

Preface

This document is the author's translation of his article published in the DKG-Journal 47 (5): 128-135 in October 2015.

On the description of *Aphyosemion jeanhuberi* and the end of the fairy tale of *Aphyosemion louessense* „Malinga“

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The period of time between the discovery of a new killifish and the publication of its scientific description can vary between a few months and several years, in some cases even decades pass. In this article I would like to report on the long history of an *Aphyosemion* species which after its discovery was first (and absolutely justified) considered an undescribed

Summary: This article contains parts of the basic information contained in the scientific description of *Aphyosemion jeanhuberi*. Until today, killifish hobbyists erroneously called the population „GJH 212“ *Aphyosemion louessense* „Malinga“ so that the latter term should be history. Instead, the use of the correct specific name *Aphyosemion jeanhuberi* for all populations conspecific with „GJH 212“ is recommended.



This photograph was taken from the DKG-Journal 5/2002, page 114 top; the then caption was: *Aphyosemion louessense* „Malinga“. Indeed this is *A. jeanhuberi* „GJH 212“ – Photo by H. WISCHMANN



A specimen of the same population. This photograph was taken from the DKG-Journal 2/2004, page 36, and showed the same caption: *Aphyosemion louessense* „Malinga“ – Photo by Dr. L. SEEGER

valid species, then for reason that can not be retraced at all (and incorrectly) called *Aphyosemion louessense* „Malinga“, and finally 36 years later named in honor of its discoverer. Without question I am proud to say that I participated in the naming!

It was in the 1970s when Dr. Jean H. HUBER of Paris conducted collecting trips to Gabon and the Republic of Congo (the former People's Republic of Congo) during which he discovered several new species and later described these. Some of these species are *Aphyosemion mimbon*, *Diapteron seegersi*, *Epiplatys mesogramma*, and *E. phoeniceps*.

The results of his second trip to Gabon in August 1979 were published in an article with the title „Rapport sur la deuxième Expédition au Gabon (août 79). Etude des Cyprinodontidés récoltés“ (HUBER, 1979). It contains a list of the 32 localities of that collecting trip which received a leading „2“ because this was the author's second trip to Gabon: 201, 202, 203... 232.

Figure 7 at page 41 shows a wild male with the caption „A. sp. groupe *ogoense*, loc. 212, Malinga“, that photograph had been taken by the late Maurice CHAUCHE. By using this caption, HUBER indicates that the male belongs to the „*ogoense*“ species group and was collected at his locality 212. At page 38, the position of this locality is given as follows: „Along the earth road through the forest which is planned to connect Malinga to the village named Rébé in the northwest in the future, about 30 km of Malinga, stream with rather strong current. *Aphyosemion* sp. (*ogoense* group)“ (translation from French W. EBERL).

Here we can clearly see that HUBER recognized this killie as a member of the „*ogoense*“ species group which had been precisely defined but a few years ago, but he did not want to assign it to any of the then known species. It is my opinion that the use of the toponym „Malinga“ in the caption contributed to the creation of the error that this locality be near or in Malinga. But this is disproved by the locality list.

In 1982, the German version of the book „Prachtkärpflinge“ by R.H. WILDEKAMP was published by the editor Alfred Kernen Verlag; page 141 contains a colour photograph of a male of the same species with the caption „This westernmost form of the *Aphyosemion ogoense/louessense* group is difficult to clas-

sify, it is presently still called *Aphyosemion* spec. JH-212, and comes from Malinga in southern Gabon“ (translation from German W. EBERL). This caption reveals that also at the press time of this book (early 1982 or earlier) the population „212“ of HUBER's collecting trip to Gabon was not considered a representative of one of the then known species of the „*ogoense*“ group.

In this concern, the use of the locality code „JH 212“ is of interest because it shows the collector's name, but not the country. As already shown in EBERL & FELLMANN (2014: 58), I prefer the code „GJH 212“ for this population. It has never been used by HUBER himself, but it allows the least scope for interpretations.

