Order CYPRINODONTIFORMES (part 2 of 4)

Suborder APLOCHEILOIDEI (cont.)

Family RIVULIDAE New World Rivulines

48 genera/subgenera · 467 species/subspecies

Subfamily Rivulinae

Anablepsoides Huber 1992

-oides, have the form of: referring to occurrence of A. atratus close to the water surface and never at deeper levels, similar to Anableps (Anablepidae), and alluding to Garman’s 1895 comment that its shape “approaches” that genus

Anablepsoides amanã (Costa & Lazzarotto 2008)
named for Amanã Sustainable Development Reserve in Amazonas, Brazil, where type locality (stream draining in lago Amanã) is situated; amanã comes from the indigenous language Nheengatu, meaning “rain water”

Anablepsoides amphoreus (Huber 1979)
like an amphora (a two-handled pot with a neck narrower than the body), referring to two pre-opercular neuromasts (like the “ears” or handles of an amphora) and to overall color and body shape of both sexes

Anablepsoides atratus (Garman 1895)
dressed in black, referring to any or all of the following: blackish lower surface and black or dark bands on sides of both sexes

Anablepsoides bahianus (Huber 1990)
-bahianus, belonging to: Bahia, Brazil, type locality, and honoring the hospitality of the Bahian people

Anablepsoides beniensis beniensis (Myers 1927)
-beniensis, suffix denoting place: Río Beni, Bolivia, type locality (also occurs in Brazil)

Anablepsoides beniensis lacustris (Myers 1927)
lacustrine (belonging to a lake), referring to lagoons along shores of Lake Rogagua, Bolivia, type locality

Anablepsoides bibosi Valdesalici & Gil 2019

named for arroyo Bibosi, Río Chapare drainage, Tiraque, Cochabamba, Bolivia, type locality

Anablepsoides bondi (Schultze 1949)
in honor of Franklin F. Bond (1897-1946), University of Rochester (Rochester, New York, USA), who collected type while researching mosquito-control fishes in Venezuela

Anablepsoides cajariensis (Costa & De Luca 2011)
-cajariensis, suffix denoting place: Cajari River drainage, Amapá, Brazil, only known area of occurrence

Anablepsoides caurae (Radda 2004)
of Río Caura, Bolivar State, Venezuela, where it is endemic

Anablepsoides cearenensis (Costa & Vono 2009)
-cearenensis, suffix denoting place: Ceará, Brazil, where type locality (São Gonçalo do Amarente) is situated; also first record of Rivulus (original genus) from Ceará

Anablepsoides chapare Valdesalici & Gil 2017

named for Chapare Province, Bolivia, where type locality (small pool near Isinuta, Isiboro River drainage, tributary of Río Mamoré, Departamento Cochabamba) is situated

Anablepsoides christinae (Huber 1992)
in honor of Huber’s wife Christine, for her patience and assistance while he was editing the monograph in which the description appeared

Anablepsoides corpulentus (Thomerson & Taphorn 1993)
stout, referring to its “short stocky” body

Anablepsoides cryptocalicus (Seegers & Huber 1981)
kryptos, hidden; kallos, beauty, referring to modest but still attractive colors of the male [authorship sometimes given as (Seegers 1980)]

Anablepsoides deltaphilus (Seegers 1983)
philus, loving or fond of: Orinoco River delta, Venezuela, type locality
Anablepsoides derhami (Fels & Huber 1985)  
in honor of Swiss ichthyologist and aquarist Patrick de Rham (b. 1936), who collected type, and for his contributions  
to the study of killifishes from Peru

Anablepsoides elongatus (Fels & de Rham 1981)  
elongate, referring to elongate body shape compared to presumed congeners in Rivulus at time of description

Anablepsoides erberi (Berkenkamp 1989)  
in honor of German aquarist Hans Joachim Erber, for his longtime work breeding killifishes and his assisting  
Berkenkamp for many years

Anablepsoides transvermeuleni Valdesalici 2015  
in honor of friend and killifish aquarist Frans Vermeulen, Aruba, who collected type with his wife Marjan

Anablepsoides gamae Costa, Bragança & Amorim 2013  
in honor of ichthyologist Cecile Gama, for her “pioneering ichthyological field studies” in the Amazon of Amapá,  
Brazil, where this killifish occurs

Anablepsoides gaucheri (Keith, Nandrin & Le Bail 2006)  
in honor of the authors’ friend, Philippe Gaucher, Scientific Director, Centre National de la Recherche Scientifique  
and Mission Parc de la Guyane (Cayenne, French Guiana), who found the first specimens, for his “fascinating” work  
on Amazonian fauna

Anablepsoides hartii (Boulenger 1890)  
in honor of British botanist John Hinchley Hart (1847-1911), Superintendent of the Royal Botanic Gardens, Trinidad,  
who “presented” several specimens to the British Museum

Anablepsoides henschelae Costa, Bragança & Amorim 2013  
in honor of zoologist Elisabeth Henschel, Federal University of Rio de Janeiro, for “valuable help” during collecting  
trips in the Amazon

Anablepsoides hoetmeri Nielsen, Baptista & van den Berg 2016  
in honor of Jan Willem Hoetmer, Dutch biologist, environmentalist and killifish hobbyist, who discovered this species  
and helped collect type

Anablepsoides holmiae (Eigenmann 1909)  
of Holmia, a village in Guyana, referring to its occurrence in creeks “about” Holmia

Anablepsoides igneus (Huber 1991)  
fiery, referring to red color pattern of belly and lower fins (pectorals, anal and lower caudal) of males

Anablepsoides immaculatus (Thomerson, Nico & Taphorn 1991)  
im-, not; maculatus, spotted, referring to absence of “rivulus spot” on upper part of caudal-fin root of females

Anablepsoides intermittens (Fels & de Rham 1981)  
intermittens usually means intermittent (i.e., irregular), but in this case appears to mean intermediate (in between or in  
the middle), referring to its supposed intermediate systematic position between A. peruanus and A. amphorius

Anablepsoides iridescens (Fels & de Rham 1981)  
referring to iridescent or reflective colors on sides of males

Anablepsoides jari Costa, Bragança & Amorim 2013  
named for lower Jari river drainage, Amazon River basin, northern Brazil, where it appears to be endemic

Anablepsoides jucontus (Huber 1992)  
pleasant or agreeable, referring to “colorful & delicate characteristics” of its color pattern

Anablepsoides lanceolatus (Eigenmann 1909)  
referring to its “pointed, lanceolate” caudal fin

Anablepsoides limoncochae (Hoedeman 1962)  
of Limoncocha, Río Napo tributary, Ecuador, type locality

Anablepsoides lineasoppilatae Valdesalici & Schindler 2013  
lineae, stripes; oppilatae, barred, referring to interrupted stripes on sides

Anablepsoides luitalimae Nielsen 2016  
in honor of Luita Lima, aunt of ornamental-fish “fisherman” Gilson Pontes Lima, who collected type; Gilson asked  
that fish be named after his aunt because she educated him (Dalton Nielsen, pers. comm.)

Anablepsoides lungi (Berkenkamp 1984)  
in honor of German aquarist Karl Lung, who helped collect type

Anablepsoides mazaruni (Myers 1924)  
named for the Mazaruni River, Guyana, “apparently being the first fish to be described” from that river
Anablepsoides mejiai (Vermeulen 2020)
in honor of zoologist Daniel Mejia-Vargas, Universidad de los Andes (Colombia), who discovered this species, for his many contributions to ichthyology, especially to our knowledge of the killifishes of Colombia

Anablepsoides micropus (Steindachner 1863)
*micro*-, small; *pous*, foot, referring to extremely small ventral fins (“Die V entrale ist äusserst kurz”)

Anablepsoides monticola (Staeck & Schindler 1997)
of the mountains, referring to comparatively high altitude of type locality (eastern slope of Cordillera de Alcucuiro, Ecuador)

Anablepsoides ophiomimus (Huber 1992)
ophis, snake; *mimus*, mime, referring to shape and “known behavior of the superspecies” to which it initially belonged, described as “territorial & very keen on jumping”

Anablepsoides ornatus (Garman 1895)
decorated, presumably referring to “puncticulations” on body, which “form transverse blotches along the back, streaks along the sides, series of dots across the fins, a dark band on the lower lip, and a dark streak backward from below each eye”

Anablepsoides ottonii Costa, Bragança & Amorim 2013
in honor of Brazilian ichthyologist Felipe Ottomni, Universidade Federal do Maranhão, “for his constant enthusiasm and friendship, and important participation during expeditions to northern Brazil”

Anablepsoides parlettei (Valdesalici & Schindler 2011)
in honor of American sculptor and jewelry maker Casey Parlette (b. 1979), who discovered this species while living for a year in Peru; he co-collected type, provided the authors with type locality data, photographs and specimens, and has since launched a line of nature-inspired jewelry named “parlettei jewelry” after this “colorful little fish”

Anablepsoides peruanus (Regan 1903)
Peruvian, referring to Amazon River basin of Peru, where it is endemic

Anablepsoides roraima Costa, Bragança & Amorim 2013
named for Brazilian state of Roraima, where it occurs in the middle rio Branco drainage, Amazon basin

Anablepsoides rubrolineatus (Fels & de Rham 1981)
rubro-, red; *lineatus*, lined, referring to red longitudinal lines on sides of males

Anablepsoides speciosus (Fels & de Rham 1981)
showy or brilliant, referring to brilliant red and green spots on sides of males

Anablepsoides stagnatus (Eigenmann 1909)
from a pool of standing water, described as “Abundant in little pools just below the saw-mill” at Christianburg, Guyana (also occurs in Suriname)

Anablepsoides taeniatus (Fowler 1945)
striped, referring to “distinct dark longitudinal bands following in the scale junctures” on upper sides and back of males

Anablepsoides tessellatus (Huber 1992)
tessellated, i.e., inlaid with small square stones, referring to small square spots on sides of preserved males

Anablepsoides tocantinensis (Costa 2010)
-ensis, suffix denoting place: floodbanks of rio Tocantins, near Sampaio, Tocantins, Brazil, only known area of occurrence

Anablepsoides urophthalmus (Günther 1866)
oura, tail; *ophthalmus*, eye, referring to white-edged ocellus on upper part of caudal-fin root of females

Anablepsoides urubuiensis Costa 2013
-ensis, suffix denoting place: Urubui River floodplains, northern Brazil, only known area of occurrence

Anablepsoides vieirai Nielsen 2016
in honor of biologist and environmentalist Gilberto da Silva Vieira, who discovered this killifish and helped collect type

Anablepsoides waimacui (Eigenmann 1909)
Waimacui, local name for this killifish among the indigenous people along the Potaro River basin, Guyana

Anablepsoides xanthotus (Ahl 1926)
xanthus, yellow; *notus*, back, referring to “back and upper sides light yellowish in both sexes” (translation)

Anablepsoides xinguensis (Costa 2010)
-ensis, suffix denoting place: rio Xingú basin, near Altamira, Pará, Brazil, only known area of occurrence

Atlantirivulus Costa 2008
*Atlanticus*, Atlantic; *rivulus*, stream, referring to occurrence in streams of the Atlantic Forest of eastern Brazil
**Atlantirivulus depressus** (Costa 1991)  
depressed, referring to smaller head depth compared to closely related congeners

**Atlantirivulus guanabarensis** Costa 2014  
-ensis, suffix denoting place: river drainages flowing into Guanabara Bay, and adjacent coastal plains to the west, Estado do Rio de Janeiro, Brazil, where it occurs

**Atlantirivulus haraldsioli** (Berkenkamp 1984)  
in honor of German biologist and limnologist Harald Sioli (1910-2004), considered the founder of Amazonian ecology

**Atlantirivulus janeiroensis** (Costa 1991)  
-ensis, suffix denoting place: Estado do Rio de Janeiro, Brazil, where type locality (forest stream near Silva Jardim) is situated

