

A Further Update on the Nomenclature of *Copernicia glabrescens* and *C. macroGLOSSa* (Arecaceae)

Una Actualización Adicional Sobre la Nomenclatura de *Copernicia glabrescens* y *C. macroGLOSSa* (Arecaceae)

CELIO E. MOYA LÓPEZ

Dr. Nicholas J. Turland, a Rapporteur-général, Nomenclature Section, International Botanical Congress, 2017 and 2024, and chair editor of International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code), *Botanischer Garten und Botanisches Museum Berlin, Freie Universität Berlin*, brought to my attention (pers. comm., 31 August 2023) some errors in my previous work (Moya 2021, 2022) concerning the nomenclature of *Copernicia macroGLOSSa*. Here, I address these errors.

Materials and Methods

Turland's textual opinions are within quotations (""). All references to the "Code" refer to Turland et al. (2018), and all of Turland's explanations, corrections, or suggestions are based on his personal communication (31 August 2023). The literature I consulted was in BHL (2023) and Hathitrust.org (2023).

Results

I found a total of 37 specimens associated with *Copernicia macroGLOSSa* in 11 herbaria: A, B [destr.], BRU, F, FI, GH, HAC, K, NY, P, and US (acronyms from Thiers 2016). All specimens cited were examined from high-resolution photographs except for those at HAC, which I examined in person. Specimens seen by the author are marked with "!", those not seen with "[n.v.]," and those without marks were seen as digital images.

Until now I considered the same name, based on the same type as an isonym, but Turland explained to me that "An isonym is the same name with the same type, but a name that is not

validly published cannot have a type, because it is not a “name” in the sense of the *Code* (Art. 6.3, 12.1).”

In Moya (2021 and 2022), I misinterpreted the *Code* relating to article 46.4, because when Beccari (1907) attributed *Copernicia glabrescens* and *C. macroglossa* to Wendland, their rank was unchanged; thus, the names should be attributed to H. Wendl. ex Becc. Turland explained to me that, “Art. 46.4 specifies a *different* name that was not validly published, or a name at a *different rank*.” In this case the *same names* are retained at the *same rank*; thus, they were validly published. Thus, Art. 46.4 does not apply, and the name should be attributed to “H. Wendl. ex Becc.”

Other errors in Moya (2021 and 2022) are also corrected here. Among others, it is considered that Charles Wright authored all palm names published in Sauvalle (1871), which was corrected in Moya (2023).

Also, in Moya (2021), I misinterpreted the *Code* relating to Article 8.3 when he designated as the lectotype of *Copernicia macroglossa* the fragment of *Wright 3969* at B (destroyed) and the original photo of Wright’s specimen at B, which Burret had sent to León and are now present at HAC. The fragment is no longer part of the holotype specimen because it is not permanently conserved in the same herbarium as the holotype. It is a duplicate (Article 8.3 of the *Code*); for that reason, here I update and decide that the material from B in HAC are duplicates and, therefore, isolectotypes of *C. macroglossa*.

***Copernicia glabrescens* (Fig. 1)**

Charles Wright, in Sauvalle (1871), was the first to use the name “*Copernicia glabrescens*,” attributing it to H. Wendland and basing it on *Wright 3968*, but provided no description, diagnosis, or reference, which makes it a *nomen nudum* and invalid according to article 38.1 of the *Code* (Moya 2022 and 2023).

Copernicia glabrescens in Sauvalle (1873) and Gómez de la Maza (1893) are not validly published names (Art. 6.3, 12.1 of the *Code*.)

Here I correct my error in Moya (2022), then *Copernicia glabrescens* Becc. Thus, the correct name is *Copernicia glabrescens* H. Wendl. ex Becc., *Webbia* 2: 170. 1907.



1. *Copernicia glabrescens* in disturbed, mesic forest near Cajalbana, Cienfuegos.
© 2017 D. R. Hodel.



