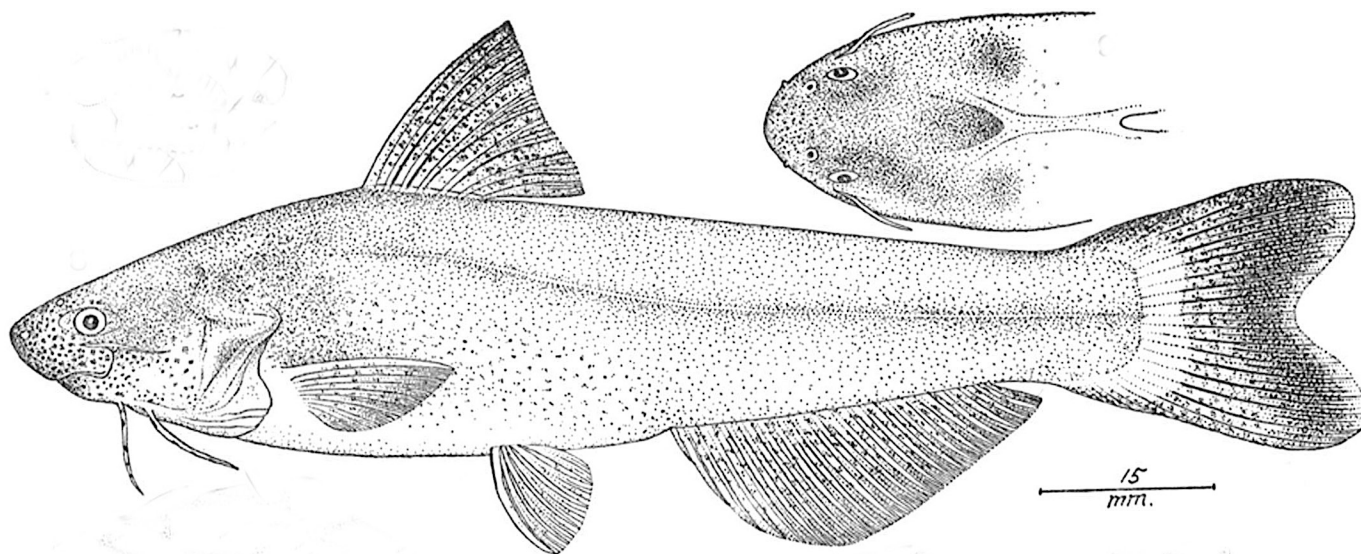


Order SILURIFORMES

Climbing Catfishes

Family **ASTROBLEPIDAE**

Bleeker 1862



Astroblepus jurubidae, holotype. Illustration by Henry Weed Fowler. From: Fowler, H. W. 1944. Fresh-water fishes from northwestern Colombia. Proceedings of the Academy of Natural Sciences of Philadelphia 96: 227–248.

Astroblepus**Humboldt 1805**

astro, from *astér* (Gr. ἀστήρ), star; *blepus*, from *blépos* (Gr. βλέπος), look, i.e., stargazer, referring to dorsally placed eyes of *A. grivalvii*

***Astroblepus acostai* Ardila Rodríguez 2011** in honor of Eduardo Acosta Bendek (1930–2014), physician and Director, Universidad Metropolitana de Barranquilla, where Ardila Rodríguez works, for cooperation with his research both in and outside of the institution

***Astroblepus ardiladuartei* Ardila Rodríguez 2015** in honor of Ardila Rodríguez' son, Carlos Julio Ardila Duarte, also a biologist, who collected holotype

***Astroblepus ardilai* Ardila Rodríguez 2012** in honor of Ardila Rodríguez' son, Carlos Julio Ardila Duarte, for his scientific illustrations of the fishes of Bolivar, Colombia

***Astroblepus bellezaensis* Ardila Rodríguez 2015 -ensis**, Latin suffix denoting place: Municipio La Belleza, Santander, Colombia, only known area of occurrence

