

Orthography of Pilatian names: establishing the correct epithets with regard to Latin and nomenclatural rules

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The contribution deals with the issue of specific or subspecific epithets published by various authors in different forms, *alberti/albertii* or *pilati/pilatii*, and currently mostly maintained with the termination *-ii* in official repositories for names, especially the MycoBank and Index Fungorum databases. A view into the protologues of each name dedicated to Albert Pilát clearly shows that different terminations have been applied in different periods, and that relevant recommendations of the International Code of Nomenclature have also evolved over time.

The orthographic variants *alberti* and *pilati* are in principle correct, based on the Latinised form of Pilát's full name. Thus the original names of the involved taxa are to be maintained or resurrected if such epithets were given in their protologues. However, names later formed with the epithets *albertii* or *pilatii* appear to be in accordance with the provisions in force at the time. For a complete view of the topic, some examples of seemingly similar epithets created in different ways are mentioned for comparison, and the issue of interpretation of relevant recommendations of the Code is discussed in general. Finally, different approaches to nomenclatural stability are stated as a matter to be resolved in the upcoming Madrid Code.

Key words: Albert Pilát, code, genitive form, MycoBank, nomenclature, orthographic variant.

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Příspěvek řeší problematiku epitet druhů nebo poddruhových taxonů, publikovaných různými autory v různé podobě *alberti/albertii* nebo *pilati/pilatii* a dnes zavedených většinou s koncovkou *-ii* v oficiálních úložištích jmen hub, především v databázích MycoBank a Index Fungorum. Pohled do protologů jednotlivých jmen jasně ukazuje, že v různých dobách byly užívány různé koncovky, a stejně tak se v průběhu času vyvíjela i příslušná doporučení nomenklatorického kódu.

Ortografické varianty *alberti* a *pilati* jsou v principu správné, protože vycházejí z latinizované formy Pilátova jména. Tím pádem jména taxonů, kterých se to týká, mají být zachována nebo oprášená, pokud jejich epiteta tak byla uvedena v protolozích. Nicméně i pozdější tvorba jmen s epitety *albertii* a *pilatii* se jeví být v souladu s tehdy platnými ustanoveními. K dokreslení problematiky jsou pro srovnání uvedeny příklady odlišné tvorby zdánlivě obdobných epitet a v obecné

rovině je diskutována problematika výkladu příslušných doporučení kódu. Závěrem jsou zmíněny různé přístupy k nomenklatorické stabilitě coby věc k dořešení v připravovaném Madridském kódu.

INTRODUCTION

Albert Pilát (2 November 1903 – 29 May 1974) belonged to the most outstanding representatives of Czechoslovak mycology – a productive author (besides books and articles in other journals, we can mention 200 papers in *Česká Mykologie*), collector (tens of thousands of specimens in the PRM herbarium, and a similar number obtained by exchange with other collectors) and enthusiastic organiser of mycological life (Herink et Svrček 1953, Herink 1973). Moreover, due to his international engagement and collaboration with mycologists in many countries around the world, he has become a famous and worldwide respected person. Therefore, it is not surprising that dozens of new taxa at various taxonomic levels published by a plethora of Czech and foreign mycologists have been dedicated to him.

Nowadays, in the ‘database era’, it is very simple to check MycoBank or Index Fungorum for all names derived from Pilát’s name. Generally, we can see that species epithets created in the genitive form are presented in the orthographic variant *albertii* or *pilatii*, although many of them were originally published as *alberti* or *pilati*. As both official repositories now represent an informal standard for many authors, according to which they have unified the nomenclature in plenty of studies, we feel obliged to verify the correctness of contemporary changes compared with the original variants in protologues of particular taxa. This year, commemorating fifty years since Pilát’s death, he certainly deserves this issue to be solved.

MATERIAL AND METHODS

Based on primary search in the MycoBank (www.mycobank.org) and Index Fungorum (www.indexfungorum.org) databases, names of interest (having epithet word stems *albert-* or *pilat-*) were selected for further scrutiny. Protologues of these names were checked directly in the literature or through the internet (especially scanned copies of foreign journals, if available) for their etymology and correctness of the original variants. Simultaneously, the MycoBank codes of particular names and their orthographic variants were excerpted by us and in some cases also added by the MycoBank curator by providing copies of the original Czech sources in which many names were published (but which are unfortunately not widely available to foreign readers so far).

Subsequently, the relevant articles and recommendations were screened in respective editions of the nomenclatural code during the 20th and early 21st century (links to all editions accessible at <https://www.iapt-taxon.org/historic/index.htm>). Important changes in their wording were summarised, and served as a background for discussion, in which the main issues were analysed and presented opinions justified. Consultations with experts in the field (see Acknowledgements) gradually contributed to clarification of particular issues, supporting the presented statements or providing different opinions.

RESULTS

HISTORICAL ANALYSIS OF PILATIAN NAMES

Surprisingly, the only species (and its subspecific taxa) with the epithet *pilati* maintained in both MycoBank and Index Fungorum is a lichenised ascomycete originally described as *Biatora pilati* Hepp (in Flechten Europas no. 261, 1857), subsequently recombined into *Lecidea pilati* (Hepp) Körb. (in Parerga lichenologica (Breslau) 3: 223, 1865) with the currently accepted correct name *Adelolecia pilati* (Hepp) Hertel et Hafellner (in Hertel, Beihefte Nova Hedwigia 79: 260, 1984). However, the species name certainly could not have been dedicated to Albert Pilát in 1857, but is in fact named after Mt Pilatus in Switzerland (see the protologue: “An Kalkfelsen auf dem Pilatus II”).

To avoid any confusion, *Colipila pilatensis* Baral (in Mycological Progress 11(1): 209, 2011) is also named after Mt Pilatus in Switzerland, while *Baeomyces pilatensis* M. Choisy (in Bulletin mensuel de la Société Linnéenne de Lyon 20(6): 132, 1951) is named after Mt Pilat in France, and *Marasmius albertianus* Singer (in Bulletin du Jardin botanique de l'État à Bruxelles 34: 351, 1964) originated from Parc National Albert (now Virunga National Park in DR Congo).