2. *Copernicia macroglossa* in dry savanna near Cartegena, Cienfuegos. © 2017 D. R. Hodel.

***Copernicia macroglossa* (Fig. 2)**

Charles Wright, in Sauvalle (1871), was the first to use the name “*Copernicia macroglossa*” attributing it to Grisebach & H. Wendland, basing it on *Wright 3969*, but provided no description, diagnosis, or reference, which makes it a *nomen nudum* and invalid according to article 38.1 of the Code (Moya 2021 and 2023).

Copernicia macroglossa in Sauvalle (1873), Kerchove (1878), Salomon (1887), and Gómez de la Maza (1893) are not validly published names (Art. 6.3, Art. 12.1 of the Code.)

Charles Wright (in Sauvalle 1871) proposed the name *Copernicia macroglossa*, name that Schaedtler (1875) used when he wrote: “*Ohne Stammbildung, mit unverhältnißmäßig großen Fächern, die fast aus der Erde hervorstehen. Sie macht durch ihren zwerghaften Wuchs bei lebhafter Färbung des Blattgrüns einen mehr seltsamen, als schönen Eindruck.*” [Without stem formation, with disproportionately large fans that almost protrude from the soil. It makes a more strange than beautiful impression due to its dwarfed stature with vivid hue of the chlorophyll.]

I disagree with the opinion of several specialists of the Code who feel that Schaedtler's description is adequate for valid publication. They say that the description satisfies Art. 38.1(a) of the Code because of the three characteristics it provides. However, "Without stem formation" does not apply to *Copernicia macroglossa*; "with disproportionately large fans that almost protrude from the soil" can refer to any plant with large palmate leaves; and "It makes a more strange than beautiful impression due to its dwarfed stature with vivid hue of the chlorophyll" is a very general, non-specific characteristic unrelated to the species. In its whole, the characteristics Schaedtler (1875) offers can refer to any plant with large palmate leaves.

Schaedtler's (1875) statement is unaccompanied by a description or diagnosis of the taxon that clearly distinguishes it from other taxa; thus, it does not meet the requirements of the Code.

The only component of Schaedtler (1875) that relates to the species is the name "*Copernicia macroglossa*," which Wright had published, four years earlier in Sauvalle (1871). Another aspect that invalidates Schaedtler's name *C. macroglossa* is that this name is a case of plagiarism, according to the definition of the Oxford University (2023) although this argument it is not considered in the Code.

With all due respect to opinions contrary to mine, Schaedtler (1875) treatment of *Copernicia macroglossa* cannot be considered a validly published new name because it is not accompanied by a defining description or diagnosis. Therefore, it does not satisfy Art. 38.1(a) of The Code and must be considered *nomen nudum*.

Also, at that time, at least 10 specimens of *Copernicia macroglossa* from Wright 3969 were available in European herbaria: B, K, and P; from *Sagra 101* in B, G and P; and from *Sagra s.n.* in BR. Several have inflorescence fragments, which define the species although Schaedtler did not see or mention these.

Here, I correct my error in Moya (2021) when I discussed *Copernicia macroglossa* Becc., when it should be *Copernicia macroglossa* H. Wendl. ex Becc.

***Copernicia macroglossa* H. Wendl. ex Becc., Webbia 2: 177. 1907.**

Type. CUBA. Sancti Spíritus province, Trinidad municipality, "*Potrero Manatí*," 19 Mar. 1867, *C. Wright 3969*, p. p. B, emend. Moya (lectotype, [first-step]: Dahlgren & Glassman 1963: 153, A*, [second-step]: designated here, GH00028326; isolectotypes: A00028328, B [destr.], BRU00054980, F0092049.1, F0092049.2, F279245 [photo A, n.v.], F279246 [photo GH, n.v.], FI072424 [frag. ex B], GH00028325, GH00028327, GH00028329, HAC ex HABA!, HAC4536 [frag.

ex B!], HAC [photo B!], K000209133, K000209134, K000462348, NY00071177, NY1662386, NY1662387, P00725593, P00725594, P00725595).

