

The correct date and place of publication of the ten new generic names employed by Acharius in the *Lichenographia Universalis*

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Clarification in the *Tokyo Code* of the authorship of names appearing in the work of another allowed exemplification in the *Vienna Code* that it is the acceptance by the author of the name and not that by the publishing author that is critical for valid publication. This permits resolution of a long-standing uncertainty as to whether generic names published in Acharius's *Lichenographia Universalis* of 1810 were or were not first introduced in Luyken's *Tentamen Historiae Lichenum* of 1809. In that work, Luyken reproduced diagnoses of Acharius's new genera while the *Lichenographia* was still in press, and 5–6 months before Acharius's work was published. However, as Luyken did not accept the new genera in his final classification some workers had considered the names not validly published under Art. 34 of the *Code*. Now, following the *Vienna Code*, we conclude that these names were validly published in 1809 and must be attributed to "Ach., in Luyken". The correct place and date of publication of the ten generic names involved is presented along with notes on their nomenclatural status; these include the well-known genera *Alectoria*, *Evernia*, *Lecanora*, *Nephroma*, and *Ramalina*.

KEYWORDS: Art. 34, *Ascomycota*, "in" citations, *Lecanoromycetes*, lichens, Luyken, nomenclature

Little is known about Johann [Iohannes] Albert [Albertvs] Luyken (1785–1867), who was born in Wessel (Germany) and died in Landfort (The Netherlands). He studied medicine in Halle and then Göttingen from 1807–09 (Grumann, 1974: 108) and published as his doctoral dissertation in medicine, surgery and obstetrics *Tentamen Historiae Lichenum in Genere cui Accedunt Primae Lineae Distributionis Novae* for his public examination on 21 December 1809 (Fig. 1). This appears to have been his only publication in systematics, and was essentially a commented discussion of the different systems proposed for lichen classification, concluding with a key to 21 genera he accepted. The *Lichenographia Universalis* of Erik Acharius (1757–1819) was completed on 14 July 1807, according to the Preface (Acharius, 1810: viii), and sent to Göttingen to be printed. However, while Acharius's book was not actually released until April or May 1810 (Stafleu & Cowan, 1976: 4), Luyken clearly had access to a copy of the proofs and comments that it "is now in press and will shortly be published" (Luyken, 1809: 82) (Table 1). The works were typeset by different printers in Göttingen: Henricus Dieterich set Luyken's work and Johann Friedrich Röwer that of Acharius. Whether both worked for the publisher of Acharius's work, I.F. Danckwerts, is unknown, but Luyken does not appear to have been given access to the work by Acharius personally as there is no mention of that in Luyken's dissertation.

On pp. 85–96 of his dissertation, Luyken reproduced generic diagnoses of the 41 genera being accepted in Acharius's *Lichenographia*. In the *Lichenographia*, Acharius presented detailed descriptions of the genera at the start of the book (Acharius, 1810: 15–132), and then brief generic diagnoses before the treatments of the species he accepted in them in the remainder of the book. Luyken reproduced the latter shorter diagnoses word-by-word, except in abbreviating "Apothecium" to "Apoth." (Figs 2–3) and the occasional slip in transcribing or typesetting (e.g., "immarginatum" is used, not "marginatum", under *Cenomyces* on p. 93). In two cases generic names were spelled differently from the *Lichenographia*: *Cenomyces* (not *Cenomyce*; only on p. 93 as this name was not accepted in Luyken's key) and *Ceteraria* (not *Cetraria*; a name first validly published by Acharius (1803) but spelled *Ceteraria* on pp. 79, 92 and 100 by Luyken). In both cases the names are attributed to Acharius and the spelling changes are not commented on. We interpret the single use of *Cenomyces* as a typographical error in transcription, and his consistent use of *Ceteraria* as a considered but unjustifiable orthographic correction. If this interpretation of *Cenomyces* is not accepted, as that is masculine and *Cenomyce* feminine, the numerous combinations under *Cenomyce* would have to be corrected to the masculine; e.g., *Cenomyce fimbriata* to *Cenomyces fimbriatus*.