In the following years and even until today, this population remained available in the hobby continuously, but under various designations. For instance, a random look reveals that a one pair could be seen at the killie exhibition of the BKV in June 2002 as *Aphyosemion louessense* „Malinga“; a photograph of the male taken by H. WISCHMANN was published in a report on that convention (BLUM, 2002: 144). The photograph taken by Dr. SEEGERs was published in the DKG-Journal 2/2004 under the same designation (SCHAIBLE, 2004: 36). However, even completely different combinations of specific names and locality information had been used and are still in use: *Aphyosemion louessense* „G 212“, *Aphyosemion* spec. „JH 212“ (in HUBER's Killie Data online), *Aphyosemion* spec. „Malinga“, *Aphyosemion* spec. „212“, and perhaps even others.

Right after my entry into the world of killifish, I had first contact with this population and I can still very well remember how in the early 1990s Karl-Heinz KOHLER of Bietigheim-



Wild male of *A. jeanhuberi* „GBG 93/20“, photographed in 1993 – Photo by W. GRELL

Bissingen was able to distribute his offspring among many other killie friends. It was about the same time when Wolfgang GRELL gave me hard copies of many articles on killifish and so I became acquainted with the *Aphyosemion* of the Republic of Congo.

In summer 1993, the late Wolfgang GRELL and Friedrich BITTER conducted a collecting trip dur-

ing which they were able to find an *Aphyosemion* population at their locality „GBG 93/20“ 15 km west of Malinga whose colour pattern corresponded to that from the locality „GJH 212“. Unfortunately, this population was then not distributed in the hobby, there are but a few colour slides of wild males taken by Wolfgang GRELL. Soon I doubted that the population from Ma-



This photograph of newly collected wild specimens was taken directly at the locality „COFE 2010/3“, namely at the stream Bilala near the village of Isiengui between Divenié and Malinga – Photo by W. EBERL



A wild pair of *A. jeanhuberi* „COFE 2010/3“, photographed in an aquarium – Photo by W. GRELL



This wild male of *A. jeanhuberi* comes from the locality „COFE 2010/7“ – Photo by W. GRELL



Guido PASSARO in January 2012 at one of the two localities of *A. jeanhuberi* in direct vicinity of the village of Rébé along the side road from Malinga to Lékindou and Lébamba – Photo by W. EBERL

linga be conspecific with *Aphyosemion louessense* from the localities around Sibiti. The redefinition of *Aphyosemion louessense* (PELLEGRIN, 1931) by HUBER & RADDA (1979: 180-181) was particularly crucial. But I had to wait until July 2010 when together with Emmanuel FELLMANN I was able to travel to Divenié, a small city in the Republic of Congo only a

few kilometres south of Malinga. The results of our collections of populations in the Divenié region looking like the one from the locality „GJH 212“ are elaborately described in EBERL & FELLMANN (2014).

In January 2012, Guido PASSARO and me conducted a collecting trip to southern Gabon during which we focused upon the existence

of this still undescribed species on Gabonese territory. First we drove down to Ndendé in order to turn northeast up to Lébamba and then we followed the minor road along the Congolese border passing the gentle Gendarmes of Lékindou in order to finally arrive at Malinga. We were able to find the two localities „GJH 212“ and „GBG 93/20“ at first go by simply having an eye on the distance from Malinga, in addition we managed to discover two streams with very similarly coloured specimens in the village of Rébé which had been mentioned by Huber in his locality list (HUBER, 1980: 32). As can be seen, the knowledge of this species developed as follows: August 1979 discovery at a locality in Gabon by J.H. HUBER, July 1993 discovery of a second population about 15 km further to the east by GRELL and BITTER, stagnancy until 2010 with permanent conservation of the first population in the hobby, July 2010 discovery of six more populations near Dive-nié in the Congo by EBERL and FELLMANN, January 2012 recollections at the two eldest known localities and discovery of two more populations near Rébé west of the locality „GJH 212“ by EBERL and PASSARO.