The species epithets *pilatiana* (*Lepiota pilatiana*, *Peniophora pilatiana*, and related combinations) and *pilatianus* (*Agaricus pilatianus*, *Leucoagaricus pilatianus*, *Leucocoprinus pilatianus*, and related combinations) are unequivocally formed in accordance with Art. 60.8(d) of the Shenzhen Code (Turland et al. 2018), hence there is no need to deal with them in this contribution.

Names dedicated to Albert Pilát, originally published under the epithet *pilati*

Searching in original sources, we found that the original spelling *pilati* was used in the epithets until 1954 (and in later combinations from 1957 and 1971, based on *pilati* basionyms). This means that the variant *pilatii* was not used in the protologues. Only recent records in MycoBank and Index Fungorum have introduced and maintain the variant *pilatii* in these names. For details, see notes to particular names.

Cenangium pilati Velen., Monographia Discomycetum Bohemiae: 58, 1934 [MB 664444]

In MycoBank, *Cenangium pilatii* [MB 274423] is presently maintained as the current name, and *C. pilati* as an orthographic variant. The origin of the variant *C. pilati* is mentioned in the remarks on *C. pilatii*. The same approach is applied in all similar cases listed below.

Corticium pilati Boidin, Bulletin mensuel de la Société Linnéenne de Lyon 23(8): 229, 1954 [MB 258932]

In MycoBank, *Corticium pilatii* [MB 344080] is presently maintained as the legitimate name.

Its etymology is not given in the protologue, but Boidin cited a letter by John Eriksson stating: “I have several specimens of this species from Carpatorossia, where it was collected several times by Pilát...”.

Clavulicium pilati (Boidin) Boidin, Bulletin de la Société d'Histoire Naturelle de Toulouse 92: 280, 1957 [MB 664445]

In MycoBank, *Clavulicium pilatii* [MB 295000] is presently maintained as the current name.

Crepidotus pilati Velen., Mykologia 6(6): 65, 1929 [MB 664446]

In MycoBank, *Crepidotus pilatii* [MB 505584] is presently maintained as the current name.

Later homonym assigned to different species, *Crepidotus pilatii* Raithelh. (in Hongos Argentinos II: 129, 1977) [MB 274438], being an illegitimate name, does not need to be solved in this contribution.

Gorgoniceps pilati Velen., Monographia Discomycetum Bohemiae: 182, 1934 [MB 664447]

In MycoBank, *Gorgoniceps pilatii* [MB 274424] is presently maintained as the current name.

Hypholoma pilati Velen., České houby 4–5: 919, 1922 [MB 664448]

In MycoBank, *Hypholoma pilatii* [MB 274425] is presently maintained as the legitimate name.

Nematoloma pilati (Velen.) Pilát, Klíč k určování našich hub hřibovitých a bedlovitých: 348, 1951
Of the four possible combinations (two orthographic variants of the generic name and two of the species epithet), *Naematoloma pilatii* [MB 521793] is maintained as the legitimate name, *Nematoloma pilatii* [MB 318579], *Naematoloma pilati* [MB 521794] and *Nematoloma pilati* [MB 541436] as orthographic variants. However, the correct form of the generic name was supported by Farr et Farr (1981), referring to Karsten (1879a): "... Karsten apparently first published the name as *Nematoloma*, and '*Nematoloma*' is orthographically correct (D.H. Nicolson, pers. comm.)." The repositories consider that the original spelling was *Naematoloma* and that this name was published previously (Karsten 1879b) to *Nematoloma* (Karsten 1879a). However, three facts support the name *Nematoloma* being published first. Firstly, Karsten (1879a) published *Nematoloma* explicitly as a '*gen. nov.*', while no indication of a new genus is included in *Naematoloma*. Secondly, the announcement of Karsten's publication in "Meddelanden ..." (Karsten 1879a) in *Naturae Novitates* 2(3): 27, 1879) was made in February 1879, but that of "Bidrag ..." (Karsten 1879b) in April 1879 (*Naturae Novitates* 2(8): 60, 1879). Thirdly, etymologically the Greek *ναίμα* (gelatinous; see Fries, *Syst. Mycol.* 2: 536, 1823) is transliterated *naema* in Latin, used for example in the names *Naemacyclus* Fuckel, *Naemaspora* Fr., *Naematelia* Fr., *Sphaeronaema* Fr. or *Sphaeronaemella* P. Karst. In fact, Fries changed *Sphaeronaema* (Fries, *Obs. Mycol.* 1: 187, 1815) to *Sphaeronaema* in his sanctioning work (Fries 1823, see above) because this genus groups gelatinous species. *Nematoloma* as erected by Karsten does not contain gelatinous species but includes species with a cortinate pileus margin. This would be etymologically more correct because the Latin transliteration *nema* of the Greek *νήμα* means thread, which is an important feature in the genus *Nematoloma* because the filamentous cortina is composed of numerous threads (Luis Parra, pers. comm.). *Nematoloma pilati*, as published in the protologue, may therefore be considered an orthographically correct combination.

Lachnea pilati Velen., Monographia Discomycetum Bohemiae: 308, 1934 [MB 664449]

In MycoBank, *Lachnea pilatii* [MB 274426] is presently maintained as the legitimate name.

Scutellinia pilati (Velen.) Svrček, Česká mykologie 25(2): 84, 1971 [MB 541461]

In MycoBank, *Scutellinia pilatii* [MB 323342] is presently maintained as the current name.

Lentinellus pilati Herink, Česká mykologie 7(4): 162, 1953 [MB 268368]

In MycoBank, *Lentinellus pilatii* [MB 299445] is presently maintained as the legitimate name.

