

Lectotype and type locality of *Heros notatus* (JARDINE, 1843) (Teleostei: Cichlidae)

Lectotypus und Typuslokalität von *Heros notatus* (JARDINE, 1843) (Teleostei: Cichlidae)

Zusammenfassung: Die Festlegung des Lectotypus und die Eingrenzung des Typusfundortes von *Heros notatus* (Jardine, 1843) durch SCHINDLER & STAECK (1997) ist vereinzelt auf Widerspruch (STAWIKOWSKI & KULLANDER 1997, STAWIKOWSKI & WERNER 1999) gestoßen. Eine Analyse der für den betreffenden Sachverhalt relevanten Regularien und Empfehlungen in den Internationalen Regeln für die Zoologische Nomenklatur (ICZN) ergibt jedoch, dass die geäußerte Kritik unberechtigt ist. Lectotypus von *Heros notatus* (JARDINE, 1843) ist daher das in JARDINE (1843) abgebildete Exemplar (Ikonotypus). Als Typusfundort dieser Art ist unter Berücksichtigung der Reiseroute des Sammlers (SCHOMBURGK 1841, EIGENMANN 1912; SCURLA 1964) der untere Essequibo bei Rockstone in Guyana anzusehen.

As a result of a discussion of its taxonomy, *Centrarchus notatus* JARDINE, 1843 was treated as a va-

lid taxon within the South-American cichlid genus *Heros* by SCHINDLER & STAECK (1997). The specimen depicted in a drawing in JARDINE (1843: Plate 13) was designed as lectotype by both authors who used the term iconotype ("Ikonotypus") for this drawing to indicate its outstanding taxonomic importance.

In his original description of *C. notatus*, JARDINE (1843) did not mention the locality where the depicted specimen was collected. SCHINDLER & STAECK (1997), however, restricted the type locality to the lower Essequibo River at Rockstone in Guyana. This restriction is in agreement both with the route of the collector (for information on his expedition see SCHOMBURGK 1841, EIGENMANN 1912, SCURLA 1964) and the International Code of Zoological Nomenclature (Article 76). Both the designation of a lectotype and the restriction of the type locality were criticized by STAWIKOWSKI & KULLANDER (1997), who argued, that the term iconotype was not used in the ICZN and that the drawing of a specimen could not be the lectotype, since only a specimen of a syntype series could be selected as a lectotype. However, Article 74.4. of the ICZN confirms that the "designation of an illustration... as a lectotype is to be treated as designa-

tion of the specimen illustrated. . .; the fact that the specimen no longer exists or cannot be traced does not of itself invalidate the designation". The regulation in this article exists since 1962 (see KRAUS 1970). It is true that the term iconotype is not used in the ICZN, but it has been a well-defined term both in systematics and among zoologists for many decades. Following the definition in LINCOLN et al. (1998, 151) an iconotype is "a drawing or photograph of a type specimen". This definition perfectly reflects the meaning of the plate in JARDINE (1843) and the specimen depicted in this drawing.

Further, STAWIKOWSKI & KULLANDER (1997, see also KULLANDER & STAWIKOWSKI 1997) speculate about the type locality of *C. notatus*. Although they confirm the fact that there is no information on any locality in JARDINE (1843), they mention several rather speculative suppositions why the type locality of *C. notatus* might be the Rio Negro in Brazil (STAWIKOWSKI & KULLANDER 1997). In a later publication (STAWIKOWSKI & WERNER 1999) these speculations are quoted as convincing evidence against the designation of the type locality by SCHINDLER & STAECK (1997). However, according to article 76 of the ICZN the first reviser of a taxon has the right to designate a type locality if no exact locality is mentioned in the original description, as in the case of *C. notatus* Jardine, 1843 (see also MAYR, 1969, p. 377: "If no type-locality is given, or if only a vague one [India], the first reviser may designate a restricted type-locality."). Of course, the reviser should take into consideration all available information – above all the route of the collector – before the designation of the type locality (ICZN article 76, MAYR 1969).

After carefully checking all available evidence and in complete accordance with the above mentioned prerequisites SCHINDLER & STAECK (1997) restricted the type locality to the lower Essequibo River in Guyana. This is not only in agreement with the route of SCHOMBURGK (the suspected collector) but gets additional support by the fact that two other cichlid species described by JARDINE (1843) either have their type locality in the Essequibo River (*Centrarchus cyanopterus*), or were collected by Schomburgk in this area (*Cybbia argus*).

In conclusion, there are no reasons to doubt that plate 13 in JARDINE (1843) has the status of an iconotype, that SCHINDLER & STAECK (l. c.) were

justified in selecting the depicted specimen as the lectotype of *Heros notatus* (JARDINE, 1843), and that the type locality of this species is the lower Essequibo River in Guyana, South America.

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