910

hetero-, different; lepis, scale, referring to strongly serrated scales on eyed side, weakly serrated on blind side

# Cynoglossus interruptus Günther 1880

interrupted, referring to upper lateral line on eyed side, discontinued at middle of body

# Cynoglossus itinus (Snyder 1909)

of the willow, allusion not explained, perhaps alluding to a local Japanese name (e.g., Sebastes itinus, Perciformes: Sebastidae)

# Cynoglossus joyneri Günther 1878

in honor of British engineer (constructing railways) Henry Batson Joyner (1839-1884), who presented a collection of sea fishes from Tokyo, Japan, to the British Museum, including holotype of this one

## Cynoglossus kapuasensis Fowler 1905

-ensis, suffix denoting place: Kapuas River, West Kalimantan, Borneo, Indonesia, type locality

#### Cynoglossus kopsii (Bleeker 1851)

in honor of Bleeker's friend, George François de Bruijn (sometimes spelled Bruyn) Kops (1820-1881), a Dutch naval officer who studied the geology, history and ethnography of the Riau Archipelago, and collected type

## Cynoglossus lachneri Menon 1977

in honor of Ernest A. Lachner (1916-1996), curator of fishes at the U.S. National Museum, who initiated Menon's revision of the genus and provided "constant guidance and encouragement" [possibly a junior synonym of *C. hunteri* von Bonde 1925, whose types have unfortunately been lost]

# Cynoglossus lida (Bleeker 1851)

from Ikan (=fish) Lidah, local Malay name for tonguefishes

# Cynoglossus lineolatus Steindachner 1867

lined, referring to extremely fine, brown longitudinal lines on eyed side, corresponding in number to the horizontal rows of scales

# Cynoglossus lingua Hamilton 1822

tongue, a "Latin translation of that given to it by the natives" of India, referring to its tongue-like shape

#### Cynoglossus luctuosus Chabanaud 1948

mournful, allusion not explained, possibly referring to color in alcohol, light brown with dark-brown mottling on

eyed side, giving the appearance of several irregular transverse bands, and blackish fins on both sides (except for pelvic fin and anterior dorsal fin)

## Cynoglossus maccullochi Norman 1926

patronym not identified but almost certainly in honor of Allan Riverstone McCulloch (1885-1925), former Curator of Fishes, Australian Museum, who described many Australian flatfishes

#### Cynoglossus macrolepidotus (Bleeker 1851)

macro-, large; lepidotus, scaled, referring to large ctenoid scales on eyed side, described as having 50 along lateral line

## Cynoglossus macrophthalmus Norman 1926

macro-, large; ophthalmus, eye, allusion not explained, presumably referring to larger eyes compared to C. maccullochi and C. ogilbyi, described in same publication

## Cynoglossus macrostomus Norman 1928

macro-, large; stomus, mouth, referring to larger mouth compared to C. puncticeps, maxillary extending to "well beyond eye"

#### Cynoglossus maculipinnis Rendahl 1921

maculatus, spotted; pinnis, fin, referring to numerous brown spots on fins of eyed side

## Cynoglossus marleyi Regan 1921

in honor of Natal fisheries officer Harold Walter Bell-Marley (1872-1945), who collected (or helped to collect) type (and that of *C. durbanensis*)

## Cynoglossus melampetalus (Richardson 1846)

mela[m], black; petalus, having petals (i.e., scales or thin plates), latinization of Chinese name Hih leen ta sha, meaning "black-scaled sole" (although described as a dark chestnut-brown with a large grayish blotch behind gill opening)

## Cynoglossus melanopterus (Bleeker 1851)

melanos, black; pterus, fin, referring to blackish margin on dorsal and anal fins in life

#### Cynoglossus microlepis (Bleeker 1851)

micro-, small; lepis, scale, referring to small scales, described as having 150 along lateral line of eyed side, 165 on blind side

## Cynoglossus microphthalmus (von Bonde 1922)

micro-, small; ophthalmus, eye, referring to smaller eyes compared to the similar C. capensis

## Cynoglossus monodi Chabanaud 1949

in honor of naturalist and explorer Théodore Monod (1902-2000), founder and director of Institut Français d'Afrique Noire (now Institut Fondamental d'Afrique Noire)

# Cynoglossus monopus (Bleeker 1849)

mono-, one; pous, foot, referring to single ventral fin (a characteristic of genus), fused with anal fin

# Cynoglossus nanhaiensis Wang, Munroe & Kong 2016

-ensis, suffix denoting place: Nanhai, Chinese name for South China Sea, where most specimens were collected

#### Cynoglossus nigropinnatus Ochiai 1963

nigro-, black; pinnatus, finned, referring to fins "jet-black basally, gradually becom[ing] paler toward edges in either side"

# Cynoglossus ochiaii Yokogawa, Endo & Sakaji 2008

in honor of Akira Ochiai (1923-2017), Kochi University, for his "great" contributions to the taxonomy of Japanese cynoglossids

## Cynoglossus ogilbyi Norman 1926

patronym not identified but almost certainly in honor of ichthyologist James Douglas Ogilby (1853-1925), who described several Australian flatfishes

# Cynoglossus oligolepis (Bleeker 1855)

oligo-, few; lepis, scale, referring to "considerably fewer" (translation) scales along lateral line compared with *C. macrolepidotus* (a misnomer since Bleeker later [1870] described *C. oligolepis* as having smaller, more numerous [68 vs. 50] scales)

#### Cynoglossus papuensis Allen & Erdmann 2024

-ensis, Latin suffix denoting place: eastern Papua New Guinea, type locality

#### Cynoglossus pottii Steindachner 1902

patronym not identified but probably in honor of Constantin Edler von Pott, captain of the ship *Pola*, from which type was collected