***Astroblepus boulengeri* (Regan 1904)** in honor of Belgian-born British ichthyologist-herpetologist George A. Boulenger (1858–1937), British Museum (Natural History), for his “ever-ready advice and help”; in addition, Boulenger reported this catfish as *Stygogenes humboldtii* (= *Astroblepus cyclopus*) in 1887

***Astroblepus brachycephalus* (Günther 1859)** short-headed, from *brachýs* (Gr. βραχύς), short, and *kephalḗ* (Gr. κεφαλή), head, referring to shorter head ($\frac{1}{2}$ of TL) compared with *A. sabalo* ($\frac{1}{4}$ of TL)

***Astroblepus cacharas* Ardila Rodríguez 2011** named for the Cácharas, an indigenous group of people who inhabited the upper reaches of the Río Cácharas, Norte de Santander, Colombia, type locality

***Astroblepus cajamarcaensis* Ardila Rodríguez 2013 -ensis**, Latin suffix denoting place: Departamento de Cajamarca, Andes of Peru, type locality

***Astroblepus caquetae* Fowler 1943** of Caquetá, Colombia, where type locality (Río Ortegusa) is situated

***Astroblepus chapmani* (Eigenmann 1912)** patronym not identified; Eigenmann mentioned a “Dr. F. M. Chapman” in a later (1942¹) publication, who was a traveling companion in South America, perhaps ornithologist Frank M. Chapman (1864–1945), American Museum of Natural History

***Astroblepus chimborazo* (Fowler 1915)** of Chimborazo, Ecuador, type locality

***Astroblepus chinchaensis* Ardila Rodríguez 2014 -ensis**, Latin suffix denoting place: Distrito Chinchao, Peru, where type locality (Quebrada [brook] Saria, elevation 1100 m) is situated

***Astroblepus chotae* (Regan 1904)** of the Chota Valley, Ecuador, type locality

***Astroblepus cirratus* (Regan 1912)** Latin for curly or fringed, presumably referring to nasal flap “produced into a barbel which is as long as the diameter of the eye”

***Astroblepus curitiensis* Ardila Rodríguez 2015 -ensis**, Latin suffix denoting place: Municipio de Curiti, “land of mists and beautiful sunsets” (translation), Departamento de Santander, Colombia, type locality

***Astroblepus cyclopus* (Humboldt 1805)** latinization of Cyclops, mythological one-eyed giants that lived inside the volcano of Mt. Aetna (or Etna) of Sicily, alluding to local reports that the Andean volcanoes of Ecuador regularly eject a muddy substance mixed with fresh water and large numbers of this catfish, which presumably live in subterranean lakes beneath the volcano; Humboldt believed these claims but they have never been authenticated [see essay, next page]

***Astroblepus dux* Posado 1909** Latin for leader, allusion not explained,

¹ Eigenmann, C. H. and W. R. Allen. 1942. Fishes of Western South America. I. The intercordilleran and Amazonian lowlands of Peru. II. The high pampas of Peru, Bolivia, and northern Chile. With a revision of the Peruvian Gymnotidae, and of the genus *Orestias*. University of Kentucky. I–xv + 1–494, Pls. 1–22.

probably referring to “El Capitán,” its vernacular name in Medellín, Colombia, at the time

***Astroblepus eigenmanni* (Regan 1904)** in honor of German-born American ichthyologist Carl H. Eigenmann (1863–1927), who loaned specimens to Regan; in addition, Eigenmann reported this catfish as *Cyclopium cyclopium* in 1888

***Astroblepus festae* (Boulenger 1898)** in honor of Italian naturalist Enrico Festa (1868–1939), who collected holotype [although named after a man, “ae” is an acceptable way to form a genitive from a masculine noun that ends in “a”]

***Astroblepus fissidens* (Regan 1904)** *fissus* (L.), cleaved or split; *dens* (L.), tooth, probably referring to premaxillary teeth, which are “acutely” bicuspid or “more or less Y-shaped”

***Astroblepus floridablancaensis* Ardila Rodríguez 2016** *-ensis*, Latin suffix denoting place: municipio de Floridablanca, Colombia, type locality