To be exact, the protologue says *Lentinellus piláti*, but diacritical marks are not used in scientific names (Art. 60.7 of the Shenzhen Code), hence the correct variant of the published epithet is *pilati*. Herink (1953) also commented (see page 166 of the same article) the name *Lentinus pilati*, proposed by Velenovský (1931). Nevertheless, Velenovský only published it under the provisional name *Lentinus Pilati* m. [= mihi] for *Lentinus jugis* Fr. ss. Pilát, and represents in fact an abnormal specimen of *Mucidula mucida*, as demonstrated by Herink (1953).

Leptonia pilati Svrček, Česká mykologie 7(4): 176, 1953 [MB 268627]

In MycoBank, *Leptonia pilatii* [MB 344142] is presently maintained as the current name.

The protologue begins already on page 174, the Latin diagnosis is found on page 176.

Lycoperdon pilati Velen., České houby 4–5: 818, 1922 [MB 664451]

In MycoBank, *Lycoperdon pilatii* [MB 274427] is presently maintained as the current name.

To be exact, the species was introduced as *Lycoperdon pilati* sp. n. (*Calvatia* p.). It is questionable whether it can be taken as a simultaneous publication of the taxon in the genus *Calvatia*. Anyway, the name *Calvatia pilati* or *C. pilatii* are not listed in the official repositories.

Parthenope pilati Velen., Novitates mycologicae: 189, 1940 [1939] [MB 664452]

In MycoBank, *Parthenope pilatii* [MB 274428] is presently maintained as the current name.

Although 1939 is mentioned on title page, the book was in fact published in 1940, which is clear from the fact that collections from May 1940 are mentioned in the Addenda on the last pages 207–208.

Plicaria adae* var. *pilati Velen., Monographia Discomycetum Bohemiae: 344, 1934

[MB 255809, presently assigned to the record of *Plicaria adae* var. *pilatii*]

Pluteus pilati Velen., Mykologia 6(2–3): 25, 1929 [MB 664453]

In MycoBank, *Pluteus pilatii* [MB 274439] is presently maintained as the current name.

Poria pilati Bourdot, Bulletin de la Société mycologique de France 48: 230, 1932

[MB 274429, presently assigned to the record of *Poria pilatii*]

Its etymology is not given in the protologue, but Bourdot mentioned that the species was collected by Pilát at Kosovska Polana (formerly the Carpatorossia Region of Czechoslovakia, now Kosivs'ka Polyana in the Zakarpattia Oblast of Ukraine).

Aporpium pilati (Bourdot) Bondartsev et Singer ex Bondartsev, The Polyporaceae of the European USSR and Caucasia: 159, 1953 [MB 251242]

In MycoBank, *Aporpium pilatii* [MB 344010] is presently maintained as the legitimate name.

Psalliota pilati Velen., Novitates mycologicae: 155, 1940 [1939] [MB 664454]

In MycoBank, *Psalliota pilatii* [MB 274430] is presently maintained as the current name.

Psalliota pilati* var. *pilati

[MB 425129, presently assigned to the record of *Psalliota pilatii* var. *pilatii*]

The typical variety was created automatically by publication of var. *microspora*, see below.

Psalliota pilati* var. *microspora Velen., Novitates mycologicae: 155, 1940 [1939]

[MB 274437, presently assigned to the record of *Psalliota pilatii* var. *microspora*]

Regarding the year of simultaneous publication of the species and variety names, as well as of the following *Pseudotapesia pilati*, see note at *Parthenope pilati*.

Pseudotapesia pilati Velen., Novitates mycologicae: 180, 1940 [1939] [MB 664455]

In MycoBank, *Pseudotapesia pilatii* [MB 274431] is presently maintained as the current name.

Russula pilati Zvára, Bulletin de la Société mycologique de France 48: 258, 1932

[MB 274432, presently assigned to the record of *Russula pilatii*]

The protologue begins in fact already on page 256 (the heading “*Russula Pilati* Zvara n. sp.” is on page 258, but belongs to the figure legend only). Anyway, dedication is given in the first paragraph on p. 258: “... uno exemplari legit Dr. Albertus Pilat, botanicus Pragensis bene meritus, cui speciem meam dedico”.

Rutstroemia pilati Velen., Monographia Discomycetum Bohemiae: 231, 1934 [MB 664456]

In MycoBank, *Rutstroemia pilatii* [MB 274433] is presently maintained as the current name.

Spathularia pilati Velen., *Novitates mycologicae*: 205, 1940 [1939] [MB 664457]

In MycoBank, *Spathularia pilatii* [MB 274434] is presently maintained as the current name.

Regarding the year of publication, see note at *Parthenope pilati*.

Tomentella pilati Litsch., *Bulletin de la Société mycologique de France* 49: 72, 1933

[MB 274435, presently assigned to the record of *Tomentella pilatii*]

Its etymology is not given in the protologue, nevertheless the cited specimen is: A. Pilát, *Iter orientale* 1931, no. 310.

Tomentella pilati* var. *pilati

[MB 429392, presently assigned to the record of *Tomentella pilatii* var. *pilatii*]

The typical variety was created automatically by publication of var. *laevis*, see below.

Tomentella pilati* var. *laevis Skovst., *Comptes Rendus des Travaux du Laboratoire Carlsberg: Serie Physiologique* 25(1): 24, 1950

[MB 352539, presently assigned to the record of *Tomentella pilatii* var. *laevis*]

Originally published as “*pilati* var. *leave*” (as also remarked in MycoBank), but *Tomentella* is a feminine, hence replacement by epithet *laevis* is correct.

Tricholoma pilati Velen., *Mykologia* 2(9–10): 138 and 142, 1925 [MB 664458]

In MycoBank, *Tricholoma pilatii* [MB 274436] is presently maintained as the current name.

The Czech protologue is given on the page 138, the Latin one on page 142.

Names dedicated to Albert Pilát, originally published under the epithet *albertii* or *pilatii*

On the other hand, orthographic variants with *-ii* terminations have been applied in epithets published since 1958 (except the abovementioned combination *Scutellinia pilati* from 1971, based on an older basionym).

