

# The *ETYFish* Project

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COMMENTS: 

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## Series SYNGNATHARIA

### Order SYNGNATHIFORMES (part 1 of 2)

#### Suborder SYNGNATHOIDEI

#### Family AULOSTOMIDAE Trumpetfishes

##### ***Aulostomus* Lacepède 1803**

*aulon*, tube; *stomus*, mouth, referring to small mouth at end of long, compressed tube

##### ***Aulostomus chinensis* (Linnaeus 1766)**

*-ensis*, suffix denoting place: China, originally based on more than one species described from multiple sources, including “*Acus chinensis maxima*, corpore compresso” of China from Petiver (1702)

##### ***Aulostomus maculatus* Valenciennes 1841**

spotted, referring to black or dark-brown round spots, often concentrated on back and belly but sometimes extending sparsely to the sides

##### ***Aulostomus strigosus* Wheeler 1955**

slender, allusion not explained, but like its congeners it is a slender (elongate and compressed) fish

#### Family CENTRISCIDAE Shrimpfishes and Snipefishes

5 genera · 13 species

##### Subfamily Centriscinae Shrimpfishes

##### ***Aeoliscus* Jordan & Starks 1902**

“moving,” according to the authors, allusion not explained but certainly referring to movable dorsal-fin spine, compared with fixed or rigid dorsal-fin spine of *Centriscus*

##### ***Aeoliscus punctulatus* (Bianconi 1854)**

diminutive of *punctum*, spot, referring to scattering of small black spots on body

##### ***Aeoliscus strigatus* (Günther 1861)**

striped, referring to black streak running from snout, through eye and base of pectoral fin, and along lower edge of dorsal cuirass

##### ***Centriscus* Linnaeus 1758**

diminutive of *kentron*, thorn or spine, presumably referring to fixed first spine of anterior dorsal fin (in usual position of caudal fin)

##### ***Centriscus cristatus* (De Vis 1885)**

crested or ridged, presumably referring to “ridged crown” (described from a dried specimen)

##### ***Centriscus scutatus* Linnaeus 1758**

shielded, referring to back and upper body encased in protective transparent plates

##### Subfamily Macroramphosinae Snipefishes

##### ***Centriscops* Gill 1862**

*ops*, appearance, referring to its resemblance to *Centriscus*, i.e., *Centriscus*-like

##### ***Centriscops humerosus* (Richardson 1846)**

pertaining to the shoulder, differing from *Centriscus scutatus* (presumed congener at the time) “chiefly in its high and gibbous shoulder”

##### ***Macroramphosus* Lacepède 1803**

*macro-*, long; *r[h]amphosus*, beaked, referring to greatly elongated snout

##### ***Macroramphosus gracilis* (Lowe 1839)**

slender, referring to more slender and elongate body compared to *M. scolopax*

##### ***Macroramphosus sagifue* Jordan & Starks 1902**

Japanese name for this species

**Macroramphosus scolopax (Linnaeus 1758)**

*Scolopax*, genus of long-billed birds (snipes or woodcocks), referring to similarly long jaws

**Notopogon Regan 1914**

*notos*, back; *pogon*, beard, referring to “patch of bristles” on back behind head of adult *N. lilliei*

**Notopogon armatus (Sauvage 1879)**

armed with a weapon, presumably referring to five spines of first dorsal fin, especially the long second spine

**Notopogon fernandezianus (Delfin 1899)**

*-ianus*, belonging to: Juan Fernández Islands, type locality

**Notopogon lilliei Regan 1914**

patronym not identified but almost certainly in honor of marine biologist Dennis Gascoigne Lillie (1884-1963), member of Terra Nova Antarctic Expedition (1910-1913), during which type was collected

**Notopogon macrosolen Barnard 1925**

*macro-*, long; *solen*, pipe, referring to longer tube-like snout compared to congeners

**Notopogon xenosoma Regan 1914**

*xenos*, strange or foreign (i.e., different); *soma*, body, allusion not explained, perhaps referring to unusual body shape created by long spine of first dorsal fin

**Family FISTULARIIDAE** Cornetishes

**Fistularia Linnaeus 1758**

*-ia*, pertaining to: *fistula*, pipe, presumably alluding to “Tobacco-pipe Fish,” its common name dating to at least 1685, referring to its shape

**Fistularia commersonii Rüppell 1838**

in honor of French naturalist Philibert Commerçon (also spelled Commerson, 1727-1773), who discovered what Rüppell believed to be this species, noting that it was “probably wrongly named” (translation) by Cuvier in 1816 as *F. immaculata* (= *petimba*)

**Fistularia corneta Gilbert & Starks 1904**

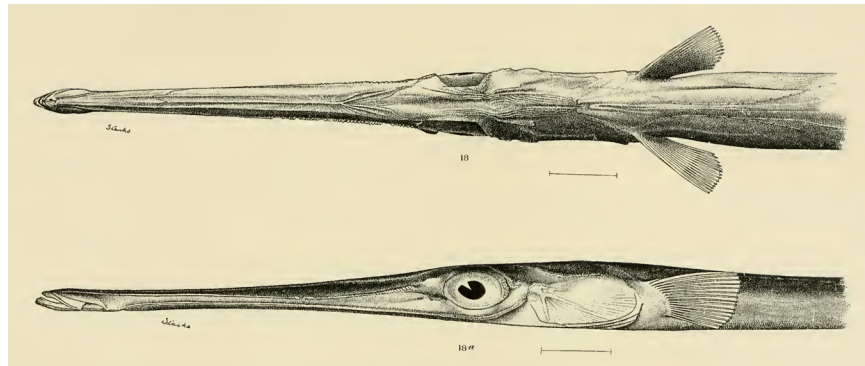
Spanish for cornet (horn or small trumpet) and common name for related species, presumably referring to horn-shaped mouth

**Fistularia petimba Lacepède 1803**

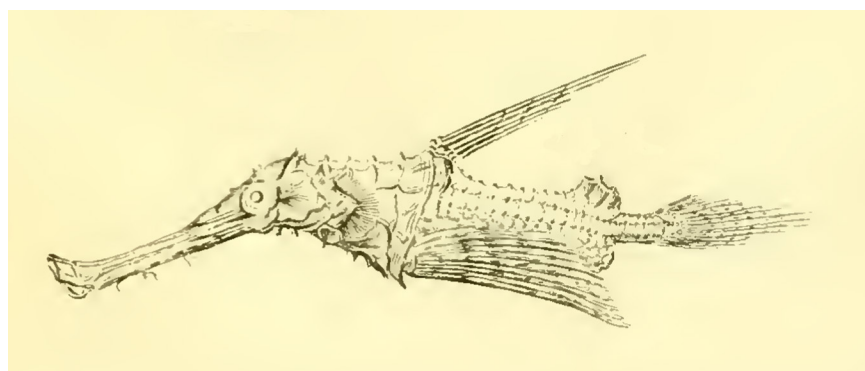
from *Petimbuaba*, Portuguese name of *F. tabacaria* as reported in Marcgrave’s *Historiae naturalis brasiliae* (1648)

**Fistularia tabacaria Linnaeus 1758**

*-aria*, pertaining to: *tabacum*, referring to “Tobacco-pipe Fish,” its common name dating to at least 1685, referring to its shape



*Fistularia corneta*. From: Gilbert, C. H. and E. C. Starks. 1904. The fishes of Panama Bay. *Memoirs of the California Academy of Sciences* v. 4: 1-304, Pls. 1-33.



*Solenostomus paradoxus*. From: Pallas, P. S. 1770. *Spicilegium Zoologicum quibus novae imprimis et obscurae animalium species iconibus, descriptionibus atque commentariis illustrantur*. Berolini, Gottl. August. Lange. v. 1 (fasc. 8): 1-56, Pls. 1-5.

## Family SOLENOSTOMIDAE Ghost Pipefishes

### ***Solenostomus* Lacepède 1803**

*solen*, pipe; *stomus*, mouth, referring to small mouth at end of long, tube-like snout

### ***Solenostomus armatus* Weber 1913**

armored, referring to “strong armament of the body” (translation), presumably its dermal plates and/or series of sharp curved spines beginning behind head along upper and lower surface of body and along lateral line

### ***Solenostomus cyanopterus* Bleeker 1854**

*cyno-*, blue; *pterus*, fin, referring to large blue-black spots on dorsal fin

### ***Solenostomus halimeda* Orr, Fritzsche & Randall 2002**

named for resemblance to *Halimeda*, a genus of marine algae, especially greenish coloration and rounded shapes of spinous dorsal, pelvic and caudal fins

### ***Solenostomus leptosoma* Tanaka 1908**

*leptos*, slender; *soma*, body, presumably referring to “elongate, much compressed” body

### ***Solenostomus pagnius* Jordan & Thompson 1914**

etymology not explained, perhaps from *paignios*, Greek for sportive, or *paignion*, plaything or toy; if so, allusion not evident

### ***Solenostomus paradoxus* (Pallas 1770)**

contrary to expectation, allusion not explained, probably referring to its overall bizarre appearance

### ***Solenostomus snuffleupagus* Short & Hirasti 2026**

named for Mr. Snuffleupagus, a character in the children’s television series *Sesame Street*, which, like this species, has a distinctly shaggy, filamentous appearance and a long, drooping snout

## Family SYNGNATHIDAE Pipefishes and Seahorses

61 genera/subgenera · 336 species/subspecies

### Subfamily Syngnathinae Tail-brooding Pipefishes and Seahorses

50 genera/subgenera · 268 species

### ***Acentronura* Kaup 1853**

*a-*, without; *kentron*, thorn or spine; *oura*, tail, proposed as a subgenus of *Hippocampus* without “projections or spikes” (translation) on tail (and body) of *A. gracilissima*

### ***Acentronura breviperula* Fraser-Brunner & Whitley 1949**

*brevis*, short; *perula*, pocket, referring to short brood-pouch (seven rings) of males, compared to 13 and 12 on *A. gracilissima* and *A. tentaculata*, respectively

### ***Acentronura gracilissima* (Temminck & Schlegel 1850)**

most thin or slender, referring to its compressed body

### ***Acentronura mossambica* Smith 1963**

*-ica*, belonging to: Mozambique, type locality (occurs in western Indian Ocean from East Africa to Madagascar and Persian Gulf)

***Acentronura tentaculata* Günther 1870**

tentacled, referring to “long, fringed tentacles and filaments” on body and tail

***Amphelikturus* Parr 1930**

*ampheliktos*, coiled round; *oura*, tail, presumably referring to prehensile tail with caudal fin present

***Amphelikturus dendriticus* (Barbour 1905)**

branched (like a tree), referring to branched dermal flaps (“peculiar filamentous appendages”) on eye, head, and dorsal and ventral surfaces

***Anarchopterus* Hubbs 1935**

*an-*, without; *archus*, anus; *pterus*, fin, referring to absence of anal fin

***Anarchopterus criniger* (Bean & Dresel 1884)**

*crinis*, hair; *-iger*, to bear, referring to “Minute filaments above the eyes, and apparently along the sides of the body”

***Anarchopterus tectus* (Dawson 1978)**

concealed or disguised, referring to its being commonly identified as *Micrognathus* (now *Halicampus*) *crinitus*

