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A New Species of *Houlletia* Brongniart (Orchidaceae) is Described From Colombia.

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Abstract

A new species of *Houlletia* Brongniart is described from Colombia, department of Caqueta.

The genus *Houlletia* was established in the *Annales des Sciences Naturelles; Botanique*, ser. 2, 15: 37 (1841) by Brongniart in honor of Jean-Baptiste Houlet, a French botanist and horticulturist who served as a director of the Botanic Jardin des Plantes in Paris.

There are two morphologically distinct groups within the genus. The first group has flowers which appear globose, non-resupinate, white to yellow on erect inflorescences, with a rectangular or ovate epichile, the lateral projections on the hypochile are broad. The second group has resupinate flowers, heavily spotted in red-brown or a deep reddish-brown color, the epichile is triangular and the projections on the hypochile are acute.

The genus consists of nine recognized species (WCSP, 2018) occurring from Guatemala to Bolivia and eastern Brazil of which seven are found in Colombia.

The following are the seven species found in Colombia.



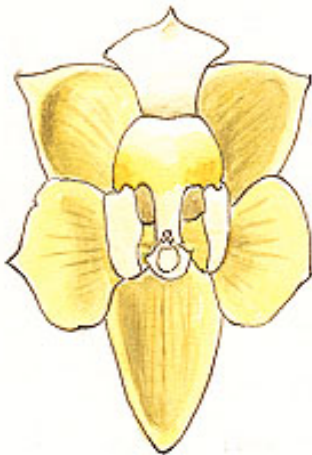
Houlletia conspersa P. Ortiz drawing from archive of Pedro Ortiz Valdivieso.



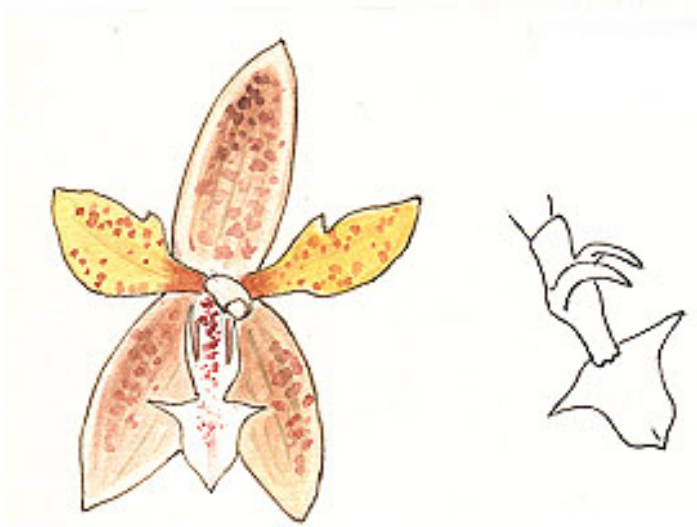
Houletia lowiana Rchb. f. drawing from archive of Pedro Ortiz Valdivieso.



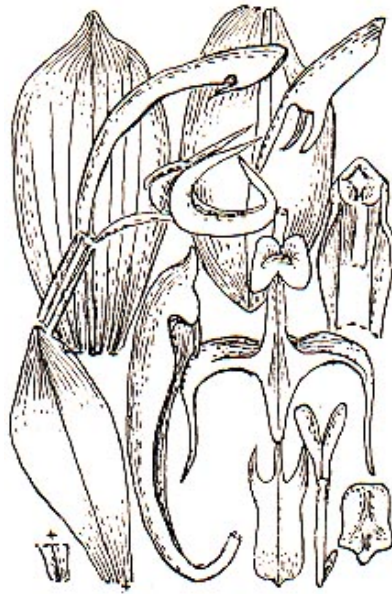
Houletia odoratissima Linden ex Lindl. & Paxton drawing from archive of Pedro Ortiz Valdivieso.



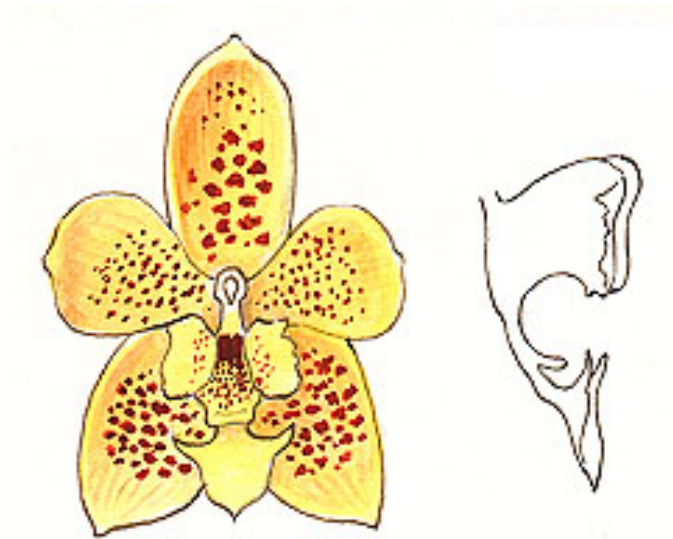
Houletia sanderi Rolfe drawing from archive of Pedro Ortiz Valdivieso.



