Order RAJIFORMES
4 families · 38 genera/subgenera · 300 species/subspecies

Family ARHYNCHOBATIDAE Softnose Skates
14 genera/subgenera · 106 species

Arhynchobatis Waite 1909
Arhynchobatis asperrimus Waite 1909

Atlantoraja Menni 1972
Atlantoraja castelnaui (Miranda Ribeiro 1907)
Atlantoraja cyclophora (Regan 1903)
Atlantoraja platana (Günther 1880)

Bathyraja Ishiyama 1958

Subgenus Bathyraja

Bathyraja abyssicola (Gilbert 1896)
Bathyraja aguja (Kendall & Radcliffe 1912)
Bathyraja albomaculata (Norman 1937)
Bathyraja aleutica (Gilbert 1896)
Bathyraja andriashevi Dolganov 1983
Bathyraja bergi Dolganov 1983
Bathyraja brachyurops (Fowler 1910)
Bathyraja cousseaeae Díaz de Astarloa & Mabragna 2004
Bathyraja diplotaenia (Ishiyama 1952)
Bathyraja eatonii (Günther 1876)
Bathyraja fedorovi Dolganov 1983
**Bathyraja griseocauda** (Norman 1937)
grisaeus, gray; caudus, tail, referring to grayish-brown color of entire or lower surface of tail

**Bathyraja hesperafricana** Stehmann 1995
hesper, westerly, referring to West African distribution on the Eastern Central Atlantic slope

**Bathyraja interrupta** (Gill & Townsend 1897)
interrupted, referring to row of acutely curved, smooth spines along middle of back, extending from interhumeral region to dorsal, but are “interrupted” along posterior half of disc, where spines are “absent or obsolete”

**Bathyraja irrasa** Hureau & Ozouf-Costaz 1980
unshaven, referring to rough, wrinkled surface appearance

**Bathyraja ishiharai** Stehmann 2005
in honor of Hajime Ishihara (b. 1950), Stehmann’s “skatology” colleague and friend for more than 25 years, who devoted his life’s research to chondrichthyan fishes, producing important revisions of North Pacific Bathyraja

**Bathyraja isotrachys** (Günther 1877)
iso-, equal; trachys, rough, presumably referring to body and tail both covered with “minute asperities, each with a stellate base”

**Bathyraja kincaidii** (Garman 1908)
in honor of Trevor Kincaid (1872-1970), zoologist and oyster farmer, University of Washington (Seattle, USA), “to whom we are indebted for knowledge of [this] species”

**Bathyraja leucomelanos** Iglésias & Lévy-Hartmann 2012
leucos, white; melanos, black, referring to coloration of dorsal and ventral surfaces, respectively

**Bathyraja lindbergi** Ishiyama & Ishihara 1977
in honor of the late Georgii Ustinovich Lindberg (1894-1976), ichthyologist, Zoological Institute, Russian Academy of Sciences, for his “great work” on western North Pacific zoogeography

**Bathyraja longicauda** (de Buen 1959)
longus, long; caudus, tail, referring to long caudal region, 52.9% of total length in holotype

**Bathyraja macloviana** (Norman 1937)
-iana, adjectival suffix: Maclou, latinization of Malo, source for the historical Spanish (Islas Malvinas) and French (Îles Malouines) names for the Falkland Islands, where this ray occurs

**Bathyraja maculata** Ishiyama & Ishihara 1977
blotched, referring to color markings on dorsal surface

**Bathyraja magellanica** (Philippi 1902)
-ica, belonging to: Straits of Magellan, type locality

**Bathyraja mariposa** Stevenson, Orr, Hoff & McEachran 2004
Spanish for butterfly, referring to large yellow patches on pectoral fins, which on some specimens approximate shape of butterfly wings, and on all specimens resemble elaborate shading patterns often seen on butterfly wings

**Bathyraja matsubarai** (Ishiyama 1952)
in honor of ichthyologist Kiyomatsu Matsubara (1907-1968), Imperial Fisheries Institute (Tokyo), who collected one of the paratypes at a fish market, and “to whom the author is much indebted for many favours”

**Bathyraja meridionalis** Stehmann 1987
southerly, referring to its being the southernmost deepwater species of the genus

**Bathyraja microtrachys** (Osburn & Nichols 1916)
micro-, small; trachys, rough, “Upper parts everywhere roughened with fine stellate prickles, these smallest and sparsest on the bases of the pectorals, largest and most closely set on the base of the tail and fine and close set between the eyes”

**Bathyraja minispinosa** Ishiyama & Ishihara 1977
mini-, minute; spinosa, full of thorns, referring to fine prickles on dorsal surface, which are smooth to the touch

**Bathyraja multispinis** (Norman 1937)
multi-, many; spinus, spine, probably referring to median series of 42 spines extending from nuchal region to first dorsal fin

**Bathyraja murrayi** (Günther 1880)
in honor of John Murray (1841-1914, later the founder of modern oceanography), of the HMS Challenger, which
secured type

*Bathyraja notoroensis* Ishiyama & Ishihara 1977  
-enous, suffix denoting place: Notoro Peninsula, Sea of Japan, type locality

*Bathyraja pacifica* Last, Stewart & Séret 2016  
-ica, belonging to: western rim of Pacific Ocean, near where it occurs

*Bathyraja pallida* (Forster 1967)  
pallid, referring to “unusually pale” coloration of dorsal surface

*Bathyraja papilionifera* Stehmann 1985  
papilio, butterfly; fero, to bear, referring to butterfly-shaped dark blotch around anus

*Bathyraja peruana* McEachran & Miyake 1984  
-ana, belonging to: Peru, referring to Point Aguja, type locality

*Bathyraja richardsoni* (Garrick 1961)  
in honor of zoologist Laurence R. Richardson (1911-1988), Victoria University of Wellington, “for his extensive contribution to deep water research in New Zealand, and especially in Cook Strait” (type locality)

*Bathyraja scaphiops* (Norman 1937)  
etymology not explained; presumably scaphio-; -ops, face or appearance, based on “Cuphead Skate” vernacular, allusion not evident

*Bathyraja schroederi* (Krefft 1968)  
in honor of William C. Schroeder (1895-1977), Woods Hole Oceanographic Institution, for his outstanding contribution to the study of western Atlantic elasmobranchs

*Bathyraja shuntovi* Dolganov 1985  
in honor of Yacheslav P. Shuntov (b. 1937), chief scientist of the Pacific Institute of Scientific Fisheries and Oceanography Center (Vladivostok), where Dolganov was working at the time

*Bathyraja smithii* (Müller & Henle 1841)  
in honor of Andrew Smith (1797-1872), Scottish military physician, explorer, ethnologist and zoologist, who collected type

*Bathyraja spinicauda* (Jensen 1914)  
spina, thorn; cauda, tail, referring to erect and “slightly bent backwards” spines along middle of tail

*Bathyraja spinosissima* (Beebe & Tee-Van 1941)  
most spiny, referring to dorsal and ventral surfaces “covered thickly and evenly with small, recurved spines” and tail “covered everywhere with small spines, even over the surface of the dorsal fins”

*Bathyraja trachouros* (Ishiyama 1958)  
trachys, rough; oura, tail, probably referring to 20 “enlarged thorns” along middle of tail

*Bathyraja trachura* (Gilbert 1892)  
trachys, rough; oura, tailed, referring to strong spines on middle of tail

*Bathyraja tunae* Stehmann 2005  
in honor of María Cristina Oddone Franco, nicknamed “Tuna,” the “most enthusiastic elasmobranch student” Stehmann has ever met; “The author wishes her luck in her further career, and that all her dreams may come true.”

