

Encyclia oblongata (A. Rich.) Acuña - A Cuban Dilemma Solved

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***Encyclia oblongata* (A. Rich.) Acuña - A Cuban Dilemma Solved**

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ABSTRACT: The type of *Epidendrum oblongatum* A. Rich. is established after a careful analysis of all the elements pertaining to this species.

Achille Richard described more Cuban encyclias than any other author. However, most of the species published by this French author have been historically ignored or considered synonyms. Of all the *Epidendrum* L. (*Encyclia* Hook.) species Richard named (*nematocaulon*, *ochranthum*, *sagraeanum*, *affine*, *oblongatum*, *hircinum*), only *Epidendrum nematocaulon* (*Encyclia nematocaula* (A. Rich.) Acuña) and *Epidendrum ochranthum* (*Encyclia ochrantha* (A. Rich.) Withner) are currently accepted. Most of the Cuban *Encyclia* species he named were properly described and published and the source material is well conserved and available for study. Many of Richard's species have been recently renamed or reduced to synonymy without regard for his work. One such species is *Epidendrum oblongatum* A. Rich. Determining the true identity of *Encyclia oblongata* (A. Rich.) Acuña has proven to be a complex task. A number of elements associated with the name exist that must be considered. The protolog with Richard's comments, a specimen in Geneva labeled TYPUS, a specimen in Paris labeled Isotype, Richard's original drawing corresponding to the plate in Sagra, the plate published by Sagra and finally Valle et al. (2014) have an illustration of *Encyclia hamiltonii* Sauleda and Esperon labeled *Encyclia oblongata* implying *E. hamiltonii* is a synonym of *E. oblongata*. All of these elements must be examined one by one.

Richard wrote the volume with the original description but died before the volume with the plates was published. Sagra finished and published the volumes. The original description of *E. oblongatum* (*Historia Física Política y Natural de la Isla de Cuba, Botánica* 11: 239) was published in 1850 and the plate of *E. oblongatum* (*Historia Física Política y Natural de la Isla de Cuba, Botánica Atlas* 12: Tab. 80) was published in 1855 (Mill, 1895). Richard's original drawing with his handwriting of the plate published in 1855 is in Paris. A search of the major herbaria that Stafleu and Cowan (1983) listed as possibly containing material that Richard examined did not result in any additional material referable to *E. oblongatum*.

The protolog of *E. oblongatum* does not reveal anything unusual that could easily distinguish it from several other species of *Encyclia* in Cuba. However, in the protolog, Richard states: "Observations. In this species the flowers are the same size, same color as in the previous species, only that the midlobe is more rounded by not being wider than longer. But the raceme is simple and not branched; the leaves are lax, coriaceous, very obtuse, narrower and longer in the posterior and the pseudobulbs are ovoid elongate and not compressed." The previous species that

Richard refers to is *Epidendrum duboisianum* A. Rich. Of which he states in the protolog: “Observations: This species appears to be a variation with large flowers of *E. phoeniceum* which has great diversity of forms.” Richard was familiar with *E. phoeniceum*; he was in communication with Lindley and Hooker and had visited Kew (Stafleu & Cown, 1983). Richard had seen enough live material of *E. phoeniceum* to even elaborate on the original definition of Lindley and explain that it was a species with wide variation. Richard still decided to describe *E. oblongatum* because he felt it was different from *E. pyriforme*, *E. phoeniceum* and *E. duboisianum*.

The specimen at Geneva labeled TYPUS and listed as type of *E. oblongatum* has several labels attached. At the top left there is a label that has written on it: *Epidendrum oblongatum* Sagra, underneath on the same label *Epid. phoeniceum* Ldl. and TYPE! Underneath is an orange label that says TYPUS. On the upper right side of the specimen is a label that says Del Guanabo, Sin Duplicado. On the bottom left is a label that says 290, Ram. De La Sagra 1829. Next to it is another label that states: HERBIER DE CANDOLLE, Donne in 1921 a la Ville De Genève par Msr. Agustin de Candolle et ses enfants – Series n’ayant servi a la redaction, ni du Prodromus, ni des Monographiae Phanerogamorum, renutes a la collection genegale de l Herhier Delessert a partir de 1924. Translation: Given in 1921 to the Ville De Genève by Agustin de Candolle and children - Series not used in the writing of the Prodromus nor Monographiae Phanerogamorum, residing in the general collection of the Herbarium Delessert from 1924.

This information matches the historical events that allowed Richard to study the Cuban specimens. Sagra was at that time collecting plants for the Cuban flora and Richard had been assigned the task of studying his collection for the Cuban Flora. The specimen at Geneva was collected at Guanabo and corresponds to morphs attributed to *E. phoenicea* occasionally found in Cuba. Richard’s handwriting does not appear anywhere on the specimen. There is no indication that Richard saw this specimen although Stafleu and Cowan (1983) list Geneva as a depository of specimens that Richard studied, but add that Sagra’s specimens for the Cuban flora are in Paris. In addition, the specimen does not match the protolog.

The specimen in Paris has an annotation label stating: Det.: L. A. Garay as *Epidendrum oblongatum* A. Rich. and has stamped in red ISOTYPE. Another label states: *Encyclia pyriformis* (Lindl.) Schltr., Fide: Orchidaceae checklist in Kew Internet, 2004. The original label on the specimen states: *Epidendrum* (in Richard’s handwriting, without a species epithet), ILE DE CUBA, No. (blank), M. R. DE LA SAGRA. 1836. On a strip glued on the label is the number 1438. This specimen bears little resemblance to the specimen in Geneva. Ackerman (2014) lists this specimen as the holotype of *E. oblongatum* and reduces *E. oblongatum* to synonymy under *E. phoenicea*. Ackerman (2014) also lists *E. pyriformis* as a synonym of *E. phoenicea*.

Nir (2000) lists *E. oblongata* as a synonym of *E. pyriformis* and gives as the type of *E. oblongata*: Wright s.n. (K). Nir does not indicate that he has seen the specimen at K and the specimen was not located at Kew.

Valle et. al. (2014) show a picture of *Encyclia hamiltonii* with the caption: *Encyclia oblongata*. This is done without any explanation. No mention is made of the type of *E. oblongata*. None of the elements involved with *E. oblongata* match the flower or type of *E. hamiltonii*.

The plate in Sagra (Tab. 80) has a long rhizome between pseudobulbs that resembles the rhizome of *Encyclia grisebachiana* (Cogn.) Acuña. In the description Richard does not mention this characteristic, however it is very clearly illustrated in the Sagra plate (Tab. 80) and in his

original drawing. None of the other species he illustrated show this distinctive characteristic. The description and plate of *E. oblongatum*, illustrate some of the characters found in *E. pyriformis*. The relatively short leaves and the circular and emarginated midlobe are characteristics of *E. pyriformis*. This appears to be the reason Withner (1996) considered *E. oblongatum* a synonym of *E. pyriformis*. However, the elongated rhizome shown in the plate of *Epidendrum oblongatum* and the pseudobulbs “ovoid elongate and not compressed” that Richard mentions in the description differentiates *Encyclia oblongata* (Rich.) Acuña from *E. pyriformis*. Both characters: The elongated rhizome and the ovoid non-compressed pseudobulbs are characteristic of *Encyclia grisebachiana* (Cogn.) Acuña whose area of distribution overlaps *E. pyriformis*.

Although Richard’s illustration of *E. oblongatum* shows similarities with *E. grisebachiana*, the difference between *E. grisebachiana* and *E. oblongatum* is clear. The branched inflorescence with many flowers clearly distinguishes *E. grisebachiana* from the few flowered illustration of *E. oblongata*. In addition, *E. grisebachiana* almost always has two leaves and flowers from a mature growth while in Richard’s illustration, *E. oblongatum* has a single leaf and is flowering from an immature growth.

As with *E. phoeniceum*, Richard was familiar with *E. pyriformis*, clearly describes it (Sagra, 1850 p. 238-239) and notes the differences between *E. pyriformis*, *E. phoeniceum*, *E. duboisianum*, and *E. oblongata*. *Epidendrum oblongatum* cannot be considered a synonym of *E. pyriformis*, *E. phoeniceum* or *E. hamiltonii*. The knowledge that we have now of the distribution and characteristics of *E. pyriformis* and *E. grisebachiana* could lead to the conclusion that the protolog of *E. oblongatum* and the original drawing by Richard in Paris (here designated as a lectotype) define what is *E. oblongatum*: A possible natural hybrid of *E. pyriformis* and *E. grisebachiana*, a hybrid swarm (which could also include *Encyclia plicata* (Lindl.) Britton & Millsp.) or a species, yet to be found or extinct sharing vegetative characteristics with these species. All of the species Richard described have a type specimen in Paris with Richard’s handwriting stating the genus and species. The specimen labeled Isotype in Paris, in the absence of a specific epithet or any other indication by Richard that it is a type, cannot be considered as a type. The case of *E. oblongata* is the same as was the case with *E. phoenicea* where the protolog was published, a type specimen did not exist and an illustration was published at a later date. The original illustration of *E. phoenicea* was found at K and was designated as the lectotype (Sauleda & Esperon, 2012). The original drawing made by Richard in (P) (later illustrated in Historia Física Política y Natural de la Isla de Cuba, Botánica Atlas 12: Tab. 80) is here designated as the lectotype.

