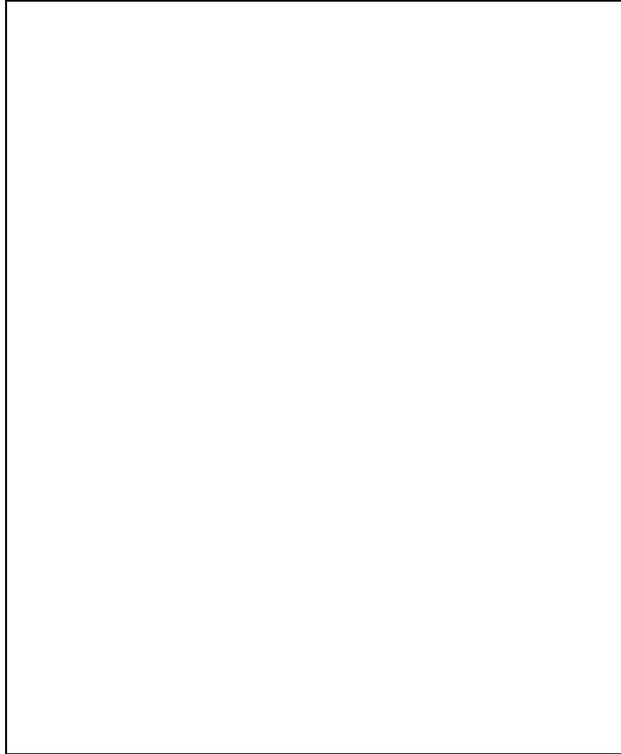


LENTIBULARIACEAE

Utricularia smithiana Wight [= *Utricularia caerulea* var. *smithiana* (Wight) C.B. Clarke; *U. graminifolia* sensu V. Chandras. non Vahl].

Description: Herbs; rhizoids up to 2 cm long, filiform, glandular, branches up to 6 mm long, papillose; stolons up to 3 cm long, filiform, branched. Foliar organs up to 15 x 2 mm, rounded at apex, 3-nerved,



often nerves branched further. Traps c 1.5 mm across, globose; mouth basal; appendages 2, subulate. Racemes up to 45 cm long, erect, simple, grooved, glabrous, 1-7-flowered; scales c 2 x 1 mm, basifixed, lanceate, 3-nerved, acute to acuminate at apex; bracts 2.5-3.5 x 1.5-1.8 mm, basifixed, ovate, 3-5-nerved, acute to acuminate at apex; bracteoles 1-2 mm long, subulate, 1-nerved; flowers up to 15 mm long; pedicels 5-10 mm long, winged. Calyx-lobes unequal, glandular within, papillose without, denticulate along margins; upper lobe 4-7.5 x 4-5.5 mm, ovate, acuminate at apex; lower lobe 4-7 x 2.7-4 mm, lanceate, bidentate to 4-denticulate at apex. Corolla blue to violet, papillose; upper lip 4-6.5 x 4-5 mm, obovate to oblong, crested across on ventral side, ciliate along lower margin, rounded at apex; lower lip 10-16 x 11-19 mm, semi-orbicular, hairy in throat, gibbous at base, rounded at apex; spur up to 7 mm long, conical, papillose within, acute at apex. Stamens c 2 mm

long; filaments strap-shaped; anther thecae distinct. Pistil c 2.5 mm long; ovary ovoid; stigma bilipped, lips equal in size. Capsules 3.5-5 x 2.5-3 mm, ovoid, wall uniformly membranous; placenta 2-3 x 1,2-2 mm, ovoid. Seeds 0.2-0.35 mm long, subglobose to oblongoid; hilum terminal, prominent; testa reticulate, scrobiculate, cells elongate.

Fl. & Fr.: June-November.

Habitat: Along marshy places at high altitudes above 1000 m.

Pollen: 4- or 5-colporate, 30 x 30 μ (Taylor, 1989).

Distribution: India - Endemic to southern parts of W. Ghats: Tamil Nadu, South Karnataka and Kerala.

Notes: *Utricularia smithiana* Wight was treated either conspecific with *U. graminifolia* Vahl (Chandrasekaran, l.c.) or treated as a variety of *U. caerulea* (Clarke, l.c.). But the larger flowers, absence of thickening along the dehisced margin of capsule, and scrobiculate seeds clearly distinguish *U. smithiana* from *U. graminifolia*.

This species is restricted to higher altitudes of W. Ghats, from Kanniyakumari to Biligiri hills of Mysore. Few collections from Nilgiri resemble *U. smithiana* in their large-sized flowers, but they never set fruiting to confirm their identity.

References:

Janarthanam, M.K. & Henry, A.N. 1992. Bladderworts of India. Pp. 101-102.

Taylor, P. 1989. The genus *Utricularia* – a taxonomic monograph. *Kew Bull. Add. Ser.* 14: 1-724.