***Apterygocampus* Weber 1913**

*a-*, without and *pterygion*, fin, referring to absence of fins (in adults) except for rudimentary caudal; *kampos*, a mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*

***Apterygocampus epinnulatus* Weber 1913**

etymology not explained, presumably *e-*, without; *pinnulatus*, with finlets or small fins, referring to absence of fins (in adults) except for rudimentary caudal fin

***Bhanotia* Hora 1926**

*-ia*, belonging to: Hora’s “esteemed friend” Kali Das Bhanot (no other information available)

***Bhanotia fasciolata* (Duméril 1870)**

banded, referring to small white bands on head and trunk rings

***Bhanotia nuda* Dawson 1978**

bare or naked, referring to absence of spines in diagonal anterodorsal snout ridge and absence of “obvious” bony plates on opercular membrane

***Bhanotia pauciradiata* Allen & Kuitert 1995**

*pauci-*, few; *radiata*, rayed, referring to low number of dorsal- and pectoral-fin rays compared to congeners

***Bryx* Herald 1940**

Herald called it a “coined name, to be declined *Bryx*, *Brycis*” (*bryx* can mean “of the depths,” but this does not seem to apply to the type species, *B. veleronis*, which was collected at a depth of 27.4–36.5 m)

***Bryx analicarens* (Duncker 1915)**

*analis*, anal; *carens*, from *carere*, to be without or devoid of, referring to absence of anal fin

***Bryx dunckeri* (Metzelaar 1919)**

patronym not identified but almost certainly in honor of ichthyologist Georg Duncker (1870–1953), Zoological Museum Hamburg, who revised the family in 1915

***Bryx randalli* (Herald 1965)**

in honor of ichthyologist John E. Randall (1924–2020), Bishop Museum (Honolulu), “whose extensive underwater ecological studies have made him a leader in the new approach to ichthyology” (he also collected type)

***Bryx veleronis* Herald 1940**

*-is*, genitive singular of: Allan Hancock Pacific Expeditions research ship *Velero III*, from which type was collected

***Bulbonaricus* Herald 1953**

*bulbus*, a swelling; *naricus*, pertaining to the nostrils, referring to “bulblike lobes [of *B. davaoensis*] in which the nostrils are contained”

***Bulbonaricus brauni* (Dawson & Allen 1978)**

in honor of John Braun (Perth, Australia), who “recognized the fish as unusual and brought the living holotype to the Western Australian Museum” (Braun, who ran a marine aquarium-fish business from his home, was Allen’s friend and dive buddy; he died “long before his time” after suffering a heart attack while playing racquetball [G. R. Allen, pers. comm.])

***Bulbonaricus brucei* Dawson 1984**

in honor of carcinologist Alexander James “Sandy” Bruce (b. 1929), Heron Island Research Station, Australia, who collected type and provided color photographs

***Bulbonaricus davaoensis* (Herald 1953)**

-*ensis*, suffix denoting place: Davao Gulf, Mindanao Island, Philippines, type locality (occurs in Indo-West Pacific from East Africa and Indonesia east to Philippines and Fiji, north to Taiwan, south to Queensland, Australia)

***Campichthys* Whitley 1931**

etymology not explained, possibly an inversion of *Ichthyocampus*, original genus of type species, *C. tryoni*

***Campichthys galei* (Duncker 1909)**

in honor of Charles Frederick Gale (1860-1928), Chief Inspector of Fisheries of Western Australia, who collected holotype

***Campichthys nanus* Dawson 1977**

dwarf, referring to diminutive size of male holotype, 25 mm SL

***Campichthys tricarinatus* Dawson 1977**

*tri-*, three; *carinatus*, keeled, referring to tripartite snout ridge: a low ridge immediately behind upper jaw followed by two well-separated knob-like projections

***Campichthys tryoni* (Ogilby 1890)**

in honor of Ogilby's friend Henry Tryon (1856-1943), Assistant Curator, Queensland Museum, "in remembrance of the very pleasant collecting trip we enjoyed together" at Moreton Bay, Queensland, Australia, type locality

***Corythoichthys* Kaup 1853**

*corythos*, helmet, allusion not explained, perhaps referring to "elevated" head rising from large orbits (per Kaup 1856); *ichthys*, fish

***Corythoichthys amplexus* Dawson & Randall 1975**

encircling, referring to large bands of color encircling body

***Corythoichthys benedetto* Allen & Erdmann 2008**

in honor of Benedetto "Bettino" Craxi (1934-2000), Prime Minister of Italy (1983-1987), named at the request of Baroness Angela Van Wright Von Berger of Monaco for her "beloved friend," whose "love and respect for nature and the sea was just one of his many great qualities"; Von Berger successfully bid to conserve this species at the Blue Auction, a black-tie charity auction in Monaco (20 Sept. 2007) in support of Conservation International's Bird's Head Seascape marine conservation initiative [presumably a noun in apposition, without the genitive "i"]

***Corythoichthys conspicillatus* (Jenyns 1842)**

spectacled, referring to its "large and full" eyes, "with somewhat of a spectacled appearance"

***Corythoichthys flavofasciatus* (Rüppell 1838)**

*flavus*, yellow; *fasciatus*, banded, referring to 18-20 thin orange-yellow horizontal stripes connecting purplish blotches on upper half of body and tail

***Corythoichthys haematopterus* (Bleeker 1851)**

*hematos*, bloody; *pterus*, fin, referring to its red fins ("pinnis rubris") [as far as we can tell, only the caudal fin is reddish]

***Corythoichthys insularis* Dawson 1977**

of an island, referring to type locality, D'Arros Island, Amirante Islands, Seychelles

***Corythoichthys intestinalis* (Ramsay 1881)**

intestinal, believed by Ramsay to be a parasitic pipefish because it was discovered in the intestinal cavity of a sea cucumber; pipefish taxonomist Charles E. Dawson (1977) notes that "such an association is unknown for pipefishes and this is doubtless an erroneous observation"

***Corythoichthys isigakius* Jordan & Snyder 1901**

-*ius*, pertaining to: Ishigaki Island, Yaeyama Islands, southern Ryukyu Islands, Japan, type locality (authors report that *ishigaki* is Japanese for "stone fence")

***Corythoichthys nigripectus* Herald 1953**

*nigri-*, black; *pectus*, of the breast or chest, referring to blackish pigmentation on ventral surface of anterior trunk rings

***Corythoichthys ocellatus* Herald 1953**

with eye-like spots, referring to "metameric arrangement" of "irregular ocelli covering the trunk and especially the tail, except the ventral surfaces"

***Corythoichthys paxtoni* Dawson 1977**

in honor of John R. Paxton (b. 1938), Curator of Fishes, Australian Museum (Sydney)

***Corythoichthys polynotatus* Dawson 1977**

*poly*, many; *notatus*, marked, referring to dark spots or blotches on venter of anterior 6-8 trunk rings of males

***Corythoichthys quattuordecim* Yuki, Fricke & Motomura 20257**

Latin for fourteen, referring to presence of 14 trunk rings, a rare meristic character within the genus

***Corythoichthys schultzi* Herald 1953**

in honor of Leonard P. Schultz (1901-1986), Curator of Fishes at the U.S. National Museum, and who authored monograph on Marshall and Marianas Island fishes in which Herald's description appeared

***Corythoichthys waitei* Jordan & Seale 1906**

in honor of Australian zoologist Edgar R. Waite (1866-1928), the "accomplished" curator of the Australian Museum and then at the Canterbury Museum of Christchurch, New Zealand

***Cosmocampus Dawson* 1979**

*kosmos*, ornament or decoration, referring to ridges and dermal flaps "decorating" head; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*

***Cosmocampus albirostris* (Kaup 1856)**

*albus*, white; *rostris*, snout, referring to white (sometimes unpigmented) snout

***Cosmocampus arctus* (Jenkins & Evermann 1889)**

contracted, i.e., pressed together or shortened, allusion not explained, perhaps referring to its small and slender body

***Cosmocampus balli* (Fowler 1925)**

in honor of zoologist Stanley C. Ball (1885-1956), Bishop Museum (Honolulu), "in slight acknowledgment of his interest in the fishes of Oceania" (he also helped collect type)

***Cosmocampus banneri* (Herald & Randall 1972)**

in honor of zoologist Albert Henry Banner (1914-1985), University of Hawaii, whose "welcome field efforts resulted in the capture of the holotype of this species"

***Cosmocampus brachycephalus* (Poey 1868)**

*brachys*, short; *cephalus*, head, referring to short head, 4 $\frac{1}{3}$  times in anterior part of body

***Cosmocampus caldwelli* (Herald & Randall 1972)**

in honor of David K. Caldwell (1928-1990), Curator of Ichthyology, Los Angeles County Museum of Natural History, who provisionally determined in 1958 that museum specimens of this pipefish represented an undescribed species

***Cosmocampus coccineus* (Herald 1940)**

scarlet or berry red, referring to "carmine red" color of living specimens collected in red algal beds at Albemarle Island, Galápagos [treated as a subspecies of *C. arctus* by some workers]

***Cosmocampus darrosanus* (Dawson & Randall 1975)**

*-ensis*, suffix denoting place: D'Arros Island, Amirante Isles, Seychelles, type locality

***Cosmocampus elucens* (Poey 1868)**

shining out, presumably referring to silvery bar on each body ring

***Cosmocampus heraldi* (Fritzsche 1980)**

in honor of ichthyologist Earl S. Herald (1914-1973), for his life-long interest in pipefishes

***Cosmocampus hildebrandi* (Herald 1965)**

in honor of the late Samuel F. Hildebrand (1883-1949), U.S. Fish and Wildlife Service, who recognized in 1941 that this species was "somewhat different" from other previously known American pipefishes

***Cosmocampus howensis* (Whitley 1948)**

*-ensis*, suffix denoting place: Lord Howe Island, Australia, type locality (occurs in southern Pacific from New South Wales to Easter Island)

***Cosmocampus investigatoris* (Hora 1926)**

*-is*, genitive singular of: Royal Indian Marine Survey steamer *Investigator*, from which type was collected

***Cosmocampus maxweberi* (Whitley 1933)**

in honor of the "eminent Dutch biologist" Max Weber (1852-1937), who described this pipefish in 1913 but used a preoccupied name

***Cosmocampus profundus* (Herald 1965)**

deep, collected at a depth of 100 fathoms (182.88 m)

***Cosmocampus retropinnis* Dawson 1982**

*retro*, back; *pinnis*, fin, referring to posterior or caudal location of dorsal-fin origin

***Cylix* Short & Trnski 2021**

*kylix*, Greek for cup or chalice, referring to cup-like pentamerous crest on top of head

***Cylix nkosi* Short, Smith, Harasti & Claassens 2024**

a South African (KwaZulu-Natal) species named for the Nguni or Zulu term for chief, referring to the crown-like nature of the highly derived bony protuberance on the supraoccipital bone

