

Non-availability of a name electronically published: the case of *Adamas* Huber, 1979 (Pisces, Cyprinodontiformes, Nothobranchiidae), invalidly replaced on the Internet

Jean H. HUBER

Corresponding member, Ichtyologie, Muséum national d'Histoire naturelle,
57 rue Cuvier, F-75231 Paris cedex 05 (France)
author@killi-data.org

Huber J. H. 2007. — Non-availability of a name electronically published: the case of *Adamas* Huber, 1979 (Pisces, Cyprinodontiformes, Nothobranchiidae), invalidly replaced on the Internet. *Zoosystema* 29 (1): 209-214.

ABSTRACT

A discussion on the nomenclatural status of electronic publications and on the procedures of replacement names, following the recent availability of *Nomenclator Zoologicus* on-line, is forwarded, to avoid deviations from the *International Code of Zoological Nomenclature* rules and code of ethics. The case of *Adamas* Huber, 1979 (Pisces), preoccupied by *Adamas* Malaise, 1945, a genus in Hymenoptera, and invalidly replaced on the Internet, is presented. *Adamans* n. nom. is proposed to replace *Adamas*. The derived family-group name, Adamantini Huber, 2000, also changes to Adamansini n. nom. Finally, a short discussion is provided on the opportunity/risk of the Internet use for nomenclatural acts in zoology.

KEY WORDS

Zoological nomenclature, electronic publications, *Adamans* n. nom., Adamansini n. nom., *Adamas*, Adamantini.

RÉSUMÉ

Non-disponibilité d'un nom publié électroniquement : le cas d'Adamas Huber, 1979 (Pisces, Cyprinodontiformes, Nothobranchiidae), remplacé de manière invalide sur internet.

Une discussion sur le statut nomenclatural des publications électroniques et sur les procédures de remplacement des noms, suite à la récente mise à disposition du *Nomenclator Zoologicus* sur internet, est engagée pour éviter des détournements des règles du *Code international de nomenclature zoologique* et de son code d'éthique. L'exemple d'*Adamas* Huber, 1979 (Pisces), préoccupé par *Adamas* Malaise, 1945, un genre d'Hymenoptera, mais remplacé de manière invalide sur internet, est présenté. *Adamans* n. nom. est proposé pour remplacer *Adamas*. Le nom du groupe-famille dérivé, Adamantini Huber, 2000, devient Adamansini n. nom. Les avantages/risques de l'utilisation d'internet pour des actes nomenclaturaux en zoologie sont brièvement discutés.

MOTS CLÉS

Nomenclature zoologique, publications électroniques, *Adamans* n. nom., Adamansini n. nom., *Adamas*, Adamantini.

INTRODUCTION

The problem of names first proposed on the Internet (web sites, blogs, e-magazines, e-mailing, newsgroups, etc.) is a recent key issue in zoological nomenclature and will become more and more important with the development of that media. Even though the relevant dispositions of the latest edition of the *International Code of Zoological Nomenclature* (ICZN 1999 hereafter called the *Code*) are clear on the matter, current practices sometimes contradict the rules and recommendations of the *Code*. This may result in increased confusion in zoological nomenclature, which could finally be highly detrimental to systematics.

This paper stems from a specific case, the fish genus *Adamas* Huber, 1979 for which a replacement name has been proposed in *Munis*, an Internet-based magazine. It first describes the International Commission on Zoological Nomenclature (ICZN) rules regulating electronic publications, and the ethical issues pertaining to the replacement of preoccupied names within the environment of the Internet era communication facilities (e.g., availability of *Nomenclator Zoologicus* online). The example of *Adamas* and its nomenclatural solution are then described. Finally, issues pertaining to the use of the Internet for nomenclatural acts in zoology are raised.

NEW NAMES PROPOSED ON THE INTERNET OR ON ELECTRONIC FILES

According to the current *Code* (ICZN 1999), valid from January 1, 2000, a new name proposed on the Internet or on electronic files is available if, and only if, it complies with articles 8.6 and 9.8, as quoted hereafter:

“8.6. Works produced after 1999 by a method that does not employ printing on paper. For a work produced after 1999 by a method other than printing on paper to be accepted as published within the meaning of the *Code*, it must contain a statement that copies (in the form in which it is published) have been deposited in at least 5 major publicly accessible libraries which are identified by name in the work itself. [...]

9. What does not constitute published work. Notwithstanding the provisions of Article 8, none of the following

constitutes published work within the meaning of the *Code*. [...] 9.8. text or illustrations distributed by means of electronic signals (e.g. by means of the World Wide Web)”.

Even more, the *Code* recommends (Recommendation 8B) that a new scientific name or nomenclatural act is first published in a printed work.