Agaricus albertii Bon, *Documents mycologiques* 18(72): 63, 1988 [MB 134728]

Its etymology is not given in the protologue, but the name is introduced as a nomen novum for *A. macrosporus* (Møller et J. Schaeff.) Pilát (non Montagne 1837), so it appears to be dedicated to Albert Pilát.

Agaricus albertii* var. *albertii [MB 520016]

The typical variety was created automatically by reassignment of *A. kuehnerianus* to the variety level within *A. albertii*, see below.

Agaricus albertii* var. *excellens (F.H. Møller) Bohus, *Annales historico-naturales Musei Nationalis Hungarici* 82: 51, 1990 [MB 499974]

An invalidly published name (reference to the basionym omitted; despite maintained as legitimate, comment on name status “Art. 33.3” is given in MycoBank). Identical case with *A. albertii* var. *substramineus* as well as with *Telamonia pilatii* (see below).

Agaricus albertii* var. *kuehnerianus (Heinem.) P. Roux et Guy Garcia, *Mille et un champignons*: 13, 2006 [MB 522054]

Agaricus albertii* var. *substramineus (Courtec. et Bon) Bohus, *Annales historico-naturales Musei Nationalis Hungarici* 82: 51, 1990

Name absent from MycoBank, present in *Index Fungorum* with the note: “Nom. inval., Art. 41.4 (Melbourne)”. However, even if invalid, we propose its inclusion in MycoBank as well.

Cortinarius pilatii Svrček, Česká mykologie 22(4): 274, 1968 [MB 329113]
Originally published as *Cortinarius (Telamonia) pilatii*.

Telamonia pilatii (Svrček) Hlaváček, Mykologický sborník 62(2–3): 56, 1985 [MB 105822]
Invalid name according to Art. 33.3, as mentioned in MycoBank. The reason is apparently that Hlaváček published the new combination as *Telamonia pilatii* (Svrček) comb. n., without an indication of the basionym (corresponding to Art. 33.3 in the St. Louis Code).

Flagelloscypha pilatii Agerer, Sydowia 27: 239, 1975 [MB 314161]

Geastrum melanocephalum f. pilatii V.J. Staněk, Flora ČSR – Gasteromycetes: 485 and 783, 1958 [MB 346859]
The Czech protologue with type designation is found on page 485, the Latin description/diagnosis and its etymology on page 783.

Hymenochaete pilatii Corfixen et Parmasto, Karstenia 57(1–2): 63, 2017 [MB 820918]

Lactarius pilatii Z. Schaeff., Česká mykologie 22(1): 18, 1968 [MB 332900]
The protologue already begins on page 17, the Latin diagnosis on page 18.

Laeticorticium pilatii Parmasto, Eesti NSV Teaduste Akadeemia Toimetised 14(2): 228, 1965 [MB 332932]

Dentocorticium pilatii (Parmasto) Duhem et H. Michel, Cryptogamie Mycologie 30(2): 165, 2009 [MB 517428]

Phlebiopsis pilatii (Parmasto) Spirin et Miettinen, MycoKeys 17: 25, 2016 [MB 817927]

Pachydisca pilatii Svrček, Česká mykologie 20(1): 15, 1966 [MB 335510]
The Czech protologue is given on pages 8–10, the Latin diagnosis on pages 15–16.

Phellinus pilatii Černý, Česká mykologie 22(1): 2, 1968 [MB 336257]

Porodaedalea pilatii (Černý) Fiasson et Niemelä, Karstenia 24: 25, 1984 [MB 106409]

Sanguangporus pilatii (Černý) Tomšovský, Phytotaxa 239(1): 84, 2015 [MB 551564]

Thelephora pilatii (Litsch.) Kõljalg, I. Saar et Svantesson, Folia Cryptogamica Estonica 61: 80, 2024 [MB 855276]
Although Litschauer originally published the name *Tomentella pilatii* (see above), the authors of the combination give the basionym *Tomentella pilatii* Litsch.

Names of different etymology

As mentioned above, not all names with epithets *alberti/albertii* or *pilati/pilatii* are dedicated to Albert Pilát. Some of them are dedicated to other persons or based on local names. Nevertheless, as the names from which the epithets are derived are also Albert or Pilat/Pilatus, the same orthographic principle should be applied in the following cases.

Acarospora alberti Samp., Líquenes Inéditos: 5, 1920
[MB 375470, currently assigned to the record of *Acarospora albertii*]

A specific case. Gustavo Sampaio dedicated the new species to Alberto Ferreira Sampaio, his son, who died in 1920: “á adorada memória de meu filho Alberto, para quem era sempre um grande prazer acompanhar-me nas minhas excursões liquenológicas....” However, as Alberto represents a Portuguese

form of the name Albert, in accordance with Rec. 60C.1 of the Shenzhen Code we are convinced that the original variant *alberti* is correct. A possible alternative may be *albertoi* (adding a single *-i* to a male person's name ending in a vowel except for *-a*), but not *albertii*.

Acarospora smaragdula f. alberti (Samp.) H. Magn., A monograph of the genus *Acarospora*. Kungliga Svenska Vetenskapsakademiens Handlingar, Ser. 3, 7(4): 142, 1929
[MB 602340, currently assigned to the record of *Acarospora smaragdula f. albertii*]

Cortinarius albertii Dima, Frøslev et T.S. Jeppesen, Mycological Research 110(9): 1050, 2006 [MB 500727]

Named after László Albert, a Hungarian mycologist.

Calonarius albertii (Dima, Frøslev et T.S. Jeppesen) Niskanen et Liimat., Fungal Diversity 112: 127, 2022 [MB 553789]

Fusarium alberti Roum., Fungi selecti Gallici exsiccati, Cent. 19: no. 1867, 1882

[MB 177526, currently assigned to the record of *Fusarium albertii*]

Published as a nomen nudum in an exsiccate collection, but probably named after Albert Gory, collector of the specimen (copy of specimen label available at <https://www.mycportal.org/ill/mycology/ILL00102/ILL00102914.jpg>). The specimen itself is dated October 1881, but Century 19 was released in 1882 (as mentioned on its title page).