*Bathyraja tzinovskii* Dolganov 1983  
in honor of Arctic oceanographer Vladimir Diodorovich Tzinovskiy (b. 1946, also spelled Tzinovsky), P. P. Shirshov Institute of Oceanology (Moscow), who collected type

*Bathyraja violacea* (Suvorov 1935)  
violet-colored, referring to bläc-violet hues and dark violet vermicultations on dorsal surface

*Subgenus Arctoraja* Ishiyama 1958  
arc-; north, referring to distribution in the North Pacific; raia, Latin for ray or skate

*Bathyraja panthera* Orr, Stevenson, Hoff, Spies & McEachran 2011  
leopard, referring to distinctive dorsal coloration, often characterized by rosettes of black spots surrounding yellow blotches

*Bathyraja parmifera* (Bean 1881)  
parma, shield; fero, to bear, probably referring to median row of large spines on back and tail

*Bathyraja simoterus* (Ishiyama 1967)  
simus, flat-nosed, teres, rubbed off, referring to very blunt snout with broad tip

*Bathyraja smirnovi* (Soldatov & Pavlenko 1915)  
in honor of “Mr. Smirnov,” Inspector of Fishes, who collected fishes from the Sea of Okhotsk
**Brochiraja** Last & McEachran 2006

*brochus*, projection, referring to projecting thorns on anterior snout; *raia*, Latin for ray or skate

**Brochiraja aenigma** Last & McEachran 2006
enigmatic, referring to its unresolved taxonomic status (generic placement is provisional since post-juvenile holotype lacks bifurcated thorn on mid-distal rostral cartilage, a diagnostic feature of the genus)

**Brochiraja albilabiata** Last & McEachran 2006
*albus*, white; *labiatus*, lipped, referring to distinctive, white-edged mouth, which is strongly contrasted against a very dark, beard-like patch beneath the mouth

**Brochiraja asperula** (Garrick & Paul 1974)
diminutive of *asper*, rough, referring to “meagre development of prickles on the disc”

**Brochiraja heuresa** Last & Séret 2012
latinized from the Greek *heuresis* (that which is found, discovered), based on the ancient Greek *Heureka* (“I have found it”) or, in modern English, “Eureka,” referring to its being discovered among a collection of skates the authors initially thought represented a different species, *B. aenigma*

**Brochiraja leviveneta** Last & McEachran 2006
*levis*, smooth or bald; *venetus*, sea-colored or blue, referring to color of dorsal disc

**Brochiraja microspinifera** Last & McEachran 2006
*micro-*, small, being a dwarfed version of its larger New Zealand sibling species, *B. spinifera*

**Brochiraja spinifera** (Garrick & Paul 1974)
*spina*, thorn; *fero*, to bear, referring to numerous spines on tail

**Brochiraja vittacauda** Last & Séret 2012
*vitta*, ribbon; *cauda*, tail, referring to unusually broad, ribbon-like lateral skin folds that terminate near its tip

**Insentiraja** Yearsley & Last 1992
*in-*, without; *sentis*, thorn, referring to absence of thorns on tail and middorsal regions of disc; *raia*, Latin for ray or skate

**Insentiraja laxipella** Yearsley & Last 1992
*laxus*, loose; *pellis*, skin, referring to flabby integument of ventral surface

**Insentiraja subtilispinosa** (Stehmann 1989)
*subtilis*, very fine; *spinus*, spinulose, referring to velvet-like dermal denticles
Irolita Whitley 1931
etymology not explained; presumably from Irolita, a fairy tale princess whose beauty was worthy of the world’s admiration

Irolita waitii (McCulloch 1911)
patronym not identified but clearly in honor of zoologist and museum director Edgar R. Waite (1866-1928), who works on fishes are frequently cited by McCulloch

Irolita westraliensis Last & Gledhill 2008
-ensis, suffix denoting place: Western Australia, only known distribution

Notoraja Ishiyama 1958
etymology not explained, perhaps notos, back, referring to numerous prickles on dorsal surface, or notos, south, referring to occurrence of N. tobitukai in “southernmost regions within the seas inhabited by the northern members” of Breviraja; raia, Latin for ray or skate

Notoraja alisae Séret & Last 2012
of research vessel Alis (named for a local wind) Institut de Recherche pour le Développement (IRD) in Nouméa, which conducted many exploratory cruises in New Caledonia, from which type was collected

Notoraja azurea McEachran & Last 2008
latinization of the French l’azure (blue), referring to striking, metallic blue dorsal coloration

Notoraja fijiensis Séret & Last 2012
-ensis, suffix denoting place: Fiji Islands, type locality

Notoraja hirticauda Last & McEachran 2006
hirtus, rough or bristly; cauda, tail, referring to dense covering of fine denticles on both surfaces of tail

Notoraja inusitata Séret & Last 2012
unusual or strange, referring to its “strange” appearance, i.e., head and disk morphology resembling some species of Sinobatis, Bathyraja and Insentiraja

Notoraja lira McEachran & Last 2008
earth or ridge thrown up by a plough, referring to type locality, the Broken Ridge (southeast Indian Ocean), an elevated plateau thrust upward at the juncture of two continental plates

Notoraja longiventralis Séret & Last 2012
longus, long; ventralis, ventral, referring to very long anterior lobe of pelvic fin

Notoraja martinezi Concha, Ebert & Long 2016
in honor of Ecuadorian biologist Jimmy Martínez, World Wildlife Fund, who collected and “kindly provided” type

Notoraja ochroderma McEachran & Last 1994
ochro, pale yellow; derma, skin, referring to pale yellow color

Notoraja sapphira Séret & Last 2009
referring to intense blue dorsal coloration, resembling that of a dark sapphire (gemstone)

Notoraja sereti White, Last & Mana 2017
in honor of Bernard Séret (b. 1949), the “highly respected” French ichthyologist, who has contributed greatly to the taxonomy of sharks and rays, and in particular to our knowledge of skates of the genus Notoraja

Notoraja sticta McEachran & Last 2008
stiktos, spotted or dappled, referring to strong blotched dorsal coloration

Notoraja tobitukai (Hiyama 1940)
in honor of T. Tobituka, under whose direction the trawling fishery survey collected the type

Pavoraja Whitley 1939
pavo, peacock, likely referring to ornate coloration with small eyespots; raia, Latin for ray or skate

Pavoraja alleni McEachran & Fechhelm 1982
in honor of ichthyologist Gerald R. Allen (b. 1942), Western Australia Museum (Perth), who furnished the authors with specimens

Pavoraja arenaria Last, Mallick & Yearsley 2008
sandy, referring to pale dorsal disc coloration

Pavoraja mosaica Last, Mallick & Yearsley 2008
mosaicus, an inlay of various colors and geometric patterns, referring to striking dorsal coloration

Pavoraja nitida (Günther 1880)
elegant, probably referring to color pattern: light and dark brown with dark brown blotches “ornamented” by small, round yellowish ocelli
Pavoraja pseudonitida Last, Malick & Yearsley 2008
pseudo-, false, i.e., although this species may superficially resemble P. nitida, such an appearance is false

