

## On the erroneous records of *Phalloptychus januaris* (Hensel, 1868) from freshwaters in Argentina.

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### Abstract

The poeciliid species *Phalloptychus januaris* has been reported repeatedly from Argentina. The chronology of the records in literature is analyzed and the records of *Phalloptychus januaris* from Argentina are tentatively assigned to *Phalloceros caudimaculatus*.

### Resumen

El poecilidio *Phalloptychus januaris* ha sido citado repetidamente para la Argentina. Se analiza la cronología de las referencias en la literatura. Las citas correspondientes a *Phalloptychus januaris* son asignadas tentativamente a *Phalloceros caudimaculatus*.

Just as the species name indicates, Hensel (1868) described *Girardinus januaris* from the area of Rio de Janeiro. Garman (1895) placed both, *Girardinus iheringii* Boulenger, 1889 and *G. caudimaculatus* Hensel, 1868, in the synonymy of *G. januaris* and additionally erected the new genus *Glaridodon*, preoccupied and replaced by *Glaridichthys* Garman, 1896 for the latter. Based on specimens from the port of Buenos Aires, Berg (1897) reported the first record of *Glaridodon januaris* from a locality in Argentina, following the synonymy proposed by Garman, and possibly following Hilgendorf (*vide* Philippi 1906) in the assumption that Perugia's (1891) record of *Gambusia gracilis?* from the Argentinean province of Córdoba also to be synonymous with *Glaridodon januaris*. Perugia proposed a questionable synonymy of *Xiphophorus obscurus* Weyenbergh, 1877 with *Xiphophorus gracilis* Heckel, 1848 sub *Gambusia gracilis?* (Heck.). Koerber & Azpelicueta (2009) recently revalidated *Jenynsia obscura* (Weyenbergh, 1877) as a senior synonym of *J. pygogramma* Boulenger, 1902.

Eigenmann (1907) recognized *Girardinus januaris* and *G. caudimaculatus* as distinct in both, species and generic level, and erected the genera *Phalloptychus* for the first and *Phalloceros* for the latter, albeit misspelling it *P. caudomaculatus*. In all later papers which report *Phalloptychus januaris* from Argentina (e.g. Lahille 1923, Pozzi 1945, Ringuelet & Arámburu 1961, Ringuelet et al. 1967, López et al. 1987, López et al. 2003) neither information is given that the specimens of Berg have been re-examined since the separation of Eigenmann, nor any details that actually would allow to confirm such records. Lucinda (2008) confirmed the distribution of *Phalloceros caudimaculatus* in the coastal drainages of Southeastern Brazil, Uruguay and province of Buenos Aires together with Eastern affluents of the lower Uruguay river. Thus, being this species the only one of 22 recognized members of the genus that could have possibly been found by Berg in the port of Buenos Aires and Lahille (1923, *vide* Ringuelet et al. 1967) in the río Lujan. The distribution of members of the genus *Phalloptychus* was restricted to the coastal drainages between Bahia and the Laguna dos Patos drainage by Lucinda (2005) who also provided a detailed history for



this genus.

Concluding that neither the record of Perugia from Córdoba, nor the specimens of Berg and Lahille correspond to *Phalloptychus januarius*, we consider all previous records of this species from Argentinean localities to be erroneous and, with the exception of Perugia's *Gambusia gracilis*?, tentatively assign all to refer to *Phalloceros caudimaculatus*. *Phalloptychus januarius* is hereby considered not to be distributed in Argentina and furthermore should not be included in faunal lists for Argentina until new findings and examinations would confirm undoubtedly its presence in this country. With his record of *Glaridodon januarius* from Buenos Aires Berg (1897) seems to have provided the first record of *Phalloceros caudimaculatus* from Argentina.

Confusion between the identities of *Phalloceros caudimaculatus*, *Phalloptychus januarius* and sometimes even *Cnesterodon decemmaculatus* was not only widespread among ichthyologists of the early 20<sup>th</sup> century. The same happened in the aquarium hobby in times when aquarium fishes distributed in Southern South America were imported to Europe mainly from Buenos Aires rather than from localities in the remaining distributional range of Cnesterodontini as Uruguay or Southeastern Brazil.