Lecideomyces pilati E.A. Thomas ex Cif. et Tomas. [MB 664450]

In MycoBank, *Lecideomyces pilatii* [MB 367795] is presently maintained as the legitimate name.

Originally published as nomen nudum *Lecideomyces pilati* (Hepp) by E.A. Thomas in Beiträge zur Kryptogamenflora der Schweiz, IX, Heft I: 178, 1939. Subsequently validated by Ciferri et Tomaselli in Atti dell'Istituto Botanico della Università e Laboratorio Crittogamico di Pavia, ser. 5, 10(2): 269, 1954, stating “*Lecideomyces pilati* Thomas, l.c. pag. 65 (1953) (nomen)” and below “Ex *Lecidea pilati* Hepp”. Synonymy with Hepp's species, originally described from Mt Pilatus (Switzerland, see above), is also confirmed by Lamb (1963: 392), stating “Syn. *Lecidea Pilati* (Hepp) Körb.” in the record of *Lecideomyces pilati*.

Torulopsis pilati F.H. Jacob, Faure-Rayn. et Berton, Mycopathologia 69: 83, 1979 [MB 285744]

Named after the Massif du Pilat (Département de la Loire, France), from which the yeast was isolated. In MycoBank, *Torulopsis pilati* [MB 324775] is maintained as an orthographic variant.

Rhodotorula pilati (F.H. Jacob, Faure-Rayn. et Berton) Weijman

Original variant: *Rhodotorula pilatii* (F.H. Jacob, Faure-Rayn. et Berton) Weijman in J.A. Barnett, R.W. Payne, D. Yarrow, Yeasts: Characteristics and Identification: 752, 1983

The new combination was really published as *pilatii*, but with *Torulopsis pilati* being the basionym. In MycoBank, *Rhodotorula pilati* [MB 535417] is presently maintained as the legitimate name, whereas *Rhodotorula pilatii* [MB 115392] as an orthographic variant.

In the protologue of *Slooffia pilati* (see below), different authors of this combination are mentioned: = *Rhodotorula pilati* (F.H. Jacob et al.) Barnett et al. However, they are authors (editors) of the whole book, not authors of the combination (see the citation of original variant).

Slooffia pilati (F.H. Jacob, Faure-Rayn. et Berton) Q.M. Wang, F.Y. Bai, M. Groenew. et Boekhout, Studies in Mycology 81: 186, 2015 [MB 813204]

In MycoBank, *Slooffia pilati* [MB 623123] is maintained as an orthographic variant.

In both records, the etymology refers to the paper in Mycopathologia 69: 83, 1979 (a basionym publication).

BASIC PROVISIONS OF THE CODE

To understand the principles on which the discussion is based, we have to follow the International Code of Nomenclature for algae, fungi, and plants (formerly International Code of Botanical Nomenclature, further simply referred to as the Code).

Relevant articles of the current Code in force

Until the new version is published, nomenclatural rules are given in the Shenzhen Code (Turland et al. 2018). Basically, the termination of species epithets is defined by Art. 60.8:

60.8. The termination of specific or infraspecific epithets derived from personal names that are not already in Greek or Latin and do not possess a well-established latinized form (see Rec. 60C.1) is as follows: ...

Terminations contrary to the above standards are treated as errors to be corrected to *-[i]i*, *-[i]ae*, *-[i]ana*, *-[i]anus*, *-[i]anum*, *-[i]arum*, or *-[i]orum*, as appropriate (see also Art. 32.2). However, epithets formed in accordance with Rec. 60C.1 are not correctable (see also Art. 60.9).

Nevertheless, we are dealing with a name possessing a well-established Latinised form, so we have to follow the cited recommendation 60C.1, as well as the following recommendation, 60C.2:

60C.1. When forming specific and infraspecific epithets from personal names already in Greek or Latin, or that possess a well-established latinized form, the epithets, when substantival, should (Art. 60.8 notwithstanding) be given the appropriate Latin genitive form (e.g. *alexandri* from Alexander or Alexandre, *alberti* from Albert, *arnoldi* from Arnold, *augusti* from Augustus or August or Auguste, ...

60C.2. New epithets based on personal names that have a well-established latinized form should maintain the traditional use of that latinized form.

The Latinised form *Pilatus* is well-established since at least the era of Pontius Pilatus (or vice versa – respecting chronological order – *Pilát* represents the traditional Czech form of the name *Pilatus* since at least the 16th century; see e.g. Němčanský 1593, pp. 116–117: <https://www.digitale-sammlungen.de/en/view/bsb10861207?page=116,117>). The name *Pilát* thus represents exactly the same case as *August/Augustus*, mentioned in the cited recommendation. Therefore, there are no doubts that the correct termination of this epithet should be *pilati*.

Obviously, the same principle should be applied to the epithet *alberti*, derived from his first name, which is directly included as an example in the cited recommendation.

To achieve correctly terminated species epithets in all relevant cases, Art. 32.2 should be applied:

32.2. ... Names of species or infraspecific taxa are validly published even when their epithets were published with an improper Latin or transcribed Greek termination but otherwise in accor-

dance with this Code; they are to be changed to accord with Art. 23 and 24, without change of authorship or date (see also Art. 60.8).

Differences between versions of the Code

It should however be noted that the wording of particular articles or recommendations of the Code has changed over time, and some detailed definitions or examples introduced (see previous versions at <https://www.iapt-taxon.org/historic/index.htm>). Backwards in time, we can summarise the most important changes relevant to the Pilatian names issue.