For example, if a new name is proposed in a website page or a PDF file (downloadable or attached to an e-mail), and if the author does not clearly state that he will produce a CD-rom or a printed version of the same work, and deposit it in at least five major public institutions, such a new name is not considered as available.

THE ISSUE OF NAME REPLACEMENT PROCEDURES WITH THE NEW ONLINE AVAILABILITY OF *NOMENCLATOR ZOOLOGICUS*

The recent online availability of the major text book *Nomenclator Zoologicus* (since December 1, 2004 and, expanded, since September 22, 2005, at <http://uio.mbl.edu/NomenclatorZoologicus>) has consistently changed the process of replacing homonyms in zoology. Indeed, it is extremely easy with this on-line tool to determine if a name is preoccupied and if the homonymy has been reviewed by a third party or not. These informations are directly viewable on-line for each name with an “Homonym Mapping” tool in addition; unreplaced homonyms, such as *Adamas*, are labelled as “Homonym yes, Corrected no”. As easily accessible as it is now, this information is of great help for taxonomists, as it is a guarantee to avoid homonyms in the future (if universally known). It may however be misused (see below), especially if the code of ethics of the ICZN is not taken into consideration. This code states :

“3. A zoologist should not publish a new replacement name (a nomen novum) or other substitute name for a junior homonym when the author of the latter is alive; that author should be informed of the homonymy and be allowed a reasonable time (at least a year) in which to establish a substitute name.

4. No author should propose a name that, to his or her knowledge or personal belief, would be likely to give offence on any grounds. [...]

6. Editors and other responsible for the publication of zoological papers should avoid publishing any material

which appears to them to contain a breach of the above principles”.

Replacement of a preoccupied name should better be performed by the author of the name, and editorial boards should at least be aware of the problem.

THE SPECIFIC CASE OF *ADAMAS* HUBER, 1979

Adamas Huber, 1979 (Huber 1979) was erected to include a new fish species from the Congo basin. This taxon has been immediately and unanimously accepted as a distinct genus of cyprinodontiformes fishes, along with new morphological, osteological, behavioural and biogeographical studies (Scheel & Romand 1981; Parenti 1982; Van der Zee 1990; Huber 1998, 2005) and was indexed as valid in all general or specialized catalogues (e.g., Wildekamp *et al.* 1986; Wildekamp 1993; Poll & Gosse 1995; Eschmeyer 1998; Huber 2000; Lazara 2001; Wildekamp & Van der Zee 2004). However, *Adamas* is preoccupied. The name was first published by Malaise (1945), for a genus in Hymenoptera, itself a replacement name for another preoccupied name, *Dimax* Konow, 1897. The genus *Adamas* Malaise, 1945 has been studied recently (Wei 2004) and considered as valid, with the description of new species from China.

Late 2005, a team of scientists from Gazi Üniversitesi, Ankara, Turkey, submitted an article to a brand new in-house Internet-based magazine, *Munis Entomology & Zoology* (received September 2005, accepted October 2005) proposing a replacement name *Fenerbahce*, for *Adamas* Huber, 1979. This paper was downloadable as a PDF document in the January 2006 issue at <http://www.munisentzool.org/downloads.asp?olay=detay&id=71> (Özdikmen *et al.* 2006).

As shown above, the name *Fenerbahce* must be considered an unavailable name, because it has been proposed on the Internet and on electronic files only, in a work that was not intended to be published in a CD-rom or printed version, nor deposited in five public institutions.

Therefore a replacement name must be proposed that complies with the *Code*.

Herein, the name *Adamans* n. nom. is proposed as a substitute generic name for *Adamas* Huber, 1979. The type species remains *Adamas formosus* Huber, 1979. The selection of the new name, with a spelling very close to the previous name, has been guided by conservative principles because the previous name was very well accepted and used in publications.

Etymology: diamond, steel-blue (from Latin: *Adamans*, derived from Greek, initially used in *Adamas*, with the same meaning), in reference to the unique white-blue brilliant heart-shaped frontal spot. Gender: masculine.

The family-group name Adamantini Huber, 2000 proposed for the family level taxon containing *Adamas* is also invalid, according to Article 39 of the *Code*: “The name of a family-group taxon is invalid if the name of its type genus is a junior homonym or has been totally or partially suppressed [...] by the Commission. If that family-group name is in use it must be replaced either by the next oldest available name from among its synonyms [...], including the names of its subordinate family-group taxa, or, if there is no such synonym, by a new name based on the valid name (whether a synonym or a new replacement name (nomen novum)) of the former type genus”.

Then, because of a lack of synonyms and because the stem of *Adamans*, Adamant-, remains the same as for the preoccupied name, the new name *Adamansini* n. nom. is here proposed. The selection of the new name, with a very close spelling to the previous name, has been guided on conservative principles to minimise the change in nomenclature. It follows Recommendation 29A: “As a means of avoiding homonymy between a new family-group name and a previously established one, due to the respective type genera having identical stems [...], an author is advised to use the entire name of the type genus of the new family-group taxon as the stem”.