As meanwhile not only wild specimens had become available in the aquarium for the purpose of distribution in the hobby and for colour photographs of live specimens, but also specimens of both sexes preserved in the field for the purpose of type specimens, the work on the scientific description (VALDESALICI & EBERL, 2015) could be started. The urgent creation of a scientifically relevant taxon was not only a major aspect of my digital presentation about the collecting trip „COFE 2010“ in the scope of the 2011 DKG Convention and subsequent lectures, but this attitude can also be seen in the following citation taken from the DKG Supplement on the „COFE 2010“ collecting trip: „We decided to follow HUBER’s use of a nomenclatorically undefined species designation and to consistently refrain from the use of the term „*Aphyosemion louessense*“ for this population („GJH 212“). This point of view was confirmed by the approval of the revisors of the scientific description of the new species. I must admit there is absolutely no possibility to force killifish hobbyists to use certain generic and specific names. But the fact that the widely spread use of the term *Aphyosemion*



On the traces of Jean H. HUBER: this photograph of the locality „GJH 212“ of *A. jeanhuberi* 30 km west of Malinga in the direction of Lébamba was taken on January 11, 2012 – Photo by W. EBERL

louessense „Malinga“ in the hobby for *Aphyosemion* spec. „GJH 212“ has no taxonomic and nomenclatoric relevance, but a scientific description on the other hand well has, should be convincing sufficiently to consider the fairy tale of *Aphyosemion louessense* „Malinga“ from now on as history. It is desirable that the populations of this species are no longer called *Aphyosemion louessense* „Malinga“, but *Aphyosemion jeanhuberi* – indeed with a correct and complete locality code!

For the purpose of delimitation of *Aphyosemion jeanhuberi* from the „true“ *A. louessense* as well as the other species of the „*ogoense*“ group, the Diagnosis at page 11 of the description contains the following information:

„*Aphyosemion jeanhuberi* belongs to the *Aphyosemion ogoense* species group... which is characterized by presenting dark red margins on the dorsal and dorsal portion of the caudal fin, an asymmetric caudal fin shape, and wide dark red stripes parallel to the caudal fin rays in males. Males of *A. jeanhuberi* can be distinguished from males of the remaining species belonging to this assemblage by their unique colouration consisting of isolated red dots on the flanks and

caudal peduncle over a light blue background (vs. two horizontal red stripes in *Aphyosemion ogoense*; a wide red middorsal stripe in *Aphyosemion louessense*; vertical, irregular red bars in *Aphyosemion pyrophore*; a wide vertical red bar on the central portion of the caudal fin in *Aphyosemion caudofasciatum*; horizontal lines in *Aphyosemion ottogartneri*, ...).“

This description of the colour pattern of adult males is given at pages 113 and 114 of the description:

„Body and head metallic light blue, dorsally light brown, ventrally whitish; irregular series of scattered red dots along flanks and caudal peduncle, dots sometimes connected vertically. Three narrow oblique red bars on the opercle, a red stripe and dot below the orbit. Dorsal, anal, pelvic, and caudal fin light blue; two horizontal series of dots on the proximal portion of the dorsal fin with a broad orange submarginal and a dark red marginal stripe, radially-arranged relatively broad stripes parallel to the fin rays.“

Beyond this, the scientific description also contains meristic data as well as a table with the morphometric data and the description of



The friendly inhabitants of Itabi were willingly ready to show the fish collectors from Europe a nearby stream where another population of *A. jeanhuberi* was found – Photo by W. EBEL



A wild male of *A. jeanhuberi*, „GJH 212“, introduced in Januar 2012 by W. EBERL and G. PASSARO, photographed on February 20, 2013 – Photo by W. GRELL



