## Epidendrum cordiforme C. Schweinfurth sp. nov.

Herba parvula, superne praesertim multo ramosa, late patens. Caules tenues, vaginis pustulosis fere omnino obtecti. Folia parva, disticha, saepe subopposita, elliptico-oblonga vel ligulata, in vivo carnosa, in sicco saepe conduplicata et arcuata, apice rotundato-bilobulata. Inflorescentiae saepissime uniflorae, subsessiles. Sepala oblonga vel elliptico-oblonga, acuta vel mucronata. Petala spathulato-oblanceolata vel anguste oblanceolata. Labellum simplex; lamina columnae adnata et columnam circumdans, late cordata, acuminata, valde concava, nervis conspicuis ornata, marginibus anterioribus utrinque involutis ut apex rostriformis appareat. Columna parva.

Plant small, much branched especially above, up to 14.5 cm. tall, widely spreading, sometimes arcuate. Roots fibrous, flexuous, glabrous, commonly numerous, issuing from the base and lower parts of the stems. Stems entirely or mostly concealed by densely pustulose leafsheaths which are more or less evanescent in age. Leaves small, numerous, spreading, distichous, often subopposite, elliptic-oblong to linear, up to 2.1 cm. long including the very short petiole, up to 4.5 mm. wide (blade preserved in alcohol), fleshy, commonly more or less arcuate and conduplicate in the dried specimen, abruptly bilobed at the apex with nearly equal rounded lobules. The living leaf-blade is apparently very fleshy, with the mid-nerve longitudinally sulcate above so that the upper surface is concave and the lower surface convex. Inflorescences terminal, commonly 1-flowered (very rarely 2-flowered), subsessile with a very short recurved peduncle. Pedicel concealed by a pustulose infundibuliform bract. Perianth rigid-nervose, with the parts widely spreading. Dorsal sepal oblong or elliptic-oblong, sometimes slightly broader above the middle, about 8-10.5 mm. long and 2-2.6 mm. wide, acute or dorsally mucronate at the apex, 7to 11-nerved below the middle. Lateral sepals ellipticoblong or oblong-lanceolate, slightly asymmetric, about 8-10 mm. long and 2.5-2.9 mm. wide, dorsally mucronate at the apex, 7- to 11-nerved below the middle. Petals spatulate-oblanceolate or narrowly oblanceolate, 7–9 mm. long, 2-2.7 mm. wide above the middle, acute or subacute, 3-nerved to near the apex or 5-nerved below the middle, sometimes minutely bulbose-thickened at the

base within. Lip adnate to the column near the middle of the column; lamina simple, rotundate-cordate or cordate-ovate, concave, ecallose, with radiating thickened nerves of which the three median nerves are commonly the most prominent and the middle nerve is exserted on the lower surface and extends as a keel to the acuminate apex, about 6–8 mm. long from the junction with the column and 6–8.4 mm. wide near the cordate base, with the anterior margins on each side usually involute thus forming an abruptly long-acuminate or rostrate apex. Column short, stout, gradually dilated above, up to about 2 mm. long on the dorsal surface in the middle, slightly longer on the sides. Pollinia four, strongly complanate, ellipsoid, rounded or obovoid.

The collection  $A.Smith\ H\ 1092$ , while obviously belonging to this species, bears immature flowers with rather smaller perianth segments and narrower lip than typical.

Epidendrum cordiforme differs from E. fundi Ames in having pustulose leaf-sheaths and in having dissimilar sepals, petals and lip. It has commonly solitary flowers and larger perianth than E. microcardium Schltr. It is much smaller in every respect than E. exile Ames.

Costa Rica: epiphyte in moss on living tree in semi-shade within Caribbean cloud forest zone, Palmira, region of Zarcero, at 6000 feet altitude, flowers pale old gold changing to dull pinkish russet in mature state, about 14 mm. long and broad when expanded, September 27, 1937, Austin Smith A 458 (Herb. Field Mus. No. 941812); same habitat in subtropical zone at Palmira, Province of Alajuela, Canton Alfaro Ruiz, at 2200 meters altitude, "the very pale greenish-yellow [sepals] tipped obscure dusky violet: the basal part of bud (as well plant stems) with purplish glands. fl. opening campanulate-pale yellowish or even cream color", August 10, 1938, Smith H 1092; same habitat and locality as H 1092, semi-decumbent, "fls. plain sulphine vellow," September 2, 1938, Smith H 1163; same locality as the last, on tree trunk in open woodland in semi-shade, at 1900 meters altitude, in subtropical zone, stem up to 15 cm. tall, "fls. sulphine yellow to buffy yellow", October 4, 1938, Smith H 1247 (Type in Herb. Ames No. 55372): El Gallito, at 1900 meters altitude, "Flor amarillo pálido, 30-10-38'', Manuel Valerio 2665.