**Atlantirivulus jurubatibensis** (Costa 2008)  
-ensis, suffix denoting place: Parque Nacional de Jurubatiba, Estado do Rio de Janeiro, Brazil, type locality

**Atlantirivulus lazzarotii** (Costa 2007)  
in honor of biologist Henrique Lazzaroto (correctly spelled Lazzarotto), Universidade Federal do Rio de Janeiro, who collected the first specimens (paratypes)

**Atlantirivulus luelingi** (Seegers 1984)  
in honor of Karl Heinz Lüling (1913-1984), curator of fishes, Zoologisches Forschungsmuseum Alexander Koenig (Bonn), who collected type under “particularly difficult personal circumstances” (translation) in 1982

**Atlantirivulus maricensis** Costa 2014  
-ensis, suffix denoting place: Maricá lagoon system, Estado do Rio de Janeiro, Brazil, where it appears to be endemic

**Atlantirivulus nudiventris** (Costa & Brasil 1991)  
nudus, bare; ventris, belly, referring to absence of pelvic fins

**Atlantirivulus paranaguensis** Costa 2014  
-ensis, suffix denoting place: river basins flowing into Paranaguá Bay, Brazil, where it appears to be endemic

**Atlantirivulus ribeirensis** Costa 2014  
-ensis, suffix denoting place: Ribeira de Iguape river basin, São Paulo, Brazil, where it appears to be endemic

**Atlantirivulus riograndensis** (Costa & Lanés 2009)  
-ensis, suffix denoting place: Rio Grande do Sul, Brazil, where type locality (Pai João swamp, Parque Nacional da Lagoa do Peixe) is situated; also first record of *Rivulus* (original genus) from Rio Grande do Sul

**Atlantirivulus santensis** (Köhler 1906)  
-ensis, suffix denoting place: west of Santos, São Paulo, Brazil, presumed type locality (described from an aquarium specimen, no type deposited)

**Atlantirivulus simplicis** (Costa 2004)  
simple, referring to unadorned color pattern of males

**Atlantirivulus unaensis** (Costa & De Luca 2009)  
-ensis, suffix denoting place: Una, a “well preserved area” of Atlantic Forest in Bahia, Brazil, type locality

**Austrofundulus Myers 1932**  
*austro-*, south, referring to occurrence of *A. transilis* in Venezuela; *Fundulus*, presumed to be a South American representative of the subfamily Fundulinae (now a full family of North American killifishes)

**Austrofundulus guajira** Hrbek, Taphorn & Thomerson 2005  
named for the Guajira peninsula of Venezuela and Colombia, where it occurs

**Austrofundulus leohaignei** Hrbek, Taphorn & Thomerson 2005  
in honor of the late Emil “Leo” Hoigne (d. 1996, pronounced on-yen), Argentinian aquarist (relocated to Venezuela), who discovered this species (in 1969) and many other annual killifishes in Venezuela; “It was our privilege to know him and share his delight in discovering and keeping annual killifishes.”

**Austrofundulus leoni** Hrbek, Taphorn & Thomerson 2005  
of a leo, lion, referring to its “large size and majestic nature,” and for the family of Oscar León Mata (1964-2018), killifish collector and aquarist, environmental engineer, and fish curator (Museo de Ciencias Naturales en Guanare); the family made Hrbek’s stay in Venezuela “especially pleasant” and were “instrumental to conducting research in the Maracaibo basin”

**Austrofundulus limnaeus** Schultz 1949  
marshy, referring to its seasonal pond habitat

**Austrofundulus myersi** Dahl 1958  
in honor of Stanford University ichthyologist George S. Myers (1905-1985), “whose works [on neotropical killifishes] have helped [Dahl] more than anything else in his endeavors”
Austrofundulus rupununi Hrbek, Taphorn & Thomerson 2005
named for the Rupununi savannah, Guyana, only known area of occurrence

Austrofundulus transilis Myers 1932
that goes across, allusion not explained, perhaps referring to its “most remarkable” resemblance of this Venezuelan species with the African Adiniops (subgenus of Nothobranchius, Nothobranchiidae), although this “likeness appears to be a matter of parallelism rather than of close relationship”

Cynodonichthys Meek 1904
cyno-, dog andodon, tooth, referring to large “canine-like” tooth on each side in front of upper jaw of C. tenuis; ichthys, fish

Cynodonichthys birkhahni (Berkenkamp & Etzel 1992)
in honor of German aquarist Holger Birkhahn, for “intensive” (translation) collecting work during two trips to Panama, including helping to collect type of this species

Cynodonichthys boehlkei (Huber & Fels 1985)
in honor of the late James E. Bohlke (1930-1982), Academy of Natural Sciences of Philadelphia, who helped collect type in 1973

Cynodonichthys brunneus (Meek & Hildebrand 1913)
brown, referring to brownish body color

Cynodonichthys chucunaque (Breder 1925)
named for Río Chucunaque, Darién, Panama, where type locality (a small side stream near Yavisa) is situated

Cynodonichthys degreefi (Collier 2016)
in honor of Dutch (now living in Florida, USA) aquarist Jaap-Jan De Greet (b. 1957), who collected type

Cynodonichthys elegans (Steindachner 1880)
elegant, fine or select, allusion not explained, possibly referring to attractive coloration of red spots on sides of males (smaller and more subdued on females)

Cynodonichthys frommi (Berkenkamp & Etzel 1993)
in honor of aquarist Daniel W. Fromm (Cherry Hill, New Jersey, USA), for active field work and fish collections in Costa Rica and Panama during various trips, and for breeding the fish he collected and publishing the results

Cynodonichthys fuscolineatus (Bussing 1980)
fuscus, dark or dusky; lineatus, lined, referring to dark brown specks that form irregular lines on sides of both sexes

Cynodonichthys glaucus (Bussing 1980)
hoary blue, referring to bluish-gray coloration of males

Cynodonichthys godmani (Regan 1907)
in honor of Frederick DuCane Godman (1834-1919), entomologist, ornithologist and collector in Central America for the British Museum, who collected type [Regan originally used the Germanic spelling (godmanni) but emended it later that year, which is in prevailing usage]

Cynodonichthys hendrichsi (Álvarez & Carranza 1952)
in memory of Pedro Hendrichs Perez, National Institute of Statistics and Geography (Aguascalientes City, México), father of type collector, Pedro H. D. Hendrichs

Cynodonichthys hildebrandi (Myers 1927)
in honor of Samuel F. Hildebrand (1883-1949), “who has added much to our knowledge of the fishes of Panama,” where this species occurs (also in Costa Rica); type supplied by Carl L. Hubbs, who suggested that it be named after Hildebrand

Cynodonichthys isthmensis (Garman 1895)
-ensis, suffix denoting place: Costa Rica (an isthmus), type locality (also occurs in Nicaragua)

Cynodonichthys kuelpmanni (Berkenkamp & Etzel 1993)
in honor of aquarist Volker Külpmann (Cuxhaven, Germany), who participated in field work in Panama and helped collect type
Cynodonichthys leucurus (Fowler 1944)
leuco-, white; oura, tail, referring to white border around dark-brown caudal fin of males

Cynodonichthys magdalenae (Eigenmann & Henn 1916)
of Magdalena, referring to highlands of Magdalena River basin, west of Bogotá, Colombia, where specimens (except for two from Boquia, Cauca River basin) were collected

Cynodonichthys monikae (Berkenkamp & Etzel 1995)
in honor of Monika Etzel, wife of junior author, for accompanying his collecting trips in the 1970s, and for the “immense patience and sacrifice” that made 20 “time-consuming and costly study trips” possible (translation)

Cynodonichthys montium (Hildebrand 1938)
of mountains, referring to its occurrence in small mountain streams in Atlantic river basins of Panama

Cynodonichthys myersi (Hubbs 1936)
in honor of George S. Myers (1905-1985), then Curator of Fishes, U.S. National Museum, for his work on rivuline fishes

Cynodonichthys pacificus (Huber 1992)
referring to both meanings of “pacific,” i.e., peaceful, for its “general quiet behavior,” and for its distribution along Pacific coastal river basins of Colombia

Cynodonichthys rubripunctatus (Bussing 1980)
rubri-, red; punctatus, spotted, referring to distinctive red spots on sides of adult males

Cynodonichthys siegfriedi (Bussing 1980)
in honor of Peter Siegfried, who “dedicated considerable effort” and “kindly volunteered his time on numerous occasions” in collecting several series of this and other Costa Rican Rivulus (original genus) for Bussing’s study

Cynodonichthys sucubti (Breder 1925)
named for Rio Sucubti drainage, Darien, Panama, where type locality (a small side stream) is situated

Cynodonichthys tenuis Meek 1904
slender, referring to its elongate body, “depressed anteriorly, compressed posteriorly”

Cynodonichthys uroflammeus (Bussing 1980)
oura, tail; flammeus, flame, referring to “flame-colored tail region” of males

Gnatholebias Costa 1998
gnathus, jaw, referring to “robust and long” jaw; lebias, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

Gnatholebias hoignei (Thomerson 1974)
in honor of Emil “Leo” Hoigne (d. 1996, pronounced on-yea), Argentinian aquarist (relocated to Venezuela), who collected type, for contributions to our knowledge of New World annual rivulines

Gnatholebias zonatus (Myers 1935)
banded, referring to 11 narrow dark vertical bars along sides of both sexes, the last on caudal peduncle

Laimosemion Huber 1999
laimos, throat, referring to red pre-opercular marking (“shield”) in males; semeion, short for Aphyosemion (Nothobranchiidae), referring to “striking similarities” with this African genus, including the so-called “shield”

Subgenus Laimosemion

Laimosemion agilae (Hoedeman 1954)
of Agila, near type locality, described as a rivulet between Agila at Suriname River and Berlijn at Para River, Suriname (also occurs in Guyana and French Guiana)

Laimosemion breviceps (Eigenmann 1909)
brevi-, short; ceps, head, “Distinguished by its short head” compared to presumed Guyanan congeners in Rivulus
**Laimosemion cladophorus** (Huber 1991)
*clado-* , branch; *phorus*, bearer, referring to caudal fin of males, with red stripes, “made of joint branches, like a tree” (per Huber, 2001)

**Laimosemion dibaphus** (Myers 1927)
double-dyed garment or robe, allusion not explained, perhaps referring to “dark purplish brown” body color and white venter and/or “rows of dark spots run[ning] down the scale-series, possibly with a series of maroon dots between rows”; Huber (1992) suggests name refers to blue and red color on males, but these colors are not mentioned by Myers

**Laimosemion frenatum** (Eigenmann 1912)
briddled, referring to “conspicuous” black band from eyes to around the chin

**Laimosemion geayi** (Vaillant 1899)
in honor of pharmacist and natural history collector Martin François Geay (1859-1910), who collected type

**Laimosemion gransabanae** (Lasso, Taphorn & Thomerson 1992)
of Gran Sabana, Bolivar, Venezuela, where type locality is situated

**Laimosemion lyricauda** (Thomerson, Berkenkamp & Taphorn 1991)
*lyris*, lyre; *cauda*, tail, referring to extensions of dorsal and ventral caudal-fin rays of males, forming a lyretail

**Laimosemion mabura** Valdesalici & García Gil 2015
named for the Mabura Hill area of Guyana, Essequibo River drainage, where it occurs

**Laimosemion mahdiaense** (Suijker & Collier 2006)
-*ensis*, suffix denoting place: village of Mahdia, Mazaruni-Potaro District, Guyana, type locality

**Laimosemion manaense** (Hoedeman 1961)
-*ensis*, suffix denoting place: Mana River, French Guiana, type locality

**Laimosemion paruyagi** Vermeulen, Suijker & Collier 2012
in honor of Subhas Chand Paruyg (Georgetown, Guyana), local helper during most of the expeditions in Guyana made by first and second authors, who helped collect type