This female was collected together with the above shown male – Photo by W. GRELL

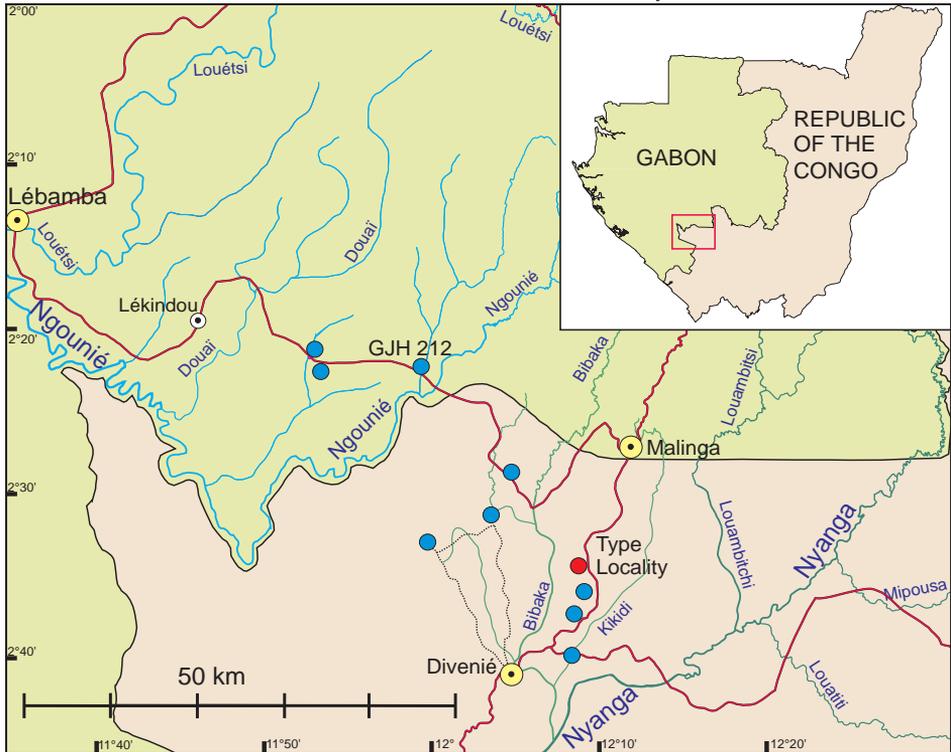


In the front a wild male of *Aphyosemion louessense* „COGE 2013/6“ with the colour pattern of the posterior part of the body that is typical for this species – Photo by W. GRELL

the known localities, but these shall not be given in the scope of the present article. The interested reader is referred to the original description of *A. jeanhuberi*.

The second part of the description of *A. jeanhuberi* contains remarks on the identity of *A. louessense*, mostly consisting of information that is already contained in EBERL & FELLMANN (2014: 78-86).

The specific name *jeanhuberi* was selected upon my suggestion in honour of Dr. Jean Henri HUBER (Paris) because he discovered this species, recognized it as a new species, and spread this acquaintance. Beyond that, his lifework in the form of numerous contributions to the knowledge of Cyprinodontiforms during the recent decades can not be appreciated sufficiently.



The presently known localities of *Aphyosemion jeanhuberi* in the area of Malinga and Divenié

Literature:

- BLUM, H.-J. (2002): BKV Congress 2002, DKG-Journal 34 (5): 143-146
- EBERL, W. & E. FELLMANN (2014): COFE 2010. Beitrag zur Kenntnis hinsichtlich der Cyprinodontiden von Kongo-Brazzaville. DKG-Supplementheft Nr. 12, Dezember 2014
- HUBER, J.H. (1980): Rapport sur la deuxième Expédition au Gabon (août 79). Etude des Cyprinodontidés récoltés. Revue française d'Aquariologie Herpétologie 7 (2): 37-42
- HUBER, J.H. & A.C. RADDA (1979): Die Rivulinae des südlichen Kongo (Brazzaville). 2. Der *Aphyosemion lujae*-Komplex. Aquaria 26: 175-185
- PELLEGRIN, J. (1931): Poissons de la Louessé (Kouilou) recueillis par M. A. BAUDON. Description d'une Variété nouvelle. Bulletin de la Société Zoologique de France 56: 219-221
- SCHAIBLE, I. (2004): *Aphyosemion louessense* „RPC 78/33“. DKG-Journal 36 (2): 35-38
- VALDESALICI, S. & W. EBERL (2015): *Aphyosemion jeanhuberi*, a new killifish species of the *Aphyosemion ogoense* species group (Cyprinodontiformes: Nothobranchiidae), with remarks on the identity of *Aphyosemion louessense* (PELLEGRIN, 1931). aqua, International Journal of Ichthyology Vol. 21 No. 3: 110-119
- WILDEKAMP, R.H. (1982): Prachtkärpflinge. Alfred Kern Verlag, ISBN 3-87401-045-7