



# BRACHIONIDIUM Lindl.

The genus *Brachionidium* with about 65 species is widely distributed from Guatemala, where it is represented by *B. folsomii*, to southern Brazil, where it is represented by *B. restrepoides*. Nine species occur in Costa Rica (*B. calypso*, *B. cruzae*, *B. dressleri*, *B. folsomii*, *B. haberi*, *B. minusculum*, *polypodium*, *B. pusillum*, and *B. valerioi*), and five species are found in Panama, with a few of each on both sides of the border.

The genus was proposed by Lindley when he transferred his *Restrepia parvifolia* to a new genus *Brachionidium*, the name meaning "small arm," referring to the protruding, arm-like processes of the stigma and rostellum. This first recognized species had been collected by Jean Linden in Colombia in 1842. In the 1860's, Endrés was acquainted with three species in Costa Rica. Most species of the genus are local and infrequent, usually found in wet forests. Many grow terrestrially, erect or creeping, in the shaded leaf-litter, but some species trail like a vine, or grow erect in relatively exposed habitats.

Plants are characterized by sheathed, stemlike, branching rhizomes that creep, ascend or stand erect, and produce at intervals a short, similarly sheathed ramicaul and its leaf. The sheaths are usually long-pointed, and in a few species the sheaths are scurfy or scaly. The flowers are delicate and short-lasting. They are borne singly, and usually non-resupinate with four free, membranous floral parts: a middle sepal, an opposite synsepal composed of the connate lateral sepals, and a pair of large petals more or less similar to the sepals. All are more or less acuminate and tail-like. The lip is small, thick and usually transverse with a central callus, reminiscent of the lip of a *Stelis* Sw. The anterior margin of the lip varies from entire, fringed, or variously callous. A callus often runs parallel to the margin, sometimes with a cavity between the two edges, thereby forming a bimarginate margin. The column is short and broad with an apical anther and a transverse, apical, bilobulate stigma. The lobes appear to be separate, but beneath

the rostellar flap they are contiguous. The tips of the stigmatic processes project forward above the anterior margin of the rostellum beneath the bed of the anther. Either six or eight pollinia are present, usually in two sets of three or four pollinia. There is no correlation between the number of pollinia and any morphological feature.



*Brachionidium minusculum* Luer & Dressler

Left

*Brachionidium valerioi* Ames & C. Schweinf.

Alajuela: San Ramón, A.M. Brenes Biological Preserve, flowered in cultivation at Jardín Botánico Lankester, M. Blanco 847. Photographed: 18 May 2000. Reproduction ratio: 9:1.



Top

*Brachionidium minusculum* Luer & Dressler

Cartago: Orosi, Tapantí National Park, near El Mirador point. Photographed *in situ*. Reproduction ratio: 10: 1.

Bottom

*Brachionidium folsomii* Dressler

Panama. Photographed *in situ*. Reproduction ratio: 2: 1.



*Brachionidium minusculum* Luer & Dressler

Cartago: Orosi, Tapantí National Park, Mirador Point, 1250 m, 26 January 2002, flowered in cultivation at Jardín Botánico Lankester, F. Pupulin 3512, J. Warner & B. Holley.  
Photographed: 18 May 2003. Reproduction ratio: 10:1.