***Astroblepus floridaensis* Ardila Rodríguez 2013** *-ensis*, Latin suffix denoting place: río a la Florida (Quebrada Florida), Departamento del Amazonas, Andes of Peru, type locality

***Astroblepus formosus* Fowler 1945** Latin for beautiful or handsome, referring to its “pleasing contrasted coloration” (brown to black body, whitish belly and whiskers, pale to whitish fins)

***Astroblepus frenatus* Eigenmann 1918** Latin for bridled, referring to dark streak from eye to base of barbels

***Astroblepus grivalvii* Humboldt 1805** in memory of Don Mariano Grixalva, a “respectable scholar” who “disseminated at Popayan [Colombia, where this catfish occurs] a taste for the physical sciences, which he himself cultivated with success” (translation)

***Astroblepus guentheri* (Boulenger 1887)** patronym not identified but clearly in honor of German-born British ichthyologist-herpetologist Albert Günther (1830–1914), British Museum (Natural History), where

Vomited by a volcano: Alexander von Humboldt and *Astroblepus cyclopius*

With a name like *cyclopius*, you’d expect this astroblepid (or climbing) catfish from the Andes of Ecuador to have only one eye. Or at least look like it has one eye. But no, the name has nothing to do with eyes. Instead, it has to do with Humboldt’s belief that living specimens of the catfish are regularly expelled from the volcanoes they live under or inside.

German naturalist Alexander von Humboldt (1769–1859) spent five years exploring the New World, including parts of present-day Ecuador, Venezuela, Brazil, Cuba, Mexico, and a brief visit to the United States. He contributed at least



Artist’s rendering of *Astroblepus cyclopius*, ejected from a volcano.
From: Pouchet, F.A. 1883. *The Universe; or, The Wonders of Creation*.
7th ed. Portland, Me.: H. Hallett and Company.

20 new fish taxa to the literature, including two new catfish genera that are still valid today, *Eremophilus* (Trichomycteridae) and *Astroblepus* (Astroblepidae). Humboldt was quite amazed by the latter.

In his description of *Pimelodus* (now *Astroblepus*) *cyclopius* (herein translated from the French), Humboldt talked about a chain of active Andean volcanoes that frequently eject enormous quantities of mud. While none of these “volcanic inundations” took place during his visit, he learned from town archives and from “several very well informed persons, who have successfully devoted themselves to the physical sciences,” that these volcanoes also eject “an innumerable quantity of fish,” and have done so many times over the years.

In 1691, for example, one volcano “threw out thousands on the field of the city of Ibarra. The putrid fevers which commenced at that period were attributed to the miasma which exhaled from these fish, heaped on the surface of the earth and exposed to the rays of the sun.” Again, in 1698, “thousands of these animals enveloped in argillaceous mud were thrown over the crumbling borders” of a volcano that sunk back into the earth.

“Some Indians have assured me,” Humboldt wrote, “that the fish vomited by the volcanoes were sometimes still living in descending along the flank of the mountain: but this fact does not appear to me sufficiently proved . . .”. The Indians, however, did convince Humboldt that the ejected fishes were identical to those found in rivulets at the foot of these volcanoes. This led Humboldt to surmise that Ecuador “contains great subterranean lakes which conceal these fishes,” with small outlets that occasionally allow them access to the surface.

Humboldt’s claim that the catfish lives in subterranean waters has not panned out; indeed, the species appears to be quite common in surface waters. The even more fantastic claim that it is ejected from volcanoes — presumably, when the presumed subterranean waters heat up, condense and push through vents in the sides of the volcanoes — has not been verified either. In fact, Humboldt’s extraordinary account is seldom mentioned in modern literature.

So how did *Astroblepus cyclopius* come by its specific name? Humboldt offered no explanation, but anyone well versed in Greek mythology — as Humboldt and other scholars of his time period almost certainly were — would see the connection right away.

