Octomeria Valerioi A. & S. sp. nov. Herba epiphytica, pro genere magna. Rhizoma repens, lignosum. Caules subapproximati, quadriarticulati, monophylli. Folium linearioblongum, erectum. Flores fasciculati, perparvi. Sepala lateralia oblongo-lanceolata. Sepalum dorsale latius. Petala elliptico-lanceolata. Labellum subquadrato-ovatum, prope basim utrinque minute lobatum, bicarinatum, in apice truncato trilobulatum.

Plant large for the genus, over 38 cm. tall. Rhizome stout, creeping, branching, woody, concealed by evanescent sheaths. Roots fibrous, flexuous, stout, glabrous. subapproximate, 11-19.2 cm. long, monophyllous, from a decumbent base, composed of 5 internodes, mostly concealed by 5 tubular sheaths which are successively larger upward and waste into fibers in anthesis. Leaf linear-oblong. 15.6- over 19.4 cm. long (most of the blades broken off below the tip), 1.15-1.65 cm. wide, rigidly erect, somewhat narrowed above to a minutely bilobed and apiculate apex. cuneate-narrowed to a scarcely petioled sulcate base, thickly coriaceous, mid-nerve sulcate above and carinate beneath. Flowers fascicled in the axil of the leaf, small (buds only are Lateral sepals oblong-lanceolate, 4.9 mm. long, 1.9 mm. wide, 3-nerved, obtuse with a short apical mucro on the outer surface. Dorsal sepal similar but broader, lanceolate, about 2.4 mm. wide. Petals elliptic-lanceolate, very similar to the dorsal sepal but slightly shorter. Labellum subquadrate-ovate, 3-lobed, about 2.7 mm. long, nearly 2 mm, wide across the side lobes, rounded-cuneate at base, abruptly truncate in front with a trilobulate apex; lateral lobes minute, suborbicular, fleshy. Disc 3-nerved, a pair of fleshy keels originating near the center of the lateral lobes and converging slightly toward the middle. Column stout, about 2 mm. long, slightly arcuate. Anther semiglobose. Pollinia 8, complanate-pyriform.

This is the second representative of its genus to be recorded from Central America. Octomeria Valerioi is about twice as large as O. costaricensis Schltr., and has much smaller flowers and very dissimilar lip.

The description was made from dried specimens.

Costa Rica, Province of Guanacaste, El Silencio, near Tilarán, Paul C. Standley & Juvenal Valerio 41769, January 13, 1926. About 750 meters altitude. "On tree; buds pale green." (Type in Herb. Ames No. 33478.) The two following collections, which are fruiting and have no serviceable flowers, are doubtless conspecific; Standley & Valerio 44788 (showing a 5- to 6-jointed stem and a leaf 21.3 cm. long); Standley & Valerio 44817 (showing a 4- to 5-jointed stem and a leaf 1.75 cm. wide).