DISCUSSION ON SOME THEMES REGARDING NOMENCLATURAL ACTS AND ELECTRONIC DOCUMENTS

Although the *Adamas* replacement issue is not very complicated with the current *Code*, remarkably

clear, the case appears to be emblematic in that it raises, at least for the future, many questions relevant to electronic communication. This is a hot issue that ICZN may have to tackle quickly, notably with the vertiginous and uncontrolled – uncontrollable – growth of the various applications of the Internet (web sites, blogs, e-magazines, e-mailing, etc.) or of materialized electronic devices (CD-roms and alike, USB keys, data-included software, etc.), for all items of nomenclature. This is particularly true for replacement names, with the many examples of still uncorrected homonymy that are shown in the online *Nomenclator Zoologicus*.

The case of *Adamas* is actually only one example among many on the mentioned web site, where many cases of homonymy are corrected in a variety of animal groups by a very few number of authors. The process of replacement is obviously opportunistic and organised and does not result from a concrete research project. It is predictable that such an hectic activity in groups for which the authors have no demonstrated experience and knowledge will only result in creating more complex nomenclatural problems and that others will have to spend time to clean behind such “prolific” authors.

In line with the *Adamas* case, some prospective thoughts may be proposed on the opportunity or risk of the Internet use **at least for nomenclatural acts**.

1. There is a positive aspect of electronic communication: to obtain the current electronic and postal address of a given living person will become more and more easy anywhere in the world, even if that person is not anymore involved in a given domain of expertise.

The code of ethics of ICZN should consequently be more and more easy to follow, at least from a practical point of view.

2. The choice of a specific electronic media for publication is not any more a secondary issue: to prepare a new electronic magazine and to send at least five printed copies to international institutions is extremely easy with basic computer skills and dedicated software, and it is far quicker than anything involving publishing.

Then, where will be the borderline between a truly ICZN-advised publication available primarily as a print and also as an electronic file (“brick and mortar” in the specific language of Internet) like most international scientific journals, and an e-magazine, even serious, which can be home-made, use electronic possibilities to reduce time to publication, costs of printing in volume and charges in staff, possibly offer on-line pre-publication downloads and just add five prints (or CD-roms) as a side product?

3. The dimension of quick distribution of information has become over-weighted with the electronic era: to index electronically a work and bring added value with payable – or not – services is easy, and may be quickly done, depending on the amount of brought-in resources (today mainly human, tomorrow fully automatic). This is done by many electronic data bases that have emerged with the digitising of data, such as the *Zoological Record* on-line where the indexation of a new work (with or without CD-roms) is today extremely quick (for example, the January issue of *Munis*, a new and local e-magazine, has been edited for computer screens during the second quarter).

Then, since obviously it is not part of today’s mission of the *Zoological Record* to analyse the nomenclatural availability of a received paper before its electronic indexation, where will be the borderline between nomenclatural availability and the indexation for a paper in data bases, such as the *Zoological Record* which appears official because of its wide international exposure? Further, for an invalid web-based generic name, what will be the difference in terms of nomenclatural availability between the initial incorporated data base indexer, a follower “authored” indexer, and a subsequent author who reports on it?

CONCLUSION

This article addresses two important thread of questions related to nomenclatural acts and electronic new media, such as the Internet, while keeping in mind their huge capacities of sharing and spreading knowledge and even their un-thought potentialities in the future.

Even if the nomenclatural non-availability of names created on electronic files only is today clear and self-standing, its translation into practice may be less obvious and may induce confusions, at least up until the proposed new registration system of ZooBank is operational (if it is mandatory and if precisely the problem of materialized “prints” is tackled properly).

More specifically on preoccupied names listed in the online *Nomenclator Zoologicus* as unresolved, like the *Adamas* case, although the Commission is quoted in the *Code* as “not empowered to investigate or rule upon alleged breaches of them”, the present case might push it to reconsider the situation and change those ethical observations into a rule (or a decision), including when the new ZooBank is operational. It is herein expressed as a hope by the present author, with the aim of minimizing conflicts, of respecting others and of promoting equal access and share of knowledge.

Acknowledgements

Thanks are due to Prof. Philippe Bouchet (MNHN and current ICZN member) and Dr Andrew Polaszek (current ICZN secretary) for their tireless cooperation and help. The contributions of the two reviewers, Alain Dubois (MNHN) and Maurice Kottelat (Cornol, Switzerland), have also been very helpful and they are gratefully acknowledged.

