ISSN 2325-4785 New World Orchidaceae – Nomenclatural Notes Nomenclatural Note – Issue No. 57 September 18, 2019

A New Natural Hybrid of Encyclia moebusii H. Dietr. (Orchidaceae) is Described for Cuba.

¹Darien Piña Dávila, Pablo Esperon² and Ruben P. Sauleda².

¹ Calle Calixto García no. 20, Reparto Vista Alegre, municipio Media Luna, provincia Granma, Cuba.

² 6442 SW 107 Ct. Miami, Fl, 33173.

Abstract

A second natural hybrid of *Encyclia moebusii* H. Dietr. is described from Cuba, *Encyclia xdarienense* Esperon and Sauleda.

Natural hybrids are common in the genus *Encyclia* Hook. and several hybrid swarms have been documented (Sauleda & Adams, 1984 and 1990, Dressler and Pollard, 1974). In Cuba several natural hybrids have been described (*Encyclia xcamagueyensis* Seijo et. al., *Encyclia xbrevifolia* (Jenn.) Ackerman & Mùjica-Benitez, *Encyclia xosmentii* Sauleda and Esperon) and a hybrid swarm (*Encyclia xgrahamii* (Hook.) Bosmenier et. al.) which includes as a synonym one of the morphs described as *Encyclia navarroi* Vale & D. Rojas have been recognized. Several other species recently described for Cuba are possibly natural hybrids or part of a hybrid swarm and several observed natural hybrids are yet to be described. Cuba and the Bahama Islands are one of the centers of adaptive radiation of the genus *Encyclia*. Where species of encyclias are sympatric, natural hybrids or hybrid swarms seem to commonly occur. This is especially true in Cuba with the species *Encyclia phoenicea* (Lindl.) Neumann, *Encyclia plicata* (Lindl.) Britton & Millsp. and now we are finding that *Encyclia moebusii* H. Dietr. also hybridizes with sympatric species.

Plants of *Encyclia xosmentii*, a natural hybrid with *E. moebusii*, were observed by the river bank of Rio Baez, Guantanamo growing with *Encyclia hamiltonii* and *E. moebusii* but with different growing habits. *Encyclia hamiltonii* Sauleda & Esperon is an epiphyte while *E. moebusii* is a lithophyte and the hybrid, *Encyclia xosmentii*, grows as an epiphyte (Sauleda and Esperon, 2016).

We here describe another natural hybrid between *E. moebusii* and *E. phoenicea* all three growing as lithophytes. The lithophytic habit, at this locality, of *E. phoenicea* is rare and only has been found to occur in localities (Lobaina, pers. com.) where *E. moebusii* is also present. The *E. moebusii* found at the site with the hybrid is highly variable and have rounder labella than shown in the type illustration of *E. moebusii* possibly due to introgression. *Encyclia moebusii* has been found at several locations and in most cases there appears to be introgression. In addition, plants of *E. moebusii* have been selfed and the resulting plants are highly variable, typical of introgression that is so common in the genus *Encyclia* in Cuba.

Encyclia xdarienense Esperon and Sauleda, nat. hyb. nov.

Encyclia moebusii H. Dietr. X Encyclia phoenicea (Lindl.) Neumann.

Type: Provincia Holguin, Cuba, municipality Mayari, Salto del Naranjo, next to Rio Naranjo, collector Osmany Cisnero Batista s. n., 2017. Specimen made from plant in cultivation, 2018, by Darien Piña Dávila, holotype deposited in Serie Catasus 3076, HAJB.

Etymology

This species is named in honor of Darien Piña Dávila who first determined it was a natural hybrid, made the holotype and deposited it in the herbarium HAJB.