Cyclops, the one-eyed giants who forged Zeus’ thunderbolt, Hades’ helmet of invisibility, and Poseidon’s trident, lived inside the volcano of Mt. Aetna (or Etna) of Sicily.

holotype is housed

***Astroblepus heterodon* (Regan 1908)** *héteros* (Gr. ἕτερος), different; *odon*, Latinized and grammatically adjusted from the Greek nominative ὀδούς (*odoús*), tooth, referring to unicuspid teeth on upper jaw and bicuspid teeth on lower

***Astroblepus hidalgoi* Ardila Rodríguez 2013** in honor of Peruvian ichthyologist Max Hidalgo, Universidad Nacional Mayor de San Marcos de Lima, for his contributions to the study of the freshwater fishes of Peru

***Astroblepus homodon* (Regan 1904)** *homós* (Gr. ὁμός), same; *odon*, Latinized and grammatically adjusted from the Greek nominative ὀδούς (*odoús*), tooth, probably referring to teeth of the outer series of the premaxillaries, which are all bicuspid, or “more or less Y-shaped”

***Astroblepus huallagaensis* Ardila Rodríguez 2013** *-ensis*, Latin suffix denoting place: río Huallaga, Departamento de Huánuco, Andes of Peru, type locality

***Astroblepus itae* Ardila Rodríguez 2011** in honor of ITA, Instituto Técnico Agrícola, Cáchira, Norte de Santander, Colombia, in existence for 55 years

***Astroblepus jimenezae* Ardila Rodríguez 2013** in honor of Luz Fernanda Jiménez Segura, director of the ichthyology lab at Universidad de Antioquia, for her contributions to the knowledge of Colombian fishes

***Astroblepus jurubidae* Fowler 1944** of the Río Jurubidá, Nuquí, Colombia, type locality

***Astroblepus labialis* Pearson 1937** Latin for of the lips, characterized by its very wide lips

***Astroblepus latidens* Eigenmann 1918** *latus* (L.), wide or broad; *dens* (L.), tooth, referring to wider teeth on outer row of premaxillary compared with the similar *A. trifasciatus*

***Astroblepus longiceps* Pearson 1924** *longus* (L.), long; *-ceps* (Neo-Latin), headed, presumably referring to its head, $3\frac{1}{2}$ – $3\frac{3}{8}$ times in length

***Astroblepus longifilis* (Steindachner 1882)** *longus* (L.), long; *filis* (scientific Neo-Latin), thread-like or filiform thread, referring to its long pectoral- and caudal-fin rays

***Astroblepus mancoi* Eigenmann 1928** in honor of Inca governor and founder Ayar Manco, also known as Manco Cápac, “the Moses of the Peruvians, who led the exodus from Tampu-tocco to Cuzco about 1100 A.D.”

***Astroblepus mariae* (Fowler 1919)** in honor of Hermano Apolinar Maria (1867–1949), missionary monk, ornithologist, and Director, Museum at the Instituto de La Salle, Bogotá, who collected holotype and offered Fowler the opportunity to study it [although named after a man, “ae” is an acceptable way to form a genitive from a masculine noun that ends in “a”]

***Astroblepus marmoratus* (Regan 1904)** Latin for marbled, referring to its brownish coloration, “marbled with blackish”

***Astroblepus martinezi* Ardila Rodríguez 2013** in honor of Antonio José Martínez Negrete, Administrator, Parque Nacional Natural Paramillo (Cordoba, Colombia), for his conservation work and scientific research

***Astroblepus mendezi* Ardila Rodríguez 2014** in honor of Panamanian parasitologist Eustorgio Mendez Cedeño (1927–2016), who, for 40 years, maintained the zoological collection (which now bears his name) at the Gorgas Memorial Institute for Health Studies in Panama, the country where this catfish occurs

***Astroblepus micrescens* Eigenmann 1918** Latin for decreasing or becoming small, i.e., smallish, described as a smaller (up to 9 cm SL) subspecies of *A. grixalvii* (up to 30 cm SL)

***Astroblepus mindoensis* (Regan 1916)** *-ensis*, Latin suffix denoting place: Mindo, western Ecuador, type locality

***Astroblepus mojicai* Ardila Rodríguez 2015** in honor of José Iván Mo-

jica, Director, Museo de Ictiología del Instituto de Ciencias Naturales de la Universidad Nacional de Colombia (Bogotá), for contributions to the knowledge of Colombian ichthyology