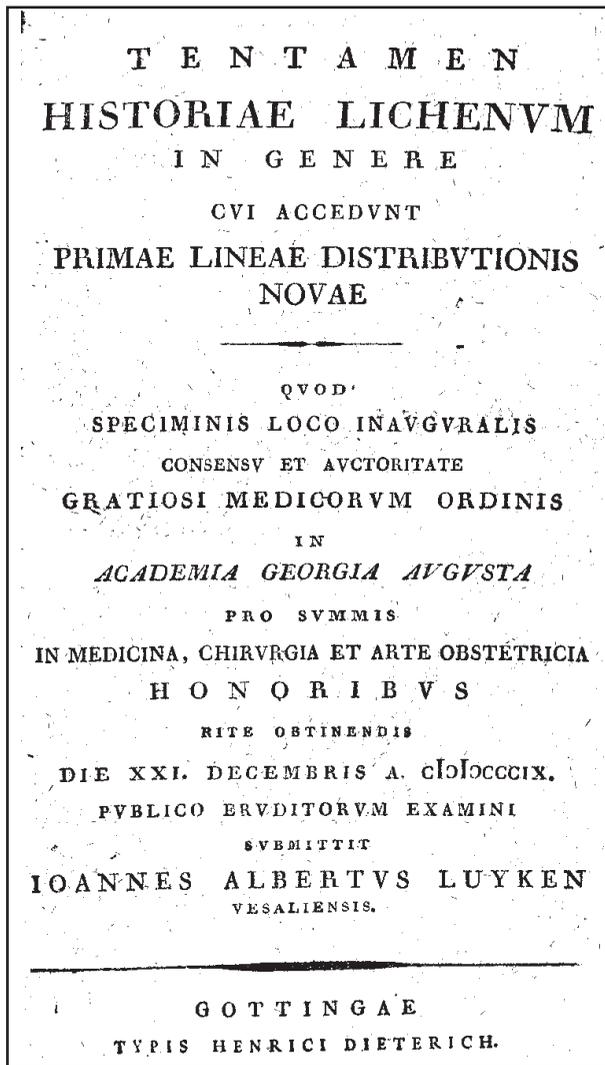


Fig. 1. Title page of Luyken's dissertation (Luyken, 1809).

Luyken's work is not available in many libraries (Stafleu & Cowan, 1981: 199, report G, L and NY), but D.L.H. encountered a copy in the personal collection of Frederick A. Sowter (1899–1972) while undertaking his PhD studies, and as a result attributed the generic name *Alectoria* to “Ach. apud Luyken” (Hawksworth, 1970: 213) or “Ach. in Luyken” (Hawksworth, 1972: 197) and accepted the year of publication as 1809. Stafleu & Cowan (1976: 5) agreed and noted “Many of the new taxa in the *Lichenographia* were validly published previously by Acharius in Luyken, Tent. Hist. Lich. 1809.” However, T.A. (e.g., Ahti, 2000: 82) and others took the view that these Acharian names Luyken did not adopt in his final key were not accepted by him and so were not validly published in Luyken's work under Art. 34 of the *Code*. It is pertinent that none of the ten new genera introduced in the *Lichenographia* was amongst the 21 included in Luyken's final key (Luyken, 1809: 99–102).

This dichotomy of views is reflected in *Index Nominum Genericorum (Plantarum)* (Farr & al., 1979) where the 1809 references remain where synonyms are cross-referenced, but not in the lists of accepted names where 1810 citations are used in the current online version. A similar situation exists in Appendix III of the *Code* (McNeill & al., 2006), in which *Borrera* and *Ramalina* are attributed to “Ach.” in 1810, whereas *Dufourea* is twice attributed to “Ach. ex Luyk.” in 1809. The 1810 dates are those employed in *NCU-3* (Greuter & al., 1993), *Dictionary of the Fungi* (Kirk & al., 2001), the online *Index Fungorum* (<http://www.indexfungorum.org/Names/Names.asp>), and all contemporary lichen checklists and monographs.

Although not recognised by us at the time, the “break through” in resolving this issue under the rules on nomenclature came with the clarification of Art. 46, dealing with author citations, in the *Tokyo Code* (Greuter & al., 1994). This made more explicit the correct author citation of a name attributed to one person in the work of another. If the publishing author attributes both the name and the description to someone else, that person is considered to be the author of the name, and so, under Art. 34.1 (a), it is that author's acceptance that is necessary for valid publication, not that of the author of the publication. Art. 34 Ex. 3 of the *Vienna Code* (McNeill & al., 2006) provides an example of this situation, as does Art. 46 Ex. 10.

A particular difficulty over interpreting attribution of the names in Luyken's work has been the understanding of the mainly eighteenth century style flowery Latin text, and we therefore present English translations of key parts of the text in Table 1.