Syntypes: CUBA. La Habana province, Guanabacoa municipality: Guanabacoa, Jata, La Havanne, 1829, *Sagra 101* (B [dest.], BR, F [photo G], FI [n.v.], G, HAC [photo B!], HAC [frag. ex G-DC in B!], P×2). Cienfuegos province and municipality: Calicita RR, 13 Jul. 1895, *Combs 335* (B [dest.], FI ex B [n.v.], GH [n.v.], NY).

Beccari (1907), in the protologue of *Copernicia macroglossa*, did not indicate any type. For the description he used different specimens, *Wright 3969* at B, *Combs 335* at B, and *Sagra s.n.* at G, creating syntypes, according to article 9.6 of the Code.

Dahlgren and Glassman (1963) designated *Wright 3969* "pro parte" in A* as the lectotype of *Copernicia macroglossa*, and also showed in figure 119 the corresponding image at A, which did not include the Arnold Arboretum herbarium logo (A), with a mixture of the lectotype of *C. macroglossa* on the left and isotype of *Copernicia leoniana*, now synonymous with *Copernicia × escarzana*, on the left (Moya 2021).

The mixed specimen in question from the Harvard University Herbaria (HUH) was separated and mounted on two different herbarium sheets, at an unspecified date, one sheet for each taxon and now with the Gray Herbarium (GH) logo.

The *Copernicia macroglossa* portion now has the barcode GH00028326, which I consider here as a second-step lectotype. It still has Howard's notation on the cardboard "A. *Copernicia torreana* (*C. macroglossa*) and B. *Copernicia burretiana* (*C. × escarzana*)," with an arrow with A pointing to the portion of the inflorescence of *C. macroglossa*. Isolectotypes include the 22 duplicates at A, BRU, F, FI, GH, HAC, K, NY, and P.

Suggestions to Include in the New Code of 2024

Considering the importance of a description that is required for valid publication of a name of a new taxon, I propose that the concept description should be defined in a new article, as they do with diagnosis in article 38.2, since only very ambiguous information appears in the glossary "description. [Not defined] – a published statement of a feature or features of an individual taxon; ...".

I also suggest that Code specialists include the concept of plagiarism, as a form of invalid publication, considering that Oxford University (2023) defines plagiarism as presenting work or

ideas from another source as your own, with or without consent of the original author, by incorporating it into your work without full acknowledgement. All published and unpublished material is covered under this definition. Intentional or reckless plagiarism is a disciplinary offence. Plagiarism, despite doing a lot of damage to science, has not been given all the value it deserves; if considered so, it could be used retroactively in relation to nomenclature.

Acknowledgements

I sincerely thank Dr. Nicholas J. Turland for his detailed explanations, suggestions, and corrections for the interpretation of the Code that have allowed me to correct errors, and for bringing this oversight to my attention, as well as for the translation of *Copernicia macroglossa* in Schaedtler. I am grateful to Donald R. Hodel for carefully reviewing the manuscript and improving the English and providing photographs of the palms discussed here. I thank the Biodiversity Heritage Library (BHL) and HathiTrust Digital Library (hathitrust.org) for allowing me to review the consulted. I give special thanks to an anonymous reviewer for checking the manuscript. All have my sincere thanks.

