

Correct Citations for Five of the Most Significant 19th-century Personages in the Flora of Cuba

Citas Correctas de Cinco de los Personajes Más Importantes del Siglo XIX en la Flora de Cuba

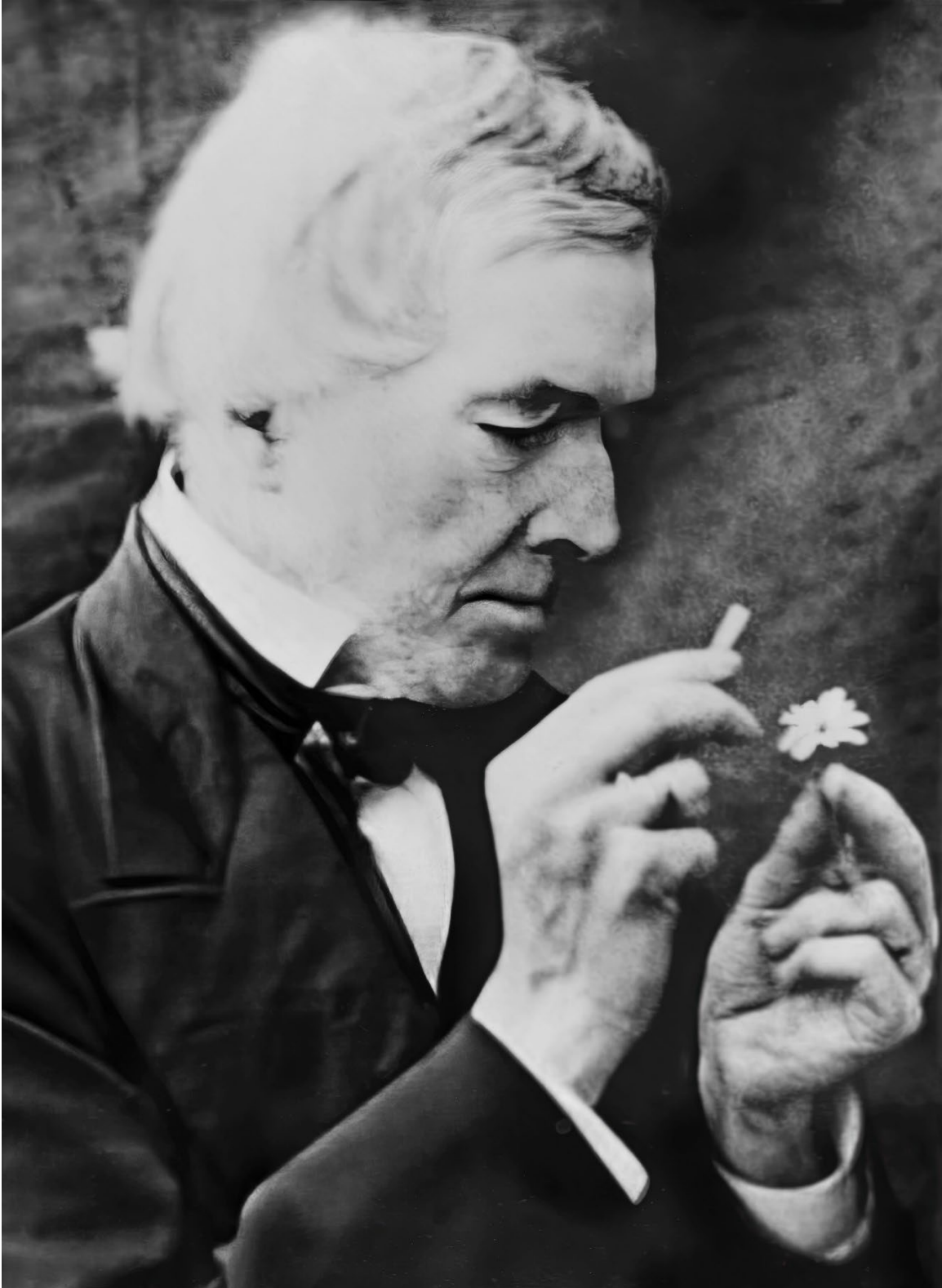
CELIO E. MOYA LÓPEZ

Abstract

The correct citations for five of the most significant 19th-century personages (Grisebach, Richard, Sagra, Sauvalle, and Wright) in the *Flora of Cuba* are provided. New taxa that Achilles Richard (1841, 1845, 1846, 1850, 1851, and 1855) named and described in Sagra should be “A. Richard.” The correct years of publication for new taxa named and described in Grisebach's *Flora of the British West Indian Islands* are 1859, 1860a, 1860b, 1861a, 1862, and 1864; in his *Plantae Wrightianae, e Cuba Orientali* are 1861b and 1863; and in his *Catalogus Plantarum Cubensium* is 1866. The correct an accepted authorship citation for the new taxa that Charles Wright named and described in Sauvalle (1868, 1869a, 1869b, 1870a, 1870b, 1871a, 1871b, 1872a, 1872b) should be “C. Wright,” while those that appear again in the reprinted book (1873) are later isonyms. We must respect the principle of priority that each taxon can have only one correct name.

Resumen