Luyken quite explicitly attributes Acharius's generic names to him (by “Ach.”) and above the start of the presentation of Acharius's classification indicates that he is adding the essential characters and synonyms from Acharius's forthcoming publication. This is confirmed by the descriptions in Luyken's *Historia Lichenum* being identical to those that later appeared in *Lichenographia Universalis* (cf. Figs. 2, 3.) With the clarification of the status of names and diagnoses attributed to another author, it is clear that Acharius is the author of the new generic names intended to be introduced in the *Lichenographia* but which were reproduced with their diagnoses in Luyken's work and so have to be attributed to “Ach., in Luyken (1809)”. As it is Acharius and not Luyken that is the author of the names, the fact that none of these names was accepted in Luyken's final key is irrelevant to their valid publication (cf. Art. 34 Ex. 3 in the *Vienna Code*).

The changes in places of valid publication have no impact on typifications of the generic names as no species names were mentioned by Luyken.

Details of the affected generic names, their correct citation, and their current taxonomic and nomenclatural status are presented below.

Table 1. Translations of pertinent text from Luyken (1809).

Page 3. — *In fine opusculi novam tentabo Lichenum divisionem, ex illa Cl. SCHRADERI et ACHARII compositam. Ante vero admonendum hic esse censeo, ne adrogans et adprehendendum proclivis adpellar, sic progrediente opusculo, ego, quamvis tiro, eorum rationi non adsentiam, quos longe mihi superiores esse persuasum mihi habeo, quorum doctrinam insignem et merita praeclara, ea, qua par est observantia, agnosco. Non mehercule proverbium illud mihi opponi vellem: aliorum errores reprehendere, quam emendate facilius.*

At the end of this little work I shall attempt a new classification of Lichens, based upon that of Schrader and Acharius. First, however, lest I be called arrogant or inclined to fault-finding, I think it ought to be remembered that if I, though a beginner, disagree in the course of this work with the opinions of those authors, whom I regard as far superior to me, I [nonetheless] acknowledge their remarkable learning and obvious merits with proper respect. I would on no account wish the old saying to be applied to me: “it is easier to censure the faults of others than to correct them.”

Page 82. — *Haec maior distributio Lichenum mihi non valde commendanda esse videtur, et item ordo generum, in quo Cel. auctor interdum magnos saltis fecit¹, qui praecipue systemati naturali minime conveniunt. Plures etiam species sub genera sunt collocatae, ad quae minime pertinent.*

Maxime mutata distributio Lichenum videtur in editione tertia aut potius¹⁵) in opere tertio Cel. ACHARII de Lichenibus quod nunc subprelo versatur et sub titulo: Lichenographia universalis (Goettingae 1810. 4) brevi tempore in lucem prodibit.

This older² arrangement of lichens does not seem to me greatly to be commended; likewise the order of the genera, where our author sometimes makes great leaps, which are particularly unsuitable in a natural system. Moreover, many species are placed in genera to which they scarcely belong.

The arrangement of Lichens seems most altered in the third edition; or rather¹⁵) in the third work by Acharius on Lichens, which is now in press and will shortly be published under the title: *Lichenographia Universalis* (Göttingen 1810. 4).

Page 82 footnote. — ¹⁵) *Nam Cel. auctor semper opera sua priora citat praecipue in synonymis, (quod non est probandum) ita ut, si haec completa habere velis, prioribus operibus carere non poteris*

¹⁵) For the famous author [i.e., Acharius] always cites his previous works especially in the case of synonyms (which is not to be recommended) so that, if you wish to have these in full, you should not be without the previous works.³

Page 85 (above the start of the presentation of Acharius's classification in the Lichenographia). — *Ad hanc normam Generum Dianome⁴ expressa ac ordinata est, quam hinc proferam, et cui differentias essentielles generum, atque Synonyma addam. Genera, quae in hoc opere usque ad XLI aucta, in propria sectione dilucide explicata et multis observationibus et iconibus illustrata sunt. Dianome generum sequens est:*

The arrangement of genera, which I offer here, is set out and organised following this pattern [as stated in the preceding text]; to which I shall add the essential distinguishing characteristics of the genera as well as the synonyms. The genera, which in this work are increased to 41, are clearly laid out in their proper sections, and are explained with many remarks and figures. The arrangement of the genera is as follows:

1 Cf. the Roman proverb, used also by Linnaeus, “Natura non fecit saltum”.

2 Here Luyken is referring to Acharius (1803).

3 What we take this to mean is that Acharius cites the descriptions given in his other works but does not repeat them so that anyone wishing to check the descriptions needs to go back to his earlier works.