**Laimosemion sape** (Lasso-Alcalá, Taphorn, Lasso & León-Mata 2006)
named to honor the local indigenous people of the Sape tribe, inhabitants of the upper Paragua River system, Caroní River drainage, Bolivar, Venezuela, type locality

**Laimosemion strigatum** (Regan 1912)
streaked, presumably referring to “dark longitudinal stripes along series of scales on sides” of males

**Laimosemion torrenticola** (Vermeulen & Isbrücker 2000)
*torrens*, rushing waters; *incola*, inhabitant, referring to its occurrence in small streams with fast-running water

**Laimosemion xiphidius** (Huber 1979)
small sword, referring to black band on lower caudal fin of males, which is tapered like a sword

**Subgenus Owiyeye** Costa 2006
local name for *L. amanapira* used by Tuanos Indians from the upper rio Negro, Brazil (a name first reported by Alfred Russel Wallace in notes made during his 1850-1852 expedition to the Amazon)

**Laimosemion altivelis** (Huber 1992)
*altus*, high; *velum*, sail, referring to it high and large unpaired fins of males

**Laimosemion amanapirae** (Costa 2004)
*amana-pira-miri* (*amana*, rain; *pira*, fish; *miri*, small), Indian native name recorded by Alfred Russel Wallace (1850-52) for a smaller, similar species (possibly *L. tecminae*); according to Wallace, the fish is found in small pools in the forest litter after rain (the same conditions in which *L. amanapira* was collected), which led the locals to believe it fell with rain from the sky

**Laimosemion carolinae** (Vermeulen & Mejía-Vargas 2020)
in honor of Carolina Ocaña-Insuasti, co-discoverer of this species, for her “continuous assistance” with the authors’ work

**Laimosemion flammaecauda** (Vermeulen & Mejía-Vargas 2020)
*flamma*, flaming; *cauda*, tail, referring to flame-like radial lines on caudal fin of males, apparently unique among known congers

**Laimosemion foliiscola** (Vermeulen & Mejía-Vargas 2020)
*foliis*, leaves; *cola*, dweller or inhabitant, referring to its occurrence in leaf litter in isolated sinkholes with no visible connection to any creek or running water

**Laimosemion gili** Valdesalici & Nielsen 2017
in honor of ichthyologist José Ramón García Gil (Gijón, Spain), who discovered this and many other killifish species
**Laimosemion jauaperi** Costa & Bragança 2013  
named for the rio Jauaperi drainage, Roraima, Brazil, only known area of occurrence

**Laimosemion kirovskyi** (Costa 2004)  
in honor of biologist Alexandre Kirovsky (b. 1968), who collected most of type series

**Laimosemion leticia** Valdesalici 2016  
referring to its occurrence near town of Leticia, southern Colombia

**Laimosemion nicoi** (Thomerson & Taphorn 1992)  
in honor of Leo G. Nico, Research Biologist, U.S. Geological Survey, who collected type, for many contributions to the study of Venezuelan fishes

**Laimosemion rectocaudatum** (Fels & de Rham 1981)  
*rectus*, straight; *caudatus*, tailed, referring to straight (instead of curved) posterior edge (sometimes with two small points) of caudal fin of adult males

**Laimosemion roemeri** (Costa 2003)  
in honor of German aquarist and ichthyologist Uwe Römer, who collected type [originally spelled “romeri”; since Römer is a German name, emendment to “roemeri” is necessary]

**Laimosemion staecki** (Schindler & Valdesalici 2011)  
in honor of Wolfgang Staeck (b. 1939), biologist and cichlid aquarist, who collected type, for his commitment to South American freshwater fishes and his contributions to the taxonomy of the families Rivulidae and Cichlidae

**Laimosemion tecminae** (Thomerson, Nico & Taphorn 1992)  
of Técnica Minera, or TECMIN (a Venezuelan mining company), which had been conducting geological and biological surveys in Orinoco River basin of Venezuela, where this killifish occurs; their support made its collection possible (also occurs in upper Negro River basin of Brazil)

**Laimosemion tomasi** (Vermeulen, Valdesalici & Garcia-Gil 2013)  
in honor of Joachim Tomas (1963-2012), German aquarist, adventurer and fish collector, who helped collect type; he died in a sporting accident two years later

**Laimosemion uakti** (Costa 2004)  
named for *uakti*, a Tucano mythological being living on the banks of the upper rio Negro (Amazonas, Brazil, where this killifish occurs), noted for his beauty and the sounds produced by his body

**Laimosemion uatuman** (Costa 2004)  
named for rio Uatumã basin, Amazonas, Brazil, where type locality (a temporary pool) is situated

**Laimosemion ubim** Costa & Lazzarotto 2014  
named for Igarapé do Ubim, Lago Amanã system, Amazonas, Brazil, type locality (Ubim is the indigenous name of small Amazonian palms of the genus *Geonoma*, usually reaching 2-4 m in height)

**Llanolebias** Hrbek & Taphorn 2008  
from the Spanish *Llanos*, grassy plains, particularly the Orinoco River savannahs of Venezuela and Colombia, where it occurs; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Llanolebias stellifer** (Thomerson & Turner 1973)  
star-bearer, referring to scattered iridescent sky-blue scales on both sexes

**Maratecoara** Costa 1995  
Tupí word for fighter, referring to aggressive territorial behavior of males kept in aquaria

**Maratecoara formosa** Costa & Brasil 1995  
beautiful, referring to oblique orange stripes on sides and elongate dorsal and anal fins of males

**Maratecoara gesmonei** Nielsen, Martins & Britzke 2014  
in honor of ornamental-fish trader Gesmone Fernandes Godoy, who discovered this killifish

**Maratecoara lacortei** (Lazara 1991)  
in honor of American aquarist Rosario LaCorte (b. 1929), who discovered this killifish with fish trader Luis de Camargo Costa (see *Spectrolebias costai*) and provided photographs

**Maratecoara splendida** Costa 2007  
splendid, referring to brilliant colors in males

**Melanorivulus** Costa 2006  
*melanos*, black, proposed as a subgenus of *Rivulus* characterized by black margins on unpaired and pelvic fins

**Melanorivulus athogrammus** Nielsen & Britzke 2019  
aithos, reddish brown; grammus, line, referring to 5-6 reddish-brown vertical lines on caudal fin of males
Melanorivulus amambaiensis Volcan, Severo-Neto & Lanés 2018
-ensis, suffix denoting place: rio Amambai drainage, Mato Grosso do Sul, Brazil, where it occurs

Melanorivulus apiamici (Costa 1989)
from the Tupí words apiamí, oblique, and ici, rows or lines, referring to oblique lines on sides of both sexes

Melanorivulus atlanticus Costa, Bragança & Ottoni 2015
Atlantic, being the first record of Melanorivulus from the Atlantic Forest region of northeastern Brazil

Melanorivulus bororo (Costa 2008)
named for the Bororo, indigenous tribe formerly inhabiting a vast region of the Paraguay basin of central Brazil, where this killifish occurs

Melanorivulus britzkei Nielsen 2017
in honor of ichthyologist Ricardo Britzke, São Paulo State University (Brazil)

Melanorivulus canesi Nielsen 2017
in honor of the late Paulo José Ferreira Canes, Brazilian aquarium hobbyist and environmentalist

Melanorivulus crixas (Costa 2007)
referring to its occurrence in the Crixás Aça drainage (Goiás, Brazil), named for the indigenous Crixás tribe who formerly inhabited this region

Melanorivulus cyanopterus (Costa 2005)
cyano, blue; pterus, fin, referring to blue anal fin of both sexes

Melanorivulus dapazi (Costa 2005)
in honor of Brazilian ichthyologist Ricardo Campos da Paz (b. 1963), the first collector of this species

Melanorivulus decoratus (Costa 1989)
decorated, referring to color pattern: red oblique bars on anterior sides against a blue background on males, similar but subdued (minus the blue) on females

Melanorivulus egens (Costa 2005)
poor, referring to absence of dark marks on caudal fin of males (unlike all other species then classified in the Rivulus punctatus species group)

Melanorivulus faucireticulatus (Costa 2008)
fauces, throat; reticulatus, net-like or netted, referring to black reticulate color pattern on ventral portion of head in females

Melanorivulus flavipinnis Costa 2017
flavus, yellow; pinnis, fin, referring to bright-yellow color in caudal fin of males

Melanorivulus formosensis (Costa 2008)
-ensis, suffix denoting place: rio Formoso floodplains, Goiás, Brazil, where it appears to be endemic

Melanorivulus giarettai (Costa 2008)
in honor of Brazilian herpetologist Ariovaldo A. Giaretta (b. 1966), Universidade Federal de Uberlândia (Brazil), the first collector of this species

Melanorivulus ignescens Costa 2017
becoming inflamed, referring to orange anal fin of males

Melanorivulus illuminatus (Costa 2007)
iluminated, referring to bright-blue color of sides of males

Melanorivulus imperatrizensis Nielsen & Pinto 2015
-ensis, suffix denoting place: occurring near the city of Imperatriz, Maranhão, Brazil

Melanorivulus interruptus Volcan, Severo-Neto & Lanés 2018
interrupted, referring to conspicuous, oblique, red bars forming chevron-like marks usually disrupted in midline of body of males

Melanorivulus ivinhemensis Volcan, Severo-Neto & Lanés 2018
-ensis, suffix denoting place: rio Ivinhema drainage, Mato Grosso do Sul, Brazil, where it occurs

Melanorivulus jalapensis (Costa 2010)
-ensis, suffix denoting place: rio Ivinhema drainage, Mato Grosso do Sul, Brazil, only known area of occurrence

Melanorivulus javahe (Costa 2007)
derived from the Javaés hill (Goiás, Brazil), where type locality is situated, based on name of an indigenous tribe inhabiting the middle Araguaia River basin

Melanorivulus karaja (Costa 2007)
name of the Karaja, an indigenous tribe inhabiting the region of the middle Araguaia basin (Tocantins, Brazil), where this species occurs
Melanorivulus kayabi (Costa 2008) named for Kayabi, an indigenous tribe formerly inhabiting a vast region of the Teles Pires drainage, Tapajós River basin, Mato Grosso, Brazil, type locality

Melanorivulus kayapo (Costa 2006) Kayapó, indigenous tribe inhabiting the hills where type locality (upper Rio Caiapó basin, Goiás, Brazil) is situated

Melanorivulus kunzei Costa 2012 in honor of Eduardo Kunze Bastos, author of an unpublished 1979 thesis comprising a “pioneering” study on the ecology of Rivulus pictus, which stimulated Costa into studying the taxonomy of the genus he eventually named Melanorivulus

Melanorivulus larissae Ywamoto, Nielsen & Oliveira 2020 in honor of Larissa da Silva Sobral, daughter of Daniel Sobral dos Santos, who discovered this species

Melanorivulus leali Costa 2013 in honor of Brazilian aquarist Fabiano Leal, for his dedication in breeding killifishes and for providing material of this new species

Melanorivulus linearis Costa 2018 lined, referring to red oblique lines regularly arranged on sides of males

Melanorivulus litteratus (Costa 2005) marked with letters, referring to red marks on sides of males, which resemble letters

Melanorivulus megaroni (Costa 2010) in honor of Megaron Txucarramãe, a Kaiapó indigenous leader who “gently” provided support for the ichthyological expedition to the Parque Indígena do Xingu area (Mato Grosso, Brazil), type locality

Melanorivulus modestus (Costa 1991) modest or unassuming, referring to “discreet” (translation) color pattern of males

Melanorivulus nelsoni Deprá, Silva & da Graça 2017 a pelvic-less species, in honor of ichthyologist Joseph S. Nelson (1937-2011), who published on pelvic-fin absence in bony fishes (1989), and for his “pivotal” contributions to the knowledge of fish diversity as a whole