Pavoraja umbrosa Last, Malick & Yearsley 2008
shady, referring to uniform grayish coloration of dorsal surface of disc

Psammobatis Günther 1870
psammos, sand, referring to Sandy Point, Magellan Strait, Argentina, type locality of P. rudis; batis, Greek for a flat fish, usually applied to a skate or ray

Psammobatis bergi Marini 1932
in honor of Friedrich Wilhelm Karl Berg (1843-1902), also known as Frederico Guillermo (“Carlos”) Berg, born in Latvia, foremost (“el primor”) ichthyologist specializing in the freshwater and marine fishes of Argentina (type locality)

Psammobatis extesta (Garman 1913)
extended, presumably referring to its long tail, “extended behind the dorsals,” longer and more slender than tail of Raja (= Levoraja) erinacea

Psammobatis lentiginosa McEachran 1983
freckled, referring to small spots scattered over dorsal surface of disc and tail

Psammobatis normani McEachran 1983
in honor of ichthyologist J. R. (John Roxborough) Norman (1898-1944), British Museum (Natural History), who first described this ray but reported it as P. scobina in 1937

Psammobatis parvacauda McEachran 1983
parvus, small; cauda, tail, referring to small tail, the smallest in genus

Psammobatis rudis Günther 1870
rough, referring to minute spinous tubercles, placed close together, covering all upper parts

Psammobatis rutrum Jordan 1891
shovel, probably referring to bluntly rounded snout with a short, sharply pointed fleshy tip

Psammobatis scobina (Philippi 1857)
rasp, probably referring to rasp-like quality of small sharp spines on dorsal surface

Pseudoraja Bigelow & Schroeder 1954
a pseudo-, or false, Raja: authors believed lack of dorsal fin and well-developed caudal fin on P. fischeri were sufficiently distinct to forbid its placement in Rajidae

Pseudoraja fischeri Bigelow & Schroeder 1954
in honor of zoological artist E. N. Fischer, for the “skillful portrayals of elasmobranchs” featured in many publications by Bigelow and Schroeder

Rhinoraja Ishiyama 1952
rhino, nose, referring to “peculiar” rostral cartilage that projects forward with slender rod-like bar at tip of snout; raia, Latin for ray or skate

Rhinoraja kuijensis (Tanaka 1916)
-ensis, suffix denoting place: Kuji, Ibarabi Prefecture, Japan, type locality

Rhinoraja longicauda Ishiyama 1952
longus, long; cauda, tail, referring to pre-dorsal tail length, which is always longer than the disc

Rhinoraja odai Ishiyama 1958
in honor of Mikiji Oda, who discovered this species at a Miya fish market, off Izu Peninsula, Shizuoka Prefecture, Aichi Province, Japan

Rhinoraja taranetzi Dolganov 1983
in honor of the “eminent expert” on fishes of the far-eastern seas of the U.S.S.R., Anatoly Yakovlevich Taranetz (1910-1941) [often placed in Bathyraja]

Rioraja Whitley 1939
meaning of río- not explained, perhaps allusion to Rio de Janeiro (type species was described from Brazil); raia, Latin for ray or skate

Rioraja agassizii (Müller & Henle 1841)
in honor of zoologist-geologist Louis Agassiz (1807-1873), at the time the leading authority on Brazilian fishes

Sympterygia Müller & Henle 1837
sympleisis, grown together; pteryx, fin, referring to how pectoral fins meet at the tip of snout

Sympterygia acuta Garman 1877
sharp, referring to acute and greatly produced snout
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Sympterygia bonapartii Müller & Henle 1841
in honor of biologist Charles Lucien Bonaparte (1803-1857), whose 1834 treatise on the fauna of Italy introduced several new sharks and rays to science

Sympterygia brevicaudata (Cope 1877)
bre-, short; caudata, tailed, “only one-fifth longer than the claspers”

Sympterygia lina (Poeppig 1835)
file, presumably referring to short tail, which resembles a triangular file

Family GURGESIELLIDAE Pygmy Skates
3 genera · 19 species

Cruriraja Bigelow & Schroeder 1948
- crus, limb, referring to anterior lobes of pelvic fins, which form a slender, limb-like structure; raia, Latin for skate or ray

Cruriraja andamanica (Lloyd 1909)
- -ica, belonging to: the Andaman Sea, type locality

Cruriraja atlantis Bigelow & Schroeder 1948
named after Woods Hole Oceanographic Institute research vessel Atlantis, which collected three new species of skates along the coasts of Cuba, including this one

Cruriraja cadenati Bigelow & Schroeder 1962
in honor of ichthyologist Jean Cadenat (1908-1992), Director, Marine Biological Section of the Institut Français d’Afrique Noire (Gorée, Senegal), for his work on the elasmobranchs of the west coast of Africa

Cruriraja durbantensis (von Bonde & Swart 1923)
- ensis, suffix denoting place: off the coast of Durban, South Africa (a misnomer since type was actually taken off western Cape Province)

Cruriraja hulleyi Aschliman, Ebert & Compagno 2010
in honor of Percy Alexander “Butch” Hulley (b. 1941), Iziko South African Museum, for his “pioneering” research on southern African skates (where this skate occurs)

Cruriraja parcomaculata (von Bonde & Swart 1923)
parcus, scanty; maculatus, spotted, presumably referring to fewer (14-18) spots on disc compared to Rajella leopardus

Cruriraja poeyi Bigelow & Schroeder 1948
patronym not specified but clearly in honor of Cuban zoologist Felipe Poey (1799-1891), an appropriate patronym for this Cuban skate

Cruriraja rugosa Bigelow & Schroeder 1958
wrinkled or shriveled, presumably referring to minute prickles covering underside of tail

Fenestraja McEachran & Compagno 1982
fenestra, referring to nasal capsules with basal fenestrae (compared to closely related Neoraja, which lacks them); raia, Latin for ray or skate

Fenestraja atripinna (Bigelow & Schroeder 1950)
atri-, black; pinna, fin, referring to its sooty black dorsals

Fenestraja cubensis (Bigelow & Schroeder 1950)
-ensis, suffix denoting place: Cuba (north-central coast)

Fenestraja ishiyamai (Bigelow & Schroeder 1962)
in honor of Reizo Ishiyama, for his work on Japanese batoids

Fenestraja maceachrani (Séret 1989)
in honor of John D. McEachran (b. 1941, note latinization of “Mc” to “Mac”), for his major contributions to skate and ray systematics

Fenestraja mamillidens (Alcock 1889)
referring to how each tooth (-dens) has a “broad globular base and a gently pointed mamillary summit [point]”

Fenestraja plutonia (Garman 1881)
dusky, referring to brown-grayish or purplish coloration with irregular “indistinctly defined” spots of brown

Fenestraja sibogae (Weber 1913)
named for the ship Siboga and Indonesian expedition (1898-1899) of same name, during which type was collected

Fenestraja sinusmexicanus (Bigelow & Schroeder 1950)
-ica, belonging to: sinus, gulf; mexicanus, Mexico, referring to distribution in the Gulf of Mexico
Gurgesiella de Buen 1959
eytymology not explained; probably derived from gurges, abyss, referring to deepwater habitat of G. furvescens