Houlletia tigrina Linden ex Lindl. drawing from archive of Pedro Ortiz Valdivieso.



Houlletia unguiculata Schltr. only known from Schlechter's illustration in *Figuren Atlas – Orchideenfloren der sudamerikanischen*, Selbalverlag, Berlin, Nr. 219, 1929.



Houletia wallisii Linden & Rchb.f. drawing from archive of Pedro Ortiz Valdivieso.

A population was discovered in the department of Caqueta, along the road between Altamira and Florencia at El Portico at an elevation of 1900-2000 m with flowers non-resupinate reddish-brown to yellow with reddish-brown spots, broad acute projections on the hypochile and a broad narrowly triangular epichile.

Plants with the above combination of characters do not correspond to any of the known species. It is here described as a new species.

***Houletia uribevelezii* Sauleda, sp. nov.**

Type: Colombia, department of Caqueta, road between Altamira and Florencia at El Portico, elev. 1900-2000 m. (Holotype, HPUJ). Specimen from cultivation, in collection of Jose Luis Aguirre, specimen made March 24, 2020.

Etymology

This species is named in honor of Dr. Carlos Uribe Velez of Bogota, Colombia. Dr. Carlos Uribe Velez is a surgeon-doctor who is known as the "father of knee surgery" and at the same time a renowned orchid grower, photographer and writer. Dr. Carlos Uribe Velez is at the present time writing "Orquídeas, Tesoro de Colombia" a monumental illustrated treatment of the orchids of Colombia in honor of Padre Pedro Ortiz Valdiviezo. He has published the first three volumes and is now working on the fourth volume of what will be at least six volumes.

Diagnosis

Houletia uribevelezii Sauleda is distinct from all of the known species *Houletia*. It differs primarily in the shape of the epichile. The epichile of *H. uribevelezii* is similar to *Houletia conspersa* P. Ortiz but in *H. uribevelezii* it is thinner, the lateral edges are more acute and the apex is acute where in *H. conspersa* the apex is slightly emarginate. The hypochile of *H. uribevelezii* resembles *Houletia lowiana* Rchb. f. differing in the position of the lateral

edges, which are bilobed and spreading away from the column in *H. lowiana*, but clasping the column in *H. uribevelezii*. In *H. uribevelezii* the lateral edges are not bilobed. In addition the inflorescence of *H. lowiana* is erect, *H. uribevelezii* is pendant. *Houlletia uribevelezii* also differs from both *H. conspersa* and *H. lowiana* in color. *Houlletia conspersa* is white with reddish-brown spots and *H. lowiana* is yellow without spots. *Houlletia uribevelezii* varies from dark reddish-brown to yellow with reddish-brown spots.

Description

Plants epiphytic, caespitose, to 72 cm tall; pseudobulb ovoid, obtusely angled, to 3.5 cm wide, 6 cm tall, unifoliate, enclosed by 3 scarious sheaths, longest extends up to the union of the petiole, sheaths narrowly lanceolate, from 5 to 20 cm long, from 8 cm wide to 20 cm tall; leaf to 63 cm long, 24 cm wide, narrowly oblong-elliptic, acute, plicate, basally contracted into a petiole, petiole to 24 cm long; inflorescence basal, pendant, peduncle strongly decurved to 15 cm long, reddish-brown, with spathaceous sheaths, sheaths lanceolate, acute to 4 cm long, 8 mm wide; floral bracts tubular, inflated, lanceolate, acute to 8 mm long, 1.5 mm wide; raceme 3 to 8-flowered; sepals from yellow to greenish-brown or reddish-brown with yellow apex, with reddish-brown spots, dorsal sepal broadly obovate, subacute, to 3 cm long, 2.7 cm wide, lateral sepals elliptic to ovate-oblong, subacute, to 3 cm long, 2 cm wide, united at base for 3 mm; petals from yellow to greenish-brown or reddish-brown with yellow at apex, obovate, minutely spotted or heavily spotted with reddish-brown spots, obovate, subacute, to 3.8 cm long, 3 cm wide; labellum to 3.8 wide, 4.2 long, deeply three lobed, the epichile narrowly triangular yellow with acute lateral edges and abruptly acute apex, hypochile is orange with or without reddish-brown spots, with broad yellow lateral projections apically acute; column semiterete, greenish-white, to 12 mm long, 6 mm wide; anther yellow, 3 mm wide.



