Some notes on Epidendrum schumannianum Schltr., including the Description of a New Species from Panama, Epidendrum pseudo-schumannianum, sp. nov.

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Rudolph Schlechter, writing in Fedde's Repert. Spec., Vol. IX, p. 215, for 1911 described from Costa Rica a new species of Epidendrum belonging to the section Oerstedella Rchb.f. The specimen in question had been communicated by K. Schumann in 1903 and was cultivated by Ch. Wercklé. Other than that, it lacked further locality data but it was remarked, "A beautiful species, which belongs in the relationship with E. myrianthum Lindley and E. centropetalum Rchb.f." It will be recalled that E. wercklei, a rare cloud forest species of Costa Rica, belongs to this same relationship with glandular stems and lateral inflorescences, as do E. wallisii and E. pseudo-wallisii. Since Schlechter's type specimen was destroyed in the bombings of Berlin in World War II, some additional excerpts from his latinized description are worth repeating:

"... 30-80 cm. in height, .3-.5 cm. in diameter ... lip from the base shortly unguiculate, three lobed, the lateral lobes lanceolate-falcate, divaricate, the interior margins irregularly undulate-incised, intermediate lobe obovate-cuneate, diminishing anteriorly rounded, apex bifid. . . ."



Epidendrum schumannianum Schltr. x 1. This is the real species of Schlechter's description, rediscovered and recollected by Clarence Kl. Horich, "Rainforests of the Sarapiqui, between Cariblanco and San Miguel, 500-800 m., Costa Rica. 61P1531."

In 1961 a plant was shipped by Clarence Kl. Horich from Costa Rica to the Arboretum Research Collections in Arcadia labelled, "Blue Epidendrum, very rare, growing with *Epidendrum pseudo-wallisii* in the rainforests of the Sarapiqui, between Cariblanco and San Miguel, 500-800 m., Costa Rica 61P1531." Labelling the plant and carefully potting it, I recall our observations that it was vegetatively similar to a plant illustrated by Paul Allen in *A.O.S.B.* Fig.

1, p. 359, Vol. X for 1942 . . . hence when it flowered, we anticipated the flowers would be the same as in that plant.

The species proved of difficult cultivation, as do other members of this group, but finally potting it in plastic with redwood wool, it finally began to root and years later flowered in 1966 . . . but was not the plant illustrated by Paul Allen, but quite different. Recourse to Dr. Dressler brought forth his reply that the labellum of this plant was what Schlechter had described as *E. schumannianum*, hence the Panamanian discovery currently grown under that name was erroneous.

Flowering this species again and again, and comparing flowers to Schlechter's fine latinized description, leaves no doubt but that this is true, and that this plant (our 61P-1531) represents the real *E. schumannianum* (see illustrations and plate by Rosalie Roth). I have carefully prepared a specimen of this plant (61P1531) and deposited it in the Herbarium of UCLA to serve as the *neotype* of this species, the *holotype* having been lost in the Berlin bombings of World War II.

The question thence occurs what is the other species, found in Panama and not Costa Rica that we have grown so long under the name of "E. schumannianum" and which has been used to make numerous novelty hybrids.

Writing in the *Amer. Orch. Soc. Bull.*, Vol. X, p. 359, for 1942, Paul H. Allen provides us with some information on this second, misidentified plant. He states that there is an "apparently abundant supply of these fine plants in the mountainous region north of El Valle de Anton, in Cocle Province, Panama, at elevations above 2,500 ft. The plants



Epidendrum pseudo-schumannianum Fowl. x 3/4. This is the new species from Panama so long confused with Schlechter's concept but deserving a name of its own. "Beyond La Loma del Tigre, District of El Valle de Anton, on very tall trees of a warm humid jungle, 800-1,000 meters, Prov. Cocle, Panama." Collection of Irene Dobkin.