Gurgesiella atlantica (Bigelow & Schroeder 1962)
referring to distribution from the Atlantic coast of Nicaragua to the “offing” of the Amazon River

Gurgesiella dorsalifera McEachran & Compagno 1980
dorsal, dorsal fin; fero, to bear, referring to its being the only species of Gurgesiella with a dorsal fin

Gurgesiella furvescens de Buen 1959
growing dark, likely referring to dusky, dark coffee (“café obscuro”) coloration

Family RAJIDAE Skates
16 genera · 161 species/subspecies

Amblyraja Malm 1877
ambly, blunt, probably referring to relatively blunt snout compared to related skate genera; raia, Latin for ray or skate

Amblyraja doellojuradoi (Pozzi 1935)
in honor of marine biologist and malacologist Martín Doello-Jurado (1884-1948), Museo Argentino de Ciencias Naturales, for his studies of Argentine hydrobiology

Amblyraja frerichsi (Krefft 1968)
in honor of Th. Frerichs, captain of the research vessel Walther Herwig, from which type was collected, for “his keen interest in deep-sea catches, which assured us many precious discoveries” (translation)

Amblyraja georgiana (Norman 1938)
referring to South Georgia (southern Atlantic Ocean), type locality

Amblyraja hyperborea (Collett 1879)
hyper-, very; boreas, northern, referring to distribution in the Arctic Ocean and waters around Canada and northwest Europe (also occurs in Pacific Ocean and in waters surrounding Antarctica and New Zealand)

Amblyraja jenseni (Bigelow & Schroeder 1950)
in honor of Danish zoologist Adolf Severin Jensen (1866-1953), Lund University, for contributions to the ichthyology of the North Atlantic

Amblyraja radiata (Donovan 1808)
radiated, referring to large spinous plates on body and tail, each with a radiated or stellate base

Amblyraja reversa (Lloyd 1906)
reversed, referring to pale coloration on dorsal surface and dark coloration on ventral surface

Amblyraja taaf (Meissner 1987)
abbreviation of Terres australes et antarctiques françaises (Territory of the French Southern and Antarctic Lands), a group of volcanic islands in the southwestern Indian Ocean, type locality

Beringraja Ishihara, Treloar, Bor, Senou & Jeong 2012
Bering, referring to the Bering Sea, where B. binoculata and B. pulchra are presumed to have originated since they are allopatrically distributed, one on each side of the sea; raia, Latin for ray or skate

Beringraja binoculata (Girard 1855)
br-, two; oculatus, eyed, referring to prominent eyespot at base of each pectoral fin

Beringraja cortezenis (McEachran & Miyake 1988)
-ensis, suffix denoting place: Sea of Cortez (also known as Gulf of California), where it is endemic

Beringraja inornata (Jordan & Gilbert 1881)
unadorned, referring to the smoothness of its disc

Beringraja pulchra (Liu 1932)
beautiful or lovely, perhaps referring to mottled color pattern

Beringraja rhina (Jordan & Gilbert 1880)
double meaning: rhine, rasp, referring to body prickle, which are largest and most stellate on its very long rhino-, snout

Beringraja stellulata (Jordan & Gilbert 1880)
stellula, a small star, referring to numerous star-shaped prickles covering dorsal surface

Breviraja Bigelow & Schroeder 1948
brevis, short, referring to short tip of rostral process; raia, Latin for ray or skate
**Breviraja claramaculata** McEachran & Matheson 1985
*clarus*, bright; *macula*, spot, referring to light-colored spots on dorsal surface

**Breviraja colesi** Bigelow & Schroeder 1948
patronym not identified, possibly in honor of angler and amateur shark and ray biologist Russell J. Coles (1865-?).

**Breviraja mouldi** McEachran & Matheson 1995
in honor of Brian Mould, University of Nottingham, who alerted the authors that their original (1985) name for this species was preoccupied by *Breviraja (=Bathyraja) Schroederi* Krefft 1968

**Breviraja nigriventralis** McEachran & Matheson 1985
*nigra*, black; *ventralis*, belly, referring to uniformly black ventral coloration in living specimens

**Breviraja spinosa** Bigelow & Schroeder 1950
spiny, referring to 3-4 irregular rows of large and conspicuous thorns along middle belt of disc

**Dactylobatus** Bean & Weed 1909
daktylos, finger, referring to how 6-7 middle rays of pectorals form finger-like processes; *batus*, latinization of *batis* or *batos*, Greek for a flat fish, usually applied to a skate or ray

**Dactylobatus armatus** Bean & Weed 1909
armed with a weapon, referring to double row of sharp, hooked spines on ventral surface

**Dactylobatus clarkii** (Bigelow & Schroeder 1958)
in honor of British marine biologist and explorer Robert S. Clark (1882-1950), for his 1926 revision of European skates and rays

**Dentiraja** Whitley 1940
denti-, referring to numerous denticles embedded in skin of *Raja dentata* (=*Dentiraja lemprieri*), i.e., a denticulated *Raja*

**Dentiraja australis** (Macleay 1884)
southern or Australian, this being the first time Macleay has known of a “true” skate (i.e., *Raja* and its relatives) being found in Port Jackson

**Dentiraja cerva** (Whitley 1939)
doe, probably referring to deer-like coloration of female’s dorsal surface, light tan to dark brown with distinct white spots

**Dentiraja confusa** (Last 2008)
referring to previous confusion with two other Australasian skates, *D. cerva* and *D. nasutus*

**Dentiraja endeavouri** (Last 2008)
“after the ill-fated F.I.S. *Endeavour*, the Federal fisheries survey vessel that was responsible for collecting the first specimens of this species and so many of Australia’s continental shelf fishes in the early 20th century before it along with all hands was lost at sea in 1914”

**Dentiraja falloargus** (Last 2008)
fallo, false, deceive; *Argus*, mythical hundred-eyed guardian of Io, whose eyes after death where transformed into the feathers of a peacock, referring to vague, eye-like marking on middle of each pectoral fin

**Dentiraja flindersi** Last & Gledhill 2008
referring to its distribution in the western warm temperate biogeographic region of Australia, otherwise known as the Flindersian Province

**Dentiraja healdi** (Last, White & Pogonoski 2008)
in honor of David Heald, Department of Fisheries Western Australia, who discovered this species off Western Australia in the early 1980s

**Dentiraja lemprieri** (Richardson 1845)
in honor of Deputy Assistant Commissary-General F. J. Lempriere (1796-1852), “to whose exertions the Ichthyology of Van Diemen's Land [Tasmania] is much indebted”

**Dentiraja oculus** (Last 2008)
eye, referring to eye-like marking on each pectoral fin [incorrectly spelled *oculata* in the 2016 book *Rays of the World*]

**Dentiraja polyommata** (Ogilby 1910)
*poly*, many; *ommata*, eyed, referring to numerous white-edged spots on dorsal surface

**Dipturus** Rafinesque 1810
di-, two; *pteron*, fin, referring to two rayed dorsal fins on tail

**Dipturus acrobelus** Last, White & Pogonoski 2008
*acrobelus*, arrow, or pointed at the end, referring to long, angular snout and somewhat arrow-head shaped body
Dipturus amphispinus Last & Alava 2013

*amphi-*, on both sides or double; *spinus*, thorn, referring to two prominent rows of strongly tilted thorns that form a ridge on median disc

