

## TWO NEW UTRICULARIAS FROM THE WESTERN CHATS

BY

E. BLATTER AND C. MCCANN.

### *Utricularia equiseticaulis*, Blatter McCann, *sp. nov.*

[*Lentibulariaceae*; *accedit ad U. graminifoliam* Vahl, *sed differt caule ramoso, squamulis in scapo multis ovato-acuminatis vel ovato-acutis, calycis lobo superiore late ovato vel orbiculato acuto, inferiore ovato-oblongo bifido, pedicello fructifero non recurvo, fructu compresso semine subgloboso arcolis elongatis fusiformibus longitudinaliter dispositis munito.*]

A terrestrial plant, forming dense mats on mud, often mixed with other low herbaceous vegetation. Scape 10–20 cm. high, rather stout, glabrous, erect or showing a tendency for twining, minutely striate, arising from stolons which are white, thread-like, less than 0.5 mm. diam., unbranched or with several branches, uniformly thick throughout, getting slightly thinner near the top, green, flexuose. Scales on scape many, attached by their bases at intervals of about 1 cm., ovate-acuminate or ovate acute, appressed, about 2 by 1 mm., brownish. Bracts like scales as to size and shape, enclosing 2 lanceolate, falcate, thinly membranous bracteoles which are slightly shorter than the bracts and light green. Roots few, branched, short, bearing bladders larger than those on the leaves. Leaves imbricately arranged, elongate-spathulate or strap shaped, up to 9 cm. long and nearly 1 cm. broad, the upper exposed part green, the part covered by other leaves white, often producing new leaves at the apex or on the sides or at the base with many roots from the lower surface and irregularly placed bladders (the whole resembling to some extent the thallus of a liverwort). Bladders variable in size, up to 3 mm. long, long-stalked, laterally compressed. Flowers up to 6, distant. Pedicels capillary, dirty purple, 3–12 mm. long, ascending. Calyx bipartite; upper lobe broadly ovate or orbicular, acute or with a dark purple mucro, 3.5 by 3 mm., greenish purple, slightly decurrent on the pedicel; lower lobe ovate oblong, about as long as the upper, but narrower, bifid at apex, light green. Corolla about 4 mm. broad from left to right, 6 mm. long from back to front, 9 mm. from tip of spur to tip of upper petal. Upper lip obovate-oblong, slightly emarginate at tip or truncate, 4–5 mm. long, 3 mm. broad at apex, pale blue with dark purple longitudinal streaks; lower lip: upper part almost orbicular, bullate, 5–6 mm. long without the spur, tip notched, pale

blue, raised portion paler and reticulately veined with purple. Stamens 2, filaments white faintly tinged with purple, with an irregularly shaped appendage at the base; anthers deep purple. Spur more or less curved, conical, reddish purple, about as long as the limb, projecting backwards at a right or obtuse angle compared with the axis of the flower. Ovary ovate-oblong; style very short, stout; stigma bilobed, one lobe very minutely fimbriate, the other lobe retuse. Fruiting pedicel not recurved. Fruit enclosed in the enlarged calyx, ovate-oblong, compressed dorsally and ventrally, surmounted by style and stigma. Seed subglobose, with longitudinally arranged elongate fusiform areoles.

The scape resembles the stem of *Equisetum debile*, hence the specific name.

The leaves often separate from the stolons and start producing new leaves from the basal end.

*Loc.* W. Ghats: Panchgani, Dalkeith Springs, in mud (McCann and Fernandez 3508! type); Bilar, 4 miles S. W. of Panchgani, on clump of mud in flowing water, alt. about 3,900 ft. (Blatter and Fernandez 7860! 7861!).

*Fl.* The Panchgani specimen was found in flower at the end of September; leaves were fully developed. The plant from Bilar was in flower about Xmas 1927; there were no leaves.

#### EXPLANATION OF PLATE I.

1. Seed.
2. Lower lip with spur.
3. Flower with lower lip and spur removed.
4. Pistil.
5. Young fruit.
6. A bladder.

#### *Utricularia ogmosperma*, Blatter McCann, sp. nov.

[*Similis U. albo-coeruleae* Dalz. a qua tamen differt bracteis late oblongo-obovatis, labello corollae superiore anguste obovato, stylo brevi crasso, pedicello in fructu minime recurro, fructu late ovoideo fere orbiculari valde compresso, semine oblique ellipsoideo, testa longitudinaliter et profunde multisulcata.]