Houlletia uribevelezii Saulea.

Color variation of *Houlletia uribevezii* Sauleda.

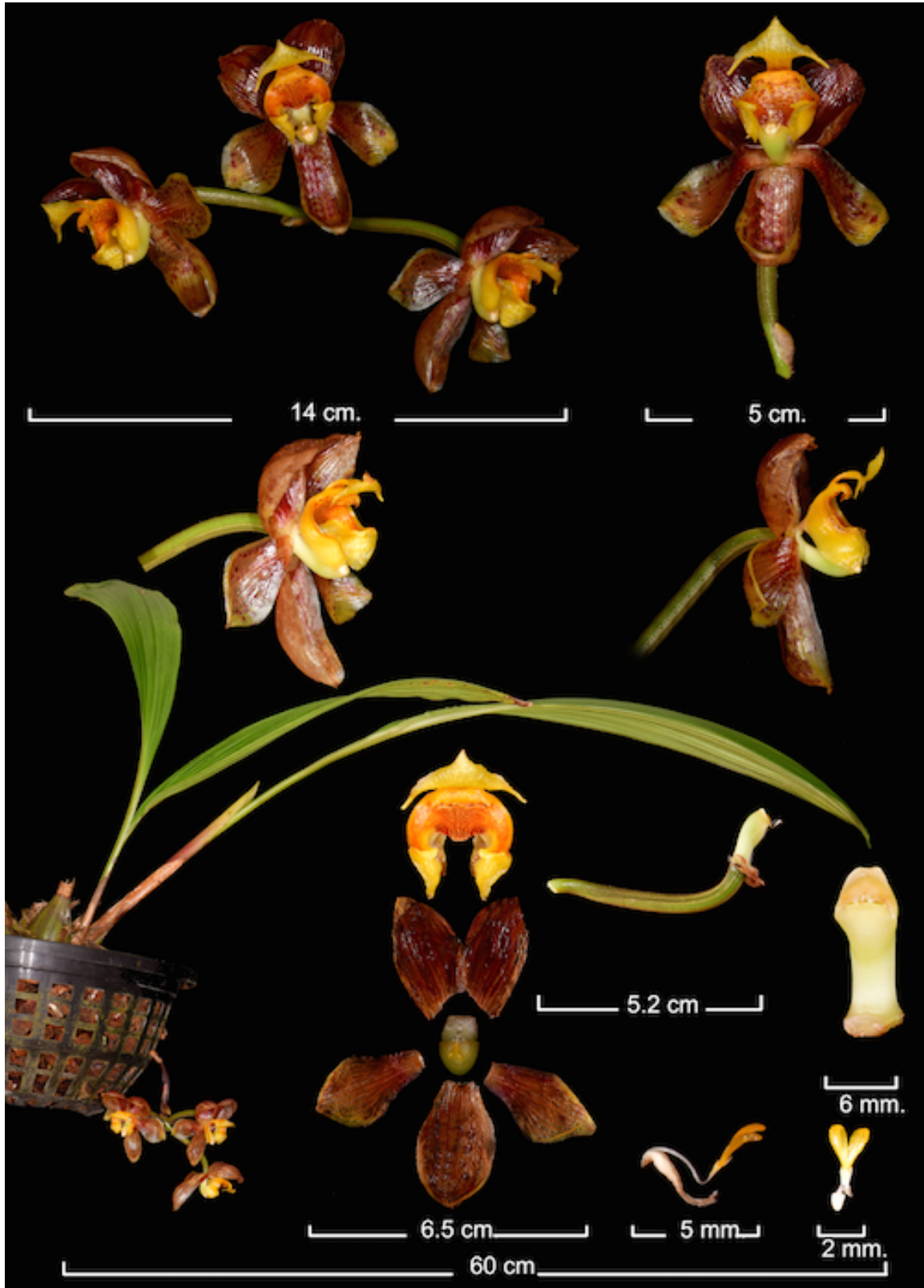


Houlletia uribevezii Sauleda. Photograph
from ORQUÍDEAS TESORO DE
COLOMBIA vol. 3.

Houlletia uribevezii Sauleda.



Houlletia uribevezii Sauleda.



Houletia uribevelezii Saulea.



Houlletia uribevelezii Saulea demonstrating distinctive labellum. Photograph by Jose Luis Aguirre.

Acknowledgements

We wish to thank Jose Luis Aguirre for making his collection available for us to study. His knowledge and generosity with his collection has been very important and resulted in the discovery of numerous new species and distributions for Colombia.

All photographs by the author unless noted.

Literature Cited

WCSP (2018). World Checklist of Selected Plant Families. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet.