Stells Allenii L. O. Williams, sp. nov. (pl. 32, figs. 1-3). Herbae caespitosae, epiphyticae, usque ad 4 dm. altae. Folia elliptica vel elliptico-ovalia, acuta vel obtusa. Inflorescentia elongata; bracteae ovato-lanceolatae, acutae vel acuminatae, infundibuliformes. Sepalum dorsale lanceolatum, acutum, cucullatum. Sepala lateralia connata, suborbiculari-ovata, acuta vel obtusa, cucullata et gibbosa. Petala late flabellata vel transverse ovalia. Labellum flabellatum, truncatum, apice callo transverso ornatum.

Large caespitose epiphytic herbs up to 4 dm. tall. Secondary stems 7-15 cm. long, 0.25-0.35 cm. in diameter, covered with 2 or 3 loose sheaths which soon disintegrate, shorter than the leaves. Leaves 10-19 cm. long, 3.5-7 cm. broad, elliptic to elliptic-oval, acute or obtuse, coriaceous, attenuated into a short petiole at the base. Inflorescence up to 30 cm. long, floriferous to the base, 1 or more borne from the apex of the stems (if more than 1 then presumably borne in different years); sheaths up to 2.5 cm. long, cucullate, ample; bracts 2-18 mm. long, reduced upward, ovate-lanceolate, acute or acuminate, infundibuliform. Flowers largest of the genus. Dorsal sepal 14-16 mm. long, 5-6 mm. broad, lanceolate, acute, 11-13-nerved, cucullate. Lateral sepals connate to their apices, together 10-12 mm. long and 8-10 mm. broad, suborbicular-ovate, acute or obtuse, cucullate and gibbous at the base, many-nerved. Petals about 1 mm. long, 1.5 mm. broad, broadly flabellate to transversely oval, the apex much thickened. Lip 0.75-1 mm. long, 1-1.4 mm. broad, about 0.75 mm. thick at the apex, flabellate, truncate, with a transverse callus at the apex of the lip,—very like the petals but slightly smaller.—coclé: hills north of El Valle de Antón, alt. 800 m., (flowers nearly black), April 10, 1942, Allen 2952 (Herb. Ames, TYPE).

Stelis Allenii is perhaps the most distinctive species of this difficult genus in Central America and seems to be the largest-flowered species of the genus. There are no near allies in Central America but the species seems to belong to Lindley's section Dialissa, a section with but a few species in the Andes.