A New Species of *Encyclia* Hooker From Eastern Cuba

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ABSTRACT: A new species of *Encyclia* Hooker from Eastern Cuba is described and compared with the species it has been confused with.

Recently some large flowered plants, labeled *Encyclia pyriformis* (Lind.) Schltr. have been appearing in orchid collections in the United States. These plants were first grown in Jamaica by Claude Hamilton of Hamlyn Orchids, from seed capsules collected in Eastern Cuba. Vegetatively the plants appear similar to the description and illustration of *Epidendrum pyriforme* Lindley. Florally the plants are distinct from *E. pyriformis*. It is evident that it is not *E. pyriformis* and does not correspond to any of the names in the literature for Cuba. We are here describing it as a new species.

*Encyclia hamiltonii* Saulea & Esperon, sp. nov.

TYPE: Ex hort. – 21 May 2013, Saulea, R. P. & E. Esperon s.n. (Holotype: FTG).

DIAGNOSIS

*Encyclia hamiltonii* can be distinguished from *E. pyriformis* and the other species of diminutive plants in Cuba, by the comparatively large size of the flowers. The labellum of *E. hamiltonii* is also larger than the labellum of *E. pyriformis*. In addition, the new species can be easily distinguished from *E. pyriformis* by comparing the callus of the labellum. On *E. pyriformis* the callus extends beyond the apex of the column and ends abruptly. In the new species, the callus descends along the disc of the labellum becoming three faint longitudinal ridges. Also the two species are geographically isolated. *Encyclia pyriformis* is found in Western Cuba while *E. hamiltonii* is found in Eastern Cuba.
DESCRIPTION

Plant epiphytic, rhizomatous, to 51 cm tall; roots many, thick, canescent; primary stem or rhizome short, stout, creeping, enclosed by imbricating scarious sheaths; secondary stems modified into pseudobulbs, erect, clustered, ovate, to 5 cm long, 2.5 cm thick, basally enclosed by scarious sheaths, 1 to 2 leaved at apex; leaves coriaceous, stiff, linear-lanceolate, acute, to 22 cm long, 2.1 cm wide; inflorescence terminal, to 26 cm tall, peduncles slender, erect, distantly several-sheathed, to 15 flowers; floral bracts ovate, obtuse, concave, to 6 mm long, 8 mm wide; ovary pedicellate, slender, to 2.5 cm long; sepals yellow, greenish-brown or dark brown with brown suffusion, oblanceolate, obtuse, to 3.1 cm long, 9 mm wide; petals yellow, greenish-brown or brown with brown suffusion, oblanceolate to spatulate, subacute to acute, to 3.0 cm long, 8 mm wide; labellum free from column, deeply 3-lobed, to 4 cm long, 3.2 cm wide, white, with 3 or more purple lines on disc, lateral lobes white, oblong, obtuse, semi-erect to nearly flat, embracing column, disc emarginate, callosity under column is two lateral erect keels extending onto disc, becoming ridges, joined by a third ridge; column white, basally light green, sometimes basally streaked with purple, elongate, to 1.4 cm long, 5 mm wide, with membranaceous incurved rounded auricles; anther yellow.

Holotype of *Encyclia hamiltonii* Sauleda & Esperon (FTG). Details of holotype.
Illustration of *Encyclia hamiltonii* Sauleda & Esperon.
There appears to be an abundance of herbarium material of this species, especially in Paris (P) and New York (NY). However, they are all labeled or annotated either E. pyriformis or Encyclia phoenicea (Lindl.) Neuman. Further detailed study of these specimens must be made to determine their true identity.

Based on the abundance of material of this species it would be logical that this species could have been described previously corresponding to one of the many obscure names of Encyclia published for Cuba. While researching the other species described for Cuba of diminutive plants with ridges on the labellum two names stand out. In the description of Encyclia triangulifera (Rchb. f.) Acuña, Reichenbach (1865) mentions that the callus becomes ridges on the labellum, but on examination of the type material, it becomes clear that E. hamiltonii is distinct from E. triangulifera because of the size of the flowers. The flowers of E. triangulifera are about one half the size of those of E. hamiltonii. The other Cuban species is Encyclia oblongata (Richard) Acuña. In the original description, Richard (1850) mentions longitudinal crests or ridges on the labellum. He also mentions an inflorescence two feet tall and the illustration accompanying the description shows an elongated rhizome. Encyclia hamiltonii does not demonstrate either of these characteristics.

Epidendrum pyriforme was described by Lindley in 1847 (Botanical Register 33, t. 50), from plants introduced to cultivation by Loddiges. Lindley states that the plants of E. pyriforme are of “diminutive stature”. The plate published with the description clearly shows the most distinctive feature of E. pyriformis, the two keels that extend beyond the column and end abruptly.

According to Withner (1996), E. pyriformis has “... been confused with other species for many years”. It is apparent that there are several species of Encyclia in Cuba of diminutive stature. Observing the type specimen of Encyclia triangulifera (Rchb. f.) Acuña, Encyclia bipapularis (Rchb. f.) Acuña, the description and illustration of the recently described Encyclia cajalbanensis Muj. Benítez, Bocourt & Pupulin and Encyclia rosariensis Muj. Benítez, R. Perez & Pupulin confirms the existence of several species vegetatively as small as E. pyriformis.

One characteristic that distinguishes E. pyriformis from the other species of diminutive plants in Cuba is the comparatively large size of the flowers. This is a characteristic shared with E. hamiltonii. However, E. hamiltonii is noticeably larger than E. pyriformis.

Encyclia pyriformis and E. hamiltonii can be easily distinguished by comparing the callus of the labellum. On E. pyriformis the callus extends beyond the apex of the column and ends abruptly. In E. hamiltonii, the callus descends onto the disc of the labellum, becoming longitudinal ridges that are joined by a third ridge.
Encyclia pyriformis (Lind.) Schltr. showing keels extending onto the disc of the labellum and ending abruptly.

Encyclia hamiltonii Sauleda & Esperon showing keels becoming three ridges and extending onto disc of labellum.

Of all the species of Encyclia described for Cuba in the 19th century, many of them have not been introduced to cultivation nor properly identified in the herbaria or in the literature of the 20th century.

According to Claude Hamilton (pers. comm.), this species was found in Eastern Cuba, while all the herbaria and live material corresponding to E. pyriformis is from Western Cuba. Based on observations and the herbarium material from Eastern Cuba, E. hamiltonii is found in the ultramaphic nucleous of Northeast Cuba from Sierra de Nipe in Holguin province to Baracoa in Guantanamo province.
Encyclia hamiltonii is sympatric with Encyclia moebusii H. Dietr. and Encyclia howardii (Ames & Correll) H. Dietr. (Hamilton, pers. comm.).

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BIBLIOGRAPHY


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