4 Dianome is from the Greek noun, Διανομή (f), a distribution.

Fig. 2. The diagnosis of the generic name *Alectoria* given by Acharius (1810: 592).

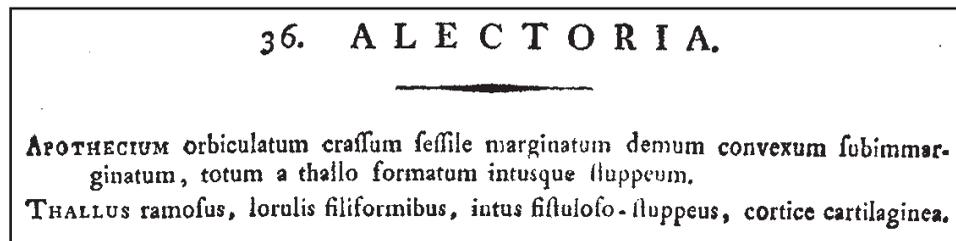
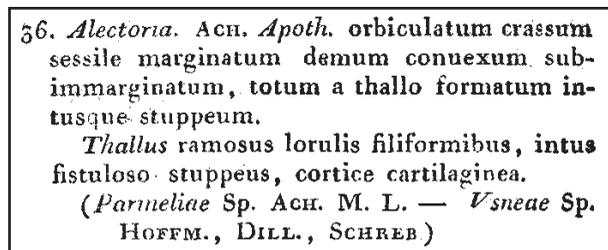


Fig. 3. The diagnosis of the generic name *Alectoria* given in Luyken (1809: 95).



Alectoria Ach., in Luyken, Tent. Hist. Lich. 95. 1809
– Type: *A. sarmentosa* (Ach.) Ach. 1810.
An accepted genus in *Parmeliaceae*.

Biatora Ach., in Luyken, Tent. Hist. Lich. 87. 1809 – Type:
B. turgida Ach. 1810.
A synonym of *Scoliciosporum* A. Massal. 1852. Ach-
arius's name is an earlier homonym of the sanctioned ge-
neric name *Biatora* Fr. 1817: Fr. 1821 [type: *B. vernalis*
(L.) Fr. 1817].

Borreria Ach., in Luyken, Tent. Hist. Lich. 91. 1809 – Type:
Not designated.
A rejected name against *Borreria* G. Meyer 1818 *nom.*
cons. (*Rubiaceae*).

Cenomyce Ach., in Luyken, Tent. Hist. Lich. 93. 1809 [as
“*Cenomyces*”] – Type: *C. pyxidata* (L.) Ach.
A synonym of *Cladonia* P. Browne 1756 *nom. cons.*
We regard Luyken's single use of the spelling *Ceno-*
myces as a typographical error inadvertently introduced
when copying material from the proofs of Acharius's
Lichenographia. Ahti (2000: 82) typified “*Cenomyce* Ach.
1810”, but should have stated that in that rank the name
was a superfluous name for *Baeomyces*, *Cladonia*, *Pyxi-*
dium, and *Coralloides* which were all cited by Acharius
(1810: 106) in synonymy. However, this typification is still
acceptable under the *Code*.

Dufourea Ach., in Luyken, Tent. Hist. Lich. 93. 1809
– Type: *D. flammea* (L. f.) Ach. 1810.
A *nom. rej.* against *Xanthoria* (Fr.) Th. Fr. 1860 *nom.*
cons.

Evernia Ach., in Luyken, Tent. Hist. Lich. 90. 1809 –
Type: *E. prunastri* (L.) Ach. 1810.
An accepted genus in *Parmeliaceae*.

Lecanora Ach., in Luyken, Tent. Hist. Lich. 90. 1809
– Type: *L. subfusca* (L.) Ach. 1810.
An accepted genus in *Lecanoraceae*.

Nephroma Ach., in Luyken, Tent. Hist. Lich. 92. 1809
– Type: *N. arcticum* (L.) Torss. 1843.
An accepted genus in *Nephromataceae*.

Ramalina Ach., in Luyken, Tent. Hist. Lich. 95. 1809
– Type: *R. fraxinea* (L.) Ach. 1810.
An accepted genus of *Ramalinaceae*. The generic
name is conserved with a conserved type.

Rhizomorpha Ach., in Luyken, Tent. Hist. Lich. 94. 1809
– Type: Not designated.
A later homonym of the sanctioned generic name *Rhi-*

zomorpha Roth 1791: Fr. 1821. This name does not refer to a
lichen-forming fungus but to sterile states of basidiomycet-
ous fungi, including the rhizomorphs of *Armillaria*.

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