#### Cynoglossus praecisus Alcock 1890

cut off in front, allusion not explained, perhaps referring to "obtusely pointed" snout compared to "symmetrically rounded" snout of *S. versicolor*, described in same paper

## Cynoglossus puncticeps (Richardson 1846)

punctus, speckled; ceps, head, referring to "many dark specks" on head (described from an illustration so actual coloration may be different or variable)

## Cynoglossus purpureomaculatus Regan 1905

purpureus, purple; maculatus, spotted, referring to numerous irregular purplish spots on eyed side

# Cynoglossus quadrilineatus (Bleeker 1851)

quadri-, fourfold; lineatus, lined, referring to two lateral lines on eyed side and two on blind side

#### Cynoglossus quadriocellatus Fricke 2020

quadri-, four; ocellata, with eye-like spots, referring to two large black ocelli on belly of eyed side and two ocelli on tail

#### Cynoglossus robustus Günther 1873

full-bodied or stout, allusion not explained, probably referring to stouter body compared to *C. gracilis*, described in the same paper

## Cynoglossus roulei Wu 1932

in honor of Louie Roule (1861-1942), chair of the ichthyology and herpetology departments, Muséum national d'histoire naturelle (Paris), in whose laboratory Wu conducted his studies; Wu acknowledged his hospitality and advice

## Cynoglossus sealarki Regan 1908

in honor of H.M.S. Sealark, Royal Navy vessel primarily used for hydrographic survey work, from which type was collected

#### Cynoglossus semifasciatus Day 1877

semi-, half; fasciatus, banded, referring to "vertical incomplete or half bands irregularly disposed" on eyed side of body

# Cynoglossus semilaevis Günther 1873

semi-, half; laevis, smooth, referring to "perfectly smooth" scales between lateral lines on eyed side and "strongly ctenoid" scales on head and between outer lateral lines and vertical fins (all smooth on blind side)

#### Cynoglossus senegalensis (Kaup 1858)

-ensis, suffix denoting place: type locality not mentioned, presumably coast of Senegal (occurs in eastern Atlantic from Mauritania south to Angola)

# Cynoglossus sibogae Weber 1913

of the ship Siboga and Indonesian expedition (1898-1899) of same name, during which type was collected

# Cynoglossus sinusarabici (Chabanaud 1931)

sinus, gulf; arabici, of Arabia, i.e., Gulf of Arabia, ancient name for the Red Sea, where it is endemic (also a Lessepsian immigrant to the Mediterranean)

# Cynoglossus suyeni Fowler 1934

in honor of Lin Su-Yen (also spelled Shu-Yen), head of the Fisheries Experiment Station, Canton (now Guangzhou), China; Fowler acknowledged him as author of Carps and Carp-like Fishes of Kwangtung and Adjacent Islands (1931)

## Cynoglossus trigrammus Günther 1862

tri-, three; grammus, line, referring to three lateral lines on eyed side

# Cynoglossus trulla (Cantor 1849)

trowel or ladle, allusion not explained, perhaps in some way referring to its shape

## Cynoglossus versicolor Alcock 1890

variegated or of various colors, referring to yellowish-brown eyed side in life, "profusely marbled with chestnut-brown and sepia" and a "large ocelliform red-brown patch, with a yellow areola on the abdomen just behind the gill-opening"

#### Cynoglossus waandersii (Bleeker 1854)

in honor of Henri Louis van Bloemen Waanders (1821-1883), administrator of the tin mines of Banka (an island in Sumatra), who discovered this species and provided type

# Cynoglossus westraliensis Fricke 2019

-ensis, suffix denoting place: Western Australia, where type locality (North West Cape) is situated

# Cynoglossus xiphoideus Günther 1862

knife-like, allusion not explained, perhaps referring it relatively elongate (and vaguely knife-like) body shape

# Cynoglossus yokomaru Naito & Endo 2019

named for Yoko-maru, research vessel of the Seikai National Fisheries Research Institute, Fisheries Research Agency, from which almost all the types were collected

## Cynoglossus zanzibarensis Norman 1939

-ensis, suffix denoting place: near Zanzibar, Tanzania, type locality (occurs in western Indian Ocean from South Africa to Madagascar)

## Paraplagusia Bleeker 1865

para-, near, referring to similarity to and/or previous placement of *P. blochii* and *P. marmorata* (=bilineata) in Plagusia (=Symphurus)

## Paraplagusia bilineata (Bloch 1787)

*bi*-, two; *lineatus*, lined, referring to two lateral lines on eyed side (at the time a unique trait compared to other flatfishes)

# Paraplagusia blochii (Bleeker 1851)

in honor of ichthyologist Marcus Élisier Bloch (1723-1799) as a replacement name (unnecessary) for *P. bilineatus* (which Bloch described in 1787) due to confusion over whether it had two lateral lines on the blind side or just one; this replacement name was itself replaced by *P. bleekeri* Kottelat 2013 but *P. blochii* is retained due to prevailing usage

## Paraplagusia guttata (Macleay 1878)

dotted or spotted, referring to "very many small whitish spots" on eyed side

# Paraplagusia japonica (Temminck & Schlegel 1846)

Japanese, described as "very common in Nagasaki Bay, mainly in spring"

## Paraplagusia longirostris Chapleau, Renaud & Kailola 1991

longus, long; rostris, snout, referring to long, obtusely pointed snout bearing a long rostral hook that overhangs mouth

# Paraplagusia sinerama Chapleau & Renaud 1993

sine, without; ramus, branch, referring to unbranched labial papillae on eyed side of body