

EPIDENDRUM HAWKESII A.H.Heller, sp.nov.

Planta ordine epiphytica, erecta, basin radicante (non supra). Foliis magnis, rigidis. Racemis erectis, longe-pedunculatis, usque ad 60-floris. Floris in sectione speciosis. Labellum valde 3-lobis, margine dentatis serratisque, lobum medium cuneato-flabellato, fortiter retuso; callis 2, alatis, ad apicem convergentes, medio lamellum erectum sigmoideum ornatum.

Plant normally epiphytic, but taking root on sharp overcut grassy slopes as a stilt-rooted plant with other customary epiphytes. Stems crowded or borne from the rhizome at some slight distance from one another, simple, rigidly erect, with profuse basal (no lateral) white, rarely branching roots; stems to 1 m tall, up to 6 mm in diam., below concealed by sheaths which are usually densely mottled or flushed with dark dull purple, slightly fractiflex in leaf-bearing upper portion. Leaves 3.75 - 11 cm long, 4 - 4.5 cm broad, obovate to oblong-elliptic, rather concave, with rounded slightly retuse apex, heavily fleshy-coriaceous and rigid, more or less mottled and spotted with dull purple on both surfaces, especially the underside. Inflorescence a very compact, densely-flowered raceme 2 - 3 cm long, on a peduncle up to 50 cm long, 20 - 60-flowered, the peduncle dull vinous-purple, mostly covered by scarious sheaths; rachis 4 - 6 cm long; a secondary branch customarily appears on each inflorescence the second season, this with an enlarged base, branching off from base of the original rachis. Floral bracts triangular-ovate, 4 mm long. Pedicellate ovary erect, lightly arcuate, dull vermilion, 4 - 5 cm long. Flowers very showy, 3 cm long, 2.5 cm broad, spreading, long-lived, vivid carmine lake with dark yellow calli on lip, the column-apex also yellow, the anther-cap apple-green. Sepals and petals rather rigidly heavy-textured, acute, nervose with raised nerves those of the sepals 5; dorsal oblanceolate, 1.5 cm long, 4.5 mm broad, reflexed above middle; laterals oblique, narrowed basally, unevenly spatulate, being expanded or lobulate on inside margin, 1.6 cm long X 4 mm broad. Petals 7-nerved, obovate, acute, the margins above middle lightly toothed, 1.5 cm long X 5.5 mm broad above middle, ascending. Lip adnate to apex of column, deeply 3-lobed basally truncate, 8 mm long X 1.2 cm broad, the margins irregularly but shortly toothed or serrated; midlobe separated from lateral lobes by a short 3 mm broad isthmus, cuneate-flabellate, deeply re-

tuse to form a bilobed segment with an apicule in the sinus, 4 mm long X 6 mm broad. Disc with 2 prominent flap-like calli at base whose apices converge; a prominent erect sigmoid keel extends from base to apex of lip. Column almost straight, with conspicuous flaring angles especially towards apex, clavate, 1 cm long. Capsule long-stalked, to 4 cm long and 1.5 cm thick, with 3 prominent blunt keels, when mature heavily flushed with dark dull vinous-purple.

NICARAGUA: Dept. Zelaya: Rama (Roosevelt) Highway, beyond Río Mico bridge, frequent stilt-rooted orchid on moist grassy roadside bank, alt. about 400 - 600 feet, 30 March 1966, A. H. Heller & A. D. Hawkes 8344 (Type in Field Museum of Natural History).

Epidendrum Hawkesii is an ally of the widespread E. ibaguense HBK, but differs from that species, which habitually occurs at far higher elevations, in a number of vital respects. Erect-growing, rigidly so, it bears roots only basally, not scattered up the viney stems of the ally, which are in our area sprawling or even clambering into adjacent umbrage. The leaves of the novelty are of divergent shape, heavier texture, and larger dimensions. And floral dimensions, color, and shape are conspicuously different. Details of all parts of the flowers—which are extremely numerous per inflorescence (up to 60), and particularly the lip with its complex callosities, and the column, are important.

In the wild, this splendid orchid was first found as a solitary specimen some years ago by the senior author; this occurred as a true epiphyte, but regrettably no materials were preserved, except for a sketch. The habitat from which the present type materials were gathered is an exceptionally interesting one, in that the highway cuts through hillsides at a somewhat higher elevation than the epiphytic specimens have as yet been located. Yet these type plants, which within certain restricted regions are very abundant and spectacular when in flower (they would otherwise pass unnoticed), can be considered as almost epiphytic, since they are found perched loosely on intricate stilt-root systems on leafy humus on sheer hillsides along with such other normal epiphytes as a handsome form of Gongora maculata Ldl., Ionopsis utricularioides (Sw.) Ldl., and Polystachya cerea Ldl. Additional orchidaceous neighbors are large clumps of Sobralia fragrans Ldl. and an as yet unidentified member of that genus. In this region the original forests in which these Epidendrums doubtless occurred as epiphytes were cut over about the year 1960. It would appear that the new species has admirably made a necessary adaptation to a radical change of environment.