Melanorivulus nigromarginatus Costa 2018 nigro-, black; marginatus, margined, referring to black margin on anal fin of males

Melanorivulus nigropunctatus Volcan, Klotzel & Lanés 2017 nigro-, black; punctatus, spotted, referring to black spots on head and body of both sexes, a feature not found in any other species of Melanorivulus

Melanorivulus ofaie Volcan, Klotzel & Lanés 2017 named for the Ofaié, an indigenous ethnicity who formerly inhabited the region of the right bank of Paraná River in central Brazil, including region where this killifish was discovered

Melanorivulus paracatuensis (Costa 2003) -ensis, suffix denoting place: rio Paracatu floodplains, rio São Francisco basin, Minas Gerais, Brazil, type locality

Melanorivulus paresi (Costa 2008) named for Paresi, indigenous tribe formerly inhabiting Parecis Hills, Mato Grosso, Brazil, type locality

Melanorivulus paraibaensis (Costa 2003) -ensis, suffix denoting place: Parnaíba River basin, northeastern Brazil, where it appears to be endemic

Melanorivulus petrisecundi Costa 2016 in honor of Dom Pedro II (1825-1891), Emperor of Brazil (1841-1889), born at Palace of Sao Cristovao in Rio de Janeiro (now the main building of the Museu Nacional, Universidade Federal do Rio de Janeiro), for his dedication to natural sciences, sponsoring important field studies that have resulted in great biological collections along entire Brazilian territory, including the first explorations of the area occupied by the M. zygonectes species group

Melanorivulus pictus (Costa 1989) painted, referring to color pattern of males: red chevrons on blue-green background

Melanorivulus pindorama Costa 2012 named for Município de Pindorama do Tocantins, Tocantins River drainage, Brazil, where it occurs

Melanorivulus pinima (Costa 1989) Tupi word for painted, referring to color pattern: red spots on sides and fins of males, similar (but subdued) on females

Melanorivulus planaltinus (Costa & Brasil 2008) -inus, belonging to: Planaltina (= from the high plains), referring to Município de Planaltine de Goiás, Goiás, Brazil, type locality
Melanorivulus polychromus Nielsen, Aguiar Neves, Ywamoto & de Aguiar Passos 2016
poly-, several; chromus, color, referring to variegated color pattern of males

Melanorivulus proximus Costa 2018
near or neighbor, referring to its distribution at the same drainage as M. scalaris

Melanorivulus punctatus (Boulenger 1895)
spotted, probably referring to black spots (red in life) on sides of males and/or dots on caudal fin of both sexes

Melanorivulus regularis Costa 2017
regular, referring to “regularly shaped and arranged” (not interconnected) bars on caudal fin of males

Melanorivulus rossoi (Costa 2005)
in honor of killifish hobbyist Aldovan Rosso, who lived in the region (Inhanduí River drainage, Paraná River basin, Brazil) and collected type (Wilson J. E. M. Costa, pers. comm.)

Melanorivulus rubromarginatus (Costa 2007)
rubro-, red; reticulatus, net-like or netted, referring to reticulate pattern on caudal fin of males

Melanorivulus ruboreticulatus Costa, Amorim & Bragança 2014
rubro-, red; marginatus, margined, referring to red marginal stripe of caudal, dorsal and anal fins in males, a feature not found in other species of Melanorivulus

Melanorivulus rutilicaudus (Costa 2005)
rutilis, bright red or rufous; caudus, tail, referring to diagnostic orangish-red caudal fin of females

Melanorivulus salmonicaudus (Costa 2007)
cauda, tail, referring to salmon color of caudal fin of males

Melanorivulus scalaris (Costa 2005)
of a ladder, i.e., like a flight of stairs, referring to red oblique bars with indented posterior borders on males, resembling “small squares aligned to form stairs”

Melanorivulus schuncki (Costa & De Luca 2011)
in honor of ornithologist Fábio Schunck, who helped collect type, for his “great enthusiasm and efforts directed to collecting trips”

Melanorivulus spixi Costa 2016
in honor of German biologist Johann Baptist von Spix (1781-1826), who explored Brazil (1817-1820), resulting in the first major fish collection made in the Rio Amazonas basin, with “detailed” information about the environment and people provided in “meticulous diaries,” which remain “unique records” to the present day

Melanorivulus ubirajarai Costa 2012
in honor of entomologist Ubirajara Martins de Souza (1932-2015), São Paulo University (Brazil), who, as Costa’s professor of taxonomy and friend, instilled “great enthusiasm” for studying the taxonomy and systematics of killifishes

Melanorivulus violaceus (Costa 1991)
violet-colored, referring to predominant color of males

Melanorivulus vittatus (Costa 1989)
banded, referring to red vertical chevrons on sides of both sexes

Melanorivulus wallacei Costa 2016
in honor of English naturalist Alfred Russel Wallace (1823-1913), co-founder of theory of evolution through natural selection, a major contributor to biogeography, and a collector of fishes from the Amazonas and Orinoco river basins, including the lower Rio Tocantins drainage, not far from where this new species is found; although his collections were lost in a fire, his accurate field notes and illustrations demonstrate the “importance he gave to small fish species, a[n] uncommon practice among naturalists of the time, motivating the present species naming”

Melanorivulus zygonectes (Myers 1927)
referring to Fundulus (subgenus Zygonectes) notatus (Fundulidae), a North American killifish, which has a “very similar” coloration

Micromoema Costa 1998
micro-, small, referring to its small size; Moema, a closely related and similar genus, i.e., a small Moema

Micromoema xiphophora (Thomerson & Taphorn 1992)
xipho-, sword; phorus, bearer, referring to sword-like extension of lower caudal-fin lobe of males

Millerichthys Costa 1995
in honor of Robert Rush Miller (1916-2003), University of Michigan, who co-described M. robustus in 1974; ichthys, fish

Millerichthys robustus (Miller & Hubbs 1974)
stout, referring to its being the most deep-bodied species among its presumed congener in Rivulus
**Moema Costa 1989**

Tupi word for false, referring to confusion in aquarium literature regarding placement of *M. piriana* in either *Pterolebias* or *Rivulichthys* (= *Trigonectes*).

**Moema apurinan Costa 2004**

named for the Apurinã, Portuguese name of an indigenous tribe of people (also known as Ipurinã, Popingaré and Kangitê) who inhabited lands drained by the Rio Purus basin (Acre, Brazil), near type locality

**Moema beucheyi Valdesalici, Nielsen & Pillet 2015**

in honor of environmentalist Michel Beuchey, who helped collect type

**Moema boticarioi (Costa 2004)**

named for Fundação O Boticário de Proteção À Natureza, for its support of studies in the diversity and conservation of annual killifishes

**Moema claudiae (Costa 2003)**

in honor of Costa’s wife, botanist Claudia Petean Bove (b. 1961), for “friendship and helpful working companion[ship] during annual fish collecting trips”

**Moema funkneri Valdesalici 2019**

in honor of George Funkner (Glasgow, Scotland), killifish breeder, researcher and collector of type series

**Moema hellneri Costa 2003**

in honor of Steffen Hellner, German breeder of South American killifishes, who donated type series to Costa

**Moema heterostigma Costa 2003**

*heteros*, different; *stigma*, spot or mark, referring to distinct colors (bright orange, reddish brown, dark brown) on dots on flank, which, due to their combined alignment, allow the simultaneous perception of horizontal and oblique rows

**Moema kenwoodi Valdesalici 2016**

in memory of Kenwood Perkins, father of Brian Perkins (aquarist and Amazon tour leader who collected type), for support provided to his son while studying species diversity and conservation in Peru

**Moema manuensis (Costa 2003)**

-*ensis*, suffix denoting place: Parque Nacional Manu, Río Madre de Dios basin, Peru, type locality

**Moema nudifrontata Costa 2003**

*nudus*, bare or naked; *frontata*, with front, referring to absence of scales on anterior portion of frontal region

**Moema obliqua (Costa, Sarmiento & Barrera 1996)**

oblique, referring to light oblique stripe on lower portion of caudal fin of males

**Moema pepotei Costa 1993**

from the Tupí-Guarani *pepó*, wing, and *tei*, large, referring to enlarged pectoral fins of males

**Moema peruensis (Myers 1954)**

-*ensis*, suffix denoting place: Peru, where it occurs in the Marañón River floodplains of the Amazon River basin

**Moema piriana Costa 1989**

Tupi word for striped, referring to body pattern of both sexes

**Moema portugali Costa 1989**

in honor of Brazilian ichthyologist Luiz Paulo Portugal, who collected type

**Moema quirii Huber 2003**

named at the suggestion of biologist, animal photographer, and exporter Lance R. Peck (Puerto Maldonado, Peru), who discovered this species: in honor of Peck’s wife Belinda, who was given the name “Qui i i” (hummingbird of the water, pronounced Kwee-e-e) by an Ese Eja (indigenous people of Bolivia and Peru) shaman [a noun in apposition, without the matronymic “ae”]; *M. ortegai* Costa 2003, apparently the same species, was published 12 days after *M. quirii* was published and is therefore considered a junior synonym

**Moema rubrocaudata (Seegers 1984)**

*rubro-*, red; *caudatus*, tailed, referring to “striking” orange-red color of caudal fin of living males

**Moema schleseri Costa 2003**

in honor of David M. Schleser, professional aquarist, author, photographer, fish-collecting tour leader, and ex-dentist, the first collector of this species

**Moema staekci (Seegers 1987)**

in honor of Wolfgang Staekc (b. 1939), biologist and cichlid aquarist, “as a sign of personal friendship and in memory of several ichthyological research trips we took together” (translation), he also collected type

**Moema wischmanni (Seegers 1983)**

in honor of German aquarist Hermann J. Wischmann, who helped collect type and brought specimens to Germany
Neofundulus Myers 1924
neo-, new; Fundulus, original genus of *N. paraguayensis* (now restricted to the North American Fundulidae), i.e., a new Fundulus

*Neofundulus acutirostratus* Costa 1992
*acutus*, pointed; *rostratus*, beaked, referring to pointed lateral profile of head

*Neofundulus aureomaculatus* Costa 2015
*aureus*, golden; *maculatus*, spotted, referring to numerous golden spots on sides of males

*Neofundulus guaporensis* Costa 1988
*-ensis*, suffix denoting place: rio Guaporé basin, Brazil, type locality (also occurs in Bolivia)

*Neofundulus paraguayensis* (Eigenmann & Kennedy 1903)
*-ensis*, suffix denoting place: Paraguay, where type locality (a laguna near Arroyo Trementina) is situated (also occurs in Argentina, Brazil and Bolivia)

*Neofundulus parvipinnis* Costa 1988
*parvus*, small; *pinnis*, fin, referring to shorter anal fin compared to congeners

*Neofundulus rubrofasciatus* Costa 2015
*rubro-*, red; *fasciatus*, striped, referring to red stripes on caudal peduncle and anal-fin base of males

*Neofundulus splendidus* Nielsen & Brousseau 2013
bright, shining or magnificent, referring to “exuberant” colors of the male

Papiliolebias Costa 1998
*papilio*, butterfly, referring to deep body, rounded fins and colors of males, resembling a butterfly; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

*Papiliolebias ashleyae* Nielsen & Brousseau 2014
in honor of the junior author’s daughter, Ashley Kimberly Brousseau, who collected the first specimen of this species

*Papiliolebias bitteri* (Costa 1989)
in honor of Friedrich Bitter, German killifish hobbyist, editor-in-chief of *Aquaristik*, and the first to report the existence of this species; according to Wildekamp (2004), he found it in a batch of fishes imported from Paraguay

*Papiliolebias francescae* Valdesalici & Brousseau 2014
in honor of Francesca Fontana, wife of the senior author, for her “love, friendship and support over the years”

