

***Epidendrum arcuiflorum* A. & S. sp. nov.** Herba mediocris. Caulis vaginis tubularibus omnino obtectus. Folia pauca, disticha, lanceolato-linearia. Pedunculus spathis duabus erectis ancipitibus inclusus. Racemus terminalis, arcuatus, densiflorus. Flores carnosii. Sepala lateralibus oblique obovata, mucronata. Sepalum dorsale oblongo-obovatum. Petala filiformia. Labellum trilobatum, lobis lateralibus semiorbicularibus, lobo intermedio lanceolato.

Stem up to the raceme 20 to about 33 cm. high, leafless below, entirely concealed by sheaths, gently fractiflex, subterete below, complanate above. Cauline sheaths close, scarious and wasting into fibers on the lower portion of the stem, strongly ancipitous and leaf-bearing on the middle and upper portions. Leaves 4-6, distichous, lanceolate-linear, 6.3-14 cm. long, 5.5-11 mm. wide, gradually narrowed above with mucronate tip, slightly narrowed below to a clasping base, about 2-5 cm. apart, mid-nerve sulcate on the upper surface and sharply carinate beneath. Peduncle entirely or nearly enveloped by 2 long erect imbricating spathes which are ancipitous, loose, 7.7-10.1 cm. long. Raceme arcuate or nodding, 8-12 cm. long, about 1.7 cm. in diameter, densely many-flowered. Rachis longitudinally striate-sulcate. Floral bracts linear-lanceolate, up to 5 mm. long at the base of the raceme. Flowers small, fleshy. Lateral sepals obliquely obovate, 5 mm. long, about 2.6-2.9 mm. wide above the middle, acute, dorsally carinate with the keel continued at the apex as a conical mucro. Dorsal sepal oblong-obovate, 4.1-4.8 mm. long, about 2 mm. wide above, acute with a dorsal mucro. Petals filiform, slightly broader above, 4-4.5 mm. long, acute. Labellum adnate to the column to its apex; lamina 3-lobed, with the lateral lobes erect and embracing the column and the middle lobe continuous with the column in natural position, about 2.7-3 mm. long, about 3-3.9 mm. wide when spread out; lateral lobes obliquely round-ovate, cordate at base, subacute at apex, margins very minutely irregular; middle lobe ovate to oblong-lanceolate, obtuse, the apex gently recurved. Disc shortly bicallose at base. Column very stout, dilated above, 3.1 mm. long; clinandrium-wing prominent erect, 4-lobed with the lobes denticulate. Anther depressed-semiglobose with a short bidentate beak. Pollinia obliquely complanate-ovoid.

The description was prepared from herbarium specimens supplemented by flowering material preserved in formalin.

Epidendrum arcuiflorum is allied to *E. Powellii* Schltr., from Panama, but it has much larger flowers with different lip characters. It suggests also the South American *E. armeniacum* Lindl. which has similarly smaller flowers, dissimilar sepals and different middle lobe of lip.

COSTA RICA, La Fuente, *Anastasio Alfaro* 212, October 27, 1925. 1200 meters altitude. "Flowers greenish drab." (TYPE in Herb. Ames No. 33652): La Fuente, *Alfaro s. n.*, November 12, 1924. 1150 meters altitude: La Flor, *Peralta, M. C. Collarino (C. H. Lankester 1090)*, October 1925. 2600 feet altitude. Leaves coriaceous, glabrous, yellowish green, racemes terminal arching. Sepals, petals and anterior lobe of lip vinaceous buffy (fawn color) with lip a brighter hue, side lobes of lip pure white. Anther cap very pale yellow (according to collectors' notes).