One additional specimen of the novelty, growing epiphytically on a bare twisted Bauhinia liana in a hot, humid, palm-aroid jungle near La Esperanza (Río Siquía) was collected in March, 1966, but

did not survive. And several plants from the Río San Juan, near San Carlos, were found by H. F. Cross, of Managua, who presently has them in his extensive greenhouses there.

Epidendrum Hawkesii has been introduced into cultivation into the United States, through seed. The new species is named to honor the junior author of these studies, and of the recent Encyclopaedia of Cultivated Orchids (Faber, London, December 1965).

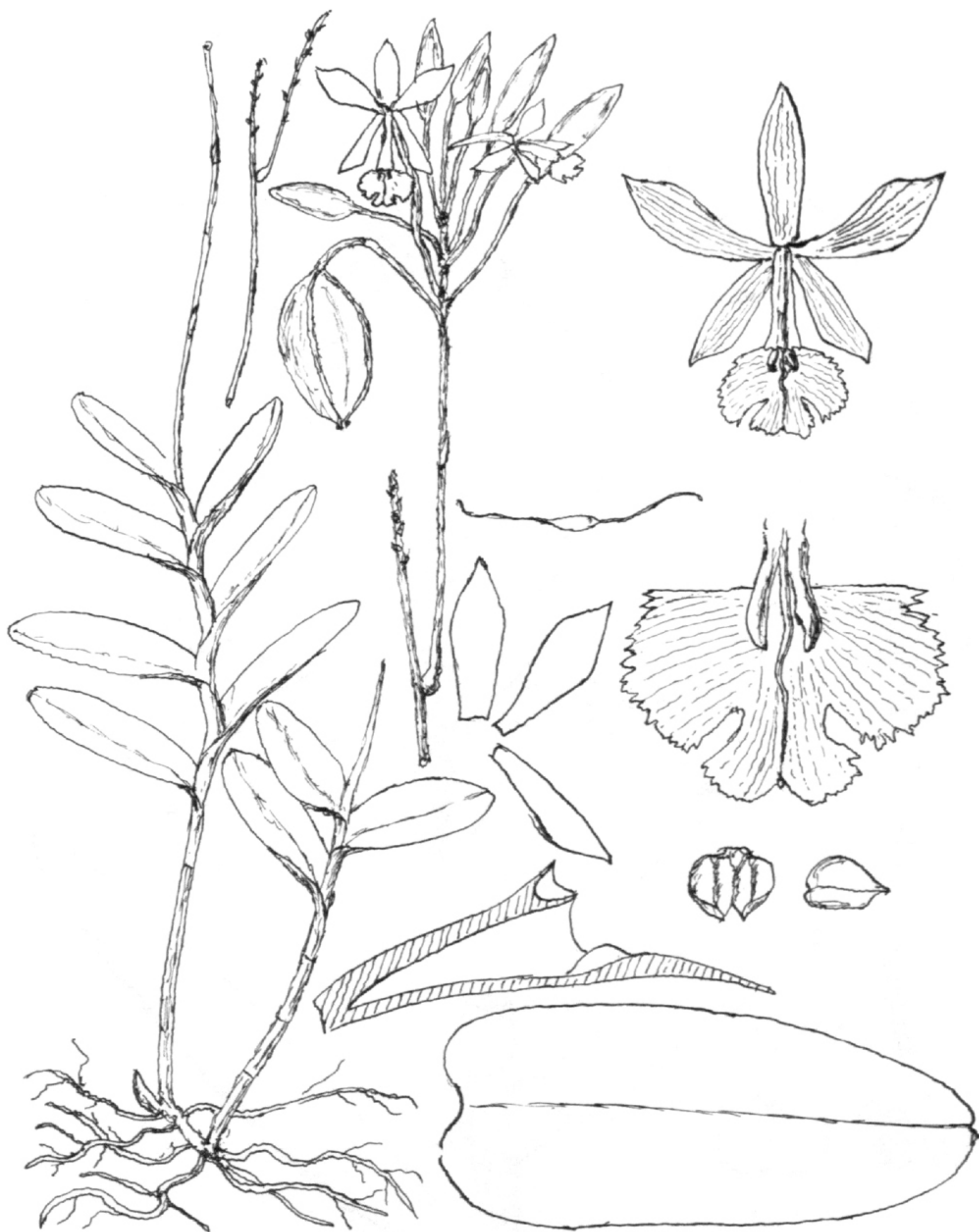


Plate 1. Epidendrum Hawkesii A. H. Heller, sp. nov.