Stansch (1914) for example showed *Phalloceros caudimaculatus* correctly on page 175, but assigned the name *Phalloptychus januarius* to the melanistic form of the first, then known in the aquarium hobby as *P. c. reticulatus*. In recognition of this error the American ichthyologist George S. Myers made a handwritten correction in his personal copy of Stansch's book: "*This fish, the common Girardinus, is a variety of the foregoing species, Phalloceros caudo.*". Myers' copy is hosted today in the Smithsonian Libraries. This confusion about the identity of *Phalloceros caudimaculatus* among aquarium hobbyists in the early 20th century may have been caused by Köhler (1906), who considered *Girardinus januarius* to be the valid name and the species to be conspecific with *Glaridodon caudimaculatus*. Posterior authors followed this determination, until Arnold (1914) recognized *Phalloptychus januarius* and *Phalloceros caudimaculatus* (sub *P. caudomaculatus*) as different valid species and presented respective figures of both.

## References

- Arnold, J.P. (1914): Zur Namenänderung der lebendgebärenden Zahnkarpfen. Die Gattungen Phalloptychus, Phalloceros und Cnesterodon. Wochenschrift für Aquarien- und Terrarienkunde 11 (27): 533-537
- Berg, C. (1897): Contribuciones al conocimiento de los peces Sudamericanos, especialmente de los de la República Argentina. Anales del Museo Nacional de Historia Natural de Buenos Aires 5: 263-302
- Eigenmann, C.H. (1907): The poeciliid fishes of Rio Grande do Sul and the La Plata Basin. Proceedings of the United States National Museum 32 (1532): 425-433
- Garman, S. (1895): The Cyprinodonts. Memoirs of the Museum of Comparative Zoology 19: 1-179
- Hensel, R. (1868): Beiträge zur Kenntniss der Wirbelthiere Südbrasilens. (Fortsetzung). Archiv für Naturgeschichte 34 (1): 323-375
- Koerber, S. & M. Azpelicueta (2009): On two *Jenynsia* taxa (Cyprinodontiformes: Anablepidae) from Argentina, originally placed in the poeciliid genus *Xiphophorus*. Zootaxa 2028: 51-58
- Köhler, W. (1906): Nomenklaturfragen. IV. Unsere beiden Girardinus-Arten. Blätter für Aquarien- und Terrarienkunde 17 (4): 35-37
- Lahille, F. (1923): Los peces Argentinos del grupo de los Esociformes. Revista de la Facultad de Agronomía y Veterinaria de la Universidad de Buenos Aires 4: 161-195
- López, H.L., R.C. Menni & A.M. Miquelarena (1987): Lista de los peces de agua dulce de la Argentina. Biología Acuática 12: 1-50
- López, H.L., A.M. Miquelarena & R.C. Menni (2003): Lista comentada de los peces continentales de la Argentina. ProBiota - Serie Técnica y Didáctica 5: 1-85
- Lucinda, P.H.F. (2005): Systematics and biogeography of the genus *Phalloptychus* Eigenmann, 1907 (Cyprinodontiformes: Poeciliidae: Poeciliinae). Neotropical Ichthyology v. 3 (no. 3): 373-382
- Lucinda, P.H.F. (2008): Systematics and biogeography of the genus *Phalloceros* Eigenmann, 1907 (Cyprinodontiformes: Poeciliidae: Poeciliinae), with the description of twenty-one new species. Neotropical Ichthyology 6 (2): 113-158
- Perugia, A. (1891): Appunti sopra alcuni pesci sud-americani conservati nel Museo Civico di Storia Naturale di Genova. Annali del Museo Civico di Storia Naturale 'Giacomo Doria' 10: 605- 657
- Philippi, E. (1906): Fortpflanzungsgeschichte der viviparen Teleosteer. *Glaridichthys januarius* und *G. decemmaculatus* in ihrem Einfluss auf Lebensweise, makroskopische und mikroskopische Anatomie. Zoologische Jahrbücher 27 (1): 1-94
- Pozzi, A.J. (1945): Sistemática y distribución de los peces de agua dulce de la República Argentina. Gaea 7 (2): 239-292
- Ringuelet, R.A. & R.H. Arámburu (1961): Peces argentinos de agua dulce. Claves de reconocimiento y caracterización de familias y subfamilias, con glosario explicativo. Agro 3 (7): 1-98

Ringuelet, R.A., R.H. Arámburu & A. Alonso de Arámburu (1967): Los peces argentinos de agua dulce. Comisión de Investigación Científica. La Plata. 602 p.

Stansch, K. (1914): Die exotischen Zierfische in Wort und Bild. Braunschweig, Germany. 349 p.

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