*Papiliolebias habluetzeli* Valdesalici, Nielsen, Brousseau & Phunkner 2016
in honor of biologist Pascal István Hablützel, the first to document this species and for his research on Bolivian fishes

*Papiliolebias hatinne* Azpelicueta, Butí & García 2009
word for nice in the indigenous Chorote language of Argentina, presumably referring to color of living males (e.g., turquoise-blue anal fin)

Pituna Costa 1989
Tupí word for night, referring to color pattern of male *P. poranga*: golden spots on a dark body, like stars in the night sky

*Pituna brevirostrata* Costa 2007
*brevi*, short; *rostrata*, snouted, referring to short snout (in contrast with its big eyes)

*Pituna compacta* (Myers 1927)
referring to its “very compact” body, “compressed posteriorly”

*Pituna obliqueseriatia* Costa 2007
*obliquus*, oblique; *seriatus*, with series, referring to oblique rows of dots on flanks of females

*Pituna poranga* Costa 1989
Tupí word for pretty, referring to color pattern of males: golden spots on a dark body

*Pituna schindleri* Costa 2007
in honor of Ingo Schindler (b.1968), German aquarist, amateur ichthyologist, and the first to collect this species

*Pituna xinguensis* Costa & Nielsen 2007
*-ensis*, suffix denoting place: known only from a temporary swamp on an island on the rio Xingú near Altamira, Pará, Brazil

Plesiolebias Costa 1989
*plesio-*, primitive, referring to its ancestral phylogenetic position in the subfamily in relation to other genera with “lebias” in their names

*Plesiolebias altamira* Costa & Nielsen 2007
named for its occurrence near the city of Altamira, Pará, Brazil
Plesiolebias aruana (Lazara 1991)
named for Aruanã, Goiás, Brazil, where type locality (a temporary pool) is situated

Plesiolebias canabravensis Costa & Nielsen 2007
-red, suffix denoting place: rio Canabrava floodplains, Tocantins, Brazil, where it occurs

Plesiolebias filamentosus Costa & Brasil 2007
filamentous, referring to long filamentous pelvic-fin ray of males

Plesiolebias fragilis Costa 2007
fragile, referring to the fragility of its tiny size (up to 20.2 mm SL)

Plesiolebias glaucopterus (Costa & Lacerda 1989)
glaucus, hoary blue; pterus, fin, referring to predominant color of anal fin of males

Plesiolebias lacerdai Costa 1989
in honor of Brazilian aquarist and horticulturist Marco Túlio Lacerda, a “dedicated student” (translation) of annual neotropical fishes and the first collector of this one

Plesiolebias xavantei (Costa, Lacerda & Tanizaki 1988)
of the Xavante, principal indigenous people of the area in Goiás, Brazil, where this killifish occurs

Prorivulus Costa, Lima & Suzart 2004
pro-, first; Rivulus, type genus of family, referring to its basal position among all annual fish rivulid genera

Prorivulus auriferus Costa, Lima & Suzart 2004
auriferous (golden), referring to golden spots on sides of males

Pterolebias Garman 1895
pterus, fin, presumably referring to filamentous unpaired-fin rays; lebias, presumed to be intermediate between Rivulus and Lebias (=Aphanius, Aphaniidae)

Pterolebias longipinnis Garman 1895
longus, long; pinnis, fin, presumably referring to filamentous unpaired-fin rays of males

Pterolebias phasianus Costa 1988
phasian, referring to slightly decurved posture and filamentous caudal-fin rays of males, similar to the feathers of a pheasant

Rachovia Myers 1927
-sa, belonging to: German aquarist Arthur Rachow (1884-1960), who had sent Myers “numerous interesting fishes”

Rachovia brevis (Regan 1912)
short, presumably referring to its shorter, more robust body compared to presumed congeners in Rivulus

Rachovia transvermeuleni Berkenkamp 2020
in honor of killifish aquarist Franz B. M. Vermeulen, Aruba, who collected type

Rachovia hummelincki de Beaufort 1940
in honor of Pieter Wagenaar Hummelink (1907-2003), Dutch naturalist, zoologist and explorer, who collected type

Rachovia maculipinnis (Radda 1964)
maculatus, spotted; pinnis, fin, referring to dark-brown dots on unpaired fins of males

Rachovia pyropunctata Taphorn & Thomerson 1978
pyro-, fire; punctata, spotted, referring to “fire red” spots on sides of males

Renova Thomerson & Taphorn 1995
Latin for renew, referring to its annual life history, “with renewal of the adult population each rainy season”; also honors students of the Programa de Ingenieria de Recursos Naturales Renovables [Renewable] de la UNELLEZ (Universidad Nacional Experimental de los Llanos Occidentales Ezequiel Zamora, Barinas, Venezuela), who first collected this fish during a class field trip

Renova oscari Thomerson & Taphorn 1995
in honor of Oscar León Mata (1964-2018), killifish collector and aquarist, environmental engineer, and fish curator (Museo de Ciencias Naturales in Guanare), who discovered this species and “who has long assisted in our work on fishes with much enthusiasm and good cheer”

Rivulus Poey 1860
etymology not explained, presumably a diminutive of rivus, i.e., a small stream or rivulet, referring to habitat of R. cylindraceus

Rivulus azurescens Vermeulen 2013
become blue, referring to reflective iridescent “azure blue” color on sides of males and to a lesser degree also of females

Rivulus berovidesi Silva 2015
in honor of Vicente Berovides Alvarez (b. 1941), Universidad de la Habana (Cuba), biologist, environmentalist
and conservationist, for his “life-long dedication and contribution to train several generations of new researchers in biological sciences”

*Rivulus cylindraceus* Poey 1860
referring to its cylindrical body shape (shared by all species of *Rivulus*)

*Rivulus pivijay* Vermeulen 2013
named for the village of Pivijay, Magdalena Department, Colombia, type locality (Pivijay is also local name of the Small-leaf Rubber Plant, *Ficus benjamina*, known from the area)

*Rivulus ribesrubrum* Vermeulen 2013
*ribes*, currant or gooseberry; *rubrum*, red, referring to red-spotted markings on body and fins of males (yellow in females)

*Rivulus roloffi* Roloff 1938
in honor of German aquarist and amateur ichthyologist Erhard Roloff (1903-1980), who collected type [manuscript name proposed by Ethelwynn Trewavas (formally published in 1948, delayed by WW2), unintentionally made available by Roloff in an aquarium publication, therefore he is author of name that honors himself (see also *Scriptaphyosemion roloffi*, Nothobranchiidae); some argue that minimum requirement of a diagnosis is not met in Roloff’s article and authorship should be Trewavas 1948]

*Rivulus xi* Vermeulen 2013
14th letter of Greek alphabet, referring to unique *x*-markings on sides of males

*Stenolebias* Costa 1995
*stenos*, narrow, referring to slender body of both species; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

*Stenolebias bellus* Costa 1995
beautiful, referring to colors of the male (e.g., black and green dorsal fin, golden opercular region, orange iris, dark-yellow anal fin)

*Stenolebias damascenoi* (Costa 1991)
in honor of Brazilian aquarist João Damasceno Soares (d. 2010), for collecting annual fishes in Mato Grosso, Brazil, including type of this one

*Terranatos* Taphorn & Thomerson 1978
*terra*, earth; *natos*, birth, referring to emergence of fry from bottom mud of temporary pools

*Terranatos dolichopterus* (Weitzman & Wourms 1967)
dolichos, long; *pteron*, fin, referring to elongate streamers on caudal fin and elongate dorsal and anal fins of males

*Trigonectes* Myers 1925
*trigonos*, triangular; *nectes*, swimmer, referring to “small wedge-shaped schools in which [cyprinodontid] fishes of this type are so often seen swimming along the surface” (per Myers, 1927)
**Trigonectes aplocheiloides** Huber 1995
-oides, having the form of; referring to similarity with the African killifish genus *Aplocheilus* (Aplocheilidae), an example of convergent morphology

**Trigonectes balzanii** (Perugia 1891)
in honor of Italian naturalist Luigi Balzan (1865-1893), who collected type during a grand solo tour of South America in 1890

**Trigonectes macrophthalmus** Costa 1990
macro-, large; opthalmus, eye, referring to larger eyes compared to the similar *T. rogoaguae*

**Trigonectes rogoaguae** (Pearson & Myers 1924)
of Lago Rogoagua, Bolivia, type locality

**Trigonectes rubromarginatus** Costa 1990
ruber, red; marginatus, margined, referring to red stripe along ventral margin of caudal fin

**Trigonectes strigabundus** Myers 1925
striga, streak or stripe; -bundus, suffix connoting abundance or fullness, allusion not explained, presumably referring to series of brown spots on each scale row, one to a scale, “forming longitudinal lines” (per Myers, 1927)

**Subfamily Kryptolebiatinae** Mangrove Killifishes

**Kryptolebias** Costa 2004
replacement name for *Cryptolebias* Costa 2004 (preoccupied by a genus of fossil cyprinodontoid fishes from Europe): kryptos, hidden, referring to how all species “had their genetic identity not correctly evaluated for more than 100 years, being hidden among the numerous species of the diverse and widespread genus *Rivulus*”; lebias, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Kryptolebias brasiliensis** (Valenciennes 1821)
enisus, suffix denoting place: Rio de Janeiro, Brazil, type locality (occurs in Atlantic coastal river basins of Brazil)

**Kryptolebias campelloi** (Costa 1990)
in honor of Brazilian chemical engineer, aquarist and amateur ichthyologist Gilberto Campello Brasil (1945-2008), for his “tireless enthusiasm” (translation) in collecting rivulids, including type of this one (see also *Hypsolebias gilbertobrasili*)

**Kryptolebias caudomarginatus** (Seegers 1984)
caudo-, tail; marginatus, margined or bordered, referring to dark border around caudal fin of males

**Kryptolebias gracilis** Costa 2007
thin (but here meaning tenuous or small), referring to its small size, the largest recorded specimen reaching about half the length of its congeners

**Kryptolebias marmoratus** (Poey 1880)
marmaratus, referring to mottled appearance of light and dark spots on body

**Kryptolebias ocellatus** (Hensel 1868)
with little eyes, referring to blotch above pectoral-fin origin and eye-spot on upper caudal-fin base of both sexes

**Kryptolebias sepia** Vermeulen & Hrbek 2005
named for cuttlefish family Sepiidae, which, like this killifish, can rapidly change colors into several distinct patterns

**Subfamily Cynolebiinae** Pearl Killifishes

**Austrolebias** Costa 1998
australis, southern, constituting the southernmost occurrence of the family; lebias, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Subgenus Austrolebias**

**Austrolebias accorsii** Nielsen & Pillet 2015
in honor of environmentalist Bruno Accorsi, who helped collect type

**Austrolebias adloffi** (Ahl 1922)
in honor of Alfred Adloff (1874-?), German-born Brazilian artist, sculptor and fish culturist, who discovered this species

**Austrolebias arachan** Loureiro, Azpelicueta & García 2004
named for the Arachán, one of the native nations of Uruguay, who inhabited region (Departamento de Cerro Largo) where this killifish occurs

**Austrolebias bagual** Volcan, Lanés & Gonçalves 2014
word used by the Brazilian gaúcho (people living in Rio Grande do Sul) for a horse that has not been castrated, but also used as an adjective for brave, courageous, fearless and audacious, as is the case here, referring to how this annual fish has unique adaptations for living in an extreme environment (the pond dries up completely during some
months of the year) and occurs in a remote and isolated area

**Austrolebias bellottii** (Steindachner 1881)
in honor of biologist-paleontologist Cristoforo Bellotti (1823-1919), who supplied specimens from his collection at Museo Civico di Storia Naturale (Milan, Italy)

**Austrolebias charrau Costa & Cheffe 2001**
named for the Charrúa, an indigenous tribe formerly inhabiting southern Rio Grande do Sul, Brazil, where this killifish occurs