Dipturus apricus Last, White & Pogonoski 2008

exposed to the sun, “in cryptic reference to its common name … Pale Tropical Skate”

Dipturus argentinensis Díaz de Astarloa, Mabragaña, Hanner & Figueroa 2008

*ensis*, suffix denoting place: the Argentine Sea, type locality

Dipturus batis (Linnaeus 1758)

Greek for a flat fish, usually applied to a skate or ray

Dipturus brevicaudatus (Marini 1933)

*brevis*, short; *caudatus*, tailed, referring to short tail, (2.1-2.7 times in TL), shorter than the similar Raja stabuliforis (*=D. laevis*)

Dipturus bullisi (Bigelow & Schroeder 1962)

in honor of marine biologist Harvey R. Bullis, Jr. (1924-1992), for providing batoid fishes collected during cruises of U.S. Fish and Wildlife Service vessels in the Gulf of Mexico, Caribbean and along the South American coast

Dipturus campbelli (Wallace 1967)

in honor of George Gordon Campbell (1893-1977), South African physician and naturalist, “instrumental” in the establishment of the South African Marine Biological Association

Dipturus canutus Last 2008

gray or ash-colored, referring to its almost uniformly gray dorsal coloration

Dipturus chilensis (Guichenot 1848)

*ensis*, suffix denoting place: Chile, type locality (but occurs throughout southeastern Pacific and southwestern Atlantic)

Dipturus chinensis (Basilewsky 1855)

*ensis*, suffix denoting place: northern China, type locality

Dipturus crosnieri (Séret 1989)

in honor of carcinologist Alain Crosnier (b. 1930), who initiated the deep trawling surveys off Madagascar in the 1970s, and who entrusted Séret with his valuable collection of Madagascar skates

Dipturus doutrei (Cadenat 1960)

in honor of M. P. Doutre, veterinary surgeon, Labaortoire National de l’Élevage et de Recherches Vétérinaires, (Dakar, Senegal) and chief fisheries officer for Senegal, off the coast of which this skate occurs (note: Doutre named a cod, Merluccius polli cadenati, after Cadenat the same year)

Dipturus ecuadoriensis (Beebe & Tee-Van 1941)

*ensis*, suffix denoting place: Ecuador, referring to type locality, San Helena Bay, Ecuador

Dipturus garricki (Bigelow & Schroeder 1958)

in honor of J. A. F. (Jack) Garrick (1928-2018), Victoria University College, Wellington, for his work on the elasmobranchs of New Zealand

Dipturus gigas (Ishiyama 1958)

large, i.e., being the largest member of a Raja subgenus Ishiyama named Tengjiei (now a junior synonym of Dipturus)

Dipturus grahamorum Last 2008

*arum*, commemorative suffix, plural: in honor of two unrelated ichthyologists, Alastair Graham (b. 1964), collection manager at CSIRO (Australia’s Commonwealth Scientific and Industrial Research Organisation), and Ken Graham (b. 1947), Fisheries Biologist, New South Wales Department of Primary Industries, for their “very important but very different” contributions to the knowledge of Australian sharks and rays [originally spelled grahami, but since name honors more than one person, emendment is necessary]

Dipturus gudgeri (Whitley 1940)

in honor of Eugene Willis Gudger (1866-1956), American Museum of Natural History (New York), “in appreciation of his work on fishes and their bibliography”

Dipturus innominatus (Garrick & Paul 1974)

*in-*, not; *nominatus*, named, referring to its not having a name even though it had been known since at least 1953

Dipturus intermedius (Parnell 1837)

presumably referring to its being intermediate in form between D. batis and D. oxyrinchus

Dipturus johannisdavisi (Alcock 1899)

in honor of the “celebrated Elizabethan navigator and explorer John Davis [ca. 1550-1605] who — though best known for his Arctic voyages — piloted three expeditions to the East Indies and lost his life in Indian Seas”
**Dipturus kwangtungensis** (Chu 1960)
-ensis, suffix denoting place: off the coast of Guangdong (=Kwangtung) Province, China, referring to type locality in South China Sea

**Dipturus laevis** (Mitchell 1818)
smooth, referring to smooth (or relatively smooth) dorsal surface

**Dipturus lamillai** Concha, Cairra, Ebert & Pomper 2019
in memory of Julio Lamilla (d. 2016, heart attack), a Chilean biologist who “devoted his life to teaching and research focused on the biology and conservation of chondrichthynes, especially batoids”

**Dipturus lanceorostratus** (Wallace 1967)
lanceola, small spear; rostratus, beaked, probably referring to long, acutely pointed snout

**Dipturus leptocauda** (Krefft & Stehmann 1975)
leptos, thin; cauda, tail, referring to longer and thinner tail compared to shorter and broader tails of some congeners

**Dipturus macrocauda** (Ishiyama 1955)
macro-, long; cauda, tail, a possible misnomer since Ishiyama described the tail as short and “stumpy”; perhaps he was referring to the “enormously large” electric organ that makes the middle of the tail thicker

**Dipturus mauganensis** (Last & Gledhill 2007)
-anus, belonging to: Maugan Province, Australian cool temperate biogeographic region where this skate is a keystone species

**Dipturus melanospilus** Last, White & Pogonoski 2008
melanos, black; spilos, stain or spot, referring to distinctive black margin on outer half of the anterior ventral disc in juveniles (less distinct in adults)

**Dipturus mennii** Gomes & Paragó 2001
in honor of ichthyologist Roberto Carlos Menni, Universidad Nacional de La Plata (Argentina), for contributions to the study of South American rays

**Dipturus nasutus** (Müller & Henle 1841)
long-nosed, referring to its produced snout

**Dipturus nidarosiensis** (Storm 1881)
-ensis, suffix denoting place: Nidaros, name of Trondheim during the Middle Ages, referring to Trondheim Fjord, Norway, type locality

**Dipturus olseni** (Bigelow & Schroeder 1951)
in honor of Danish-American ichthyologist Yngve H. Olsen (1905-2000), assistant editor of the authors’ “Fishes of the Western North Atlantic” monographs, for his “excellent editorial work”

**Dipturus oregoni** (Bigelow & Schroeder 1958)
in recognition of the fishery explorations of the U.S. Fish and Wildlife Service vessel Oregon in the Gulf of Mexico and the Caribbean Sea

**Dipturus oxyrinchus** (Linnaeus 1758)
 oxyys, sharp; rhynchos, snout, referring to long and sharp snout

**Dipturus pullopunctatus** (Smith 1964)
pullus, dark; punctatus, spotted, referring to small, dark brown to black spots scattered irregularly over dorsal surface

**Dipturus queenslandicus** Last, White & Pogonoski 2008
-icus, belonging to: Queensland, referring to its regional geographical range

**Dipturus springeri** (Wallace 1967)
in honor of Stewart Springer (1906-1991), Chief Scientist on Cruise 8 of the International Indian Ocean Expedition (which collected type), for his elasmobranch studies

**Dipturus stenorhynchus** (Wallace 1967)
stenos, narrow; rhynchus, presumably referring to “long wedge-shaped” snout (although sphenos, wedge, is perhaps a more accurate descriptor)