Encyclia oblongata (A. Rich.) Acuña Bol. Estac. Exp. Agron. Santiago de las Vegas 60: 80. 1939.
Basionym: *Epidendrum oblongatum* A. Rich. in Sagra Hist. Fis. Cuba Bot. 11: 239. 1850.
Lectotype (here designated): Original drawing by A. Richard in Paris (P), Bibliotheque Centrale of the Muséum National d'Histoire Naturelle.

Until further material becomes available a final conclusion about the current status of *E. oblongata* cannot be made. This species as with several other Cuban species is only known from an isolated collection from the first half of the 19th Century that may represent a relic population. *Encyclia oblongata* could have had a wider distribution in the past, or could be a localized species with restricted distribution such as *Encyclia havanensis* Bello, Esperon and Sauleda and *Encyclia guanahacabibensis* Sauleda & Esperon. Destruction of habitats may have brought about the demise of many species or

made them exceedingly rare. However, new reports of this species may occur, once a floristic inventory of the genus *Encyclia* is completed.



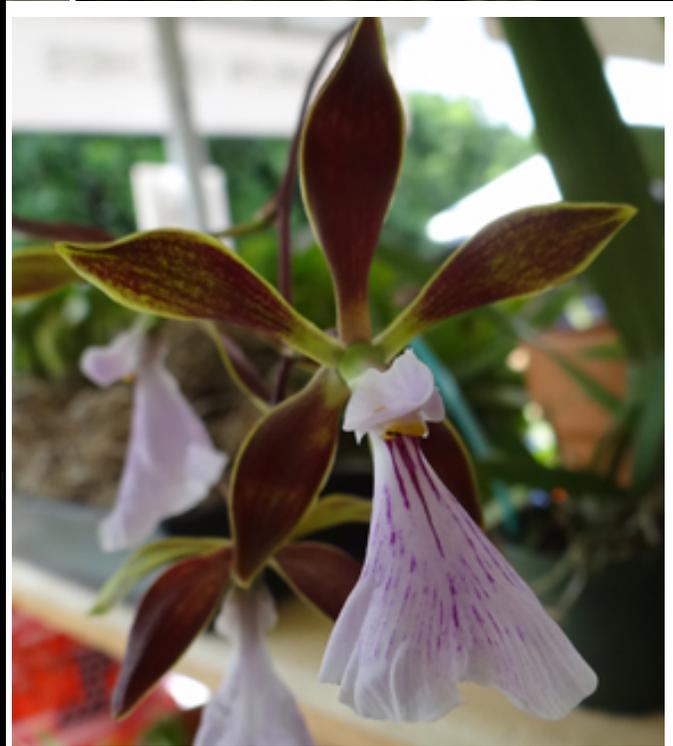
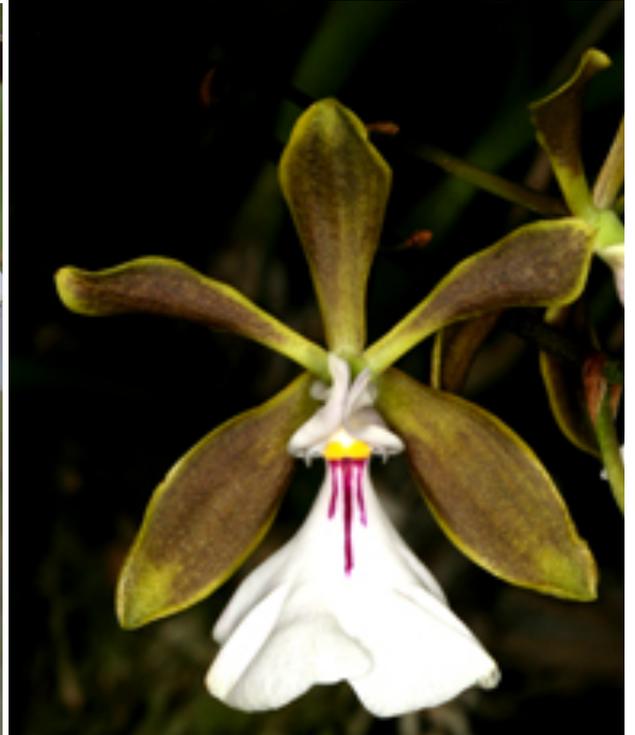
Original drawing by A. Richard in Paris (P),
Bibliothèque Centrale of the Muséum
National d'Histoire Naturelle (Lectotype).



Plate in Sagra, Hist. Fis. Cuba Bot. Atlas 12: Tab. 80.



Specimen in Paris (P) labeled Isotype.



Encyclia hamiltonii Saulea & Esperon



Encyclia grisebachiana (Cogn.) Acuña demonstrating elongated rhizome.



Encyclia pyriformis (Lindl.) Schltr.

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