***Astroblepus moyanensis* Ardila Rodríguez 2014** *-ensis*, Latin suffix denoting place: Quebrada (brook) Moyán, Departamento de Cajamarca, Peru, type locality

***Astroblepus nettoferreirai* Ardila Rodríguez 2015** in honor of Brazilian ichthyologist André Luiz Netto Ferreira (b. 1982), Universidad de São Paulo, for “great” (translation) contributions to the ichthyology of South America

***Astroblepus nicefori* Myers 1932** in honor of Brother Nicéforo Maria (1888–1980), monastic name of Antoine Rouhaire (a Frenchman), Museo del Instituto de La Salle (Bogota), who sent a collection of Colombian freshwater fishes to Myers, including holotype of this one [Myers’ spelling of the name without the second “o” is apparently not a mistake since herpetologists have also used that spelling for three reptiles named after Nicéforo; however, two other fishes that honor Nicéforo use the alternate spelling: *Leporinus niceforoi* and *Hypostomus niceforoi*]

***Astroblepus onzagaensis* Ardila Rodríguez 2015** *-ensis*, Latin suffix denoting place: Municipio de Onzaga, Departamento de Santander, Colombia, type locality

***Astroblepus orientalis* (Boulenger 1903)** Latin for eastern, the first species of the family recorded east of the Andes (Venezuela)

***Astroblepus ortegai* Ardila Rodríguez 2012** in honor of Hernán Ortega, curator, Colección Ictiológica de la Universidad Nacional Mayor de San Marcos (MUSM) de Lima, for his contributions to the knowledge of Peruvian fishes

***Astroblepus peruanus* (Steindachner 1876)** *-anus* (L.), belonging to: Peru, where type locality (Amable Maria) is situated

***Astroblepus phelpsi* Schultz 1944** in honor of businessman and ornithologist William H. Phelps, of Caracas, a “well-known leader in furthering the development of the biological sciences in Venezuela,” presumably Phelps, Jr. (1902–1988), honored by Schultz in the same publication in the name of *Spatuloricaria phelpsi* (Loricariidae: Loricariinae), but patronym could also honor his father, Phelps, Sr. (1875–1965), also an ornithologist-businessman in Venezuela

***Astroblepus pholeter* Collette 1962** *phōlētēr* (Gr. φωλητήρ), “one who lurks in holes,” referring to its cavernicolous habits

***Astroblepus pirrensis* (Meek & Hildebrand 1913)** *-ensis*, Latin suffix denoting place: location not specified, perhaps referring to Pirre River and/or Mount Pirre, both near type locality

***Astroblepus pradai* Ardila Rodríguez 2015** in honor of Saul Prada Pedros, president of the Colombian Association of Ichthyologists (ACICTIOS), which has “contributed greatly” (translation) to the knowledge of Colombian ichthyology

***Astroblepus praeliorum* Allen 1942** *-orum* (L.), commemorative suffix, plural: in honor of Hermanos Praeli, “merchants of Tarma and La Merced [Peru], who were instrumental in procuring facilities and who aided the collecting in person”

***Astroblepus preñadillus* (Valenciennes 1840)** from *preñadilla*, local name for astroblepid catfishes in the Andes of Ecuador

***Astroblepus putumayoensis* Ardila Rodríguez 2015** *-ensis*, Latin suffix denoting place: Departamento del Putumayo, Colombia, where type locality (Río Mocoa, Municipio de Mocoa) is situated

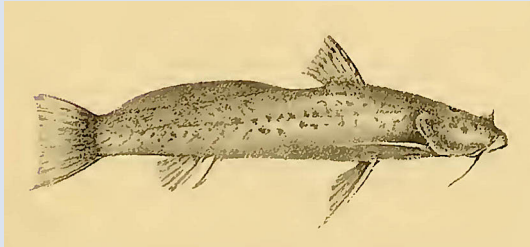
***Astroblepus quispei* Ardila Rodríguez 2012** in honor of Roberto Quispe, Museo de Historia Natural de la Universidad Nacional Mayor de San Marcos, for contributions to the study of the Andean catfishes of Peru