REFERENCES

- ESCHMEYER W. N. (ed.) 1998. — *Catalog of Fishes*. Vols 1-3. Center for Biodiversity Research and Information, California Academy of Sciences, San Francisco, 2905 p. (also online at <http://www.calacademy.org/research/ichthyology/catalog/fishcatsearch.html>).
- HUBER J. H. 1979. — Cyprinodontidés de la Cuvette Congolaise, *Adamas formosus* n. gen., n. sp. et nouvelle description de *Aphyosemion splendidum*. *Revue française d'Aquariologie Herpétologie* 6: 5-10, 6 figs, 2 tabs. (English translation: Cyprinodonts of the Congo Basin (*Adamas formosus* new genus, new species; with a new description of *Aphyosemion splendidum*). *Journal of the American Killifish Association* 12 (6): 165-174 [1979]).
- HUBER J. H. 1998. — *A Comparison of Old World and New World Tropical Cyprinodonts. A Parallel Outlook of Similar and Distinctive Characteristics Regarding Distribution, Evolution, Ecology, Behavior, Morphometrics, Genetics and Color Pattern*. Société française d'Ichtyologie, Paris, 109 p., 17 40figs.
- HUBER J. H. 2000. — *Killi-Data 2000. Updated Checklist of Taxonomic Names, Collecting Localities and Bibliographic References of Oviparous Cyprinodont Fishes (Cyprinodontiformes); in French, English, German and Spanish*. Société française d'Ichtyologie, Paris, 538 p., figs.
- HUBER J. H. 2005. — *A Review of Family-Group Names for Oviparous Cyprinodontiformes (Pisces; Teleostei)*. British Killifish Association Publication, Berkshire, UK, Separatum, (October), 16 p., 1 tab.
- ICZN 1999. — *International Code of Zoological Nomenclature*. Fourth Edition. The International Trust for Zoological Nomenclature, London, 306 p.
- LAZARA K. J. 2001. — *The Killifishes, an Annotated Checklist, Synonymy, and Bibliography of Recent Oviparous Cyprinodontiform Fishes. The Killifish Master Index 4*. American Killifish Association Publication, Cincinnati, 624 p.
- MALASE R. 1945. — Tenthredinoidea of South-Eastern Asia. *Opuscula Entomologica*, Suppl. 4: 90-286.
- ÖZDIKMEH H., POLAT N., YILMAZ M. & YAZIÇYÖZLU O. 2006. — A replacement name for the preoccupied genus name *Adamas* Huber, 1979 (Actinopterygii: Cyprinodontiformes). *Munis Entomology & Zoology* 1 (1): 167-168 (online as a downloadable PDF, available at <http://www.munisentzool.org/downloads.asp?olay=detay&cid=71>).
- PARENTI L. R. 1982. — Relationships of the African Killifish genus *Foerschichthys* (Teleostei: Cyprinodontiformes: Aplocheilidae). *Proceedings of the Biological Society of Washington* 95 (3): 451-457, fig.
- POLL M. & GOSSE J.-P. 1995. — Genres des poissons d'eau douce de l'Afrique. *Mémoire de la Classe des Sciences, Académie royale de Belgique* 9: 1-324.
- SCHEEL J. J. & ROMAND R. 1981. — A new genus of Rivulid Fish from tropical Africa (Pisces, Cyprinodontidae). *Tropical Fish Hobbyist* 29 (11): 22-30, figs, tab.
- WEI M. 2004. — Taxonomic study on the genus *Adamas* Malaise (Hymenoptera: Tenthredinidae). *Entomotaxonomia* 26 (3): 200-210.
- WILDEKAMP R. H. 1993. — *A World of Killies. Atlas of the Oviparous Cyprinodontiform Fishes of the World*. Vol. 1. American Killifish Association Publication, Mishawaka, 311 p., figs.
- WILDEKAMP R. H., ROMAND R. & SCHEEL J. J. 1986. — Cyprinodontidae, in DAGET J., GOSSE J.-P. & THYS VAN DEN AUDENAERDE D. F. E. (eds), *Check-List of the Freshwater Fishes of Africa. CLOFFA* vol. 2. ISNB, Bruxelles; MRAC, Tervuren; ORSTOM, Paris: 165-276.
- WILDEKAMP R. H. & VAN DER ZEE J. R. 2004. — Cyprinodontiformes, in PAUGY D., LÉVÉQUE C. & TEUGELS

G. G. (eds), Poissons des eaux douces et saumâtres de l'Afrique de l'Ouest. The fresh and brackish water fishes of West Africa. Vol. 2. *Faune et Flore tropicales* 40, MNHN, Paris; MRAC, Tervuren; IRD, Paris:

298-442.

VAN DER ZEE J. R. 1990. — Notes on the distribution area of the genus *Adamas*. *Journal of the American Killifish Association* 23 (3): 71-75, figs.

*Submitted on 11 December 2006;
accepted on 15 February 2007.*