Brachionidium Valerioi A. & S. sp. nov. Herba epiphytica, pusilla. Rhizoma longissime repens, radices simplices comparate crassas fibratas remote emittens. Caules perbreves, folium singulum atque florem unicum ferentes. Folia elliptica, parva, in apice acuto minute tridenticulata. Flos pro planta magnus. Sepala lateralia in laminam late ovatam cucullatam connata, in caudam linearem apice bifidam abrupte terminantia. Sepalum dorsale et petala similia. Labellum parvulum, latissime rhombicum, acutum vel mucronatum, margine anteriore multidentato, prope basim in medio callo triangulari ornatum.

Plant small. Rhizome very long creeping, filiform, mostly concealed by short tubular sheaths, producing remote fibrous roots. Stems about 6-25 mm. apart on the rhizome, very short, about 5 mm. long, entirely concealed by 2 loose imbricating, infundibuliform, mucronate sheaths. Leaf elliptic, 1-2 cm. long, 3.5-8 mm. wide, acute, minutely tridenticulate with a prominent median mucro, rather abruptly narrowed to a very short petiole. Peduncle very short, arising near the apex of the stem, 1-flowered, concealed at the base by a pair of imbricating long-mucronate Ovary turbinate, with an adrate filiform appendage, concealed by a loose infundibuliform long-mucronate sheath. Flower large, pale green or pale yellow green. Lateral sepals connate into a lamina which is broadly ovate, deeply cucullate, 2-nerved, 5.5-7 mm. long, up to 6 mm. wide, abruptly terminating in a slender cauda which is 10-17 mm. long and bidentate to nearly one-half its length, margins wholly entire. Dorsal sepal with an ovate 3-nerved lamina 5-6 mm. long, about 4.2 mm. wide, margins commonly ciliolate, terminating rather abruptly in a slender cauda which is about 19 mm. long. Petals forming an obliquely ovate 3-nerved lamina which is nearly as long as that of the dorsal sepal, with minutely ciliolate margins, terminating in a filiform cauda which is about 9-14 mm. long. Labellum relatively small, transversely rhombic with the sides slightly upcurved, 2.1-2.4 mm. long, 3.3-3.8 mm. wide across the middle when expanded, sharply acute with a broad triangular apicule, anterior margin multidenticulate with a parallel line of similar teeth just within the margin, 3-nerved, a large triangular fleshy callus in the middle near the base. Column short and stout, about 1 mm. long, terminating on each side in a short unequally bidentate arm. Pollinia 6, linear-pyriform.

Brachionidium Valerioi is allied to the West Indian B. Sherringii Rolfe, but differs in having very short peduncles and markedly ciliate-dentate lip. B. tuberculatum Lindl. from Colombia is apparently a related species, but is inadequately described.

The description was prepared from dried specimens and from flowers preserved in alcohol.

Costa Rica, Province of Heredia, Cerros de Zurquí, Northeast of San Isidro, Paul C. Standley & Juvenal Valerio 50759, March 8, 1926. 2000–2400 meters altitude (Type in Herb. Ames No. 33206): Province of Heredia, Cerro de las Caricias, North of San Isidro, Standley & Valerio 52366, March 11, 1926. 2000–2400 meters altitude; Standley & Valerio 52419.