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## *Encyclia fehlingii* (Sauleda) Sauleda and Adams Discovered on Isla de la Juventud: A Range Extension and addition to the Flora of Cuba.

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## Abstract

The Discovery of *Encyclia fehlingii* (Sauleda) Sauleda and Adams in Isla de la Juventud, Cuba, is reported.

During the Summer of 2018 while documenting the orchid populations of the basin of Rio Las Nuevas on Isla de la Juventud, a population of green-flowered encyclias that appeared to be related to *Encyclia tampensis (Lindley) Small* was discovered. The possibility of this species being *E. tampensis* was quickly discarded because of the stable character of the morphs in the population. After careful comparison of the characters of this encyclia with the other green-flowered species closely related to *E. tampensis* it was determined that the population found corresponded to *Encyclia fehlingii* (Sauleda) Sauleda & Adams.

*Encyclia fehlingii*, a species previously believed to be endemic to the Bahama Islands, occurs in Isle of Pines in the gallery forest of Rio Las Nuevas less of 1 Km from the river mouth. The gallery forest grows along the river embankment and in the area where the population of *Encyclia fehlingii* occurs, the embankment is surrounded by the adjacent estuarine vegetation and mangrove. This gallery forest appears to be particularly rich in orchid species. Other species growing sympatrically with *Encyclia fehlingii* there includes, *Encyclia havanensis* Bello, Esperon and Sauleda, *Encyclia grahami* (Hook.) Bosmenier, Esperon & Sauleda, *Cattleyopsis lindenii* (Lindl.) Cogniaux, *Encyclia fucata* (Lindl.) Britton & Millsp. and *Tolumnia lyrata* (Withner) Braem.

The occurrence of *T. lyrata* and *E. fehlingii* at this location surrounded by estuaries could be of additional interest since *T. lyrata* a species recently rediscovered in the area (Sauleda, 2020) appears to be also closely related to another Bahamian species previously considered an endemic, *Tolumnia lucayana* (Nash ex Britton & Millsp.) Braem. Especially considering that *T. lucayana*, is a polymorphic species originated from a hybrid swarm as *E. tampensis*. These relic populations of the species *Encyclia* 

*fehlingii* and *Tolumnia lyrata* at this isolated location in Cuba, could help to explain the natural history of many common or related species in the Bahamian Archipelago as well as the and the ample distribution in Florida of the hybrid swarm that the variable *E. tampensis* represents.

In addition, this discovery of *E. fehlingii* in Cuba explains the previous reports of *Encyclia tampensis* (Lindl.) Small in Cuba (Britton & Millspaugh, 1920), (Acuña, 1938); instead of the hypothesis (Withner, 1996) that these reports of *E. tampensis* could be referred to *Encyclia oxypetala* (Lindl.) Schlechter.



*Encyclia fehlingii* (Sauleda) Sauleda & Adams from the basin of Rio Las Nuevas on Isla de la Juventud, Cuba



*Encyclia fehlingii* (Sauleda) Sauleda & Adams from the basin of Rio Las Nuevas on Isla de la Juventud, Cuba.



*Encyclia fehlingii* (Sauleda) Sauleda & Adams from the basin of Rio Las Nuevas on Isla de la Juventud, Cuba.



*Encyclia fehlingii* (Sauleda) Sauleda & Adams in situ at the basin of Rio Las Nuevas on Isla de la Juventud, Cuba.



*Encyclia fehlingii* (Sauleda) Sauleda & Adams in situ at Great Abaco, Bahama Islands.





*Encyclia fehlingii* (Sauleda) Sauleda & Adams is distinguished from the other greenflowered encyclias by having a deeply 3-lobed labella, free, midlobe white with parallel purple lines, rounded, slightly emarginate, margin undulate, ocassionally with edges revolute, disc at junction of lobes with a fleshly, plate-like callus, 3-dentate in front, terminating under column, lateral dents decurrent in erect keels with an additional, interrupted ridge on both sides; column elongate with membraneous incurved rounded auricles.



Encyclia fehlingii (Sauleda) Sauleda & Adams from the Bahama Islands.



## Literature Cited

Acuña Gale, J. B. 1938 Boletin Estacion Exp. Agron. Santiago de las Vegas, Cuba, No 60. Catalogo Descriptivo de Orquideas Cubanas, p. 76.

Britton, N. L. & Millspaugh, C. F. 1920 The Bahama Flora (New York), p. 91.

Seijo, Efrain Rodriguez, Pablo Esperon, & Ruben P. Sauleda. (2008). Tolumnia lucayana Discovered in Cuba: A Range Extension. Orchid Digest, 72-1, p. 18-20.

Withner, Carl L., 1996. The Cattleyas and Their Relatives. Volume IV. The Bahamian and Caribbean Species. Timber Press. Portland, Oregon.