***Cylix tupareomanaia* Short, Trnski & Ngātiwai 2021**

neologism “gifted” by kaumātua (tribal elders) of Ngātiwai (a local Māori iwi, or tribe), a combination of *tupareo* (from *Tu Pare o Huia*, “plume of the huia,” Ngātiwai name for Home Point, adjacent to type locality, itself a combination of *pare*, plume or garland, and *huia*, an extinct bird), referring to the seahorse’s pentamerous head crest, and *Manaia*, Māori name for a seahorse (also an ancestor that appears as a stylized figure used in Māori carvings representing a guardian) [note: probably the first animal in the world to have its naming authority include not just the name of a person but that of an entire tribe]

***Enneacampus* Dawson 1981**

*ennea*, nine, referring to 9 caudal-fin rays rather than 10 as in other syngnathine (tail-pouch) genera; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*

***Enneacampus ansorgii* (Boulenger 1910)**

in honor of explorer William John Ansorge (1850–1913), who collected type

***Enneacampus kaupi* (Bleeker 1863)**

in honor of naturalist Johann Jacob Kaup (1803–1873), who reported this species as *Syngnathus* (now *Hippichthys*) *spicifer* in 1856

***Festucalex* Whitley 1931**

etymology not explained, perhaps from *festuca*, Latin for stem or stalk, perhaps referring to elongate body shape, brownish-orange body (i.e., straw-colored), and/or seagrass habitat of type species, *F. cinctus*

***Festucalex amakusensis* (Tomiyama 1972)**

*-ensis*, suffix denoting place: Amakusa Islands, Japan, where type locality (Aitsu) is situated

***Festucalex armillatus* Prokofiev 2016**

decorated with a collar, referring to wide bands on each side of gill cover, connected to each other on the throat

***Festucalex bifasciatus* Yuki & Motomura 2026**

*bi-*, from *bis* (L.), twice; *fasciatus* (L.), banded, referring to two white bars on the opercle

***Festucalex cinctus* (Ramsay 1882)**

belt or girdle, allusion not explained, perhaps referring to blackish bands around body

***Festucalex erythraeus* (Gilbert 1905)**

*-eus*, having the quality of: *erythros*, red, referring to brick-red color in life

***Festucalex gibbsi* Dawson 1977**

in honor of marine biologist Peter E. Gibbs, Marine Biological Association of the United Kingdom, who collected holotype

***Festucalex kulbickii* Fricke 2004**

in honor of reef-fish ecologist Michel L. Kulbicki, ORSTOM (Office de la Recherche Scientifique et Technique d’Outre-Mer), Nouméa, New Caledonia, who collected type and other syngnathids

***Festucalex prolixus* Dawson 1984**

stretched out or long, referring to elongate lateral trunk ridge

***Festucalex rosa* Yuki & Motomura 2025**

Latin for rose, referring to its pink ground color in life

***Festucalex rufus* Allen & Erdmann 2015**

red or reddish, referring to its distinctive coloration, generally pinkish red

***Festucalex scalaris* (Günther 1870)**

ladder, allusion not explained, perhaps referring to 13–15 irregular broad brown crossbands on body and tail (more distinct in young than in adults), which could be said to resemble the rungs of a ladder

***Festucalex townsendi* (Duncker 1915)**

in honor of Frederick William Townsend (d. 1948), captain of the Indian cable-ship *Patrick Stewart* (used for dredging and repairing telegraph cables in the Indian Ocean and Persian Gulf), who collected type (and other syngnathids examined by Duncker)

***Festucalex wassi* Dawson 1977**

in honor of fisheries officer Richard C. Wass (b. 1942), U.S. Fish and Wildlife Service, who collected type

***Filicampus* Whitley 1948**

*filum*, thread, referring to “conspicuous” filament over eye of *F. superciliaris* (= *tigris*); *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*

***Filicampus tigris* (Castelnau 1879)**

tiger, presumably referring to 12 broad dark-reddish bands on body, like the stripes of a tiger

***Halicampus* Kaup 1856**

etymology not explained, perhaps *halios*, of the sea; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*

***Halicampus boothae* (Whitley 1964)**

in honor of sea turtle naturalist Julie Booth, who collected and presented type and “many interesting fishes” to the Australian Museum from New South Wales and Lord Howe Island (biographical footnote: Booth documented the courtship and mating behavior of green sea turtles by living with them, as Jane Goodall had done with chimpanzees)

***Halicampus brocki* (Herald 1953)**

in honor of ichthyologist-herpetologist Vernon E. Brock (1912-1971), Director of the Division of Fish and Game, Honolulu, who helped collect type

***Halicampus crinitus* (Jenyns 1842)**

hairy or with long hair, referring to a “few very short minute filamentous threads scattered about the head, more particularly one over each eye”

***Halicampus dunckeri* (Chabanaud 1929)**

in honor of ichthyologist Georg Duncker (1870-1953), Zoological Museum Hamburg, who revised the family in 1915

***Halicampus edmondsoni* (Pietschmann 1928)**

in honor of biologist Charles Howard Edmondson (1876-1970), Bishop Museum (Honolulu), who helped Pietschmann and his work (he also collected type)

***Halicampus grayi* Kaup 1856**

patronym not identified but almost certainly in honor of British zoologist John Edward Gray (1800-1875), who published Kaup’s monograph on syngnathid fishes under the auspices of the British Museum

***Halicampus macrorhynchus* Bamber 1915**

*macro-*, long; *rhynchus*, snout, referring to its “much longer” snout compared to the similar *H. koilomatodon* (=grayi)

***Halicampus marquesensis* Dawson 1984**

*-ensis*, suffix denoting place: Marquesas Islands, where it is endemic

***Halicampus matafae* (Jordan & Seale 1906)**

in honor of Mata’afa Iosefo (1832-1912), chief of Upolu Island, Samoa, type locality, a “distinguished and able statesman, once king of Samoa” [although named after a man, some classically trained zoologists latinized the names of individuals whose names ended with the letter “a” by adding an “e” to the spelling]

***Halicampus nitidus* (Günther 1873)**

neat, elegant or shining, described as a “lovely marked” species with whitish body rings, three of which “stand out particularly due to their shiny white color” (translation)

***Halicampus punctatus* (Kamohara 1952)**

spotted, referring to brilliant steel-blue spots (pale in alcohol) on lateral surface of trunk

***Halicampus spinirostris* (Dawson & Allen 1981)**

*spini-*, spiny; *rostris*, snout, referring to “spiny armature” on snout

***Halicampus vittatus* (Kaup 1856)**

banded, referring to white bars (27 on type) crossing body and tail

***Halicampus zavorensis* Dawson 1984**

*-ensis*, suffix denoting place: Zavora, Mozambique, type locality (also known for Sur, Oman)

***Haliichthys* Gray 1859**

etymology not explained, perhaps *halios*, of the sea, or perhaps alluding in some way to *Halicampus* Kaup 1856 (either way, this is a mundane name for such a “curious” fish, to use Gray’s adjective); *ichthys*, fish

***Haliichthys taeniophora* Gray 1859**

*taenia*, ribbon or fillet (a thin, narrow strip of material); *phora*, bearer, referring to branched, weed-like appendages or dermal flaps on head and body

***Hippichthys* Bleeker 1849**

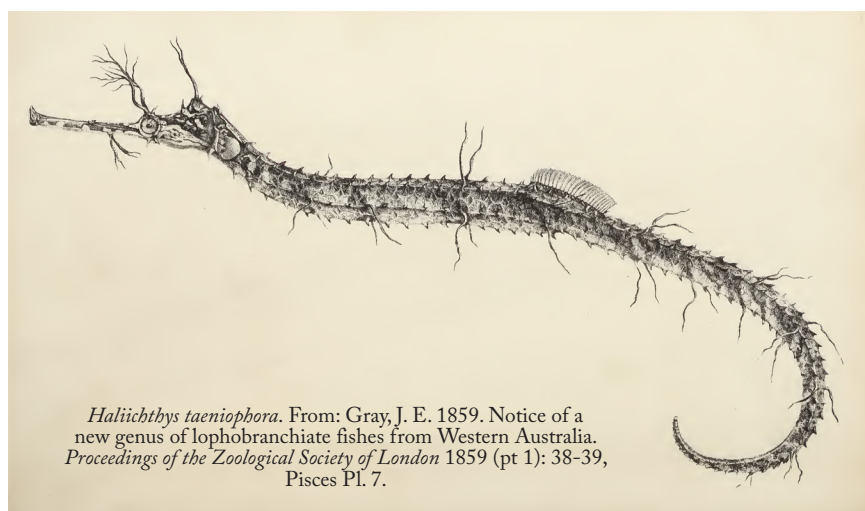
etymology not explained, presumably *hippos*, horse (although this species does not resemble the seahorse genus *Hippocampus*); *ichthys*, fish

Subgenus ***Hippichthys******Hippichthys albomaculosus* Jenkins & Mailautoka 2010**

*albus*, white; *maculosus*, spotted, referring to distinctive series of white spots below inferior trunk ridge

***Hippichthys cyanospilos* (Bleeker 1854)**

*ciano-*, blue; *spilos*, mark or spot, referring to light-blue spots or speckling present on some specimens



***Hippichthys heptagonus* Bleeker 1849**

*hepta-*, seven; *gonia*, angle, referring to heptagonal body shape (tail is tetragonal)

***Hippichthys spicifer* (Rüppell 1838)**

*spica*, ear of grain; *fero*, to bear, referring to slender longitudinal ridge on opercles, with furrows or grooves running out from both sides, creating a shape that looks like an ear or spike of wheat or grain

Subgenus ***Parasyngnathus* Duncker 1915**

*para-*, near, proposed as a subgenus of *Syngnathus*

***Hippichthys parvicarinatus* (Dawson 1978)**

*parvus*, small; *carinatus*, keeled, referring to longitudinal keels on scutella

***Hippichthys penicillus* (Cantor 1849)**

painter's brush, referring to tail and caudal fin having the "appearance of a small brush"

***Hippocampus Rafinesque* 1810**

tautonymous with *Syngnathus hippocampus* Linnaeus 1758 (see *H. hippocampus*, below), which Rafinesque unnecessarily renamed as *H. heptagonus*

***Hippocampus abdominalis* Lesson 1827**

abdominal, referring to large belly; females usually have a deep trunk region and males can have enormous pouches

***Hippocampus alatus* Kuitert 2001**

Latin for winged, referring to paired spines on superior trunk ridges that are directed outward and have broad dermal flaps, resembling wings

***Hippocampus algiricus* Kaup 1856**

*-icus*, belonging to: Algiers, Algeria, western Mediterranean Sea, type locality (not since reported there; now known to occur in eastern Atlantic from Senegal to Angola)

***Hippocampus angustus* Günther 1870**

narrow, the body "but little dilated in males, ... females still narrower"

***Hippocampus barbouri* Jordan & Richardson 1908**

in honor of Harvard herpetologist (and wealthy patron of science) Thomas Barbour (1884-1946), for his work on the fishes of the Indies

***Hippocampus bargibanti* Whitley 1970**

in honor of diver and biologist Georges Bargibant, who collected type while collecting seafans (*Muricella* ssp.) for the Nouméa (now Lagoon) Aquarium, New Caledonia (type locality); so closely does this seahorse match the polyps of its host seafan, that it was not "discovered" until the seafan was placed in an aquarium

***Hippocampus borboniensis* Duméril 1870**

*-ensis*, suffix denoting place: Borbon (or Bourbon), early name for Réunion island, western Mascarenes, type locality

***Hippocampus breviceps* Peters 1869**

*brevis*, short; *ceps*, head, presumably referring to its short snout



*Hippocampus colemani*, a probable male as it appears to have a pouch. Photo by Neville Coleman, for whom it is named. From: Kuitert, R. H. 2003. A new pygmy seahorse (Pisces: Syngnathidae: *Hippocampus*) from Lord Howe Island. *Records of the Australian Museum* v. 55: 113-116.

***Hippocampus camelopardalis* Bianconi 1854**

*camelus*, camel; *pardus*, leopard, together forming ancient name of giraffe, presumably referring to its high coronet (“cornu nucali longo”), like the horns of a giraffe

***Hippocampus capensis* Boulenger 1900**

-*ensis*, suffix denoting place: Cape of Good Hope, Cape Province, South Africa, where type locality (Knysna Harbor) is situated

***Hippocampus casscsio* Zhang, Qin, Wang & Lin 2016**

derived from the abbreviations of South China Sea Institute of Oceanology (SCISO), part of the Chinese Academy of Sciences (CAS)

***Hippocampus colemani* Kuitert 2003**

in honor of Neville Coleman (1938-2012), environmental photographer, explorer and conservationist, who discovered and photographed this seahorse at Lord Howe Island, and then returned specifically to collect type, spending “many long hours underwater”

***Hippocampus comes* Cantor 1849**

companion, allusion not explained, perhaps a companion to *H. mannulus* (= *trimaculatus*), the other species Cantor described from the Sea of Penang (Malaysia) in the same publication

***Hippocampus coronatus* Temminck & Schlegel 1850**

crowned, referring to top of head “surmounted by a bony crest” (translation), i.e., its very large coronet

***Hippocampus curvuspis* Fricke 2004**

*curvus*, curved; *cuspis*, spine, referring to its curved spines, including nape spine and several spines on superior and lateral trunk ridges [treated as synonym of *H. hystrix* (in part) and *H. spinosissimus* (in part) by some workers]

***Hippocampus dahl* Ogilby 1908**

in honor of Christian Dahl (no other information available), who found type “attached to a branch of seaweed, which was coiled round the anchor line of a boat in Moreton Bay, Queensland, Australia

***Hippocampus debelius* Gomon & Kuitert 2009**

in honor of underwater photographer and author Helmut Debelius (b. 1947), for the “effort he made in obtaining the type specimen” [presumably a noun in apposition, without the genitive “i”]

***Hippocampus denise* Lourie & Randall 2003**

in honor of Denise Tackett (1947-2015), writer and author on reef life, who “first brought this species to the notice of the authors on separate occasions, and has spent hundreds of hours underwater observing the behavior of pygmy seahorses,” primarily *H. bargibanti*; in addition, “Denise” means “follower of Dionysus, the Greek god of wine; wild, frenzied,” alluding to the fact that this species, compared to *H. bargibanti*, is indeed more active [a noun in apposition, without the genitive “ae”]

***Hippocampus erectus* Perry 1810**

upright, presumably referring to its vertical swimming posture (true for all seahorses)

***Hippocampus fisheri* Jordan & Evermann 1903**

in honor of zoologist Walter K. Fisher (1878-1953, description says middle initial is “V,” perhaps a typo), Jordan’s colleague at Stanford University

***Hippocampus fuscus* Rüppell 1838**

dusky, dark or swarthy, referring to uniform dark-brown body in life, with light-brown fins

***Hippocampus guttulatus* Cuvier 1829**

diminutive of *guttata*, dotted, allusion not explained, perhaps referring to white spots coalescing into horizontal wavy lines on body

***Hippocampus haema* Han, Kim, Kai & Senou 2017**

Korean for seahorse but also connoting “common” and “representative,” referring to how it is one of the most common seahorses in Korea (also occurs off Japan)

***Hippocampus hippocampus* (Linnaeus 1758)**

*hippos*, horse; *kampos*, monster, i.e., a hippocamp, a mythological creature with the head, torso and forelegs of a horse and the tail end of a fish or dolphin, galloping through the ocean pulling Poseidon’s golden chariot (some say *campus* means “caterpillar,” referring to the seahorse’s narrow tail covered in rounded spines similar to rows of caterpillar feet, or to a medieval belief that seahorses are larval dragons)

***Hippocampus histrix* Kaup 1856**

porcupine, referring to body covered with thorns or small spines

***Hippocampus ingens* Girard 1858**

gigantic, one of the largest seahorses, reaching 30 cm in height

***Hippocampus japapigu* Short, Smith, Motomura, Harasti & Hamilton 2018**

Japan Pig or Japapigu, colloquial name for this seahorse in Japan (where it appears to be endemic)

***Hippocampus jayakari* Boulenger 1900**

in honor of Atmaram Sadashiva Grandin Jayakar (1844-1911), surgeon, Indian Medical Service, and collector of natural history, who presented type to the British Museum; Boulenger wrote: “Dr. Jayakar is, I regret to hear, leaving Muscat [Oman, type locality]. It gives me great pleasure to connect his name with this latest discovery of his at the station where for so many years he has been collecting fishes for the British Museum, with the result of enriching ichthyology by many new species ...”

***Hippocampus jugumus* Kuitert 2001**

derived from the Latin *jugum*, meaning yoke, referring to yoke-like ridge formed by shoulder rings joined over nape

***Hippocampus kelloggi* Jordan & Snyder 1901**

in honor of entomologist Vernon Lyman Kellogg (1867-1937), Jordan’s colleague at Stanford University

***Hippocampus kuda* Bleeker 1852**

from *Ikan Kuda* (*Ikan*=fish, *Kuda*=horse), Malay name for seahorses

***Hippocampus lichtensteinii* Kaup 1856**

in honor of zoologist Martin Heinrich Carl Lichtenstein (1780-1857), Museum für Naturkunde Berlin, who provided type [taxonomic status uncertain]

***Hippocampus minotaur* Gomon 1997**

mythical creature with the head of a bull and the body of a human, referring to its “contrasting massive bull-like head and graceful trunk and tail”

***Hippocampus mohnikei* Bleeker 1853**

in honor of German physician and naturalist Otto Gottlieb Mohnike (1814-1887), who collected type

***Hippocampus multispinus* Kuitert 2001**

*multi*-, many; *spinus*, thorn or spine, referring to numerous spines over the head and body

***Hippocampus nalu* Short, Claassens, Smith, de Brauwier, Hamilton, Stat & Harasti 2020**

three etymologies: (1) in honor of Savannah Nalu Olivier (Instructor and Dive Master, Pisces Diving), who discovered this seahorse in Sodwana Bay, South Africa; (2) *nalu*, the expression “here it is” in the South African languages Xhosa and Zulu, referring to how it “was there all along until its discovery”; (3) *nalu*, Hawaiian word

for waves or surf of the *moana* (ocean), referring to how this seahorse was seen moving about in strong swells or surges to different locations in its sandy coral reef habitat

***Hippocampus paradoxus* Foster & Gomon 2010**

strange or contrary to expectation, referring to its unusual morphology relative to all other seahorses (e.g., lack of a dorsal fin; series of fleshy fin-like lobes along the dorsal midline of the trunk and tail; extremely robust cleithrum and prominent first nuchal plate)

***Hippocampus patagonicus* Piacentino & Luzzatto 2004**

Patagonian, referring to its occurrence along the Patagonic Argentine coast

***Hippocampus planifrons* Peters 1877**

*planus*, flat or level; *frons*, forehead or brow, allusion not explained, presumably referring to flat facial profile

***Hippocampus pontohi* Lourie & Kuitert 2008**

in honor of Hence Pontoh, Indonesian dive guide who brought this pygmy seahorse to the authors' attention; according to the senior author (2016), Pontoh "has an impressive knack for spotting pygmy seahorses"

***Hippocampus pusillus* Fricke 2004**

dwarfish, referring to small adult body size, up to 39 mm body height

***Hippocampus reidi* Ginsburg 1933**

in honor of Earl D. Reid (1885-1960), Senior Scientific Aid, Division of Fishes, United States National Museum (later Assistant Curator of Fishes), where Ginsburg worked

***Hippocampus satomiae* Lourie & Kuitert 2008**

in honor of Satomi Onishi, dive guide and underwater photographer in West Bali, Indonesia, who collected type

***Hippocampus sindonis* Jordan & Snyder 1901**

-*is*, genitive singular of: Michitaro Sindo, one of Jordan's students at Stanford University, where he served as an assistant curator of fishes

***Hippocampus spinosissimus* Weber 1913**

very spiny, presumably referring to any or all of the following: coronet with 4-5 sharp spines; cheek with 1-2 spines; tubercles developed into long, slender, acute spines

***Hippocampus subelongatus* Castelnau 1873**

*sub-*, less than or somewhat; *elongatus*, elongate, presumably reflecting Castelnau's uncertainty whether this "rather elongate" seahorse represented a species distinct from the "elongate" *H. elongatus* (described in the same paper and now considered a junior synonym) or a "more developed" (i.e., older) form of it [although *elongatus* appeared first in the paper and *subelongatus* is clearly derived from that name, Lourie et al. 1999, as first reviser, selected *subelongatus* over *elongatus*]

***Hippocampus suezensis* Duncker 1940**

-*ensis*, suffix denoting place: Gulf of Suez, Suez, Egypt, type locality (occurs in Red Sea and northwestern Indian Ocean from Sokotra archipelago and Oman east to Pakistan)

***Hippocampus taeniopterus* Bleeker 1852**

*taenio-*, band, ribbon or fillet; *pterus*, fin, allusion not explained nor evident [often treated as a junior synonym of *H. kuda*]

***Hippocampus trimaculatus* Leach 1814**

*tri-*, three; *maculatus*, spotted, referring to three large dark spots on dorso-lateral surface of first, fourth and seventh trunk rings (less visible in dark specimens, and more common in males than females)

***Hippocampus tyro* Randall & Lourie 2009**

named for the Dutch research vessel *Tyro*, from which type was collected, in recognition of its serving as the base for a "very successful" marine biological expedition to the Seychelles

***Hippocampus waleananus* Gomon & Kuitert 2009**

*Walea*, referring to Walea Island, Togean Archipelago, Sulawesi Tengah, Indonesia, type locality; *nanus*, dwarf, a pygmy seahorse (height 16.8 mm, SL 17.8 mm)

***Hippocampus whitei* Bleeker 1855**

in honor of John White (ca. 1756-1832), surgeon-naturalist of the British Royal Navy and later Surgeon-General of New South Wales; Bleeker described this seahorse from an illustration that appeared in White's *Journal of a Voyage to New South Wales* (1790)

***Hippocampus zebra* Whitley 1964**

named for its zebra-like coloration, "yellowish-white and dark brown bands, most of them transverse, but some oblique or curved on the head and belly, ... the whole forming a very beautiful and strongly contrasting arrangement with a tendency for broad and narrow bands to alternate"

- Hippocampus zosterae** Jordan & Gilbert 1882  
of *Zostera*, named for its abundance in shallow-water lagoons, clinging by its tail to common eelgrass (or seawrack), *Zostera marina*
- Histiogamphelus McCulloch 1914**  
*histion*, sail; *gampbelus*, jaw, referring to high ridge on upper surface of snout of *H. briggsii*
- Histiogamphelus briggsii** McCulloch 1914  
in honor of zoologist Edward Alfred Briggs (1890-1969), Australian Museum, who collected type
- Histiogamphelus cristatus** (Macleay 1881)  
crested, presumably referring to “very sharp high ridge” on upper surface of snout
- Hypselognathus Whitley 1948**  
*hypselos*, high; *gnathus*, jaw, presumably referring to upper part of snout of *H. rostratus* “raised into a knife-like ridge”
- Hypselognathus horridus** Dawson & Glover 1982  
bristly or rough, referring to “spinigerous” head and body
- Hypselognathus rostratus** (Waite & Hale 1921)  
beaked, referring to “very long” snout, twice the length of the rest of the head, with a “high, elevated, knife-like, median crest”
- Ichthyocampus Kaup 1853**  
*ichthyos*, fish; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*
- Ichthyocampus bikiniensis** Herald 1953  
*-ensis*, suffix denoting place: Bikini lagoon, Marshall Islands, western Pacific, type locality
- Ichthyocampus carce** (Hamilton 1822)  
etymology not explained, possibly a local Bengali name, as it was Hamilton’s practice to derive trivial names “from some of those used by the natives of India”
- Idiotropiscis Whitley 1947**  
etymology not explained, perhaps *idios*, distinctive or peculiar; *tropis*, keel; *piscis*, fish, referring to upper body-ridges of *I. australis*, which are continuous with those of the tail (a character Whitley used to differentiate the genus from *Acentronura*)
- Idiotropiscis australis** (Waite & Hale 1921)  
southern, referring to type locality off South Australia, originally described in a genus (*Acentronura*) then known only from Japan and India [correctly spelled *australis*, an adjective, not *australe*, when in *Idiotropiscis*]
- Idiotropiscis larsonae** (Dawson 1984)  
in honor of Helen Larson, Assistant (later full) Curator of Fishes, Museum and Art Gallery of the Northern Territory (Darwin, Australia), for her many contributions to Dawson’s studies on Indo-Pacific pipefishes (she also helped collect type)
- Idiotropiscis lumnitzeri** Kuitert 2004  
in honor of Ákos Gábor Lumnitzer (b. 1972), diver and underwater photographer, who collected type
- Kaupus Whitley 1951**  
*-us*, adjectival suffix: etymology not explained, almost certainly named for naturalist Johann Jacob Kaup (1803-1873), proposed as a subgenus of *Leptonotus*, which Kaup proposed in 1853
- Kaupus costatus** (Waite & Hale 1921)  
ribbed, allusion not explained, possibly referring to “well defined” ridges on body, creating a rib-like appearance
- Kimblaeus Dawson 1980**  
*-eus*, adjectival suffix: Australian oceanographic research ship *Kimbla*, from which *K. bassensis* was collected
- Kimblaeus bassensis** Dawson 1980  
*-ensis*, suffix denoting place: Bass Strait (separating Tasmania and mainland Australia), paratype locality
- Kyonemichthys Gomon 2007**  
*kyo*, swollen and *nema*, thread, referring to thread-like form with noticeably swollen trunk of both males and females; *ichthys*, fish
- Kyonemichthys rumengani** Gomon 2007  
in honor of Noldy Rumengan, Indonesian diver and dive guide, who collected type and recognized it as a new species
- Leptonotus Kaup 1853**  
*leptos*, thin or slender; *notus*, back, referring to laterally compressed body with “very narrow” back (per Kaup 1856) of mature females

- Leptonotus blainvillianus (Eydoux & Gervais 1837)**  
-anus, belonging to: zoologist-anatomist Henri Marie Ducrotay de Blainville (1777-1850)
- Leptonotus elevatus (Hutton 1872)**  
raised, referring to lateral line passing into upper edge of tail
- Leptonotus norae (Waite 1910)**  
per Waite 1911: “I have associated with this pretty species the name of Miss Nora Niven,” for whom the trawler *Nora Niven*, from which type was collected, was named; Nora was the youngest daughter of James Just Niven (1856-1913), owner of the Napier Fish Supply Company (Napier, New Zealand), from whom Waite “received many kindnesses while in Napier”
- Leptonotus vincentae Luzzatto & Estalles 2019**  
in honor of ocean fisheries biologist Amanda Vincent, University of British Columbia (Canada), Director and Co-Founder of Project Seahorse, “whose work on conservation of syngnathids has increased our chances of having healthy populations of these fishes in the threatened seas of the world”
- Lissocampus Waite & Hale 1921**  
*lissos*, smooth, referring to smooth body (without ridges) of *L. caudalis*; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*
- Lissocampus bannwarthi (Duncker 1915)**  
in honor of physician Emile Bannwarth, who discovered this pipefish; he and his wife collected many natural history specimens in Cairo (where they lived) for the Hamburg Natural History Museum until the outbreak of WWI (1914)
- Lissocampus caudalis Waite & Hale 1921**  
of the tail, referring to “almost round and very long” tail, almost  $\frac{4}{5}$  TL
- Lissocampus fatiloquus (Whitley 1943)**  
prophetic, allusion not explained, perhaps referring to Whitley’s 1931 suggestion that Freycinet Harbour specimens identified as *L. filum* represented a new species, most likely this one, thus foretelling its description
- Lissocampus filum (Günther 1870)**  
thread, allusion not explained nor evident
- Lissocampus runa (Whitley 1931)**  
dart or javelin, allusion not explained, perhaps referring to body shape
- Micrognathus Duncker 1912**  
*micro-*, small; *gnathus*, jaw, allusion not explained, presumably referring to short snout of *M. breviostris*
- Micrognathus andersonii (Bleeker 1858)**  
in honor of A. J. Anderson, physician on the Cocos Islands who collected fishes, including type of this one
- Micrognathus brevicorpus Fricke 2004**  
*brevis*, short; *corpus*, trunk, referring to relatively short trunk with a low number of trunk rings
- Micrognathus breviostris (Rüppell 1838)**  
*brevis*, short; *rostris*, snout, referring to its very short snout (“rostrum brevissimum”),  $\frac{1}{3}$  length of head
- Micrognathus erugatus Herald & Dawson 1974**  
*e-*, not; *rugatus*, wrinkled, referring to “almost smooth” head and body (body ridges poorly developed)
- Micrognathus micronotopterus (Fowler 1938)**  
*micro-*, small; *notos*, back; *pterus*, fin, referring to short length of dorsal fin (16-18 rays)
- Micrognathus natans Dawson 1982**  
swimming or floating, referring to occurrence of most, if not all, specimens in upper portions of water column
- Micrognathus pygmaeus Fritzsche 1981**  
dwarf, referring to small size, described at 23 mm SL
- Minyichthys Herald & Randall 1972**  
*miny*, small, mature at <50 mm; *ichthys*, fish
- Minyichthys brachyrhinus (Herald 1953)**  
*brachys*, short; *rhinos*, snout, referring to “impressive thickness” of snout (but short in length) in relation to head
- Minyichthys inusitatus Dawson 1983**  
rare or uncommon, referring to apparent absence of this pipefish from previous collections
- Minyichthys myersi (Herald & Randall 1972)**  
in honor of George S. Myers (1905-1985), recently retired from Stanford University, “the major professor for many of today’s ichthyologists”

***Minyichthys sentus* Dawson 1982**

thorny or rough, referring to patches of spinules on snout

***Mitotichthys Whitley 1948***

etymology not explained, perhaps *mitis*, soft, harmless or without spines, and *otis*, ear, referring to absence of opercular keel (or longitudinal ridge) in subadult and adult *M. tuckeri*; *ichthys*, fish

***Mitotichthys meraculus* (Whitley 1948)**

diminutive of *meracus*, pure or unmixed, allusion not explained, perhaps referring to pale coloration, described as light brown with some “nondescript light and dark markings on head and body and series of small light ocelli on lower parts of sides,” compared with the striped *M. semistriatus*

***Mitotichthys mollisoni* (Scott 1955)**

in honor of Bruce Mollison, possibly a fisherman, who collected type (it “came up fastened to handline”) from his boat; Mollison also noted (and illustrated) how this pipefish clicked its head backwards “like a flip-beetle ... jerking his head stiffly backwards and then slowly forwards, and so on in a really foolish manner that it gave one a headache to see” (Scott could not determine whether this behavior, not previously recorded among pipefishes, was a “specific characteristic or merely an individual or pathological peculiarity”)

***Mitotichthys semistriatus* (Kaup 1856)**

*semi-*, half; *striatus*, furrowed or grooved (i.e., striped), referring to cross stripes (19 on holotype) on body below lateral line

***Mitotichthys tuckeri* (Scott 1942)**

in honor of G. V. Tucker (no other information available), who “netted” holotype at Bridport, Tasmania

***Nannocampus* Günther 1870**

*nanus*, dwarf, presumably referring to small size (90 mm) of *N. subosseus*; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*

Subgenus ***Nannocampus******Nannocampus elegans* Smith 1953**

elegant, fine or tasteful, allusion not explained, perhaps referring to its trim, slender body and/or coloration in life (per Smith 1963): pinkish trunk with yellow dots, males with a vertical series of blue spots on trunk and vermilion distal third of dorsal fin

***Nannocampus subosseus* Günther 1870**

*sub-*, under; *osseus*, bony, the “bones on the lower side of the head remarkably well ossified”

***Nannocampus weberi* Duncker 1915**

in honor of ichthyologist Max Weber (1852-1937), who reported this species as *N. subosseus* in 1913

Subgenus ***Mannarichthys* Dawson 1977**

named for Gulf of Mannar, western Sri Lanka, type locality of *N. pictus*; *ichthys*, fish

***Nannocampus pictus* (Duncker 1915)**

painted, presumably referring to narrow pale streaks or small pale spots on dark-brown head and body

***Nannocampus lindemanensis* (Whitley 1948)**

*-ensis*, suffix denoting place: Lindeman Island, Queensland, Australia, type locality

***Notiocampus* Dawson 1979**

*notios*, southern, referring to occurrence of *N. ruber* in southern hemisphere; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from the seahorse genus *Hippocampus*

***Notiocampus ruber* (Ramsay & Ogilby 1886)**

red, referring to coloration in life (with some minute white spots)

***Penetopteryx* Lunel 1881**

*peneto-*, poor; *pteryx*, fin, referring to rudimentary caudal fin of *P. taeniocephalus*

***Penetopteryx nanus* (Rosén 1911)**

dwarf, a “very small species,” described at 25-32 mm SL

***Penetopteryx taeniocephalus* Lunel 1881**

*taenia*, band; *cephalus*, head, presumably referring to dark-edged white bars or bands on head

***Phoxocampus* Dawson 1977**

*phoxos*, pointed, presumably referring to posterior angles of each ring on tail produced to a “pointed or hooklike projection”; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*

***Phoxocampus belcheri* (Kaup 1856)**

in honor of Edward Belcher (1799-1877), British naval officer, hydrographer and explorer, who deposited specimens

at the British Museum

***Phoxocampus diacanthus* (Schultz 1943)**

*di-*, two; *acanthus*, spine, referring to two spiny projections, one over each orbit, bearing a short dermal flap

***Phoxocampus kampeni* (Weber 1913)**

in honor of herpetologist Pieter Nicolaas Van Kampen (1878-1937), who collected many fishes with Weber in New Guinea (but not type of this one, which was collected by Weber himself)

***Phoxocampus tetrophthalmus* (Bleeker 1858)**

*tetra-*, four; *ophthalmus*, eye, referring to pale bar on opercle of adult and sub-adult males, presumably eye-like in appearance, creating the impression that this pipefish has four eyes

***Phycodurus* Gill 1896**

*phyc-*, seaweed; *oura*, tail, referring to tail, “which seems to branch out like a seaweed” (indeed, the entire fish resembles the kelp or macroalgae on which it occurs)

***Phycodurus eques* (Günther 1865)**

horseman, rider or knight (in chess), allusion not explained; perhaps used here as a variant of *equus*, horse, which it does superficially resemble

***Phyllopteryx* Swainson 1839**

*phyllon*, leaf; *pteryx*, fin, referring to leaf-like appendages on fins

***Phyllopteryx dewysea* Stiller, Wilson & Rouse 2015**

*dewy*, in honor of philanthropist Mary “Dewy” Lowe, co-founder of the Lowe Family Foundation; *sea*, “for her love of the sea and her support of seadragon conservation and research, without which this new species would not have been discovered”

***Phyllopteryx taeniolatus* (Lacepède 1804)**

*taeniola*, diminutive of *taenia*, ribbon or fillet (a thin, narrow strip of material), i.e., with small ribbons or fillets, referring to small streamers or banderoles (dermal flaps) on enlarged head and body spines

***Pseudophallus* Herald 1940**

*pseudo-*, false; *phallus*, penis, referring to phallus-like (much elongated) anal papilla of sexually mature females used in oviposition

***Pseudophallus brasiliensis* Dawson 1974**

*-ensis*, suffix denoting place: Brazil, where type locality (Rio Tocantins, Igarapé Inó, Faro de Panaquera, Pará) is situated (and where species is endemic)

***Pseudophallus elcapitanensis* (Meek & Hildebrand 1914)**

*-ensis*, suffix denoting place: El Capitan, Panama, type locality (also occurs in Costa Rica)

***Pseudophallus galadrielae* Dallevo-Gomes, Mattox & Toledo-Piza 2020**

of Galadriel, elf ruler of Lothlórien and bearer of the ring Nenyá (also known as the ring of water) in Tolkien’s “Lord of the Rings” trilogy, referring to its additional bony rings (41-55) compared to *P. brasiliensis* (40-50) and, in keeping with congeners, its occurrence in fresh water

***Pseudophallus mindii* (Meek & Hildebrand 1923)**

of Mindi, near type locality (a brackish creek) in Canal Zone, Panama (widely occurs in fresh and brackish waters off South and Central America and the Caribbean)

***Pseudophallus starksii* (Jordan & Culver 1895)**

in honor of Edwin Chapin Starks (1867-1932), Jordan’s preparator at Stanford University, who assisted in Jordan’s 1894 expedition to Mazatlán, Sinaloa, México, during which type was collected

***Pugnaso* Whitley 1948**

pug-nose, referring to short snout of *P. curtirostris*

***Pugnaso curtirostris* (Castelnau 1872)**

*curtus*, short; *rostris*, snout, referring to short snout, 33-40% HL

***Siokunichthys* Herald 1953**

named for Siokun Bay, Mindanao, Philippines, type locality of *S. herrei*; *ichthys*, fish

***Siokunichthys bentuviai* Clark 1966**

in honor of ichthyologist Adam Ben-Tuvia (1919-1999), Hebrew University of Jerusalem, who helped collect holotype

***Siokunichthys breviceps* Smith 1963**

*brevis*, short; *ceps*, head, referring to shorter head compared to *S. herrei*

***Siokunichthys herrei* Herald 1953**

in honor of ichthyologist-lichenologist Albert W. Herre (1868-1962), authority on fishes of the Philippines,

where this species was discovered

***Siokunichthys nigrolineatus* Dawson 1983**

*nigro-*, black; *lineatus*, lined, referring to black stripe on head of living specimens

***Siokunichthys southwelli* (Duncker 1910)**

in honor of British parasitologist Thomas Southwell (1879-1962), who collected type

***Siokunichthys striatus* Fricke 2004**

furrowed or grooved, referring to striae on lower parts of opercle

***Solegnathus* Swainson 1839**

*solen*, pipe; *gnathus*, jaw, referring to tubular snout

Subgenus ***Solegnathus***

***Solegnathus guentheri* Duncker 1915**

in honor of ichthyologist-herpetologist Albert Günther (1830-1914), who reported this species as *S. hardwickii* in 1870

***Solegnathus hardwickii* (Gray 1830)**

in honor of soldier and naturalist Thomas Hardwicke (1755-1835), who collected type

***Solegnathus lettiensis* Bleeker 1860**

*-ensis*, suffix denoting place: Letti Island, Banda Sea, Indonesia, type locality (occurs in southeastern Indian Ocean from Banda Sea to Western Australia)

***Solegnathus naso* Whitley 1941**

long-nosed, proposed as a subspecies of *S. robustus* with a more elongate snout

***Solegnathus robustus* McCulloch 1911**

thick or stout, presumably referring to its “broad snout and very thick tail”

***Solegnathus spinosissimus* (Günther 1870)**

very spiny, entire body “covered with small but very distinct spines”

Subgenus ***Runcinatus* Whitley 1929**

planed smooth, referring to continuous (on the same plane) dorsal ridges of trunk and tail (discontinuous on subgenus *Solegnathus*)

***Solegnathus dunckeri* Whitley 1927**

in honor of ichthyologist Georg Duncker (1870-1953), Zoological Museum Hamburg, “author of many valuable papers on the family Syngnathidae” (including a 1915 revision)

***Stigmatopora* Kaup 1853**

*stigmatos*, marked; *pora*, pore, but probably a misprint for *phora*, to bear, referring to “great number of round black dots on the dorsal aspect” of *S. argus* (per Kaup 1856, who attempted to emend spelling to “*Stigmatophora*” but original spelling stands)

***Stigmatopora argus* (Richardson 1840)**

named for Argus, mythical hundred-eyed guardian of Io, whose eyes after death were transformed into the feathers of a peacock, referring to back and sides “studded in a very beautiful manner with oval black spots having white borders” (per Richardson 1844)

***Stigmatopora harastii* Short & Trevor-Jones 2020**

in honor of David Harasti, marine biologist and underwater photographer, Port Stephens Fisheries Institute (New South Wales, Australia), one of the first to recognize this species as new, for his efforts towards conservation of Syngnathidae in Australia, and for being an “aficionado extraordinaire of his beloved genus *Stigmatopora*. David has stated he counts green pipefish to fall asleep.”

***Stigmatopora macropterygia* Duméril 1870**

*macro-*, large; *pterygius*, finned, referring to larger dorsal fin compared to *S. argus*

***Stigmatopora narinosa* Browne & Smith 2007**

broad-nosed, referring to wide and distinctive spatulate shape of snout

***Stigmatopora nigra* Kaup 1856**

black; as far as we can tell, this pipefish has not a trace of black, described as “brownish” by Kaup and now known to be greenish to brownish in life depending on habitat

***Stipecampus* Whitley 1948**

etymology not explained, perhaps *stipe*, stem or trunk, referring to vaguely twig-like color and shape of *S. cristatus*; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from the seahorse genus *Hippocampus*

***Stipecampus cristatus* (McCulloch & Waite 1918)**

crested, referring to “elevated, obtuse” ridge or crest on snout

***Syngnathoides* Bleeker 1851**

-*oides*, having the form of: similar to *Syngnathus* but tail lacking a caudal fin

***Syngnathoides biaculeatus* (Bloch 1785)**

*bi-*, two; *aculeatus*, spined, referring to spine-like point above each eye

***Syngnathus* Linnaeus 1758**

*syn*, together; *gnathos*, jaw, referring to how jaws are fused to form a suction-feeding apparatus

***Syngnathus abaster* Risso 1827**

named for Abaster, one of the three horses (the black one) of Pluto’s chariot, possibly alluding to this pipefish’s dusky (greenish-brown) coloration (Risso named four pipefishes after horses in Greek mythology, including *S. phlegon* [see below]; *S. ethon* and *S. pyrois* are junior synonyms of *S. abaster* and *S. typhle*, respectively)

***Syngnathus acus* Linnaeus 1758**

needle, presumably referring to its long, tube-like snout

***Syngnathus auliscus* (Swain 1882)**

diminutive of *aulon*, tube, referring to shorter tube-like snout compared to *S. californiensis*

***Syngnathus californiensis* Storer 1845**

-*ensis*, suffix denoting place: California (USA), type locality (occurs in eastern Pacific from California to southern Baja California of México)

***Syngnathus caribbaeus* Dawson 1979**

named for its Caribbean distribution (coasts of Central and South America from Belize to Venezuela)

***Syngnathus carinatus* (Gilbert 1892)**

keeled, referring to its “very slender sharply keeled snout”

***Syngnathus caspius* Eichwald 1831**

Caspian, referring to Caspian Sea basin, where it is endemic

***Syngnathus chihiroe* Matsunuma 2017**

derived from the Japanese *chihiro*, meaning “great depth,” referring to depth of capture of holotype and only known specimen (160-162 m), one of the deepest recorded for any member of the genus

***Syngnathus dawsoni* (Herald 1969)**

in honor of syngnathid taxonomist Charles E. Dawson (1922-1993), Gulf Coast Research Laboratory (Ocean Springs, Mississippi, USA), who collected and recognized this species as different from other Atlantic syngnathids

***Syngnathus floridae* (Jordan & Gilbert 1882)**

of Pensacola Bay, Florida (USA), type locality

***Syngnathus folletti* Herald 1942**

in honor of Wilbur (“Bill”) I. Follett (1901-1992), Curator of Fishes, California Academy of Sciences

***Syngnathus fuscus* Storer 1839**

dark or dusky, referring to “irregular dull brown color above, lighter below”

***Syngnathus insulae* Fritzsche 1980**

of an island, endemic to Isla Guadalupe, México

***Syngnathus louisianae* Günther 1870**

of Louisiana (USA), where type locality (New Orleans) is situated (occurs in western Atlantic from Bermuda and Gulf of Mexico to Jamaica)

***Syngnathus macrobrachium* Fritzsche 1980**

*macro-*, long; *brachium*, arm, referring to “particularly large” pectoral fin, extending posteriorly over two full rings

***Syngnathus macrophthalmus* Duncker 1915**

*macro-*, large; *ophthalmus*, eye, referring to its “big, protruding” (translation) eyes