A terrestrial plant, 5-25 cm. high. Stolons numerous, white, giving off leaves and roots. Roots few, very little branched, white, transparent, with only a few bladders. Scape straight, erect or twining, slender, quadrangular (2 opposite sides grooved, one flat and the one opposite to it rounded), near the base with 1 or 2 ovate-oblong, 2.5 mm. long, transparent scales attached by their base. Leaves

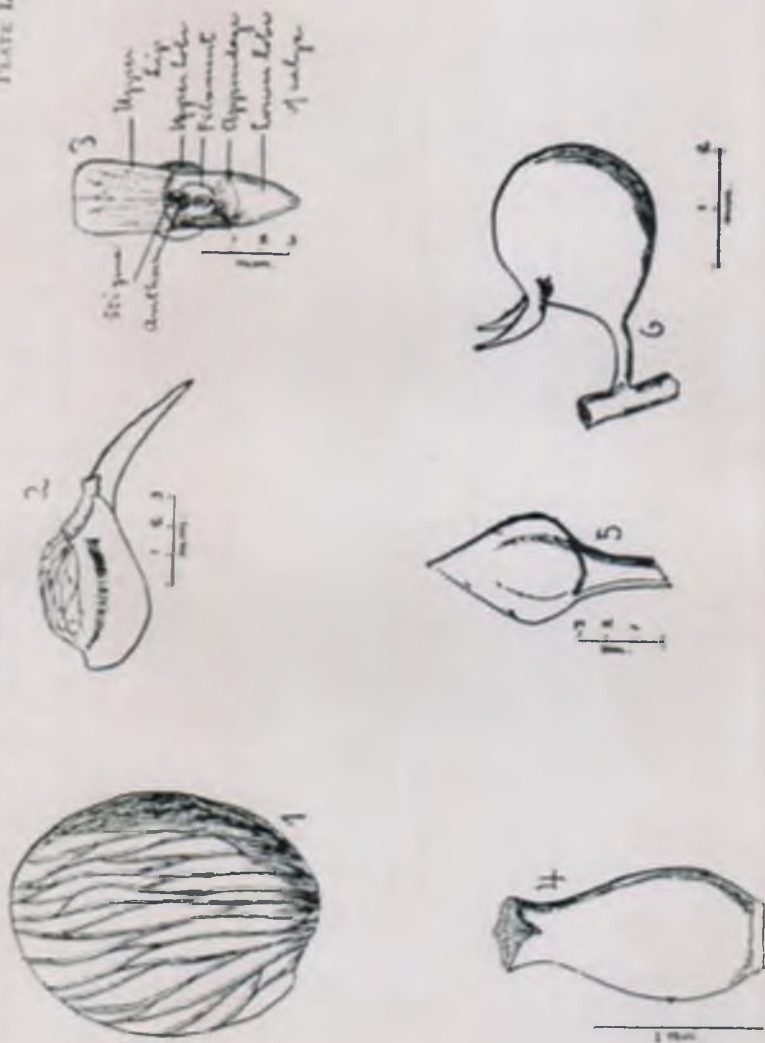
radical, small, up to 5 and 12 mm. long, oblong-spathulate or linear-spathulate, light green, contemporaneous with the flowers, very caducous, each with 1-6 bladders; bladders translucent, ovoid or suborbicular, compressed, 2 mm. long, smooth, mouth with 2 long curved antennae. Flowers 1-6 on one scape, usually only 1 or 2 in flower at the same time. Bracts beneath the pedicels very broadly oblong-obovate, apiculate, 3 mm. long, purple, membranous, transparent, attached by their bases; bracteoles 2, enclosed in the bracts, minute, lanceolate, oblique, membranous. Pedicels 5-12 mm. long, filamentous, purple, sometimes twining, not recurved in fruit. Calyx bipartite, purple, lobes subequal; lobe supporting the spur broadly ovate, up to 3 mm long, bifid at apex, lying flat on this sepal there is a whitish membranous ovate-acuminate appendage attached to the base of the stamens and almost as long as the lobe; the other lobe up to 4 mm. long and broad, ovate-orbicular, bifid or acute at apex, purple. Corolla fragrant, large; upper lip up to 6 mm. long, 3 mm. broad, narrowly obovate, deeply bilobed at tip, blue or bluish or purple with darker veins; lower lip 7-14 mm. long and as broad, shape very variable, orbicular, or quadrate-orbicular, or almost quadrate or obovate or ovate orbicular, sometimes entire or obscurely 4-5 lobed, sometimes slightly notched or emarginate at the apex, very convex, blue or bluish purple or dark purple, the much raised central part white passing through blue into purple, sometimes with a yellow spot at the base and a darker blue spot on each side higher up; under side of lower lip pale blue or pale purple. Spur purple, curved in the beginning, then straight, narrowly conical, 5-10 mm. long, acute, mostly at a right angle to the lower lip. Stamens broad, flattened, bluish or purplish. Pollen extremely small, white. Ovary ovoid, flattened, 2-3 mm. long, style short, stout, all purplish; stigma unequally 2-lobed, one lobe crenulate, the other with a triangular tooth; ovules many, round, sessile on a central fleshy placenta. Fruit broadly ovoid, almost orbicular, much compressed, grey, glittering, surmounted by persistent style and stigma, 3.5 mm. long and broad, about 1 mm. through, covered by the enlarged sepals which are slightly decurrent on the pedicels. Seeds dark brown, slightly obliquely ellipsoid, a little broader at the base, both ends blunt, longitudinally and deeply multifurrowed, iridescent.