**Austrolebias ephemerus** Volcan & Severo-Neto 2019
ephemerai or short-lived, referring to its short life cycle (~2 months) and the highly seasonal environment it inhabits

**Austrolebias melanooruns** (Amato 1986)
*melanos*, black; *horos*, edge or boundary, referring to dark border on pectoral and anal fins of males

**Austrolebias minuano Costa & Cheffe 2001**
named for the Minuane, an indigenous tribe formerly inhabiting southern Rio Grande do Sul, Brazil, where this killifish occurs

**Austrolebias nachtigalli Costa & Cheffe 2006**
in honor of Brazilian ornithologist Giovani Nachtigall Mauricio, Universidade Federal de Pelotas, for his “valuable efforts” in collecting annual fishes from Rio Grande do Sul, Brazil, where this killifish occurs

**Austrolebias nigrofasciatus** Costa & Cheffe 2001
*nigro*-, black; *fasciatus*, banded, referring to 6-12 dark vertical stripes on males

**Austrolebias patriciae** (Huber 1995)
in honor of aquarist Patricia Fromm (Cherry Hill, New Jersey, USA), who discovered this killifish with her husband Dan (see Cynodonichthys frommi), who requested it be named in her honor

**Austrolebias pelotapes** Costa & Cheffe 2017
old name for town of Pelotas, Rio Grande do Sul, Brazil, from the Spanish *pelota*, ball, referring to a little boat made in cow hide, and *tapes*, referring to indigenous tribe inhabiting area occupied in the past by this critically endangered species

**Austrolebias pongondo Costa & Cheffe 2017**
*pongoendo*, local name for people living in the village of Povo Novo, Rio Grande municipality (Rio Grande do Sul, Brazil, where this species is endemic

**Austrolebias queguay Serra & Loureiro 2018**
named for the Queguay River basin, Paysandú, Uruguay, type locality

**Austrolebias reicherti** (Loureiro & García 2004)
in honor of the late Juan Jorge Reichert Lang (1929-2000), a “fish hobbyist who dedicated his life to the exploration of freshwater systems in Uruguay” and discovered several new localities for species of Cynolebias (original genus), and co-described two species, *C. vazferreirai* and *C. nioni* (both junior synonyms of *A. cinereus*)

**Austrolebias univentripinnis** Costa & Cheffe 2005
*uni*-, single or fused; *ventri*-, ventral; *pinnis*, fin, referring to medially fused pelvic fins

**Austrolebias vandenbergorum** (Huber 1995)
in honor of Dutch aquarists Leen Van den Berg and his son Arjen, who co-discovered this species with Dan and Patricia Fromm [originally spelled “vandenbergi”; since name honors more than one person, emendment is necessary]

**Austrolebias viarius** (Vaz-Ferreira, Sierra de Soriano & Scaglia de Paulete 1965)
of roads, referring to frequency with which specimens were found in temporary puddles along the sides of roads

Subgenus **Acantholebias** Costa 2008
*acanthus*, thorn, referring to prominent contact organs on flank and pectoral fins of males; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Austrolebias luteoflammulatus** (Vaz-Ferreira, Sierra de Soriano & Scaglia de Paulete 1965)
*luteus*, yellow; *flammulatus*, with small flames, referring to yellow-to-green triangular spots along basal rays of dorsal and anal fins

Subgenus **Acrolebias** Costa 2008
*akron*, summit, referring to unique occurrence in higher altitudes among Austrolebias lineages; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Austrolebias araucarianus** Costa 2014
*anaus*, belonging to; referring to its occurrence in the Araucarian Plateau Forest of Brazil, a temperate biogeographic province in which the landscape is dominated by the conifer Araucaria angustifolia
**Austrolebias carvalhoi** (Myers 1947)
in honor of Brazilian ichthyologist-herpetologist Antenor Leitão de Carvalho (1910-1985), who discovered this species with Myers, and was the first to document *Cynolebias* (presumed genus at the time) in the Amazon basin

**Austrolebias varzeae** Costa, Reis & Behr 2004
of the rio da Várzea basin, Rio Grande do Sul, Brazil, only known area of occurrence

**Subgenus Argolebias** Costa 2008
*argos*, bright, referring to bright blue marks on flanks and fins of males; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Austrolebias affinis** (Amato 1986)
related, referring to its similarity with *A. nigripinnis*

**Austrolebias alexandri** (Castello & López 1974)
patronym not identified; according to Köber (2001), in honor of Alejandro (Alexander in English) Fernandez-Santo, Argentinian aquarist and son of one of the collectors, who died at time of description

**Austrolebias camauagens** Volcan, Gonçalves & Lanés 2017
*ensis*, suffix denoting place: middle Rio Camaquã basin, Rio Grande do Sul, Brazil, only known area of occurrence

**Austrolebias cyaneus** (Amato 1887)
blue, referring to vertical rows of bright blue dots on body and blue fins and caudal peduncle of males

**Austrolebias ibicuiensis** (Costa 1999)
*ensis*, suffix denoting place: rio Ibicui-Mirim, Rio Grande do Sul, Brazil, type locality

**Austrolebias juanlangi** Costa, Cheffe, Salvia & Litz 2006
in honor of the late Juan Jorge Reichert Lang (1929-2000), aquarium hobbyist, for his dedication in collecting and illustrating Uruguayan species of *Austrolebias*

**Austrolebias litzi** Costa 2006
in honor of German aquarist, pharmaceutical chemist and amateur ichthyologist Thomas O. Litz (b. 1965), for his “enthusiasm and efforts in collecting *Austrolebias* material,” plus providing photos and old aquarium literature

**Austrolebias nigripinnis** (Regan 1912)
*nigr*- , black; *pinnis*, fin, presumably referring to “bluish black” fins of males

**Austrolebias paranaensis** Costa 2006
*ensis*, suffix denoting place: rio Paraná floodplains, Paraguay, only known area of occurrence

**Austrolebias paucisquama** Ferrer, Malabarba & Costa 2008
*paucus*, few; *squama*, scales, referring to reduced number of scales around caudal peduncle

**Austrolebias periodicus** (Costa 1999)
periodical, referring to its annual life cycle (as in all species of the genus)

**Austrolebias toba** Calviño 2006
named for the Toba people (also known as Qom), aboriginal natives who currently inhabit the area (Chaco Province, Argentina) where this killifish was found

**Subgenus Cypholebias** Costa 2008
*kypnos*, hunchbacked, referring to convex predorsal portion of body in larger adult specimens; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Austrolebias cinereus** (Amato 1986)
ashy, referring to dark gray sides of males

**Austrolebias nonoiulensis** (Taberner, Fernández-Santos & Castelli 1974)
*ensis*, suffix denoting place: apparently a latinization of Nueve de Julio, Province Buenos Aires, Argentina, type locality

**Austrolebias robustus** (Günther 1883)
stout or robust, allusion not explained, presumably referring to body shape compared to former congeners in *Cynolebias* known at the time

**Subgenus Gymnolebias** Costa 2008
*gymnos*, naked, referring to absence of scales on ventral part of body; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Austrolebias gymnoventris** (Amato 1986)
gymnos, naked; *ventris*, belly, referring to absence of scales on ventral part of body

**Austrolebias jaegari** Costa & Cheffe 2002
in honor of the late Norberto Jaegar, Brazilian nature photographer, for his “enthusiasm and dedication to the
conservation of natural areas”

Subgenus *Megalebias* Costa 1998

*mega*-, large, referring to large size of its members, among the largest in the family; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Austrolebias cheradophilus** (Vaz-Ferreira, Sierra de Soriano & Scaglia de Paulete 1965)

*cheradus*, mud or silt; *philus*, fond of, referring to how this species remains in bottom substrate when disturbed

**Austrolebias elongatus** (Steindachner 1881)

referring to more elongate body compared to *A. bellottii*, described in same publication

**Austrolebias monstruosus** (Huber 1995)

monstrous, referring to large size and cannibalistic behavior towards small congeners in *Cynolebias* (presumed genus at the time)

**Austrolebias prognathus** (Amato 1986)

*pro*-; *gnathus*, jaw, referring to projecting lower jaw of males

**Austrolebias wolterstorffi** (Ahl 1924)

in honor of German geologist, herpetologist and curator Wilhelm Wolterstorff (1864-1943), through whose “friendly mediation” (translation) Ahl received this species

Subgenus *Incertae sedis*

**Austrolebias quirogai** Loureiro, Duarte & Zarucki 2011

in honor of Uruguayan writer Horacio Quiroga (1878-1937), “whose tales and fables based on his life in the Misiónes rainforest inspired the authors to explore nature and its mysteries”

**Austrolebias wichi** Alonso, Terán, Calviño, García, Cardoso & García 2018

named for the Wichí indigenous people who inhabit several settlements very close to type locality (near Padre Lozano town, Departamento de San Martín, Salta Province, Argentina)

Subgenus *Campellolebias*

in honor of Brazilian chemical engineer, aquarist and amateur ichthyologist Gilberto Campello Brasil (1945-2008), an “enthusiastic scholar” of Brazilian killifishes, who collected type specimens and sent them to the authors (see also *Hypsolebias gilbertobrasili*); *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Campellolebias brucei** Vaz-Ferreira & Sierra de Soriano 1974

in honor of American ichthyologist, geneticist and ecologist Bruce J. Turner (b. 1945), a “recognized expert” (translation) Ahl received this species

**Campellolebias chrysolineatus** Costa, Lacerda & Brasil 1989

*chrysos*, gold; *lineatus*, lined, referring to golden spots on scales on sides of males, arranged to form six longitudinal lines

**Campellolebias dorsimaculatus** Costa, Lacerda & Brasil 1989

*dorsum*, back; *maculatus*, spotted, referring to dark spots on dorsal fin of males

**Campellolebias intermedius** Costa & De Luca 2006

intermediate, referring to its phylogenetic position among congeners

Subgenus *Cynolebias*

in honor of American ichthyologist, geneticist and ecologist Bruce J. Turner (b. 1945), a “recognized expert” (translation) Ahl received this species

**Cynolebias akroa** Nielsen, Martins, Araujo, Lira & Faour 2018

named for the Akróa, an ethnic group belonging to the Macro-Jê linguistic trunk, who lived in the region (Santa Rita de Cássia, Bahia, Brazil) until the 19th century, when they were decimated

**Cynolebias altus** Costa 2001

high, referring to deep body of males

**Cynolebias attenuatus** Costa 2001

attenuated, referring to short fins and slender body of males

**Cynolebias elegans** Costa 2017

elegant or fine, referring to “distinctive general appearance,” in which males combine a relatively slender body with long unpaired fins

**Cynolebias gibbus** Costa 2001

humpbacked, referring to prominent convexity on anterior portion of dorsum of males
Cynolebias gilbertoi Costa 1998
in honor of Brazilian chemical engineer, aquarist and amateur ichthyologist Gilberto Campello Brasil (1945-2008), who made several expeditions to collect annual fishes in the semi-arid areas of northeastern Brazil, discovering this and many other fishes unknown to science (see also Hypsolebias gilbertobrasili)

Cynolebias gorutuba Costa 2017
named for the Gorutuba River floodplains São Francisco River basin, Minas Gerais, Brazil, type locality

Cynolebias itapicuriensis Costa 2001
-ensis, suffix denoting place: Itapicurú River basin, Brazil, where it appears to be endemic

Cynolebias leptoccephalus Costa & Brasil 1993
leptos, slender; cephalus, head, referring to deeply concave dorsal profile of head

Cynolebias microphthalmus Costa & Brasil 1995
micro-, small; opthalmus, eye, referring to small eye of males (15.4-17.2% SL of specimens >75 mm SL)

Cynolebias obscurus Costa 2014
dark, referring to predominant dark-gray coloration of males

