

Order GOBIIFORMES

Collared Wrigglers

## Family XENISTHMIDAE

Miller 1973



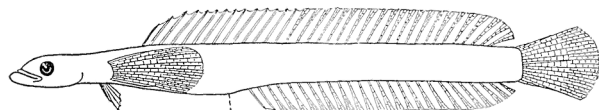
*Gymnoxenisthmus flavicinctus*, holotype, male, 20.2 mm SL. Photo by Sergei V. Bogorodsky. From: Gill, A. C., S. V. Bogorodsky and A. O. Mal. 2019. Description of a second species of *Gymnoxenisthmus* from the Red Sea (Teleostei: Gobioidi: Xenisthmidae). *Zootaxa* 4590 (1): 177–183.

### *Allomicrodesmus*

Schultz 1966

*állos* (ἄλλος), other, i.e., another genus presumed to be closely related to *Microdesmus* (Gobiidae)

*Allomicrodesmus dorotheae* Schultz 1966 in honor of Schultz' wife, Dorothea Bowers Schultz, who illustrated many of the new species in his monograph (but not this one)



*Allomicrodesmus dorotheae*, holotype, 20.9 mm SL. Illustration by Aime M. Awl. From: Schultz, L. P., L. P. Woods and E. A. Lachner. 1966. Fishes of the Marshall and Marianas islands. Vol. 3. Families from Kraemeriidae through Antennariidae. Bulletin of the United States National Museum 202 (3): i–vii + 1–176, Pls. 124–148.

### *Gymnoxenisthmus*

Gill, Bogorodsky & Mal 2014

*gymnós* (γυμνός), bare or naked, referring to absence of scales on body; *Xenisthmus*, similar in body form to that genus

*Gymnoxenisthmus flavicinctus* Gill, Bogorodsky & Mal 2019 *flavus* (L.), yellow; *cinctus* (L.), belted or girdled, referring to yellow bars on upper body

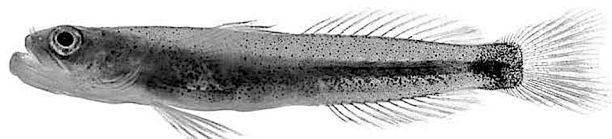
*Gymnoxenisthmus tigrellus* Gill, Bogorodsky & Mal 2014 diminutive of *tigris* (L.), tiger, i.e., little tiger, referring to orange bars on body (name was selected by school children at the Australian Museum Science Festival Expo in August 2013)

### *Paraxenisthmus*

Gill & Hoesel 1993

*pará* (παρά), near, referring to its similarity to *Xenisthmus*

*Paraxenisthmus cerberusi* Winterbottom & Gill 2006 of Cerberus, three-headed dog guarding the gates of Hades in Greek mythology,



*Paraxenisthmus cerberus*, holotype, male, 20.7 mm SL. From: Winterbottom, R. and A. C. Gill. 2006. *Paraxenisthmus cerberusi*, a new species of xenisthmid fish from Palau (Percomorpha: Gobioidi). *Copeia* 2006 (1): 10–13.

referring to its “relatively toothy attributes,” and to black juveniles and red-and-black adults, colors that are “often associated with the darkness and flames of the Christian concept of the Underworld”

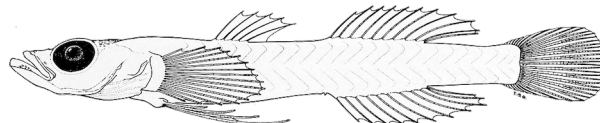
*Paraxenisthmus springeri* Gill & Hoesel 1993 in honor of American ichthyologist Victor G. Springer (1928–2022), U.S. National Museum, for his contributions to the systematics of xenisthmine and other fishes

### *Rotuma*

Springer 1988

named for the island of Rotuma, a Fijian dependency, type locality

*Rotuma lewisi* Springer 1988 in honor of Australian fisheries biologist Anthony D. Lewis (1948–2022), Fisheries Officer, Government of Fiji, for his support of Springer's field work in Fiji



*Rotuma lewisi*, paratype, 18.3 mm SL. From: Springer, V. G. 1988. *Rotuma lewisi*, new genus and species of fish from the southwest Pacific (Gobioidi, Xenisthmidae). *Proceedings of the Biological Society of Washington* 101 (3): 530–539.

### *Tyson*

Springer 1983

named for American ichthyologist Tyson R. Roberts (1940–2025), the first to collect this species (1975) and recognize its distinctiveness

*Tyson belos* Springer 1983 *bélos* (βέλος), arrow or dart, referring to its arrow-like shape



*Tyson belos*, paratype, female, 18.8 mm SL. Illustration by Jack R. Schroeder. From: Springer, V. G. 1983. *Tyson belos*, new genus and species of western Pacific fish (Gobiidae, Xenisthmidae), with discussions of gobioid osteology and classification. *Smithsonian Contributions to Zoology* 390: i–iii + 1–40.

## **Xenisthmus**

**Snyder 1908**

*xénos* (ξένος), strange or foreign (i.e., different), presumably referring to how edges of gill membranes of *X. proriger* (=clarus) are “free from the isthmus”

***Xenisthmus africanus* Smith 1958** -anus (L.), belonging to: Africa, referring to its occurrence off Mozambique, western Indian Ocean, identified as a separate species from its Red Sea congener, *X. polyzonatus*

***Xenisthmus aureus* Chang, Shen & Chen 2025** Latin for golden, referring to golden-yellow marks on body and smaller golden-yellow marks or short bars on sides

***Xenisthmus balius* Gill & Randall 1994** Latinization of *baliós* (βαλιός), spotted or dappled, referring to “reticulate mottling of irregular, brown to dark grey-brown melanophores” on head and body

***Xenisthmus chapmani* (Schultz 1966)** in honor of American ichthyologist Wilbert M. Chapman (1910–1970), who collected holotype

***Xenisthmus chi* Gill & Hoese 2004** 22nd letter of Greek alphabet (χ), referring to X-shaped markings on body

***Xenisthmus clarus* (Jordan & Seale 1906)** Latin for bright or distinct (i.e., clear), referring to its translucent, scaleless body

***Xenisthmus eirosipilus* Gill & Hoese 2004** *eiros* (εἶρω), to join in lines or string together; *spilus*, from *spilos* (σπίλος), mark or spot, referring to prominent mid-side pattern of closely spaced dark spots

***Xenisthmus nigrolateralis* Chen, Harefa, Jiang & Chang 2022** *nigro-*, from *niger* (L.), dark or black; *lateralis* (L.), of the side, referring to broad, deep-brown lateral stripe from rear of gill opening to caudal-fin base



*Xenisthmus nigrolateralis*, holotype, 27.7 mm SL. Illustration by T. Kofyan. From: Chen, I-S., T. Harefa, G.-C. Jiang and C.-W. Chang. 2022. A new wriggler of Eleotrid (Teleostei: Xenisthmidae) from Taiwan. *Zootaxa* 5189 (1): 13–17.

***Xenisthmus oligoporus* Gill, Bogorodsky & Mal 2017** *oligos* (ὀλίγος), few or scanty; *porus*, from *póros* (πόρος), pore, referring to relatively low number of sensory pores on head compared with congeners

***Xenisthmus polyzonatus* (Klunzinger 1871)** *poly-* (πολύ-), many; *zonatus* (L.), banded, referring to 12–13 broad, black crossbands on body

***Xenisthmus semicinctus* Gill & Hoese 2004** *semi-*, from *semis* (L.), a half or moiety; *cinctus* (L.), belted or girdled (but treated as a noun by the authors), referring to dark markings on dorsal part of body