***Astroblepus regani* (Pellegrin 1909)** in honor of English ichthyologist Charles Tate Regan (1878–1943), Natural History Museum (London), for his “important” (translation) 1904 monograph on loricariid catfishes

The murder of Perry Oveitt Simons

In his description of *Astroblepus simonsii*, British ichthyologist Charles Tate Regan said that the type specimens were collected at Huaras, Peru, at an elevation of 10,700 feet, by the “late” Mr. P. O. Simons. Regan did not indicate how Simons had died, but he almost certainly knew what happened.

Born in Wisconsin in 1869, Perry Oveitt Simons moved to California in 1886 and later attended Stanford University, where he studied electrical engineering. During the summers he helped zoology students collect animals in the mountains of California and Arizona. He was so good at collecting animals at high elevations that the British Museum (Natural History) hired him in 1898 for a three-year expedition to the Andes of South America. Simons sent back valuable collections of animals, several of which — including three lizards, a snake, and a frog — were named in his honor.



Astroblepus simonsii. From: Regan, C. T. 1904. A monograph of the fishes of the family Loricariidae. Transactions of the Zoological Society of London 17 (pt 3, no. 1): 191–350, Pls. 9–21.

While collecting in the Andes, Simons feared for his life. In his letters home he worried about the “irresponsible natives” who helped him in various ways. He mentioned two unsuccessful attempts on his life. One time he discovered that his meal was poisoned, for he was made sick by eating a little and his dog was killed by it. At another time he was robbed of everything he had and put in prison by the local authorities as a vagabond and on general suspicion. For several weeks he was unable to get word to anyone until he finally notified the British Consul, who had him released.

Undaunted, Simons set out on what would be his final journey in December 1901. He started out on foot from Argentina for Valparaiso, having first shipped his collecting materials ahead. On the night of December 20, 1901, while Simons was on the trail across the Paramillo de las Cuevas, near Cuevas, Mendoza, Argentina, he was murdered by his Chilean guide, Esteven Paves, with the motive of robbery. Paves is said to have struck Simons on the back of the head with a “penca,” or loaded knot at the end of a rein, and then to have driven a spike through his forehead. Paves threw Simons’ body into the Mendoza River, where it was later recovered and buried, and made off with Simons’ outfit. The murderer was later apprehended and sentenced to imprisonment in Mendoza, finally dying in prison in January 1908.

News of Simons’ brutal death shocked and saddened his colleagues. British zoologist Oldfield Thomas eulogized Simons. “Brave to a fault,” he wrote, “cheery and enthusiastic, fond of a wild life, successful as a trapper, painstaking, systematic, and extraordinarily rapid in his work, Mr. Simons was the perfection of a collector, and we shall not easily find his like again.”

Sources:

Anonymous. 1902. Killed by his guide. *The Daily Palo Alto*. Vol. XX, No. 85 (12 May). Page 4.

Anonymous. 1903. [Untitled obituary]. *The Auk*. Vol 20. Pages 94–96.

Burt, C. E., and G. S. Myers. 1942. Neotropical Lizards in the Collection of the Natural History Museum of Stanford University. Stanford University Publications, Biological Sciences, vol. VIII, no. 2. Stanford, Ca.: Stanford University Press.

***Astroblepus rengifo* Dahl 1960** in honor of Colombian medical entomologist and parasitologist Santiago Rengifo Salcedo (1913–1965), for his “ceaseless [sic] work for the advancement of biological science in Colombia”

***Astroblepus retropinnus* (Regan 1908)** *retro-* (L.), back; *pinnus* (L.), fin, referring to more posteriorly placed dorsal fin compared to the related *A. Boulengeri* and *A. homodon*

***Astroblepus riberae* Cardona & Guerao 1994** in honor of Carles Ribera, University of Barcelona, a specialist in cavernicolous spiders, who collected holotype from Ninabamba caves in Peru [although named after a man, “ae” is an acceptable way to form a genitive from a masculine noun that ends in “a”]