**Dipturus teevani** (Bigelow & Schroeder 1951)
in honor of zookeeper John Tev Van (1897-1967), “in appreciation of his helpful assistance” as editor-in-chief of the authors’ “Fishes of the Western North Atlantic” monographs (he later became Director of both the Bronx Zoo and the Coney Island Aquarium in New York City)

**Dipturus tengu** (Jordan & Fowler 1903)
Tengu or Tegu, a comical being in Japanese mythology with a very long nose, which he thrusts into the business of other people, referring to the skate’s greatly produced snout
**Dipturus trachyderma** (Krefft & Stehmann 1975)
*trachys*, coarse or rough; *derma*, skin, referring to very coarse dermal denticles on dorsal and ventral surfaces

**Dipturus wengi** Séret & Last 2008
In honor of Herman Ting-Chen Weng, Queensland fisheries biologist, “who showed an enthusiastic interest in skates and collected the first validated Australian specimens of this species in 1983”

**Dipturus wuhanlingi** Jeong & Nakabo 2008
In honor of Wu Han-Lin, Shanghai Ocean University, for his “great contributions” to Chinese ichthyology

**Hongeo Jeong & Nakabo 2009**
*Hongeo*, Korean common name for skates

**Hongeo koreana** (Jeong & Nakabo 1997)
Referring to the Korean waters where holotype was collected

**Leucoraja** Malm 1877
*leukos*, white, referring to pale color of *L. fullonica* and *L. lintea* (=*Rajella lintea*); *raia*, Latin for ray or skate

**Leucoraja circularis** (Couch 1838)
Circular, referring to the disk’s “great tendency to circularity” compared to *Raja* (=*Dipturus* oxycrinus)

**Leucoraja compagnoi** (Stehmann 1995)
In honor of Leonard J. V. Compagno (b. 1943), for his “fundamental contributions to chondrichthyan systematics, mainly on sharks, and his research devoted to South African chondrichthyans”

**Leucoraja elaineae** Ebert & Leslie 2019
In honor of Elaine Heemstra, South African Institute for Aquatic Biodiversity, for her “enormous contributions in illustrating marine fishes, mostly from the Western Indian Ocean” (her husband, ichthyologist Phillip C. Heemstra [1941-2019], collected type in 1980)

**Leucoraja erinacea** (Mitchill 1825)
Hedgehog, referring to how the specimen Mitchell examined, which curled its tail under its body, arched its back and presented its “armature and prickles,” resembled a hedgehog

**Leucoraja fullonica** (Linnaeus 1758)
Latinization of *fuller*, a tool used to smooth cloth, referring to the ray’s rough and spiny dorsal surface

**Leucoraja garmani garmani** (Whitley 1939)
In honor of Harvard ichthyologist-herpetologist Samuel Garman (1843-1927), who originally described this species but used a preoccupied name (*Raja ornata*, a fossil species)

**Leucoraja garmani caribbaea** (McEachran 1977)
Referring to its Caribbean distribution, from Quintana Roo to Nicaragua

**Leucoraja garmani virginica** (McEachran 1977)
-icoi, belonging to: Virginia, referring to its distribution largely off the coast of Virginia, USA, from Cape Hatteras (North Carolina) to Nantucket Shallows (Massachusetts)

**Leucoraja lentiginosa** (Bigelow & Schroeder 1951)
Freckled, referring to dense, small, dark, light brown and whitish spots on dorsal surface

**Leucoraja leucosticta** (Stehmann 1971)
*leukos*, white; *stiktos*, spotted or blotched, referring to relatively indistinct pale blotching on upper disc in contrast to clearly defined, small circular white spots in symmetric pattern of *L. circularis*

**Leucoraja melitensis** (Clark 1926)
-ensis, suffix denoting place: Malta, type locality (Melite is the ancient Greek name for Malta)

**Leucoraja naevus** (Müller & Henle 1841)
Mark or spot, probably referring to large roundish black eye-spot in middle of each pectoral fin

**Leucoraja ocellata** (Mitchill 1815)
With eye-like spots, referring to large white ocellus usually (but not always) near posterior angle of pectoral fin

**Leucoraja pristispina** Last, Stehmann & Séret 2008
*pristis*, saw; *spina*, thorn or backbone, referring to rows of thorns along midline of disc and tail

**Leucoraja wallacei** (Hulley 1970)
In honor of John H. Wallace, Oceanographic Research Institute (Durban), who reported this species as *Raja* (now *Rajella*) barnardi in 1967 (Wallace’s 1967 study of east coast South African rajiform fishes is a companion to Hulley’s study covering the west and south coasts)

**Leucoraja yucatanensis** (Bigelow & Schroeder 1950)
-ensis, suffix denoting place: the northeastern slope of Yucatán, only known distribution
Malacoraja Stehmann 1970
malakós, soft or fine, referring to dense, velvet-like covering of fine dermal denticles on upper surface of type species *Raja mollis* (= *Malacoraja spinacidermis*); *raia*, Latin for ray or skate

Malacoraja kreffti (Stehmann 1977)
in honor of Gerhard Krefft (1912-1993), Institut für Seefischerei (Hamburg), for his numerous publications on zoogeography and taxonomy of cartilaginous fishes (particularly the Rajidae) and Atlantic meso- and bathypelagic bony fishes; for his leadership of the Ichthyology Group of the Institute of Sea Fisheries and its extensive scientific fish reference collection; and for his knowledge and encouragement during more than 10 years of collaboration with Stehmann

Malacoraja obscura Carvalho, Gomes & Gadig 2005
dark or indistinct, referring to subtle nature of differences separating this species from its congeners

Malacoraja senta Garman 1885
*sentis*, briar, referring to numerous hooked spines of dorsal surface and in front of each eye

Malacoraja spinacidermis (Barnard 1923)
*spina*, thorn; *akis*, point; *derma*, skin, referring to fine, closely-set spinules on entire upper surface of disc and upper and lateral surfaces of tail

Neoraja McEachran & Compagno 1982
*neo-*, new, literally a new genus of *Raja*

Neoraja africana (Stehmann & Séret 1983)
African, referring to type locality off Central West Africa, with which it geographically links the Northeastern and Southeastern Atlantic representatives of the genus

Neoraja caerulea (Stehmann 1976)
blue, referring to blue-purple color of dorsal surface, obvious at first glance in trawl catches and even persistent for a long time after preservation in formalin and ethanol

Neoraja carolinensis McEachran & Stehmann 1984
*-ensis*, suffix denoting place: the Carolinian Province of the Western North Atlantic, type locality

Neoraja iberica Stehmann, Séret, Costa & Baro 2008
*-*ica, belonging to: Iberian Peninsula of Portugal and Spain

Neoraja stehmanni (Hulley 1972)
in honor of skate taxonomist Matthias Stehmann (b. 1943), Institut für Seefischerei (Hamburg)

Okamejei Ishiyama 1958
*Okame*, Japanese vernacular for “female with low-nose,” presumably referring to its relatively shorter snout; *jei*, Japanese for skate and ray

Okamejei acutispina (Ishiyama 1958)
*acutus*, sharp or pointed; *spina*, thorn, presumably referring to nuchal and tail spines

Okamejei arafurensis Last & Gledhill 2008
*-*ensis*, suffix denoting place: the Arafura Sea, referring to its distribution from southwest of Scott Reef (Western Australia), north to the Arafura Sea off the Northern Territory