Se ofrece la citación correcta para la nomenclatura de la Flora de Cuba de Grisebach, Richard, Sagra, Sauvalle, and Wright. Para los nuevos taxones que Achilles Richard nombró y describió en Sagra (1841, 1845, 1846, 1850, 1851 y 1855) debería ser “A. Richard.” Los años correctos de publicación de nuevos taxones nombrados y descritos en *Flora of the British West Indian Islands* de Grisebach son 1859, 1860a, 1860b, 1861a, 1862 y 1864; en su *Plantae Wrightianae, e Cuba Orientali*, 1861b y 1863; y en su *Catalogus Plantarum Cubensium*, 1866. La cita de autoría correcta y aceptada para los nuevos taxones que Charles Wright nombró y describió en Sauvalle (1868, 1869a, 1869b, 1870a, 1870b, 1871a, 1871b, 1872a, 1872b) debería ser “C. Wright”, mientras que los que aparecen de nuevo en el libro reimpresso (1873) son isónimos posteriores. Debemos respetar el principio de prioridad de que cada taxón puede tener un solo nombre correcto.



1. August Heinrich Rudolf Grisebach (1814–1879). © GOET Herbarium.

Introduction

In the last half of the 19th century, five people intersect and their historical publications are definitive for the Cuban flora: August H. R. Grisebach, Achille Richard, Ramón de la Sagra, Francisco A. Sauvalle, and Charles Wright. Curiously, one is German, one French, one Spanish, one United States American, and one United States American-born Cuban, respectively. To write about the Cuban flora without mentioning any one of them is very difficult.

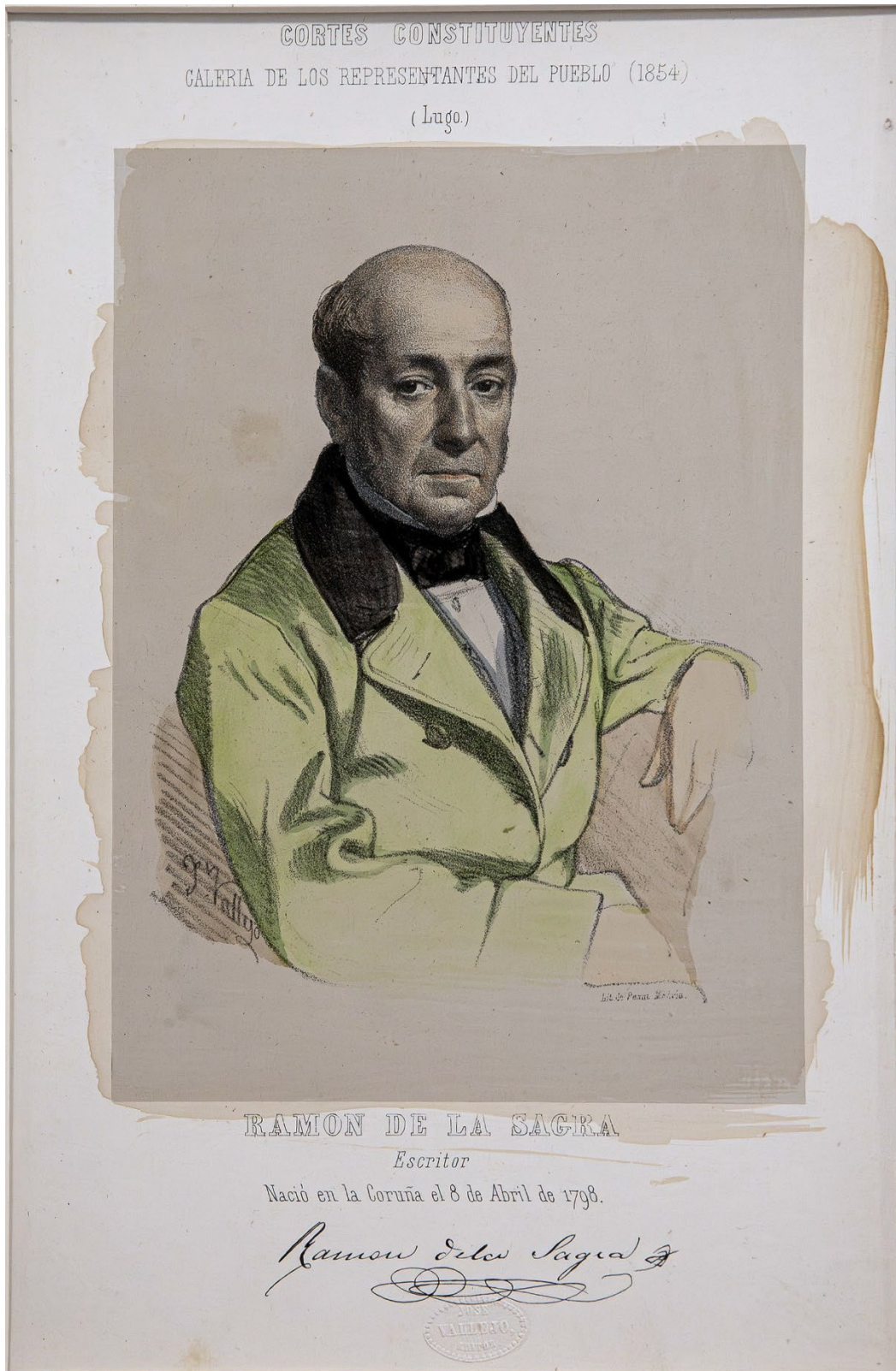
August Heinrich Rudolf Grisebach (**Fig. 1**) (Hannover, Germany, 17 April 1814 – Göttingen, Germany, 9 May 1879), was a German botanist, taxonomist, geobotanist, pteridologist, and phytogeographer. He was a member of the Leopoldina German Academy of Natural Sciences, the Prussian Academy of Sciences, and the Bavarian Academy of Sciences. He directed the Göttingen Botanical Garden in 1875.

Achille Richard (**Fig. 2**) (Paris, Île-de-France, France, 27 April 1794 in Paris – Paris, Île-de-France, France, 5 October 1852) was a French botanist, botanical illustrator, and physician. He served as curator of the Delessert Herbarium and at the Muséum d'Histoire Naturelle in Paris from 1817–1831. He was professor of Botany in the Faculty of Medicine, Paris. He was as member of the French Academy of Sciences, and French National Academy of Medicine and a foreign member of the Linnean Society. He received his Doctor of Medicine degree in Paris in 1820. Richard published *Botanique (:)* *Plantes Vasculaires*” in *Histoire Physique, Politique et Naturelle de L’Île de Cuba* (1841, 1846, 1851) in Sagra (with the alternate title *Essay on the Flora of the Island of Cuba*) and *Historia Natural*. Also, he published *Botánica* (1845, 1850, 1855) in Sagra. León (1918) wrote that in that work Richard described 1018 species, of which 324 were new.

Ramón Dionisio José de la Sagra y Peris (**Fig. 3**) (A Coruña, Galicia, Spain, 8 April 1798 – Neuchâtel, Switzerland, 23 May 1871) was a Spanish economist, politician, writer, naturalist, and botanist. Sagra lived in Havana from 1823 to 1835. He was director of the Botanical Garden and professor of Botanica of Havana. Sagra, together with his studies in botany and agriculture, developed historical, economic, and geographical essays on Cuba, which he published in Havana from 1827 onwards in the journal that he created, *Los Anales de Ciencias, Agricultura, Comercio y Artes*. His botanical and agricultural publications and expertise enabled him to publish his masterpieces *Historia Económico-Político y Estadística de la Isla de Cuba* (Sagra 1831), *Histoire Physique, Politique et Naturelle de L’Île de Cuba* (Sagra 1838–1857), and *Historia Física, Política y Natural de la Isla de Cuba* (Sagra 1838–1861). In the latter, Camille Montagne published the cellular plants and Aquilles Richard published the vascular plants of Cuba based on Sagra's collections and publications.



2. Achille Richard (1794–1852). © Achille Richard. Lithograph by N.-E. Maurin. Iconographic Collections Keywords: Achille Richard, by Nicolas-Eustache Maurin, from Wikimedia.org. (2023).



3. Ramón Dionisio José de la Sagra y Peris (1798–1871). © Archivo y Biblioteca de las Cortes Generales, Madrid.

Francisco Adolfo Sauvalle (**Fig. 4**) (Charleston, South Carolina, USA, 1 July 1807 – Regla, La Habana, Cuba, 1 February 1879), was a United States American-born Cuban politician, writer, and naturalist. Born to French parents from Haiti, he was sent to France at the age of seven for his studies, after which he settled in Cuba in 1824, where he pursued his interest and research on nature, particularly on his farm Vuelta Abajo, near the town of San Cristóbal in present-day Artemisa province. He was a landowner in Cuba, married, had children, and passed away there in 1879 (Moya 2021). Sauvalle, who also wrote about poisonous and medicinal plants in Cuba, eventually published his *Flora Cubana* in the journal *Anales de la Academia de Ciencias Médicas Físicas y Naturales de La Habana*, volumes 5 to 9 (1868, 1869a, 1869b, 1870a, 1870b, 1871a, 1871b, 1872a, 1872b).

Charles Wright (**Fig. 5**) (Wethersfield, Connecticut, USA, 29 October 1811– Wethersfield, Connecticut, 11 August 1885) was an United States American naturalist and botanist who explored and collected plants in Cuba in the mid-19th century. Considered one of the most important naturalists of his era, he made a remarkable contribution to the Cuban flora (León 1918). Over a span of eight years, he conducted three expeditions to Cuba, the first from November 30, 1856 to August 1857, the second from November 29, 1858 to August 1864, and the third from May 10, 1865 to July 1867.

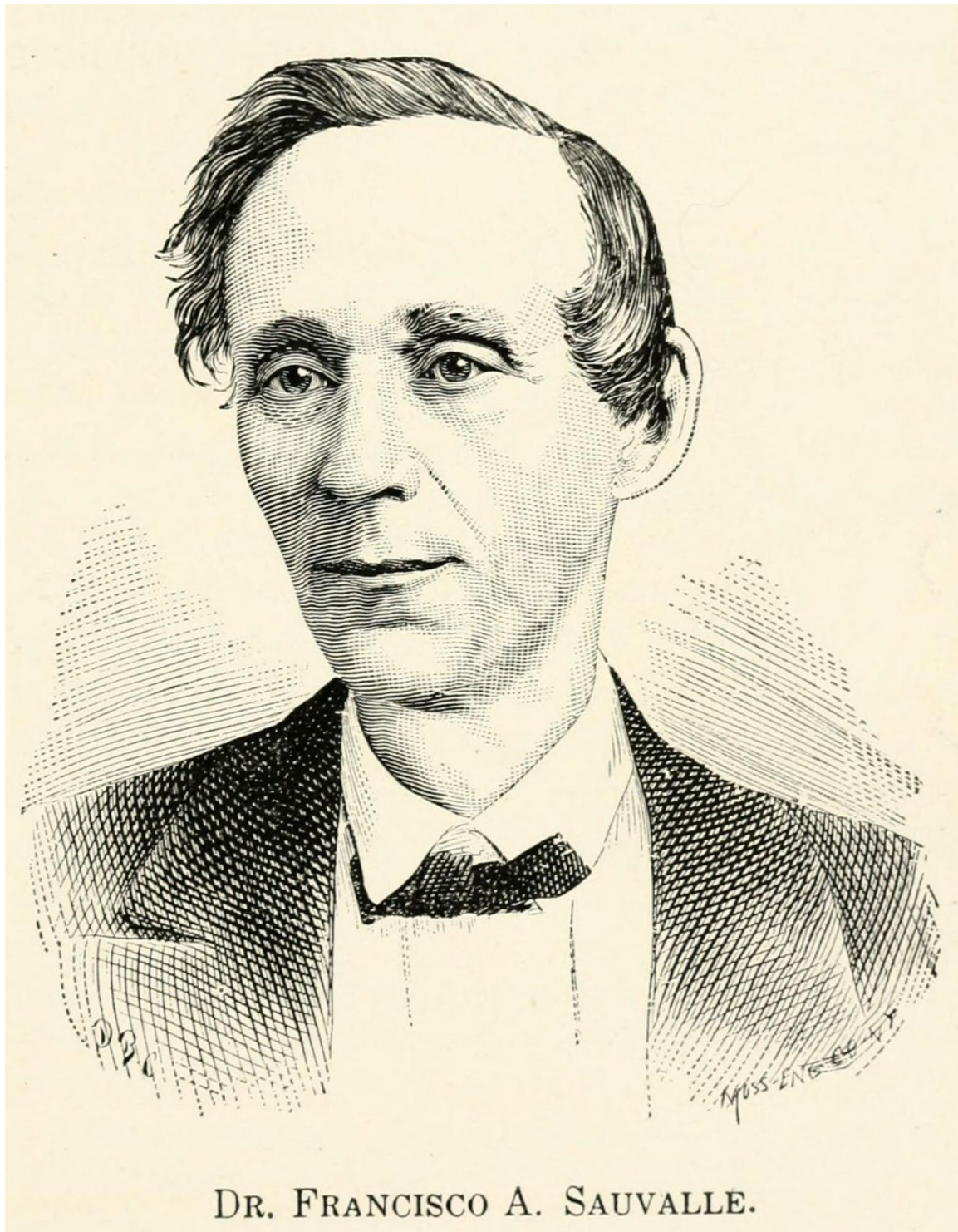
Materials and Methods

I examined Richard (1841, 1845, 1846, 1850, 1851, 1855) in Sagra where Richard published his botanical accounts. I examined Grisebach (1859, 1860a, 1860b, 1861a, 1861b, 1862, 1863, 1864, 1866). I also examined the series of articles for *Flora Cubana* that Sauvalle (1868, 1869a, 1869b, 1870a, 1870b, 1871a, 1871b, 1872a, and 1872b) published and his book (Sauvalle 1873).

Particular attention was given to others who had investigated and offered an opinion about the citations of names, including Urban (1898), Stafleu and Cowan (1976, 1983a, 1983b, 1985, 1988), Moya (2021), Turland et al. (2018), IPNI (2023), and TL-2 (2023a–e).

For the biographical accounts I considered Álvarez Conde (1958), Howard (1988), León (1918), Naranjo (2023), Stafleu and Cowan (1976, 1983a, 1983b, 1985, 1988), TL-2 (2023a–e), and Urban (1898).

To cite the title of the publication, the full alternative form is offered in the text, while the standard or abbreviated form is listed in the reference, according to IPNI (2023) and TL-2 (2023a–e) criteria. Considering that the DOI in some cases is common for the different volumes of the title of the publication, in the reference I use the BHL (BHL 2023) link that leads directly to the



4. Francisco Adolfo Sauvalle (1807–1879). © Trelles, C. M. (1918). Biblioteca científica cubana, contributed by New York Botanical Garden, LuEsther T. Mertz Library.