***Astroblepus rivasae* Ardila Rodríguez 2018** in honor of Colombian biologist Sofia Rivas Lara, Universidad Tecnológica del Chocó “Diego Luis Cordoba,” who has “contributed greatly” (translation) to the knowledge of the fishes of Chocó, Colombia (where this catfish occurs)

***Astroblepus rosei* Eigenmann 1922** in honor of botanist Joseph Nelson Rose (1862–1928), United States National Museum, a “student of the flora of South America”

***Astroblepus sabalo* (Valenciennes 1840)** a common Spanish name for many fishes from South America, including this one

***Astroblepus santanderensis* Eigenmann 1918 -ensis**, Latin suffix denoting place: Santander, Colombia, where type locality (Quebrada [brook] do Guapota) is situated

***Astroblepus simonsii* (Regan 1904)** in honor of the late Perry Oveitt Simons (1869–1901), American natural history collector in South America, who collected holotype (his guide murdered him while crossing the Andes of Argentina, presumably for his money and gear) [see essay, above]

***Astroblepus stuebeli* (Wandolleck 1916)** in honor of Moritz Alphons Stübel (1835–1904), German geologist and vulcanologist, whose collection provided holotype

***Astroblepus supramollis* Pearson 1937** *supra-* (L.), above; *mollis* (L.), soft, referring to jelly-like substance beneath skin on top of head and in front of dorsal fin on sexually mature specimens in life (in preservative the substance disappeared and the skin became wrinkled)

***Astroblepus taczanowskii* (Boulenger 1890)** in memory of Polish zoologist Władysław (or Ladislas) Taczanowski (1819–1890), who provided

holotype during an exchange between the British Museum (Natural History) and the Warsaw University Museum

***Astroblepus tamboensis* Ardila Rodríguez 2014** *-ensis*, Latin suffix denoting place: río Tambo, Huánuco, Peru, type locality

***Astroblepus thesiae* (Steindachner 1907)** in honor of Princess Theresa of Bavaria (Therese von Bayern, 1850–1925), amateur naturalist and explorer, for promoting of knowledge of the fauna of Peru, Bolivia and Ecuador via her scientific expeditions to South America

***Astroblepus trifasciatus* (Eigenmann 1912)** *tri-* (L.), three; *fasciatus* (L.), banded, presumably referring to three black bands on young specimens, although Eigenmann describes four: “across the head, another across the back at the base of dorsal fin, another across the anterior part of adipose and the back just in front of it and another across the end of the caudal peduncle”

***Astroblepus ubidiai* (Pellegrin 1931)** in honor of Georges Ubidia, a student of Swiss parasitologist Otto Fuhrmann (1871–1945); Ubidia collected the holotype, which Fuhrmann forwarded to Pellegrin

***Astroblepus unifasciatus* (Eigenmann 1912)** *uni-*, from *unus* (L.), one; *fasciatus* (L.), banded, presumably referring to a “light band, clear or marbled, from the posterior portion of the spine of the adipose and the back of the caudal peduncle obliquely downward and forward”

***Astroblepus vaillanti* (Regan 1904)** in honor of French zoologist Léon Vaillant (1834–1914), Muséum national d’Histoire naturelle (Paris), “through whose kindness [Regan] was permitted to examine the specimens in the Jardin des Plantes”

***Astroblepus vanceae* (Eigenmann 1913)** in honor of Miss Lola E. Vance (Mrs. Jacob Lievense, no other information available), who provided a small collection of fishes from Peru, including holotype of this one

***Astroblepus ventralis* (Eigenmann 1912)** Latin for of the belly, referring to lancet-shaped ventral fins, reaching slightly beyond anus in large males and females

***Astroblepus veri* Ardila Rodríguez 2015** in honor of Colombian agronomist Jorge Augusto Vera Mantilla, for his help in capturing the type specimens

***Astroblepus whympersi* (Boulenger 1890)** in honor of English mountaineer and explorer Edward Whymper (1840–1911), who collected fishes, amphibians and reptiles in the Andes of Ecuador, including holotype of this catfish, which he sent to the British Museum (Natural History)