Locally called Blue Bonnet.

*Lec.* W. Ghats: Panchgani. First Tableland, damp and waterlogged soil covered with short grass, plentiful. (Blatter F 7! type). Also on Second Tableland.

*Fl.* Starts flowering at the beginning of August and continues to the beginning of October.



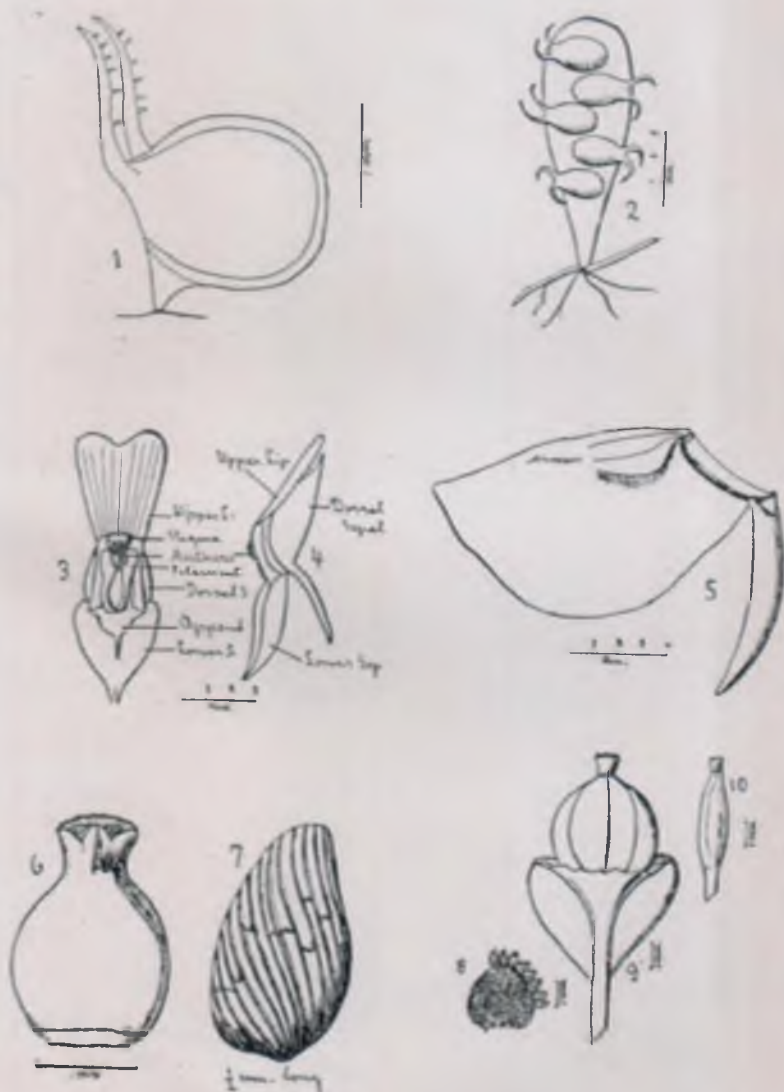


*Utricularia equiseticaulis*. BLATTIER & McCANN, sp. nov.



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J. I. B. S. X: 2.



*Utricularia ogmosperma*, BLATTER & McCANN, sp. nov.

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EXPLANATION OF PLATE III.

**Utricularia ogmosperma**, Blatter McCann, *sp. nov.*

1. Bladder.
2. Leaf with bladders.
3. & 4. Flower, lower lip and spur removed.
5. Lower lip and spur.
6. Ovary, style and stigma.
7. Seed.
8. Central placenta with seeds.
9. Fruit, one calyx-lobe removed.
10. Fruit, side-view.