Cynolebias ochraceus Costa 2014
ochre, referring to predominant color of males

Cynolebias oticus Costa 2014
relating to the ear, referring to continuous otic and postotic series of neuromasts on head, a diagnostic character for this species

Cynolebias paraguassuenensis Costa, Suzart & Nielsen 2007
-ensis, suffix denoting place: rio Paraguaçu drainage, Brazil, only known area of occurrence

Cynolebias parietalis Costa 2014
relating to or denoting the wall of a body or body cavity, referring to morphology of parietal neuromast series, which is united with posterior portion of supraorbital series, a diagnostic character for this species

Cynolebias parnaibensis Costa, Ramos, Alexandre & Ramos 2010
-ensis, suffix denoting place: Parnaíba River basin, northeastern Brazil, only species of Cynolebias from this basin

Cynolebias perforatus Costa & Brasil 1991
perforated, referring to large number of cephalic neuromasts (pores)

Cynolebias porosus Steindachner 1876
full of holes or pores, referring to rows of small sensory pores on forehead, front edge of opercle, lower jaw, and under eyes

Cynolebias rectiventer Costa 2014
rectis, straight; venter, belly, referring to straight ventral profile of body in males, unique in the genus

Cynolebias roseus Costa 2014
pink or rosy, referring to predominant color of both sexes

Cynolebias vazabarrisensis Costa 2001
-ensis, suffix denoting place: Vaza-Barris River basin, Brazil, where it appears to be endemic

Subgenus Bathylebias Costa 2008
bathys, deep, referring to occurrence of C. griseus in the deepest parts of pools; lebias, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

Cynolebias griseus Costa, Lacerda & Brasil 1990
gray, referring to pearly gray color of males

Cynopoecilus Regan 1912
presumably a combination of Cynolebias, previous genus of C. melanotaenia, and Poecilia, possibly referring to then placement in family Poeciliidae

Subgenus Cynopoecilus

Cynopoecilus feltrini Costa, Amorim & Mattos 2016
in honor of Caio Feltrin, river ecologist and ichthyologist, for his dedication in inventorying the fish fauna of southern Brazil; he also called the authors’ attention to the occurrence of Cynopoecilus near Tubarão, Santa Catarina, Brazil, type locality

Cynopoecilus fulgens Costa 2002
brilliant, referring to longitudinal rows of bright golden spots on body of male

Cynopoecilus intimus Costa 2002
very inside, referring to type locality distantly situated from sea, contrasting with coastal distribution of all other
members of its clade (Cynopoeciliidi)

_Cynopoecilus melanotaenia_ (Regan 1912)
*melano-*; black; *taenia*, band, referring to blackish lateral band from lower jaw through eye to base of caudal fin, another at base of anal fin forward to base of pectoral fin, and a third on back, on both sexes

_Cynopoecilus nigrovittatus_ Costa 2002
*nigro-*; black; *vittatus*, banded, referring to black stripes on male

Subgenus _Poecilopanchax_ Costa 2016
*poecilio-*; varicolored, allusion not explained, presumably referring to male color pattern; _Panchax_ (= _Aplocheilus_), an aplocheiloid genus, often used to compose generic names of killifishes

_Cynopoecilus notabilis_ Ferrer, Wingert & Malabarba 2014
notable or remarkable, referring to fin morphology (e.g., long filamentous ray on anal fin and lanceolate caudal fin) and color pattern (e.g., mid-lateral longitudinal black stripe on head) in males

_Hypsolebias_ Costa 2006
*hypsi-*; high, proposed as a subgenus of _Simpsonichthys_ with deeper bodies; _lebias_, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

_Hypsolebias adornatus_ (Costa 2000)
adorned or ornamented, referring to long dorsal-fin base of males

_Hypsolebias alternatus_ (Costa & Brasil 1994)
referring to alternating red and blue vertical bars on sides of males

_Hypsolebias antenori_ (Tulipano 1973)
in honor of Brazilian ichthyologist-herpetologist Antenor Leitão de Carvalho (1910-1983), collecting companion of George S. Myers, who called him “probably the ablest field naturalist in Brazil” (1952) [Myers coined the name but did not provide distinguishing characters; name made available by Tulipano]

_Hypsolebias auratus_ (Costa & Nielsen 2000)
golden, referring to color pattern of males: anterior body light gold with 2-3 rounded black humeral blotches, and head golden with small dark brown spots

_Hypsolebias brunoI_ (Costa 2003)
in honor of herpetologist Bruno Bove da Costa, Costa’s son, for his “valuable help during collection trips” (he helped collect type)

_Hypsolebias caeruleus_ Costa 2013
blue, referring to light blue body color of males

_Hypsolebias carlettoi_ (Costa & Nielsen 2004)
in honor of Brazilian aquarist André Carletto (b. 1972), who helped collect type, for his “valuable help” on several collecting trips

_Hypsolebias coamazonicus_ Costa, Amorim & Bragança 2014
*co-*; close; _amazonicus_, of the Amazon, referring to close proximity of type locality (Parnaíba River floodplains, Brazil) to the Amazon Forest

_Hypsolebias delucai_ (Costa 2003)
in honor of Andre C. De Luca (Federal University of Rio de Janeiro), first collector of this species

_Hypsolebias faouri_ Britzke, Nielsen & Oliveira 2016
in honor of Spanish aquarist and environmentalist Amer Faour, who discovered this species and helped collect type

_Hypsolebias fasciatus_ (Costa & Brasil 2006)
banded, referring to color pattern on flanks and unpaired fins of males

_Hypsolebias flagellatus_ (Costa 2003)
with a whip, referring to long filamentous rays on dorsal and anal fins of males

_Hypsolebias flammeus_ (Costa 1989)
flame-colored, referring to red vertical bars on body and fins of males

_Hypsolebias flavicaudatus_ (Costa & Brasil 1990)
*flavus*, yellow; *caudatus*, tailed, referring to yellow caudal fin of males

_Hypsolebias fulminantis_ (Costa & Brasil 1993)
struck with lightning (authors say “that injures with rays”), referring to “blue lines resembling flashes” in unpaired fins of males

_Hypsolebias gardneri_ Costa, Amorim & Mattos 2018
in honor of Scottish naturalist George Gardner (1810-1849), who made “rich natural history collections” in the
Caatinga (where this species occurs) during his trip to Brazil (1836-1841); his “reports on the region, and the numerous plant species and Cretaceous fossil fish collected by him represent important landmarks of our knowledge about Caatinga biodiversity.”

**Hypsolebias ghisolfii** (Costa, Cyrino & Nielsen 1996)
in honor of Brazilian aquarist Julio Cesar Ghisolfi, “fervent” breeder and collector of annual killifishes

**Hypsolebias gibberatus** (Costa & Brasil 2006)
humpbacked, referring to lateral profile of anterodorsal portion of body of females

**Hypsolebias gilbertobrasili** Costa 2012
in honor of Brazilian chemical engineer, aquarist and amateur ichthyologist Gilberto Campello Brasil (1945-2008), “an enthusiastic explorer and killifish collector” who discovered several new species, including this one; “On 7 November 2008, Gilberto left home alone and was not seen again, and is considered dead.”

**Hypsolebias guanambi** Costa & Amorim 2011
named for the city of Guanambi (from Tupi-Guarani word for hummingbird), Bahia, Brazil, around which vast plain areas flooded by the Caunaiba de Dentro River drainage are inhabited by five endemic annual fish species, including this one, thus constituting an important area of endemism for the Rivulidae

**Hypsolebias hamadryades** Costa, Amorim & Mattos 2018
name used by Bavarian naturalist Karl Friedrich Philipp von Martius for the Caatinga (where this species occurs in temporary forest pools) in his classification of vegetation formations of Brazil, in which he used Greek mythological beings to name each phytogeographical province, in this case a kind of Greek nymph believed to be associated with trees and which vanishes when trees die; the name is opportune since populations of species of the *H. magnificus* group (including this one) became extinct after marginal deforestation

**Hypsolebias harmonicus** (Costa 2010)
harmonious, referring to color pattern of males: three red bars alternating with 3-4 dark greenish-gray bars on anterior sides, red pectoral fins, and dark red unpaired fins with transverse rows of greenish-blue dots

**Hypsolebias hellneri** (Berkenkamp 1993)
in honor of German aquarist Steffen Hellner (Stuttgart), who collected type, and author of the 1989 book *Killifish: A Complete Pet Owner’s Manual*

**Hypsolebias igneus** (Costa 2000)
fiery, referring to red-orange color pattern of anal fin of males

**Hypsolebias janaubensis** (Costa 2006)
-*ensis*, suffix denoting place: Janaúba, Minas Gerais, Brazil, where it occurs

**Hypsolebias longignatus** (Costa 2008)
*longi*-, distant; *gnatus*, born, referring to long distance between type locality in coastal region of northeast Brazil and area occupied by remaining species of the *H. flammeus* species group in the Tocantins River basin of central Brazil

**Hypsolebias lopesi** (Nielsen, Shibatta, Suzart & Martín 2010)
in honor of Edson Lopes, for his contribution to our knowledge on raising and breeding annual fishes in captivity

**Hypsolebias macaubensis** (Costa & Suzart 2006)
-*ensis*, suffix denoting place: Macaúbas, Bahia, Brazil, where it occurs

**Hypsolebias magnificus** (Costa & Brasil 1991)
magnificent, referring to “exuberant” color pattern of males

**Hypsolebias marginatus** (Costa & Brasil 1996)
edged or bordered, referring to dark marginal and light-blue submarginal bands on dorsal and anal fins of males

**Hypsolebias martinsi** Britzke, Nielsen & Oliveira 2016
in honor of Itamar Alves Martins, Universidade de Taubaté (São Paulo, Brazil), for his contribution (e.g., laboratory support) to South American ichthyology and herpetology

**Hypsolebias mediopapillatus** (Costa 2006)
*medium*, middle; *papillatus*, with papillae, referring to neuromast on middle of posterior rostral series

**Hypsolebias multiradiatus** (Costa & Brasil 1994)
*multi-*-, many; *radiatus*, rayed, referring to larger number of dorsal-fin rays in males compared to *C. flammeus*, its presumed closest relative

**Hypsolebias nielseni** (Costa 2005)
in honor of Brazilian ichthyologist and conservationist Dalton Nielsen, first collector of this species, who sent Costa juvenile specimens that were not preserved for study

**Hypsolebias nitens** Costa 2012
sparkling, referring to iridescent color patterns along dorsal- and anal-fin bases of males
Hypsolebias notatus (Costa, Lacerda & Brasil 1990)
marked, referring to dark blotch on sides of males

Hypsolebias nudiorbitatus Costa 2011
nudus, bare or naked; orbitalis, orbital, referring to rudimentary or absent squamation on the supraorbital region

Hypsolebias ocellatus (Costa, Nielsen & de Luca 2001)
having little eyes, referring to eye-like spot on sides of females

Hypsolebias picturatus (Costa 2000)
painted, referring to intense and delicate colors of males

Hypsolebias pterophyllus Costa 2012
pteron, wing; phyllon, leaf, referring to long dorsal and anal fins of males, and to superficial similarity with Pterophyllum scalare, Freshwater Angelfish, with long dorsal and anal fins and dark bars on body sides

Hypsolebias radiosus (Costa & Brasil 2004)
rayed, referring to color pattern on caudal fin of males, consisting of 3-5 light blue stripes crossing the fin, parallel to fin rays

Hypsolebias radiseriatus Costa 2012
radii, rays; seriatus, serial, i.e., with a series of rays, referring to light short lines between subdistal portion of dorsal-fin rays in males

Hypsolebias rufus (Costa, Nielsen & de Luca 2001)
reddish, referring to predominant color of males