- Only in the Shenzhen Code, Rec. 60C.1 became a binding article, Art. 60.8, and the abovementioned paragraph “Terminations contrary ...” was included here. In previous versions (Vienna Code 2006 and Melbourne Code 2012) it appeared as recommendation 60C.1, and the current Rec. 60C.1 and 60C.2 were a number higher. Also the example of the name forming “*alberti* from Albert” occurs in the Shenzhen Code for the first time.
- Previously, the abovementioned paragraph was the separate Art. 60.12 in the Melbourne Code: “The use of a termination (for example *-i*, *-ii*, *-ae*, *-iae*, *-anus*, or *-ianus*) contrary to Rec. 60C.1 is treated as an error to be corrected (see also Art. 32.2). However, terminations of epithets formed in accordance with Rec. 60C.2 are not to be corrected.” In former versions, continuously evolving over time, this appeared as Art. 60.11 (from the Tokyo to the Vienna Code, also linked to Rec. 60C.1 and excluding the cases stated in Rec. 60C.2), Art. 73.10 (from the Leningrad to the Berlin Code, linked to Rec. 73C.1), and Art. 73 (from the Paris to the Seattle Code, linked to Rec. 73C a, b).
- The current recommendation “New epithets based on personal names that have a well-established latinized form should maintain the traditional use of that latinized form.” (now 60C.2, previously 60C.3) was introduced in the Vienna Code.
- Since the Sydney Code (1983) up to the St. Louis Code (2000), the wording was different, but identical in meaning: “Personal names already in Greek or Latin, or possessing a well-established latinized form, should be given their appropriate Latin genitive to form substantive epithets.” (Up to the Berlin Code 1988, Article 73 and related recommendations dealt with the orthography of names, renumbered to Art. 60 since the Tokyo Code 1994.)
- Only “Personal names already in Greek or Latin should be given their appropriate Latin genitive to form substantive epithets.” appeared in the preceding Leningrad Code (1978), so the part “or possessing a well-established latinized form” (now important for us) was absent prior to the Sydney Code. However, recommendations 73C.1 and 73C.2 were almost completely new in the Leningrad Code (see red text at <https://www.iapt-taxon.org/historic/1978.htm>).
- In previous versions up to the Seattle Code (1972), the only applicable rule was Rec. 73C(b): “When the name ends in a consonant, the letters *ii* are added (*ramondii* from Ramond), except when the name ends in *-er*, when *i* is added (thus *kernerii* from Kerner).”
- In the Stockholm Code (1952) this following sentence was added: “Those who follow this Recommendation may treat the termination *~i* as an orthographic error and correct it.” However, this was just a one-time addition, absent from all later versions (the number of the recommendation was 82C(b) in the Stockholm Code, renumbered to 73C(b) since the Paris Code 1956).
- Compared to the abovementioned, only minor changes and different numbering can be noticed in previous versions (Rec. XI in the Vienna Rules 1906 and the Brussels Rules 1912, and Rec. XL in the Cambridge Rules 1935 and the Amsterdam Rules 1950, differing from the older ones in a few details): “When a new specific or other epithet is taken from the name of a man, it should be formed in the following manner. ... (b) When the name ends in a consonant, the letters *ii* are added (thus *Magnusii* from Magnus, *Ramondii* from Ramond), except when the name ends in *-er*, when *i* is added (thus *Kernerii* from Kerner).”

DISCUSSION

Back in history: justification of the variant *pilati*

It is evident that the situation is not always clear, and the creation of names may depend on the preferred concept at the time. Names introduced by Czech mycologists Josef Velenovský, Jaroslav Zvára and Josef Herink, partly also by Mirko Svrček, as well as by foreign authors Victor Litschauer, Hubert Bourdot and Jacques Boidin, were uniformly created in the form *pilati* up to the mid-1950s. On the other hand, later authors, publishing new taxa in the second half of the 20th century, added the most common termination *-ii* to the epithets of new species dedicated to Pilát.

Confronting with the relevant recommendation in force in their time (see the overview above), we may come to the conclusion that the former authors often simply ignored the Rules (i.e. former name of the Code). Nevertheless, this seems hard to believe with respect to the reputation of these authors. We can see that the recommendation in the first versions was created in a very simple way (termination *-ii* generally in all cases, except when the name ends in *-er*), not taking into account the possibility of genitive formation from a Latin or Latinised name. Even the example “*Magnusii* from Magnus” did not consider the evident Latin origin of this name (compare e.g. Pompeius Magnus), whose genitive would be *Magni*. On the other hand, Latin grammar was already stable and time-tested, so it makes sense that the old authors preferred grammatically correct terminations, considering their presumably brilliant knowledge of Latin, almost standard in this era.

It may seem questionable whether Pilatus should be regarded a Latinised form of Pilát’s name, even if Pilát himself did not use the Latinised form nor was his name written as Pilatus by anybody else. At this moment we do not have evidence for this, but although it cannot be fully excluded, it is not very likely in our opinion. We can cite Jaroslav Zvára, who called him Albertus Pilat (see above, in *Russula pilati*), i.e. retaining the form Pilat, but Latinising his first name. Nevertheless, if Pilát used the Latinised version of his first name or his surname or not is not relevant to the articles of the Code (Luis Parra, pers. comm.).

From a linguistic point of view, we should take into account one more fact. The genitive form *pilatii*, formed by adding *-i-* (stem augmentation) between the word stem and the genitive termination in accordance with Art. 60.8(b), corresponds to inflection of the virtual (in fact even non-existing) Latin form Pilatius. However, if we consider the established formation of Czech names or common words from Latin names or words of this form, we realise that the terminal letter *-c* would occur in this case (based on traditional pronunciation, in which the Latin *-t* is changed to *-c-*, and subsequently the Czech word is formed phonetically) – e.g.

the names Ignatius and Horatius are Ignác and Horác in Czech, the word palatium [= palace] is ‘palác’ in Czech, hence the hypothetic Czech form of Pilatius would be ‘Pilác’, not Pilát. Thus the genitive form *pilatii* appears to be principally incorrect for not corresponding to the possibility of real formation of this Czech name.

Changing the view: unification to *-ii* terminations

Since the 1950s, authors nevertheless generally switched to the form *pilatii*. This took place after the direct recommendation “Those who follow this Recommendation may treat the termination *~i* as an orthographic error and correct it.” in the Stockholm Code (see above), which informally forced authors to take it as a standard for the genitive form without any other option (creating different epithets with *-i* or *-ii* terminations, considering the name origin, was not defined until the 1970s).