5. Charles Wright (1811–1885). © Harvard University Herbarium Library and Archives. Harvard University Herbaria Library and Herbarium.

text. For that reason, in the cited literature, the link of each part, volume or chapter is offered, which will facilitate the search and correct location of each family.

Brizicky (1962) assumed, while Stafleu and Cowan (1983a) and TL-2 (2023a–e) reaffirmed, the often overlooked dates, pages, and plates for the French edition of Sagra (1841): pp. 1–336, pl. 1–35; (1846): pp. 337–624, pl. 36–44(2); (1851): pp. 625–663, i–viii, pl. 44(3)–89.

I followed the recommendations of Turland et al. (2018).

Results

August Heinrich Rudolf Grisebach and Charles Wright

Grisebach was never in Cuba, but his publications about the place include: *Flora of the British West Indian Islands* (1859–1864); *Plantae Wrightianae, e Cuba orientali* (1861 and 1863); and *Catalogus Plantarum Cubensium* (1866), where all new descriptions for Cuban plants were based on C. Wright's collections.

Suggestions for referencing Grisebach's *Flora of the British West Indian Islands*, *Plantae Wrightianae, e Cuba orientali*, and *Catalogus Plantarum Cubensium*

Stafleu and Cowan (1976) reported that *Flora of the British West Indian Islands* (No. 2181) was originally issued in parts: pt. 1–2, pp. 1–192. 1859; pt. 3, pp. 193–315. 1860; pt. 4, pp. 315–410. 1861; pt. 5, pp. 411–506. 1862; and pt. 6–7, pp. 507–789. 1864. The reference and new names should be cited as Fl. Brit. W. I., in each case accompanied by the year corresponding to the appropriate part.

IPNI (2023) stated that Stearn (1965) corrected the publication date for part 2 of Grisebach's *Flora of the British West Indian Islands* to June 1860.

Thus:

Grisebach, A. 1859. *Flora of the British West Indian Islands* 1: 1–96. L. Reeve & Co. London.

Grisebach, A. 1860a. *Flora of the British West Indian Islands* 2: 97–192. L. Reeve & Co. London.

Grisebach, A. 1860b. *Flora of the British West Indian Islands* 3: 193–315. L. Reeve & Co. London.

Grisebach, A. 1861. *Flora of the British West Indian Islands* 4: 315–410. L. Reeve & Co. London.

Grisebach, A. 1862. *Flora of the British West Indian Islands* 5: 411–506. L. Reeve & Co. London.

Grisebach, A. 1864. *Flora of the British West Indian Islands* 6–7: 507–789, i–xvi. L. Reeve & Co. London.

Urban (1898) noted that the first part of *Plantae wrightianae, e Cuba orientali* was read on August 8, 1860 and the second part was read on April 22, 1862. Both were printed in the Memoirs of the American Academy of Arts and Sciences. New Series 8, part I in 1861 and part II in 1863. Stafleu and Cowan (1976) confirmed these dates; therefore, the citation for Pl. Wright (Grisebach) corresponds to publications in the years 1861 and 1863.

Thus:

Grisebach, A. 1861. *Plantae Wrightianae, e Cuba orientali* (Polypetalæ et Apetalæ). Pars I, in Memoirs of the American Academy of Arts and Sciences, new ser. 8: 152–192. Cambridge and Boston.

Grisebach, A. 1863. *Plantae Wrightianae, e Cuba orientali* (Monopetalæ et Monocotyledones). Pars II, in Memoirs of the American Academy of Arts and Sciences, new ser. 8: 503–536. Cambridge and Boston.

Stafleu and Cowan (1976) concluded that for *Catalogus plantarum cubensium exhibens collectionem Wrightianam aliasque minors ex insula Cuba missas* (No. 2184) (Leipzig [Wilhelm Engelmann] 1866. Oct. [Cat. pl. Cub].) that cites new names, the correct citation is Cat. Pl. Cub. 1866.