Diagnosis

Vegetatively *Encyclia xdarienense*, more closely resembles *Encyclia moebusii*. Plants of *E. xdarienense* can be distinguished from the parents by being smaller and the leaves are more erect than *E. phoenicea*, but are taller and the pseudobulbs are more ovate than *E. moebusii*. *Encyclia xdarienense* has up to 10 flowers distinguishing it from *E. phoenicea* that can have up to 30 flowers. The labellum of *E. xdarienense* also distinguishes it by being larger than *E. moebusii* but slightly smaller than *E. phoenicea*, with the shape of *E. phoenicea*. The lateral lobes of the labellum of some individuals of *E. xdarienense* clasp the column typical of *E. phoenicea*, in other individuals the apex of the lateral lobes flare out typical of *E. moebusii*. The keels under the column of *E. phoenicea* are thick and end abruptly distinguishing it from the hybrid where the keels end abruptly but are longer and thinner. The keels under the column of *E. moebusii* are thin and do not end abruptly, extending on to the disc of the labellum. The flowers of *E. phoenicea*. The sepals and petals of *E. xdarienense* are similar to *E. moebusii*.

Description

Plant lithophytic, rhizomatous, to 15 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 3 cm long, 1.2 cm thick, basally enclosed by scarious sheaths, 2-leaved at apex; leaves coriaceous, stiff, linear-lanceolate, acute to subacute, to 12 cm long, 1.2 cm wide; inflorescence terminal, to 30 cm tall, peduncles slender, erect, distantly several sheathed, to 5 flowers; floral bracts ovate, obtuse, concave, to 3 mm long, 5 mm wide; ovary pedicellate, slender, to 2.4 cm long; sepals purplish-brown, basally yellow with minute purple spots, oblanceolate, sub-acute, to 2.4 cm long, 8 mm wide; petals purplish-brown, basally yellow with minute purple spots, oblanceolate to spatulate, obtuse, to 2.4 cm long, 5 mm wide; labellum free from column, deeply 3-lobed, reniform, to 2.8 cm long, 1.8 cm wide, light to dark purple, with 3 to 5 dark purple central lines and several lighter lateral lines on disc, lateral lobes purple with short dark purple radiating lines, oblong, obtuse, erect, not embracing or embracing column, disc callosity under column is two lateral thin erect keels ending abruptly; column white or flushed with light purple, elongate, to 1.2 cm long, 4 mm wide, with membranaceous incurved rounded auricles; anther dark purple or white apically with purple suffusion.



Encyclia moebusii labellum of plant from type locality.

Encyclia phoenicea labellum. *Encyclia xdarienense* labellum of type plant.

Keels on labellum



Encyclia moebusii

Encyclia phoenicea

Encyclia xdarienense



Encyclia xdarienense type plant.



Encyclia phoenicea.

Encyclia moebusii from type locality.





Encyclia xdarienense unusual color form from type locality more closely resembling *Encyclia phoenicea* but with apex of the lateral lobes flaring out and keels under column ending abruptly.



Encyclia xdarienense type plant.



Encyclia xdarienense type plant.



Encyclia xdarienense type plant.



Encyclia phoenicea from a locality where it is sympatric with Encyclia xdarienense.

Acknowledgements

We give thanks to Dr. Luis J. Catasus Guerra, Doctor en Ciencias, investigador cultural del Jardín Botánico Cupaynicú de Granma for accepting the holotype for deposit at Serie Catasus 3076, HAJB, to Osmany Cisnero Batista for making the original collection, to Noel Coutin Lobaina for information on the lithophytic habit of *E. phoenicea* at other localities where *E. moebusii* and the hybrid are also present and to Reynol Perez Felis for the picture on page 6 of the unusual morph of the hybrid taken at the type locality.

Literature Cited

Dressler, Robert L. & Glenn E. Pollard. 1974. The Genus Encyclia in Mexico. Associacion Mexicana de Orquideologia, A. C., Mexico.

Sauleda, Ruben P. and Ralph M. Adams. 1990 (Oct. - Dec.). The Orchidaceae of the Bahama Archipelago: Additions, Distributional Extensions, and Nomenclatural Changes. Brittonia, Vol. 42, No. 4, pp. 286-291.

Sauleda, R. P. and Pablo Esperon. 2016. A New Natural Hybrid From Eastern Cuba. New World Orchidaceae – Nomenclatural Notes, Nomenclatural Note – Issue No. 22. ePublished.