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are normally epiphytes, growing in the tops of the tallest trees, well exposed to the sun. (Remember that very high humidity allows this exposure and that the leaves are screened from sun by algae on their surface, which we cannot duplicate under artificial cultivation. Ed.) The spotted, rod-like canes are erect, of about the diameter of a lead pencil, and averaging about three feet in length (92 cm.)." Concerning its colors he goes on to state, "The backs of the sepals are lobelia violet, shading to pale lobelia violet on the backs of the petals, with the undersurface of the labellum deep lavender, so that the inflorescence seen from the reverse side presents an almost unbroken violet blue color. The front surfaces of the sepals and petals however are of striking contrast, being a rich burnt sienna, heavily spotted with Hessian brown. The labellum is conspicuously three lobed, with the central lobe cleft, and is a deep aconite violet in color; the lobes are margined a lighter Saccardo's violet. . . . The plants flower from late January to April. . . ."

Additional helpful comments are provided by him in A.O.S.B., Vol. IX, p. 497, for 1950, where he states, "The upper portion of the plants are exposed to full sunlight while the base is shaded. The roots are covered with a heavy moss which never becomes dry. The temperature range at this altitude has a maximum of 90° F. by day and a minimum of 50° F. by night. . . . The natives call this plant La orquidea azul (the blue orchid). . . . Flowers appear throughout the months of May, June, and July."

Clarence Horich, who has been to the locality where this highly endemic species occurs, lists it as, "Beyond la Loma del Tigre off the small town of El Valle de Anton, on very tall trees of a cool, humid jungle together with *Huntleya burtii*, *Brassia allenii*, 800-1,000 m., Prov. Coclé, Panama."

It therefore appears warranted that some additional and new name be given this Panamanian species, so long confused with the Costa Rican species, and I propose it be called —

Epidendrum pseudo-schumannianum Fowl., sp. nov.

Herba epiphytica, pluricaule, 50-120 cm. alta; caulibus teretibus, simplicibus, 5-1 cm. diamentientibus, vaginis foliorum persistentibus, dense granuloso-verruculosis, apicem versus omnino obtectis, dimidio inferiore vaginis efoliatis; foliis erecto-patentibus oblongis vel oblongo-ellipticis, obtusis, 4-9 cm. longis, medio fere 2.5-3.5 cm. latis, glabris; inflorescentia racemosa vel vulgo paniculata, laxe multiflora, espatha; bracteis lanceolatis acuminatis, parvulis ovarii pedicello multo brevioribus; sepalis carnosulis, oblongis, obtusis, basin versus paululo angustatis, utrinque glabris, 1.5 cm. longis, supra medium 4.5 mm. latis, lateralibus paulo obliquis; petalis 8-15 mm. longis oblique obovato-spathulatis, obtusissimis, margine irregularibus, sepalis aequilongis, supra medium .9 cm. latis: labello e basi breviter unguiculata trilobo, lobis lateralibus subrotundo-ovatis, apicem erosos, lobo intermedio longiusculo obovato-cuneato, profunde inciso, anteriore retuso, segmentis sub-truncatis apicem erosa, labello toto 1.8 cm. longo, ungue .6 cm. longo, lobis lateralibus .6 cm. longis, lobo intermedio 1.2 cm. longo, supra medium 1.1 cm. latis, carinis 3-5 carnosis in ungue, media longiore; columna brevi, .6 cm. longa marginibus usque supra medium ungui labelli adnatis; ovario cum pedicello gracili glabro, 2.8 cm. longo.

Diagnosis: Similis E. SCHUMANNIANUM Schltr. sed cum lobis lateralibus labelli subrotundo-ovatis (non falcatis), labello longiore cum profunde (non vadose) retuso apice.

This species is similar to *E. schumannianum* Schltr. (a species found in northern Costa Rica and Southern Nicaragua) but differs in the larger size plant and flowers, a much longer lip which is deeply (instead of shallowly) retuse and the distinctive lateral lobes which in *E. schumannianum* are falcate-divaricate but which in the present species are rounded distally (see comparative illustrations).

Although both species are bluish, the Panamanian plant (E. pseudo-schumannianum) is distinctive in having the back sides of the sepals and petals colored blue which on the front side are light burnt sienna with red-purple spots. From the front it is not blue at all. Type: From a plant originally collected by Clarence Kl. Horich, "Beyond la Loma del Tigre, District of El Valle de Anton, on very tall trees of a warm, humid jungle, 800-1,000 meters, Prov. Cocle, Panama."

Deposited in UCLA Herbarium.



Epidendrum schumannianum Schltr. (Painting by Rosalie Roth) 61P1531