***Syngnathus makaxi* Herald & Dawson 1972**

of Laguna Makax, Isla Mujeres, Quintana Roo, México, type locality

***Syngnathus pelagicus* Linnaeus 1758**

*pelagios*, of the open sea, referring to its habitat, found in floating rafts of Sargassum weed

***Syngnathus phlegon* Risso 1827**

named for Phlegon, one of the four horses of Helios, Greek god of the sun (Risso named four pipefishes after horses in Greek mythology, including *S. abaster* [see above]; *S. ethon* and *S. pyrois* are junior synonyms of *S. abaster* and *S. typhle*, respectively)

**Syngnathus rostellatus Nilsson 1855**

beaked, presumably referring to its long, thin, tube-like snout

**Syngnathus safina Paulus 1992**

Arabic for ship, type collected by hand near a shipwreck in the Gulf of Aqaba (Jordan)

**Syngnathus schlegeli Kaup 1853**

in honor of ornithologist-herpetologist Hermann Schlegel (1804-1884), author, along with Coenraad Jacob Temminck, of the *Fauna Japonica* monograph series (1833-1850), which reports this species as *S. tenuirostris*

**Syngnathus schmidti Popov 1928**

in honor of Soviet ichthyologist Petr Yulievich Schmidt (1872-1949), who suggested this species was new and made manuscript notes about its peculiarities

**Syngnathus scovelli (Evermann & Kendall 1896)**

in honor of physician-naturalist Josiah Thomas Scovell (1841-1915), who helped collect type

**Syngnathus springeri Herald 1942**

in honor of shark expert Stewart Springer (1906-1991), who collected type

**Syngnathus taenionotus Canestrini 1871**

*taenia*-, band; *notus*, back, referring to dark longitudinal band on upper half of body

**Syngnathus temminckii Kaup 1856**

in honor of Coenraad Jacob Temminck (1778-1858), director of the Rijksmuseum van Natuurlijke Historie (Leiden, Netherlands), where type specimens are housed; named “out of gratitude and esteem”

**Syngnathus tenuirostris Rathke 1836**

*tenuis*, thin; *rostris*, snout, referring to long, thin and compressed snout (“rostrum longum, compressum, angustum”)

**Syngnathus texanus Gilbert 2013**

-*anus*, belonging to: Texas (USA), where it occurs (or occurred, possibly extinct) along the Gulf Coast [replacement name for *S. affinis* Günther 1870, preoccupied by *S. affinis* Eichwald 1831]

**Syngnathus typhle Linnaeus 1758**

etymology not explained, presumably from *typhlē*, feminine of *typhlos*, Greek for blind (although pipefishes are not blind), perhaps originating with Aristotle, who compared a pipefish to a blind snake, saying that both possessed a “diaphysis [shaft or central part of a long bone] or cloven growth under the belly and abdomen,” an association that may have been evoked in two pre-Linnaean names, *Typhlina marina* and *Caecilia marina* (*caecus* = blind), several 18th-century European vernaculars that allude to snakes (e.g., Sea Adder), and two generic names, *Microphis* and *Nerophis* (*óphis* = serpent); another explanation dates to Athenaeus (170-223 AD), who mentioned *typhlē* as the name of a Nile fish without further explanation (since syngnathids do not occur in the Nile, *typhlē* may be a corrupt Greek spelling of an Egyptian word, meaning unknown)

**Syngnathus variegatus Pallas 1814**

varicolored, presumably referring to gray-to-brown body mottled with pale transverse bands, pale ventral surface, dorsal fin sometimes with dark spots, and dark caudal fin

**Syngnathus watermeyer Smith 1963**

in honor of F. L. E. Watermeyer (no other information available), who sent type to Smith

**Trachyrhamphus Kaup 1853**

*trachys*, rough; *rhamphus*, beak, referring to “denticulated [snout] on its dorsal aspect only” (per Kaup 1856)

**Trachyrhamphus bicoarctatus (Bleeker 1857)**

*bi*-, two; *coarctatus*, pressed together, allusion not explained, perhaps referring to heptagonal body and tetragonal tail

**Trachyrhamphus longirostris Kaup 1856**

*longus*, long; *rostris*, snout, referring to longer snout compared to the similar *T. serratus*

**Trachyrhamphus serratus (Temminck & Schlegel 1850)**

toothed like a saw, referring to sharp, serrated ridge on snout

**Urocampus Günther 1870**

*oura*, tail, referring to tapering and very thin tail of *U. nanus*, twice as long as body; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from name of seahorse genus *Hippocampus*

**Urocampus carinirostris Castelnau 1872**

*carina*, keel; *rostris*, snout, referring to ridged snout

**Urocampus coelorhynchus Günther 1873**

*coelo*-, hollow; *rhynchus*, snout, allusion not explained, perhaps referring to hollowed-out appearance of snout formed by raised ridges on its top and sides

***Urocampus guentheri* Duncker 1909**

patronym not identified but clearly in honor of German-born British ichthyologist-herpetologist Albert Günther (1830–1914), who proposed the genus in 1870

***Urocampus nanus* Günther 1870**

dwarf, described at 96 mm long

***Urocampus paucianulus* Araki & Motomura 2022**

*paucus*, few or scanty; *anulus*, ring, referring to fewer trunk rings compared with the similar *U. carinirostris* and *U. coelorhynchus*

***Urocampus yaeyamaensis* Araki, Shibukawa & Motomura 2022**

*-ensis*, Latin suffix denoting place: Yaeyama Islands, southern Ryukyu Islands, Japan, type locality

***Vanacampus* Whitley 1951**

*vana-*, etymology not explained nor evident; *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from the seahorse genus *Hippocampus*

***Vanacampus margaritifer* (Peters 1868)**

*margarita*, pearl; *fero*, to bear, referring to pearlescent blue dots on sides of brownish body

***Vanacampus phillipi* (Lucas 1891)**

of Port Phillip Heads, Victoria, Australia, type locality

***Vanacampus poecilolaemus* (Peters 1868)**

*poecil-*, varicolored; *laimos*, throat, referring to two rows of dark spots on underside of head and snout

***Vanacampus vercoi* (Waite & Hale 1921)**

in honor of physician-conchologist Joseph Verco (1851–1933), President of the Royal Society of South Australia, who dredged type and many other syngnathids studied by Waite and Hale

**Subfamily Nerophinae** Trunk-brooding Pipefishes

11 genera/subgenera · 68 species/subspecies

***Belonichthys* Peters 1868**

*belónē* (Gr. βελόνη), needle, presumably referring to elongate body shape and/or German common name for this and similar species, Meernadeln (sea needle); *ichthys* (Gr. ἰχθύς), fish [treated as a synonym of *Microphis* by some workers]

***Belonichthys mento* (Bleeker 1856)**

*mentum*, chin, referring to “high snout and bulging chin” (translation)

***Choeroichthys* Kaup 1856**

*choiros*, pig, allusion not explained, probably referring to crested snout of *C. valencienni*, which appears upturned, like that of a pig; *ichthys*, fish

***Choeroichthys brachysoma* (Bleeker 1855)**

*brachy*, short; *soma*, body, presumably referring to relatively short (in height) body compared with *Microphis brachyurus*, its presumed congener at the time

***Choeroichthys cinctus* Dawson 1976**

girdle or belt, referring to barred color pattern of preserved males

***Choeroichthys hadiatyae* Allen, Erdmann & Hidayat 2020**

in honor of the late Renny K. Hadiaty (1960–2019), Indonesian Institute of Sciences, for her “valuable contributions to our knowledge of Indonesian freshwater and marine fishes and ... her long and distinguished career and productive ichthyological collaborations with the authors”

***Choeroichthys latispinosus* Dawson 1978**

*latus*, wide; *spinosus*, thorny, referring to protruding spiny ridge on snout

***Choeroichthys sculptus* (Günther 1870)**

carved or sculpted, allusion not explained, possibly referring to “edges of each ring are prominently spinous behind” and/or operculum with “numerous prominent radiating ridges”

***Choeroichthys smithi* Dawson 1976**

in honor of ichthyologist J. L. B. Smith (1897–1968), who collected type in 1951

***Choeroichthys suillus* Whitley 1951**

swinish or pig-like, allusion not explained, probably referring to crested snout, which appears upturned, like that of a pig

***Choeroichthys valencienni* Kaup 1856**

in honor of Achille Valenciennes (1794–1865), “named as a testimony of my respect for the great Ichthyologist of the age” [apparently not a misspelling; possibly a latinized treatment of Valenciennes’ name, as seen in the name of the lizard *Anolis valencienni* (Duméril and Bibron 1837)]

**Coelonotus Peters 1855**

*coelo-*, from *koilos* (Gr. κοῖλος), hollow or cavity; *nótos* (Gr. νότος), back, allusion not explained nor evident [treated as a synonym of *Microphis* by some workers]

**Coelonotus argulus (Peters 1855)**

diminutive of Argus, mythical hundred-eyed guardian of Io, whose eyes after death were transformed into the feathers of a peacock, referring to two series of ocellate dark spots on upper and lower lateral scutella of most trunk rings on adults (replacement name for *Syngnathus argus* Peters 1852, hence the diminutive, preoccupied by *Syngnathus* [now *Stigmatopora*] *argus* Richardson 1840)

**Coelonotus biocellatus Günther 1870**

*bi-*, two; *ocellatus*, with eye-like spots, referring to two series of small round, black ocelli along side of trunk

**Coelonotus kaipuae Haij, Mennesson, Keith & Lord 2022**

in honor of Georgia Kaipu, for facilitating research in Papua New Guinea by helping with the legal process for the acquisition of research permits; her “dedicated work led to new discoveries and to improve knowledge on Papua New Guinea”

**Doryrhamphus Kaup 1856**

*dory*, spear; *rhamphus*, snout, referring to spines on elongate snout of male *D. excisus*

**Doryrhamphus abbreviatus Dawson 1981**

shortened, proposed as a subspecies of *D. excisus* with a reduced number of tail rings

**Doryrhamphus aurolineatus Randall & Earle 1994**

*aureus*, gold; *lineatus*, lined, referring to bright orange stripe along middle of back

**Doryrhamphus bicarinatus Dawson 1981**

*bi-*, two; *carinatus*, keeled, referring to two ventrolateral projections on snout of sub-adult and adult males

**Doryrhamphus excisus Kaup 1856**

cut off, presumably referring to tail shorter than body

**Doryrhamphus extensus (Snyder 1911)**

stretched or spread out, allusion not explained, perhaps referring to thinner body compared to the “closely related” *Microphis pleurotaenia* (= *D. excisus*)

**Doryrhamphus janssi (Herald & Randall 1972)**

in honor of real estate developer and recreational diver Edwin Janss, Jr. (1915-1989), “whose keen interest in tropical marine biology has resulted in important field investigations in many regions”

**Doryrhamphus japonicus Araga & Yoshino 1975**

Japanese, proposed as a subspecies of *D. melanopleura* then known only from the southern Kii Peninsula of Japan (now known to occur in western Pacific off Indonesia, Philippines and Papua New Guinea, northward to Japan)

**Doryrhamphus malus (Whitley 1954)**

Latin for mast, referring to Masthead Island, Queensland, Australia, type locality