Okamejei boesemani (Ishihara 1987)
in honor of ichthyologist Marinus Boeseman (1916-2006), Leiden University, without whom Ishihara would not have been aware of problems in the systematics of Japanese *Raja*

Okamejei cairae Last, Fahmi & Ishihara 2010
in honor of parasitologist Janine Caira (b. 1957), University of Connecticut, who coordinated the collection of important chondrichthyan material in Borneo, including most of the type series of this species, during her “quest” to describe the metazoan parasites of these animals

Okamejei heemstraui (McEachran & Fechhelm 1982)
in honor of ichthyologist Phillip C. Heemstra (1941-2019), Rhodes University (Grahamstown), who furnished specimens of the new species and for being “extremely cooperative” in supplying the authors with elasmobranch material from South Africa

Okamejei hollandi (Jordan & Richardson 1909)
in honor of zoologist-paleontologist William J. Holland (1848-1932), Director of the Carnegie Museum, for supporting the authors’ study of Taiwanese fishes

Okamejei kenojei (Müller & Henle 1841)
*keno-ei*, Japanese name for this skate [authorship sometimes attributed to Bürger, who coined the name]
Okamejei leptoura Last & Gledhill 2008
leptos, fine, thin or delicate; oura, tailed, referring to thin, somewhat filamentous tail

Okamejei meerdervoortii (Bleeker 1860)
in honor of Johannes Lijdus Catbarinus Pompe van Meerdervoort (1829-1908), Dutch physician based in Nagasaki, Japan, who collected for Bleeker

Okamejei mengae Jeong, Nakabo & Wu 2007
in honor of Qing-Wen Meng, Shanghai Ocean University, for her great contributions to elasmobranch studies in China

Okamejei ornata Weigmann, Stehmann & Thiel 2015
ornate, referring to dorsal color pattern of dark brown spots encircled with beige pigment and arranged into rosettes

Okamejei schmidti (Ishiyama 1958)
patronym not identified, presumably in honor of Soviet ichthyologist Petr Yulievich Schmidt (1872-1949), who identified this skate as Raja fusca (= O. kenojei) in 1931

Orbiraja Last, Weigmann & Dumale 2016
orbis, circle, referring to paired, ring-like pectoral-fin ocelli in all three nominal species; raia, Latin for ray or skate

Orbiraja jensenae (Last & Lim 2010)
in honor of cestode parasitologist Kirsten Jensen, University of Kansas (USA) for her field surveys of Bornean fish markets, during which she captured digital images of chondrichthyan specimens for a field guide to the sharks and rays of Borneo

Orbiraja philipi (Lloyd 1906)
patronym not identified, nor can identity be inferred based on available information

Orbiraja powelli (Alcock 1898)
in honor of Lt. Frederick Thomas Powell (1806-1859) of the Indian Navy, “a colleague, in the old Marine Survey branch of the service, of Captain [Robert] Moresby,” hydrographer, maritime surveyor and draughtsman

Raja Linnaeus 1758
raia, Latin for ray or skate

Raja africana Capapé 1977
African, presumably referring to distribution off coasts of Mauritania and Tunisia

Raja arctowskii Dollo 1904
in honor of Polish scientist and explorer Henryk Arctowski (1871-1958), oceanographer of the Belgian Antarctic Expedition, during which type was collected (known from egg cases only)

Raja asterias Delaroche 1809
starry, referring to its many small white spots

Raja brachyura Lafont 1873
brachy-, short; oura, tailed, referring to its thick, short tail

Raja clavata Linnaeus 1758
club-shaped, referring to scattered club-shaped prickles on body

Raja herwigi Kreyt 1965
presumably named after research vessel Walther Herwig, from which type was collected, and not Walther Herwig (1838-1912), founder of German fisheries science, for whom research vessel was named

Raja karagea Tanaka 1927
same-karagea, local name for this species (and for Bathyraja isotrichys) among fishermen of Kesen, Rikuzen Province, Japan

Raja maderensis Lowe 1838
-ensis, suffix denoting place: Madeira, type locality

Raja microcellata Montagu 1818
micro-, small; ocellata, having little eyes, referring to its conspicuously small eyes

Raja miraletus Linnaeus 1758
latinization of the French mirallet, mirror, presumably referring to mirror-like image of eyespots on both sides of pectoral fins

Raja montagui Fowler 1910
in honor of British naturalist George Montagu (1753-1815), who described this species (posthumously) in 1818 but used a preoccupied name, Raja (= Narcine) maculata

Raja ocellifera Regan 1906
ocellus, eyespot; fer-, to bear, referring to large, bluish-black white-edged ocellus near middle of each pectoral-fin base
**Raja parva** Last & Séret 2016
small, referring to small adult size compared to most congeners

**Raja pita** Fricke & Al-Hassan 1995
*pita*, a “tasty Arabian bread” with brown spots, referring to its pita-like shape and coloration

**Raja polystigma** Regan 1923
poly-, many; stigma, mark or spot, referring to numerous black spots on dorsal surface

**Raja radula** Delaroche 1809
scraper, referring to coarse spinules covering dorsal surface

**Raja straeleni** Poll 1951
in honor of paleontologist-carcinologist Victor van Straelen (1889-1964), Director, Royal Belgian Institute of Natural Sciences, and president of the non-profit organization (Mbizi) that sponsored expedition that collected type; in addition, he accompanied one of the expedition’s trawling cruises trawler off the mouth of the Congo

**Raja undulata** Lacepède 1802
referring to numerous undulating dusky streaks

**Rajella Stehmann 1970**
diminutive of *Raja*, referring to small size of type species *R. fyllae*

**Rajella annandalei** (Weber 1913)
in honor of zoologist-anthropologist Thomas Nelson Annandale (1876-1924), Director, Indian Museum (Calcutta)

**Rajella barnardi** (Norman 1935)
in honor of Keppel Harcourt Barnard (1887-1964), South African Museum; reason not given but likely for his 1925-27 monograph on South African marine fishes, which Norman repeatedly cited, for the loan of rays from the South African Museum, and/or for the “kindly interest” he has shown in Norman’s work

**Rajella bathyphila** (Holt & Byrne 1908)
bathys, deep; philios, loving, i.e., lover of the deep, referring to its deepwater (up to 2050 m) habitat

**Rajella bigelowi** (Stehmann 1978)
in honor of the late Henry B. Bigelow (1879–1967), Woods Hole Oceanographic Institution, who, with William C. Schroeder, wrote numerous standard-setting publications on cartilaginous fishes, especially among the rajid fauna of the Western Atlantic; by resurrecting *R. bathyphila*, Bigelow and Schroeder provided the first comprehensive description and illustrations of this new species

**Rajella caudaspinosa** (von Bonde & Swart 1923)
cauda, tail; spinosa, spines, referring to two belts of numerous, minute spines on sides of upper half of tail, and one single row of spines on lower half

**Rajella challengeri** Last & Stehmann 2008
in honor of the Tasmanian research vessel FRV *Challenger*, for its contributions to the knowledge of Australian deepwater demersal fishes

**Rajella dissimilis** (Hulley 1970)
different, only skate in southern Atlantic with a marked reduction or loss of mid-dorsal thorns from disc to tail