Thus:

Grisebach, A. 1866. *Catalogus Plantarum Cubensium*. Wilhelm Englemann, Leipzig.

Achille Richard and Ramón de la Sagra

Ramón de la Sagra published in French and in Spanish, as related here in the literature, *Physical, Political and Natural History of the Island of Cuba* in 22 volumes (Sagra 1832–1861) (BHL 2023), and one more as *Historia, física y política. Atlas geográfico* for a total of 23 volumes, not in chronological order, from 1838 to 1861. Nine are in French and 14 are in Spanish, with two volumes where illustrations were accompanied by text in each language. Sagra assumed the authorship of 10 volumes in total, in the remaining 13 the authorship corresponded to his scientific collaborators, M. M. Cocteau, Alcide D'Orbigny and M. F. E. Guérin-Méneville for the animals and Camile Montagne and Aquille Richard for the plants.

However, he wrote in French in the introduction for these publications (Sagra 1845), referring to botany: “By entrusting our herbarium of phanerogams to A. Richard, entrusting him absolutely with the classification and description, we also give him a large number of our notes on localities, properties and applications.” This statement is evidence that the name was validly published and ascribed to Achilles Richard while Sagra is simply the editor (Turland et al. 2018: Art. 46.8).

Suggestions for referencing A. Richard’s *Botanique. Plantes Vasculaires* and *Historia Natural. Botánica*

To facilitate coherence in Sagra's *Physical, Political and Natural History of the Island of Cuba*, the schematic and imprecise numbering of "1 and 2," given to the French and Spanish editions, respectively, is replaced by the actual numbers Sagra gave to his volumes. In the specific case of Richard's publications in French, the three parts appear in volumes (tomes) 6–7 in Sagra, while in Spanish it appears in volumes (tomos) 11–13. However, for the years of the Richard's publications, I refer to those Stafleu and Cowan (1983a, p. 763) designated.

Richard, A. 1841. *Botanique. Plantes Vasculaires*, in Sagra, *Histoire Physique, Politique et Naturelle de L’Ile de Cuba*. (Ed. A. Bertrand). 6–7(1): 1–335, plates 1–35.

Richard, A. 1845. *Historia Natural. Botánica*, in Sagra, *Historia Física, Política y Natural de la Isla de Cuba* 10: 1–319. Imp. Francisco de P. Mellado. Madrid.

Richard, A. 1846. *Botanique. Plantes Vasculaires*, in Sagra, *Histoire Physique, Politique et Naturelle de L’Ile de Cuba*. (Ed. A. Bertrand). 6–7(2): 336–625, plates 36–44(2).

Richard, A. 1850. *Historia Natural. Botánica*, in Sagra, *Historia Física, Política y Natural de la Isla de Cuba* 11: 1–339. Impr. Maulde y Renou. Paris.

Richard, A. 1851. *Botanique. Plantes Vasculaires*, in Sagra, *Histoire Physique, Politique et Naturelle de L’Ile de Cuba*. (Ed. A. Bertrand). 6–7(3): 626–663, plates 44(3)–89.

Richard, A. 1855. *Historia Natural. Botánica. Atlas*, in Sagra, *Historia Física, Política y Natural de la Isla de Cuba* 12, 89 plates. Impr. Maulde y Renou. Paris.

The appropriate author citation for the new taxa Richard described and named in Sagra’s *Histoire Physique, Politique et Naturelle de L’Ile de Cuba* (1841, 1846, and 1851) and *Historia Física, Política y Natural de la Isla de Cuba* (1845 and 1850) (Turland & al. 2018: Art. 46, Note 2), using as an example the first species Richard described, should be:

Clematis pallida A. Rich. in Sagra, Hist. Phys. Cuba, Pl. Vasc. 6–7: 10. 1841.

“*Clematis pallida*” A. Rich. in Sagra, Hist. Fis. Cuba, 10: 4. 1845, not validly published.