Especially for non-Czech authors it may also be difficult to know or to recognise that a Czech name has a well-established Latinised form, which may be a problem if an author dedicates the name to a foreign person. Even if their number has risen over time, only few examples can yet be given in recommendation 60C.1, so besides these, any name giving depends on personal knowledge. There are many scientists to whom fungal names are dedicated, and there is apparently no universal source from which the origin and possible Latinisation of all names can be ascertained.

Moreover, from the grammatical point of view, different terminations may be applied in similar cases. Contrary to epithets *alberti* or *pilati*, on which this contribution is focused, we can mention the recently described *Lamprospora benkertii* (Eckstein et al. 2022) or *Naucoria charvatii*, described by Pilát (1953: 54). The only but crucial reason for the termination *-ii* in these cases is that the surnames of Dieter Benkert and Ivan Charvát do not have a well-established Latinised form, hence the termination *-ii* must be applied according to Art. 60.8(b), despite the fact that the names Benkert/Albert and Charvát/Pilát are basically terminated in the same way. Nevertheless, it can be disputed that this reason is crucial and whether Rec. 60C provides sufficient guidance for solving all cases, but it codifies principles to be applied in the creation of new names. Even though it is just a recommendation, it is linked to a related article (see below) and the mentioned principles should be maintained without exceptions to avoid inconsistent formation of any epithet.

The Code Decoded in practice

However, the previous statement may seem controversial in the light of the somewhat similar case of *martini/martinii*, explained by Turland (2019: 105–108): “Elisabeth and Martin are examples of personal names possessing a well-established latinized form, i.e. Elisabetha and Martinus, respectively.

When their appropriate Latin genitives are used to form substantival epithets under Rec. 60C.1, the result is *elisabethae* and *martini*.... On the other hand, if the epithets were published as *elisabethiae* and *martinii*, they could not have been formed in accordance with Rec. 60C.1 (because “Elisabethia” and “Martinus” do not exist) and they would not be contrary to Art. 60.8.”. This leads to the conclusion that all four epithets are correct and not to be changed. This is even supported in Table 8, mentioning Martinus with the male genitive *martini* and Martin with the male genitive *martinii* as two different examples.

Viewed from the Shenzhen Code, this is in clear contradiction with Rec. 60C.1, where exactly “*martini* from Martinus or Martin” is mentioned. Therefore, Martin must be regarded in this way, and the epithet *martinii* would be contrary to Art. 60.8. [“The termination of specific or infraspecific epithets derived from personal names that are not already in Greek or Latin and do not possess a well-established latinized form (see Rec. 60C.1)” means that any epithet created in accordance with 60C.1 is excluded from the scope of Art. 60.8.] It is true that ‘Martinus’ (derived from Martin as a virtual form, justifying the termination *-ii*) does not exist, but this argument becomes irrelevant if creation of the epithet *martinii* is principally incorrect. (To avoid confusion, such an epithet may be derived from the surname Martini, but this is quite a different case, not relevant here.)

Nevertheless, the example “*martini* from Martinus or Martin” was introduced in the Tokyo Code (1994). Prior to this version, the epithet *martinii* derived from Martin was regarded to be correctly formed, particularly regarded correct prior to the Sydney Code (1983), in which possessing a well-established Latinised form (applicable to Martin/Martinus) was first mentioned. This is the case justified by Turland’s statement “if the epithets were published as *elisabethiae* and *martinii*, ... they would not be contrary to Art. 60.8”, so we may deduce that the same principle can be applied to Pilatian names: *pilati* is correct, because the name has a well-established Latinised form, but *pilatii* may be correct too, certainly if published prior to the Sydney Code, and possibly also if published prior to the Shenzhen Code which strictly excludes names possessing a well-established Latinised form from Art. 60.8 for the first time. Similarly, the epithet *albertii*, published in 1988 or 2006 (and later combinations, based on these basionyms), may be considered correct, because the example “*alberti* from Albert” was only first introduced in the Shenzhen Code.

Specification in the Shenzhen Code: benefit or not?

To generalise this issue, we must clarify the relation of articles and recommendations relevant in this case. One may think that recommendations are generally not mandatory, but this does not apply to articles pointing out that a particular recommendation must be followed. As a result of that, some recommendations in

the Code have become mandatory, among which are the abovementioned 60C or the earlier Rec. 73C (see the overview above). Therefore, from the 1950s until the Melbourne Code (2012), epithets could be created in two ways, either following the general procedure (Rec. 60C.1) or the procedure for well-established Latinised names (Rec. 60C.2). According to the related article, they must not be corrected in both cases.

When a name is dedicated to a person, it is usually indicated to whom it is dedicated. Thus, if an author indicates that he dedicates the name to Albert or Alberto (see *Acarospora alberti*), one should search for the Latinised form (which is what the Code indicates) of these names, which is Albertus, and once this is known, use its genitive, which is *alberti*. Nevertheless, until the Melbourne Code, the name could be coined by anyone without any knowledge of Latin, using recommendation 60C.1 and call it *albertii* or *albertoi* (even highlighting that the person was Alberto) without any problems and in an absolutely legal and transparent way, or *alberti* using recommendation 60C.2. In case of doubt, both variants are correct, depending on whether the name is judged to be a well-established Latinised form, which is unambiguous and simple for the authors (Luis Parra, pers. comm.).

At present, if the current wording of Art. 60.8 (interconnected with Rec. 60C.1) in the Shenzhen Code is applied, authors first have to find out whether the name of the person whom they want to dedicate the new taxon to has a well-established Latinised form and then obtain the genitive of the name. This is principally an understandable idea, but forces mycologists to find the Latinised form out in any case, so as not to publish an epithet with an improper termination. Unfortunately, Latin is being abandoned more and more, so it has become demanding to ask taxonomists to find out whether a name has a Latin counterpart or not. Under pressure of effective publishing, many mycologists do not want to waste time doing such etymological searches, which are sometimes extremely complex. Moreover, it is very difficult to judge whether or not the Latinised form obtained exists and especially if it is ‘well-established’ (Luis Parra, pers. comm.).