Literature Cited

- Beccari, O. 1907. Le palme Americane della tribu delle Corypheeae. Webbia. 2: 1–343.
<https://doi.org/10.5962/bhl.title.15531>
- BHL. 2023. Biodiversity Heritage Library. <https://www.biodiversitylibrary.org> (accessed 8 September 2023).
- Dahlgren, B. and S. Glassman. 1963. A revision of the genus *Copernicia* 2. West Indian Species. Gentes Herbarum 9(2): 43–232.
<https://babel.hathitrust.org/cgi/pt?id=mdp.39015035572497&seq=1>
- Gómez de La Maza, M. 1893. Nociones de Botánica Sistemática. A. Álvarez y Co., Havana.
<https://doi.org/10.5962/bhl.title.100806>
- Hathitrust.org (2023). HathiTrust Digital Library. <https://www.hathitrust.org> (accessed 8 September 2023).
- Kerchove de Denterghem, O. 1878. Les Palmiers Histoire liconographique. J. Rothschild, Paris.
<https://doi.org/10.5962/bhl.title.47086>

- Moya, López, C. E. 2021. An Update of *Copernicia macroglossa* and *Copernicia × escarzana* (Arecaceae). *PalmArbor* 2021-07: 1-22.
<https://ucanr.edu/sites/HodelPalmsTrees/files/349374.pdf>
- Moya López, C. E. 2022. Charles Wright y las Palmas Cubanas. 8. Update *Copernicia glabrescens*. *PalmArbor* 2022-03: 1-19. <https://ucanr.edu/sites/HodelPalmsTrees/files/367229.pdf>
- Moya López, Celio E. 2023. Correct Citations for Five of the Most Significant 19th-century Personages in the Flora of Cuba. *PalmArbor* 2023-11: 1-20.
<https://ucanr.edu/sites/HodelPalmsTrees/files/387975.pdf>
- Oxford University. 2023. Oxford University to Oxford students. Plagiarism.
<https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism> (accessed 31 August 2023).
- Salomon, C. 1887. Die Palmen nebst ihren Gattungen und Arten für Gewächshaus und Zimmer-Kultur. Parey, Berlin.
<https://babel.hathitrust.org/cgi/pt?id=hvd.32044106471154&seq=7>
- Sauvalle, F. A. 1871. Flora Cubana, in *Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana*. Revista científica 7: 560–566. Imp. La Antilla, de Cacho-Negrete. Habana. <https://www.biodiversitylibrary.org/item/25027#page/568/mode/1up>
- Sauvalle, F. A. 1873. Flora Cubana [Sauvalle]. Imp. La Antilla, de Cacho-Negrete. Habana. 427 pp. <https://doi.org/10.5962/bhl.title.51954>
- Schaedtler, G. 1875. Die Palmen..., pp. 20–260, in: E. Otto, *Hamburger Garten- Blumenzeitung* 31. <https://www.biodiversitylibrary.org/item/181429#page/40/mode/1up>
- Thiers, B. 2016. Index Herbariorum: a global directory of public herbaria and associated staff. New York Botanical Garden's Virtual Herbarium. <http://sweetgum.nybg.org/science/ih/> (accessed 31 August 2023).
- Turland, N. J., J. H. Wiersema, F. R. Barrie, W. Greuter, D. L. Hawksworth, P. S. Herendeen, S. Knapp, W.-H. Kusber, D.-Z. Li, K. Marhold, T. W. May, J. McNeill, A. M. Monro, J. Prado, M. J. Price, and G. F. Smith (eds.). 2018. International Code of Nomenclature for Algae, Fungi, and Plants (Shenzhen Code) adopted by the 19th International Botanical

Congress, Shenzhen, China, July 2017. Reg. Veg. 159. Koeltz Botanical Books,
Glashütten: <https://doi.org/10.12705/Code.2018>

Celio E. Moya López is an independent researcher specializing in the biology of Cuban and
Caribbean palms. celio.moya@gmail.com
<https://orcid.org/0000-0002-5033-483X>

Text © 2023 by Celio E. Moya López.

Photographs © 2023 by D. R. Hodel.

Publication Date: 11 October 2023.

PalmArbor: <http://ucanr.edu/sites/HodelPalmsTrees/PalmArbor/>

ISSN 269083245

Editor-In-Chief: Donald R. Hodel

Hodel Palms and Trees: <http://ucanr.edu/sites/HodelPalmsTrees/>