**Rajella eisenhardtii** Long & McCosker 1999
in honor of E. Roy Eisenhardt (b. 1939), director emeritus of the California Academy of Sciences, for “generously” assisting the authors and their colleagues

**Rajella fuliginea** (Bigelow & Schroeder 1954)
sooty or painted black, referring to “sooty chocolate to nearly black” ventral coloration

**Rajella fyllae** (Lütken 1887)
of *Fylla*, name of Danish cruiser that collected type

**Rajella kukujevi** (Dolganov 1985)
in honor of ichthyologist Efim Izrailevich Kekuev (b. 1947, also spelled Kukujev and Kukuyev), Atlantic Scientific Research Institute of Marine Fisheries & Oceanography (AtlantNIRO)

**Rajella leoparda** (von Bonde & Swart 1923)
referring to numerous dark brown, nearly black spots on tail and disc, the “whole effect [of which] resembles the appearance of a leopard skin”

**Rajella linteae** (Fries 1838)
of linen, referring to pale or gray coloration, said to resemble a linen sail

**Rajella nigerrima** (de Buen 1960)
blackish, referring to dark dorsal surface

**Rajella paucispinosa** Weigmann, Stehmann & Thiel 2014
*paucus*, few; *spinosus*, thorny, referring to small number of thorns on dorsal surface compared to congeners

**Rajella purpuriventris** (Bigelow & Schroeder 1962)
*purpureus*, purple; *ventralis*, belly, referring to dark purple to black belly

**Rajella ravidula** (Hulley 1970)
somewhat gray, referring to pale gray dorsal surface of disc

**Rajella sadowskii** (Krefft & Stehmann 1974)
in honor of Latvian-born ichthyologist Viktor Sadowski (1909-1990), Instituto Oceanográfico da Universidade de São Paulo (Brazil), whose works have considerably added to the knowledge of southwestern Atlantic elasmobranchs

**Rostroraja** Hulley 1972
*rostrum*, referring to produced and elongate snout; *raia*, Latin for ray or skate

**Rostroraja ackleyi** (Garman 1881)
in honor of Lieut. Seth M. Ackley (1845-1908), United States Navy, “to whose energy and enthusiasm we were indebted for much valuable assistance”

**Rostroraja alba** (Lacepède 1803)
*albus*, white, referring to bright white ventral surface

**Rostroraja bahamensis** (Bigelow & Schroeder 1965)
*bahamensis*, suffix denoting place: the Bahama Banks, type locality

**Rostroraja cervigoni** (Bigelow & Schroeder 1964)
in honor of ichthyologist and marine biologist Fernando Cervigón Marcos (1930-2017), Estacion de Investigaciones Marines de Margarita, for the opportunity to describe the Venezuelan specimens

**Rostroraja eglanteria** (Bosc 1800)
*eglantina*, the briar rose, referring to small but very sharp spines covering dorsal surface

**Rostroraja equatorialis** (Jordan & Bollman 1890)
of the equator, referring to type locality off west coast of Colombia between Panama and the Galapagos Islands

**Rostroraja texana** (Chandler 1921)
*ana*, belonging to: American state of Texas, type locality in Gulf of Mexico, off jetties in Galveston

**Rostroraja velezi** (Chirichigno F. 1973)
in honor of Juan Vélez D., Instituto del Mar del Perú, for his dedication to ichthyology and for collaborating with Chirichigno F.

**Spiniraja** Whitley 1939
*spinus*, spiny, referring to how *Raja ogilbyi* (=*S. whitleyi*) “differs from true *Raja* in being very spiny above and below”; *raia*, Latin for ray or skate

**Spiniraja whitleyi** (Iredale 1939)
in honor of Australian ichthyologist-malacologist Gilbert Percy Whitley (1903-1975), as a replacement name for the preoccupied *Raja scabra* Ogilby, which Whitley had used in a recent article; “Mr. Whitley’s oversight,” wrote Iredale, “is the more remarkable as he and I pride ourselves that we carefully check all of our references many times,
yet even with our meticulousness errors may slip through”; Whitley later wrote that Iredale “supplied a barrage of vigorous criticism”

Family ANACANTHOBATIDAE Legskates

5 genera · 14 species

**Anacanthobatis von Bonde & Swart 1923**
a-., without, *akantha*, thorn, referring to smooth skin of *A. marmorata*; *batis*, Greek for a flat fish, usually applied to a skate or ray

*Anacanthobatis marmorata* (von Bonde & Swart 1923)
marbled, referring to profuse mottling of very small, round white spots

**Indobatis Weigmann, Stehmann & Thiel 2014**
*Indo-*, referring to distribution in the western Indian Ocean; *batis*, Greek for a flat fish, usually applied to a skate or ray

*Indobatis ori* (Wallace 1967)
acronym of the Oceanographic Research Institute (Durban, South Africa), under whose auspices this species was collected and described

**Schroederobatis Hulley 1973**
patronym not identified but clearly in honor of William C. Schroeder (1895-1977), Woods Hole Oceanographic Institution, co-author of type species, *A. americanus*; *batis*, Greek for a flat fish, usually applied to a skate or ray

*Schroederobatis americana* (Bigelow & Schroeder 1962)
American, referring to distribution off Atlantic coasts of Central and South America

**Sinobatis Hulley 1973**
*Sino-*, of Sinica (China), probably referring to South China Sea distribution of *S. melanosoma* and *S. borneensis*; *batis*, Greek for a flat fish, usually applied to a skate or ray

*Sinobatis andamanensis* Last & Bussarawit 2016
-ensis, suffix denoting place: Andaman Sea, type locality

*Sinobatis borneensis* (Chan 1965)
-ensis, suffix denoting place: Borneo, referring to type locality near Sarawak, Borneo, in the South China Sea

*Sinobatis brevicauda* Weigmann & Stehmann 2016
*brevis*, short; *cauda*, tail, referring to its much shorter tail compared to other species in the family

*Sinobatis bulbicauda* Last & Séret 2008
*bulbus*, swelling; *cauda*, tail or appendage, referring to flattened expansion of tail near tip

*Sinobatis caerulea* Last & Séret 2008
blue, referring to blue dorsal and ventral coloration

*Sinobatis filicauda* Last & Séret 2008
*filum*, thread; *cauda*, tail, referring to thread-like tail tip

*Sinobatis kotlyari* Stehmann & Weigmann 2016
in honor of Alexander Kotlyar (b. 1950), P. P. Shirshov Institute of Oceanology, Russian Academy of Sciences, who collected type in 1979; through his “kind assistance” the authors were able to “reconstruct and verify from his original logbook” the type locality

*Sinobatis melanosoma* (Chan 1965)
*melanos*, black; *soma*, body, referring to dorsally blackish to blackish-brown disc

*Sinobatis stenosoma* (Li & Hu 1982)
*stenos*, narrow; *soma*, body, referring to long and narrow disc

**Springeria Bigelow & Schroeder 1951**
in honor of Stewart Springer (1906-1991), for his “productive studies of the elasmobranchs of Florida and the Gulf”

*Springeria foliostriata* Bigelow & Schroeder 1951
*foli-*, leaf; *rostri*, snout, referring to peculiar leaf-like extension at end of snout

*Springeria longirostris* (Bigelow & Schroeder 1962)
*longus*, long; *rostri*, snout, referring to longer snout compared to *Schroederobatis americana*, its presumed congener at the time