This, however, sounds somewhat like “if you do not know the origin of the name, do not spend too much time and feel free to violate the rules of Latin”. Would stable simplicity be the solution at the cost of breaking language rules, if the “simple approach” wins in our minds?

CONCLUSIONS

To conclude, under the current rules and recommendations, the provision of Art. 61.1 appears to be generally applicable (except for the cases specified in the cited article of the Code): “Only one orthographical variant of any one name is

treated as validly published: the form that appears in the original publication". If any epithet fits the detailed provisions of the current Code, it is considered correct, and, following Turland's interpretation, if a different variant was formed in accordance with the Code in force at the time (or if not clearly defined, unless it was in clear contradiction with the Code), it may be considered correct as well – in principle, the variant used in the protologue is decisive and should be followed (if it is not subject to correction for any reason), and the other ones are to be corrected according to Art. 61.4.

Nevertheless, we must explain here that this approach leads to a certain inconsistency. One can usually come to a clear conclusion which principle has to be applied in a particular case. When an unequivocal way to create an epithet is available, it should be followed, and incorrect variants (if they have been made) should be corrected in order to unify the nomenclature and to avoid ambiguities in applying the same epithet in different taxon names and combinations. This is an equally legitimate opinion, preferring unification of identical epithets across taxa over stability of any one name in time, in spite of changing rules. It is understandable that the Code was simpler in the past, not adequately treating the case of Latinised names until the Sydney Code, but is this a reason for maintaining variants incorrect in Latin applied in the meantime instead of correct ones? In the discussion above we have tried to give evidence that *pilati* is a correct variant according to Latin grammar as well as according to the current Code (thus has definitely to be maintained if given in the protologue of any name), hence application of improper Latin terminations is an error to be corrected.

The Code is a basic law of nomenclature, comprehensive and detailed, with many examples and recommendations, even if they can never cover all possible cases. Nevertheless, it is gradually fine-tuned, so specification of particular issues can be helpful to apply correct names in further studies. Now when the new Madrid Code is being prepared, positives and negatives of different approaches can be assessed, and relevant articles and recommendations modified if needed. This is what we wanted to address with our paper, believing that it can serve as a case study for an evaluation and possible clarification of particular articles and recommendations.

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REFERENCES

- ECKSTEIN J., VEGA M., SOCHOROVÁ Z., JANOŠÍK L. (2022): *Lamprospora benkertii* sp. nov., and an evaluation of *Lamprospora* spp. with *seaveri*-type ascospore ornamentation. – *Mycotaxon* 136(4): 693–717. DOI: <https://doi.org/10.5248/136.693>
- FARR E.R., FARR D.F. (1981): Proposals to conserve or reject *Hypholoma* (Fr.) Kummer against *Nematoloma* Karsten or *Psathyrella* (Fr.) Quel. (*Agaricales*). – *Taxon* 30: 329–334.
- HERINK J. (1953): *Lentinellus Piláti* sp. n., nový druh rodu houžovec (*Lentinellus* Karst. em. Kühner) [*Lentinellus Piláti* sp. n., new species of *Lentinellus* Karst. em. Kühner]. – *Česká mykologie* 7(4): 162–167. [in Czech with Russian and English summary]
- HERINK J. (1973): Sedmdesát let doc. dr. Alberta Piláta, DrSc., člena korespondenta ČSAV [Ad septuagesimum diem natalem Alberti Pilátii]. – *Česká mykologie* 27(4): 193–200. [in Czech]
- HERINK J., SVRČEK M. (1953): K padesátinám Dr Alberta Piláta [Fifty years of Dr Albert Pilát]. – *Česká mykologie* 7(4): 145–162. [in Czech with Russian and English summary]
- KARSTEN P.A. (1879a): Skifflingar, iakttagna i Mustiala trakten den 3 November 1878. – *Meddelanden af Societas pro Fauna et Flora Fennica* 5: 57–62. [in Swedish and Latin]
- KARSTEN P.A. (1879b): Rysslands, Finlands och den Skandinaviska halföns Hattsvampar, Förra Delen: Skifsvampar. – *Bidrag till Kännedom af Finlands Natur och Folk* 32: i–xxviii, 1–571. [in Swedish]
- LAMB I.M. (1963): *Index Nominum Lichenum inter annos 1932 et 1960 divulgatorum*. – xii+810 pp., Ronald Press, New York. Available at: www.cybertruffle.org.uk/cyberliber/59644/0392.htm [in Latin; accessed 22 August 2024]
- NĚMČANSKÝ J. (1593): *Bibl české, Díl ssestý, totiž Nowý zákon, nowě wydaný Léta Páně M D XC III* [„Bible kralická“; revised original translation of the New Testament by J. Blahoslav]. – Kralice. [in Czech]
- PILÁT A. (1953): *Hymenomyces novi vel minus cogniti Českoslovakiae, II*. – *Sborník Národního muzea v Praze [Acta Musei Nationalis Pragae]* 9B(2): 3–109. [in Latin]
- TURLAND N. (2019): *The Code Decoded. A user's guide to the International Code of Nomenclature for algae, fungi, and plants*. Second edition. – Pensoft Publishers, Sofia.
- TURLAND N.J., WIERSEMA J.H., BARRIE F.R., GREUTER W., HAWKSWORTH D.L., HERENDEEN P.S., KNAPP S., KUSBER W.-H., LI D.-Z., MARHOLD K., MAY T.W., MCNEILL J., MONRO A.M., PRADO J., PRICE M.J., SMITH G.F., eds (2018): *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017 [Regnum Vegetabile no. 159]*. – Koeltz Botanical Books, Glashütten. DOI: <https://doi.org/10.12705/Code.2018>
- VELENOVSKÝ J. (1931): *Lentinus jugis* Fr. – *Mykologia* 8(6–7): 65–66. [in Czech]