Francisco Adolfo Sauvalle and Charles Wright

Sauvalle’s *Flora Cubana*, where all new Cuban plant descriptions were based on C. Wright’s collections, was published in an earlier series of nine articles (comprising 39 parts) from 1868 to 1872 and a later book reprint in 1873. Sauvalle wrote as a title in both publications *FLORA CUBANA. Revisio catalogi gnsebachiani vel index plantarum cubensium ad catalogum cl. Grisebachii anno 1866 editum attemperata, pluribus Wrightianis novis speciebus aucta, valde quoque emendata, a cl. C. Wright; omnia pro Annalibus Regiae Academiae Scientiarum Havanensis digesta, nominibusque adjectis cubensis vulgo receptis a Francisco A. Sauvalle. Setiembre 1868.*” Moya (2021). Inherent in this title is evidence that Sauvalle is only editor and that new, validly published taxa must be ascribed only to Charles Wright (C. Wright) (Turland et al. 2018: Arts. 46.2 and 46.8).

Urban (1898) first wrote about the publication history of Sauvalle’s *Flora Cubana*, but notably, he incorrectly used different author citations for new taxa.

Suggestions for referencing Sauvalle’s *Flora Cubana*

Sauvalle, F. A. 1868. *Flora Cubana*, in Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana. Revista Científica 5: 196–205, 237–245, 286–294. Imp. La Antilla, de Cacho-Negrete. Habana.

Sauvalle, F. A. 1869a. *Flora Cubana*, in Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana. Revista Científica 5: 332–338, 403–410, 428–436, 464–466. Imp. La Antilla, de Cacho-Negrete. Habana.

Sauvalle, F. A. 1869b. *Flora Cubana*, in Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana. Revista Científica 6: 71–77, 95–102, 121–126, 146–150, 174–182. Imp. La Antilla, de Cacho-Negrete. Habana.

Sauvalle, F. A. 1870a. *Flora Cubana*, in Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana. Revista Científica 6: 209–213, 249–251, 287–291, 314–322. Imp. La Antilla, de Cacho-Negrete. Habana.

Sauvalle, F. A. 1870b. *Flora Cubana*, in Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana. Revista Científica 7: 37–53, 100–110, 149–156, 194–200, 343–347, 459–460. Imp. La Antilla, de Cacho-Negrete. Habana.

Sauvalle, F. A. 1871a. *Flora Cubana*, in Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana. Revista Científica 7: 510–514, 560–566, 607–611, 715–717. Imp. La Antilla, de Cacho-Negrete. Habana.

Sauvalle, F. A. 1871b. *Flora Cubana*, in Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana. Revista Científica 8: 48–54, 73–88, 152–158, 200–209, 287–288. Imp. Lagriffoul y Dedirot. Habana.

Sauvalle, F. A. 1872a. *Flora Cubana*, in Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana. Revista Científica 8: 413–415, 471–474, 534–537, 584–588, 650–655. Imp. Lagriffoul y Dedirot. Habana.

Sauvalle, F. A. 1872b. *Flora Cubana*, in Anales de la Academia de Ciencias Médicas Físicas y Naturales de la Habana. Revista Científica 9: 126–128, 216, 245–248. Imp. Lagriffoul y Dedirot. Habana.

Sauvalle, F. A. 1873. *Flora Cubana* [Sauvalle]. Imp. La Antilla, de Cacho-Negrete. Habana. 427 pp.

The appropriate author citation for the new names in *Flora Cubana* (Sauvalle 1868–1872) (Turland et al. 2018: Art. 46, Note 2), using as an example the first species described by Charles Wright, should be:

Cleome macrorhiza C. Wright, in Anales Acad. Ci. Med. Habana 5: 199. 1868.

“*Cleome macrorhiza*” C. Wright, Fl. Cub. (Sauvalle): 4. 1873, not validly published.

Some publications consider Sagra as the author of the names of the vascular plants that A. Richard described just as they omit C. Wright from the names he described in Sauvalle's publications. These cases should be corrected and appropriately cite the author and publication.

I also suggest that each author and web pages consider the principle of priority that “Each family or lower-ranked taxon with a particular circumscription, position, and rank can bear only one correct name” (Turland et al. 2018, Art. 11.1).

Acknowledgements

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