Hypsolebias sertanejo Costa 2012
Portuguese word for something or someone originating in the Sertão, a general term designating the savannas of central and northeastern Brazil, derived from the Portuguese word desertão (big desert), referring to scarce human occupation of the region in the past, associated with the warm and dry climate; the name was chosen for this species' occurrence in the region described in the novel Grande Sertão: Veredas, by João Guimarães Rosa (1956), among the most important books in Brazilian literature

Hypsolebias shibattai Nielsen, Martins, Araujo & Suzart 2014
in honor of Oscar Akio Shibatta, Universidade Estadual de Londrina (Brazil), for his contribution to South American ichthyology

Hypsolebias similis (Costa & Hellner 1999)
like or resembling, referring to similarity to H. notatus, particularly black spot of middle of sides of males

Hypsolebias splendissimus Costa 2018
very splendid, referring to the bright colors of males, among the most colorful South American rivulid killifishes
**Hypsolebias stellatus** (Costa & Brasil 1994)  
starry, referring to greenish-blue spots on dorsal and caudal fins of males

**Hypsolebias tocantinensis** Nielsen, Cruz & Babtista 2012  
-ensis, suffix denoting place: rio Tocantins basin, Maranhão, Brazil, where it occurs

**Hypsolebias trifasciatus** Nielsen, Martins, Araujo, Lira & Faour 2014  
tri-, three; fasciatus, banded, referring to three alternating yellow-and-black stripes on anal fin of adult males

**Hypsolebias trilineatus** (Costa & Brasil 1994)  
tri-, three; lineatus, lined, referring to three longitudinal violet-brown lines on males

**Hypsolebias virgulatus** (Costa & Brasil 2006)  
with stripes of different colors, referring to male color pattern

**Leptolebias** Myers 1952  
leptos, thin or elongate, referring to "elongate and little compressed" body; lebias, short for Cynolebias, i.e., a thin Cynolebias

**Leptolebias marmoratus** (Ladiges 1934)  
marmaratus, marbled, named to “suggest marble” (translation), presumably referring to irregular wine-red longitudinal bands on sides of males, which can be said to create a mottled appearance

**Leptopanchax Costa 2016**  
leptos, thin or elongate, allusion not explained, presumably referring to body shape; Panchax (=Aplocheilus), an aplocheiloid genus, often used to compose generic names of killifishes

**Leptopanchax aureoguttatus** (Da Cruz 1974)  
aureus, golden; guttatus, spotted, allusion not explained (Myers coined name in 1952 but without a description), possibly referring to golden (but often green) metallic speckles on sides of males

**Leptopanchax citrinipinnis** (Costa, Lacerda & Tanizaki 1988)  
citrina, lemon or orange; pinnis, fin, referring to lemon-yellow fins of males

**Leptopanchax itanhaensis** (Costa 2008)  
-ensis, suffix denoting place: Itanhaém river basin, São Paulo state, Brazil, only known area of occurrence

**Leptopanchax opalescens** (Myers 1942)  
like an opal, referring to crayon sketch (made by Constance White; see Ophthalmolebias constanciae) of live adult male, which “shows the whole body as gleaming opalescent”

**Leptopanchax sanguineus** Costa 2019  
sanguineus, blood-colored, referring to predominantly red coloration in males, unique among neotropical killifishes [not seen since 1987; possibly extinct]

**Leptopanchax splendidus** (Myers 1942)  
splendid, magnificent or beautiful, referring to coloration of living males, with “dark bands intense Paris-green in color, the narrow interspaces brilliant light red,” and the head “largely red, with green spots”

**Mucurilebias Costa 2014**  
Mucuri, referring to rio Mucuri basin, Bahia, Brazil, where it occurs; lebias, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Mucurilebias leitaoi** (Da Cruz & Peixoto 1992)  
in memory of Brazilian ichthyologist-herpetologist Antenor Leitão de Carvalho (1910-1985)

**Nematolebias Costa 1998**  
nema, thread, referring to cylindrical and slender body shape of males; lebias, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

**Nematolebias catimbau** Costa, Amorim & Aranha 2014  
named for its occurrence in the Catimbau River floodplain, Estado do Rio de Janeiro, Brazil

**Nematolebias papilliferus** Costa 2002  
papilliferus, bearing, i.e., having papilla, referring to hypertrophied contact organs of pectoral fins of male

**Nematolebias whitei** (Myers 1942)  
in honor of Lt.-Col. Thomas D. White (1901-1965), U.S. Army Air Corps (later Chief of Staff for the U.S. Air Force), who collected type with his wife (see Ophthalmolebias constanciae), for his "painstaking collection and investigation of the smaller fresh-water fishes" near Rio de Janeiro, Brazil, where he was stationed (in 1952, Myers described White as a "dyed-in-the-wool aquarist, fisherman and ichthyologist")

**Notholebias Costa 2008**  
notho-, referring to superficial resemblance to some species of the African genus Nothobranchius (Nothobranchiidae), in particular N. lourensi, which has similar color patterns and body proportions; lebias, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order
Notholebias cruzi (Costa 1988)  
in honor of Brazilian herpetologist Carlos Alberto G. Cruz (b. 1944), who in recent years has also been studying Cytolebias (original genus)

Notholebias fractifasciatus (Costa 1988)  
*fractis*, fracture; *fasciatus*, banded, referring to broken pattern of stripes on caudal fin of males

Notholebias minimus (Myers 1942)  
least, at 20 mm SL, described as the “smallest known” species of Cytolebias (presumed genus at the time), and “unlikely that any smaller will be discovered”

Notholebias vermiculatus Costa & Amorim 2013  
vermiculated (wormy), referring to color pattern of caudal fin of males, “with sinuous or tortuous marks resembling the form of worms”

Ophthalmolebias Costa 2006  
ophthalmus, eye, proposed as a subgenus of Simpsonichthys with large eyes laterally (instead of dorsolaterally) placed on head; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

Ophthalmolebias bokermanni (Carvalho & Da Cruz 1987)  
in honor of Werner Carlos Augusto Bokermann (1929-1995), Fundação Parque Zoológico de São Paulo, “outstanding” (translation) herpetologist (also ornithologist), who collected type

Ophthalmolebias constanciae (Myers 1942)  
in honor of Constance White, a watercolor painter, who collected type of this “beautiful little fish” with her husband Thomas (see Nematolebias whitii) and made color sketches for Myers; named at the suggestion of Thomas, who wrote to Myers, “If by chance [this species] is new and you don’t have too many urgent candidates for names nothing would please my wife more than to have her name tied to this little beauty”

Ophthalmolebias ilheusensis (Costa & Lima 2010)  
*en-sis*, suffix denoting place: Município de Ilhéus, Bahia, Brazil, only known area of occurrence

Ophthalmolebias perpendicularis (Costa, Nielsen & de Luca 2001)  
perpendicular, referring to vertical bars followed by longitudinal bands of the same color on sides of males

Ophthalmolebias rosaceus (Costa, Nielsen & de Luca 2001)  
rosy, referring to predominant color of males

Ophthalmolebias suzarti (Costa 2004)  
in honor of Rogério Dos Reis Suzart (no other information available), who provided type material

Simpsonichthys Carvalho 1959  
in honor of Carvalho’s friend Charles J. Simpson (San Francisco, USA); *ichthys*, fish

Simpsonichthys boitonei Carvalho 1959  
in honor of Carvalho’s friend José Boitone, who collected type

Simpsonichthys cholopteryx Costa, Moreira & Lima 2003  
cholos, maimed or lame; *pteryx*, fin, referring to absence of pelvic fins, a feature shared with S. boitonei and S. parallelus

Simpsonichthys espinhacensis Nielsen, Pessali & Dutra 2017  
*en-sis*, suffix denoting place: Serra do Espinhaço (“Backbone range,” named for its longitudinally slender north-south plateaus, which resemble a vertebral column), a biosphere reserve, Rio Jequitinhonha basin, Minas Gerais, Brazil, type locality

Simpsonichthys margaritatus Costa 2012  
adorned with pearls, referring to color pattern of dorsal and caudal fins of males, in which small light spots arranged in close proximity resemble pearl collars

Simpsonichthys nigromaculatus Costa 2007  
nigro-, black; *maculatus*, spotted, referring to 2-4 black spots on posterior portion of dorsal-fin base

Simpsonichthys parallelus Costa 2000  
parallel, referring to longitudinal bands on dorsal and anal fins of males

Simpsonichthys punctulatus Costa & Brasil 2007  
diminutive of *punctum*, spot, i.e., having tiny spots, referring to rows of blue dots on flanks of males

Simpsonichthys santanae (Shibatta & Garavello 1992)  
of the Ribeirão Santana floodplains, upper Paraná River basin, Distrito Federal, Brazil, where it is endemic

Simpsonichthys zonatus (Costa & Brasil 1990)  
banded, referring to vertically barred color pattern of males (females have lighter bars)
Spectrolebias Costa & Nielsen 1997

*spectrum*, ghost; referring to translucent body of *S. semiocellatus*; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

*Spectrolebias belldoi* Nielsen & Pillet 2015

in honor of environmentalist and veterinarian Waldo Bellido Villavicencio (Santa Cruz de La Sierra, Bolivia), friend of the junior author

*Spectrolebias brousseaui* Nielsen 2013

in honor of American killifish hobbyist Roger D. Brousseau, who discovered this species and collected type

*Spectrolebias chacoensis* (Amato 1986)

-ensis, suffix denoting place: Chaco region of Paraguay, where type locality (Charca Topógrafo Acevedo) is situated (also occurs in Bolivia)

*Spectrolebias costai* (Lazara 1991)

in honor of ornamental fish trader Luis de Camargo Costa (Aruanã, Goias, Brazil), who discovered this species with aquarist Rosario LaCorte (see *Maratecoara lacortei*)

*Spectrolebias filamentosus* (Costa, Barrera & Sarmiento 1997)

*filamentosus*, referring to extended posterior dorsal- and anal-fin rays of males, extending beyond caudal fin

*Spectrolebias gracilis* Costa & Amorim 2018

*thin*, referring to thin body and small size (males up to 20.8 mm SL)

*Spectrolebias inaequipinnatus* (Costa & Brasil 2008)

*inaequalis*, unequal; *pinnatus*, finned, referring to extremely different morphology of dorsal (narrow, pointed, with long filament) and anal (broad, rounded, without filaments) fins, an uncommon feature in the family

*Spectrolebias pilleti* Nielsen & Brousseau 2013

in honor of Didier Pillet, French aquarist and environmentalist, who helped collect type

*Spectrolebias reticulatus* (Costa & Nielsen 2003)

*netted* or net-like, referring to reticulate color pattern of sides of male, unique in the genus

*Spectrolebias semiocellatus* (Costa & Nielsen 1997)

*semi-*; half; *ocellatus*, having little eyes, referring to thin eye-like spot on distal margin of anal fin of males

Xenurolebias Costa 2006

*senas*, strange, and *aoura*, tail, referring to lanceolate and asymmetric caudal fin of males due to expansion of ventral portion of the fin; *lebias*, Greek name for a kind of small fish, first applied to killifishes (“Les Lebias”) by Cuvier (1816) and now a common root-name formation in the order

*Xenurolebias cricarensis* Costa 2014

-ensis, suffix denoting place: rio Cricalé basin, former native name for present-day rio São Mateus basin, Brazil, only known area of occurrence

*Xenurolebias izecksohni* (Da Cruz 1983)

in honor of Eugênio Izecksohn (1932-2013), herpetologist, Universidade Federal Rural do Rio de Janeiro, who helped collect type

*Xenurolebias myersi* (Carvalho 1971)

in honor of the “great” (translation) Stanford University ichthyologist George S. Myers (1905-1985), in a Festschrift honoring Myers made by his students

*Xenurolebias pataxo* Costa 2014

named for the Pataxó native tribe, which formerly inhabited entire area (coastal plain between Jucuruçu and Mucuri river basins, Bahia, Brazil) where this killifish is found