**Doryrhamphus melanopleura (Bleeker 1858)**

*melano-*, black; *pleuro-*, side, referring to wide violet-black band running from tip of snout to caudal fin in living specimens

**Doryrhamphus negrosensis Herre 1934**

*-ensis*, suffix denoting place: near Dumaguete, Oriental Negros, Philippines, type locality (occurs in western Pacific from eastern Indonesia and Philippines east to Palau and Mariana Islands, and Hawaiian Islands south to Papua New Guinea)

**Doryrhamphus paulus Fritzsche 1980**

little, smallest mature male at 24.5 mm SL, maximum known size (at time of description) 38.9 mm SL

**Dunckerocampus Whitley 1933**

Duncker, in honor of ichthyologist Georg Duncker (1870-1953), Zoological Museum Hamburg, who proposed what is now this genus in 1912 but used a preoccupied name (*Acanthognathus*); *kampos*, mythological sea monster, probably used here as a general suffix for syngnathids abridged from the seahorse genus *Hippocampus*

**Dunckerocampus baldwini Herald & Randall 1972**

in honor of ichthyologist Wayne J. Baldwin, Hawaii Institute of Marine Biology, who collected type with junior author

**Dunckerocampus boylei Kuitert 1998**

in honor of Bill Boyle, a “keen” underwater fish photographer who brought this species to Kuitert’s attention

**Dunckerocampus chapmani Herald 1953**

in honor of ichthyologist Wilbert M. Chapman (1910-1970), Research Director, American Tunaboat Association

(San Diego, California, USA), who helped collect type

***Dunckerocampus dactyliophorus* (Bleeker 1853)**

*daktylios*, finger-ring; *phorus*, bearer, referring to alternating rings (varying in color from yellow and violet-brown to pale-red to black) around body

***Dunckerocampus multiannulatus multiannulatus* (Regan 1903)**

*multi-*, many; *annulatus*, ringed, referring to thinner, more numerous rings around body compared to *D. dactyliophorus*

***Dunckerocampus multiannulatus bentuviae* Fowler & Steinitz 1956**

in honor of ichthyologist Adam Ben-Tuvia (1919-1999), Hebrew University of Jerusalem, who collected type and contributed “interesting and valuable field notes” for many of the fishes Hebrew University and the Israel Sea Fisheries Research Station donated to the Academy of Natural Sciences of Philadelphia [although named after a man, some classically trained zoologists latinized the names of individuals whose names ended with the letter “a” by adding an “e” to the spelling]

***Dunckerocampus naia* Allen & Kuitert 2004**

named for the Fiji-based dive vessel *Nai'a*, from which type was collected

***Dunckerocampus pessuliferus* Fowler 1938**

*pessulum*, little bar; *fero*, to bear, referring to dark-brown transverse bar at middle of each trunk ring

***Entelurus Duméril* 1870**

*enteles*, perfect or complete; *oura*, tail, referring to long tail that stretches out from anus and is hardly differentiated from body

***Entelurus aequoreus* (Linnaeus 1758)**

smooth or even, presumably referring to smooth skin, with inconspicuous bony ridges in subadults and adults

***Heraldia Paxton* 1975**

*-ia*, belonging to: ichthyologist Earl S. Herald (1914-1973), “whose contributions to syngnathid systematics and help to other ichthyologists [including Paxton] were considerable” (Herald had prepared a brief description and diagnosis of this genus that remained unpublished)

***Heraldia nocturna* Paxton 1975**

nocturnal, referring to its posture as observed in an aquarium, swimming right-side up in the dark and upside-down when aquarium lights are on

***Leptoichthys* Kaup 1853**

*leptos*, thin or slender, allusion not explained, referring to very long and thin snout and/or elongate body; *ichthys*, fish

***Leptoichthys fistularius* Kaup 1853**

pipe- or flute-like, name coined in an unpublished manuscript by Bibron, who was perhaps influenced by Quoy & Gaimard, who placed the species in the cornetfish genus *Fistularia* (Fistulariidae) but did not describe it, presumably referring to its elongate body

***Maroubra Whitley* 1948**

named for Maroubra Beach, near Sydney, New South Wales, Australia, type locality of *M. perserrata* (from the aboriginal *marou*, pathway and *ora*, place or country, referring to aboriginal route from Botany Bay to Port Jackson)

***Maroubra perserrata* Whitley 1948**

*per-*, very; *serrata*, serrated, referring to spiny ridges running along body

***Maroubra yasudai* Dawson 1983**

in honor of the late Fujio Yasuda, Tokyo University of Fisheries, for his contributions to Japanese ichthyology

***Microphis* Kaup 1853**

*micro-*, small; *ophis*, serpent, allusion not explained, probably referring to their serpentine shape, i.e., like a small snake

***Microphis aculeatus* (Kaup 1856)**

spined or sharp-pointed, allusion not explained, presumably referring to “toothed” (i.e., serrate) body ridges (more so in juveniles than adults)

***Microphis arrakisae* Haÿ, Mennesson, Dahrudin, Sauri, Limmon, Wowor, Hubert, Keith & Lord 2024**

of Arrakis, fictional desert planet from Frank Herbert’s 1965 novel *Dune*, as a “tribute to this influential work of



G.P.W.

*Maroubra perserrata*. From: Whitley, G. P. 1948. Studies in ichthyology. No. 13. Records of the Australian Museum v. 22 (no. 1): 70-94.

science fiction” and the resemblance of this fish’s yellowish color in life to the planet’s yellow sandscape, and its behavior of moving between rocks, akin to a snake or a worm on Earth and the giant sandworms on Arrakis

***Microphis boaja* (Bleeker 1850)**

etymology not explained, perhaps a latinization or variant spelling of *buaya*, from *sumpit buaya*, its local name in Indonesia (as reported by Kottelat & Widjanarti 2005)

***Microphis brachyurus* (Bleeker 1854)**

*brachys*, short; *oura*, tail, referring to its “relatively short tail” (translation)

***Microphis brevidorsalis* (de Beaufort 1913)**

*brevis*, short; *dorsalis*, dorsal, referring to shorter dorsal fin, with a smaller number of rays, compared to *Doryrhamphus caudatus* (= *M. retzii*), its presumed congener at the time

***Microphis caudocarinatus* (Weber 1907)**

*cauda*-, tail; *carinatus*, keeled, referring to keeled scutella on side of tail

***Microphis contiguus* (Kottelat 2000)**

contiguous, referring to continuous lateral trunk ridge and inferior tail ridge

***Microphis cruentus* Dawson & Fourmanoir 1981**

spotted or stained with blood, referring to red markings on snout of living specimens

***Microphis cuncalus* (Hamilton 1822)**

etymology not explained, presumably latinization of a local Bengali name, as it was Hamilton’s practice to derive trivial names “from some of those used by the natives of India” [often misspelled *cunculus*]

***Microphis deocata* (Hamilton 1822)**

etymology not explained, presumably latinization of a local Bengali name (also spelled *deokhata*), as it was Hamilton’s practice to derive trivial names “from some of those used by the natives of India”

***Microphis deokhatoides* (Bleeker 1854)**

*-oides*, having the form of: described as “very close” (translation) to *Syngnathus deokhata* (= *M. deocata*)

***Microphis dunckeri* (Prashad & Mukerji 1929)**

patronym not identified, almost certainly in honor of ichthyologist Georg Duncker (1870-1953), Zoologisches Museum Hamburg, who revised the family in 1915

***Microphis fluviatilis* (Peters 1852)**

of a river, referring to occurrence in Zambezi River, Mozambique (type locality)

***Microphis heterosoma* (Bleeker 1851)**

*heteros*, different; *soma*, body, “recognized at first glance by the peculiar shape of the body, which is considerably lower between the eye and the vent than immediately behind the head and in front of the dorsal fin, so that the chest and belly are, as it were, by a constriction of each other, separated” (translation)

***Microphis insularis* (Hora 1925)**

of islands, referring to Andaman Islands, India and Myanmar, where it is endemic

***Microphis jagorii* Peters 1868**

in honor of Andreas Fedor Jagor (1816-1900), German ethnographer and naturalist, who collected type

***Microphis leiaspis* (Bleeker 1854)**

*leios*, smooth; *aspis*, shield, referring to smooth, unkeeled scutella

***Microphis lineatus* (Kaup 1856)**

lined, allusion not explained, probably referring to three silvery stripes along lateral line and/or occiput “scarred with three prominent lines in the middle”

***Microphis manadensis* (Bleeker 1856)**

*-ensis*, suffix denoting place: Manado, Sulawesi, Indonesia, type locality (occurs in western Pacific from Indonesia east to Philippines and Solomon Islands, north to Taiwan)

***Microphis martensii* (Peters 1868)**

in honor of German zoologist Karl Eduard von Martens (1831-1904), who collected holotype

***Microphis millepunctatus* (Kaup 1856)**

*mille*, thousand; *punctatus*, spotted, presumably referring to whitish body “dotted with black”

***Microphis nicoleae* Häy, Mennesson, Lord & Keith 2023**

in honor of the lead author’s grandmother Nicole, for the “interest that she has always shown for his work, as well as for her kindness during many years”

***Microphis ocellatus* (Duncker 1910)**

with eye-like spots, referring to small dark spots between rings on lateral trunk ridge, which Duncker noted were

ocellate in life (surrounded by white borders) but faded in preservative

***Microphis platyrhynchus* (Duméril 1870)**

*platys*, broad or flat; *rhynchos*, snout, referring to “short, broad and flat” (translation) snout

***Microphis retzii* (Bleeker 1856)**

in honor of Swedish anatomist Anders Retzius (1796-1860), who, according to Bleeker, discovered that male syngnathids carry and incubate their eggs, not females (although Retzius was the first to provide anatomical evidence of the male’s brood pouch in 1833, he credits the discovery to his colleague Carl Ulrik Ekström [1781-1858], who described the pouch in 1830)

***Microphis spinachioides* (Duncker 1915)**

*-oides*, having the form of: similar in head and body shape to the stickleback (Perciformes: Gasterosteidae) *Spinachia vulgaris* (= *spinachia*)

***Microphis torrentius* Jordan & Seale 1906**

*-ius*, adjectival suffix: *torrens*, Latin for swift water, type series collected from a “swift brook running through pasture land”

***Microphis vaillantii* (Juillerat 1880)**

in honor of Léon Vaillant (1834-1914), zoologist, Muséum national d’Histoire naturelle (Paris)

***Microphis yoshi* (Snyder 1909)**

Japanese word meaning reed, presumably referring to its reed-like shape and/or appearance

***Nerophis Rafinesque* 1810**

latinization of *nerofide*, Italian vernacular for *N. ophidion*, from *neros*, a swimmer and *ophis*, snake, i.e., a serpentine fish

***Nerophis lumbriciformis* (Jenyns 1835)**

*lumbricus*, earthworm; *formis*, shape, referring to its worm-like appearance

***Nerophis maculatus* Rafinesque 1810**

spotted, referring to 1-3 irregular rows of dark-margined spots on trunk and anterior half or more of males, and on upper part of trunk and tail of females

***Nerophis ophidion* (Linnaeus 1758)**

an ancient name meaning small snake, presumably referring to its serpentine shape