



Designation of the lectotype of *Poecilia amazonica* Garman, 1895 (Cyprinodontiformes, Poeciliidae) and discussion of its nomenclatural status

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Poecilia amazonica Garman, 1895 was described based on syntypes collected at Santa Cruz, Pará, Brazil by Mr. Caleb Cooke in October 1859. The type-series was originally deposited at the Museum of Comparative Zoology at Harvard University, under the catalog numbers MCZ 27573 (128 ex.), and MCZ 69635 (97 ex.). Five specimens were subsequently transferred to University of Michigan Museum of Zoology (UMMZ 146750), and six specimens were sent to the National Museum of Natural History (USNM 120286). Carl Hubbs examined parts of the type-series and considered the syntypes to be *Micropoecilia parae* (Eigenmann, 1894), as inferred from label information handwritten by Hubbs in 1944 and placed inside the jars of lots MCZ 27573 and UMMZ 146750 (ex MCZ 27573). However, Hubbs did not publish anything concerning the nomenclatural status of *P. amazonica*. Consequently, the name *Poecilia amazonica* has been considered valid by several authors since Garman's description (e.g. Rosen & Bailey, 1963; Meyer, 1993; Rodriguez, 1997; Parenti *et al.*, 1999; Lucinda, 2003; and Lucinda & Reis, 2005).

Poeser (2003) included *Poecilia amazonica* in a list of synonyms of *Poecilia parae* Eigenmann, 1894 and stated that two females in the type series with a dark blotch on the caudal peduncle might be *Poecilia branneri* Eigenmann, 1894. However, Poeser did not indicate which syntypes he examined and did not provide any reason or supporting evidence for synonymizing *P. amazonica* under *P. parae*. Poeser visited the UMMZ and, very likely examined the UMMZ syntypes (UMMZ 146750; W. Fink and D. Nelson, pers. com., 2010). This lot contains two females and three males and all of the specimens represent *Poecilia parae*. Poeser probably misidentified the two large males of *P. parae* as females of *P. branneri* (males of *P. parae* and females of *P. branneri* both exhibit a spot on the caudal peduncle).

One of us (CAF) examined a subset of syntypes of *Poecilia amazonica* from MCZ 27573 and MCZ 69635, representing 80 syntypes (40 from each lot) in 1998, and both *P. parae* and *P. branneri* specimens were recognized among the syntypes. Additionally in 2000, CAF examined syntypes deposited at the Smithsonian Institution (USNM 120286), of which five males were radiographed, with three identified as *P. parae* and two as *P. branneri*. The full MCZ and UMMZ type series was examined by one of us (PHFL) at MCZ and UMMZ in June 2010. This examination of the type-series of *P. amazonica* further confirmed that the MCZ syntypes are composed of specimens of *P. parae* and *P. branneri*. It can be inferred that Garman (1895) used specimens of both species to describe *Poecilia amazonica*, as based on his description of color patterns of male and female specimens.

Due to the fact that the name *P. amazonica* has been used many times since its description, we believe the designation of the lectotype of *P. amazonica* is required in order to make a valid synonym from the mixed-species syntypic lot (only five females of *M. branneri* are present among the 234 syntypes). Herein we select a single male syntype of *Poecilia amazonica* that we have identified as *P. parae* from MCZ 27573 and designate it as the lectotype of *Poecilia amazonica*. Thus, *Poecilia amazonica* Garman, 1895 becomes a junior synonym of *P. parae* Eigenmann, 1894. The lectotype was given the catalog number MCZ 168870; it is a 16.19 mm SL male (Fig. 1).

Material examined. *Poecilia amazonica*. lectotype (present designation): MCZ 168870 [ex-MCZ 27573], Pará [Belém and environs], C. Cooke, 25 Oct 1859. Paralectotypes (all collected with the lectotype): MCZ 27573, (127); MCZ 69635, (97); UMMZ 146750, (5); and USNM 120286, (6).