LENTIBULARIACEAE

Utricularia uliginosa Vahl [= Utricularia afflnis Wight; U. brachypoda Wight; U. griffithii Wight; U. decipiens Dalzell; U. affinis Wight var. griffithii (Wight) Oliv.].

Description: Herbs; rhizoids up to 2 cm long, capillary, tapering towards apex, branches 1.5 mm long, papillose; stolons up to 5 cm long, profusely branched. Foliar organs up to 8 x 1 cm, linear, rounded at

apex, 3-nerved, nerves often branched further. Traps up to 1.5 mm across, subglobose, glandular; mouth basal; appendages 2, subulate, globose, glandular; mouth basal; appendages 2, subulate, simple, glandular. Racemes up to 30 cm long, erect, terete, often grooved and winged, 1-6flowered; scales 1-2 mm long, basifixed, ovate to deltoid, 3-nerved, acute at apex; bracts 1 -2.5 mm long, basifixed, ovate to deltoid, 1-3-nerved, acute at apex; bracteolcs 0.6-1.5 mm long, subulate; flowers up to 8 mm long; pedicels 1.5-7 mm long, winged, erect or spreading in fruit. Calyx-lobes more or less equal, ovate, margin denticulate; upper lobe 2.5-4 x 2.5-3 mm (up to 7.5×6 mm in fruit), acute to acuminate at apex; lower lobe $2.4-3.5 \times 2-2.5 \text{ mm}$ (up to $7.3 \times 6 \text{ mm}$ in fruit), 2-3-denticulate at apex. Corolla blue to violet or rarely pink; upper lip 3-4 mm long, oblong, slightly constricted at middle, crested on side, hairy along lower emarginate or truncate at apex; lower lip 4-6 x

2.5-4.5 mm, obovatc to oblong, hairy in throat, gibbous, rounded or slightly 3-lobed at apex; spur 3-5 mm long; filaments linear; anther thecae distinct. Pistil c 1.5 mm long; ovary ovoid, slightly compressed; stigma bilipped, lower lip oblong and hairy, upper lip reduced to a small hemispherical structure. Capsules $3-4 \times 2-3$ mm, ovoid, wall uniformly membranous; placenta $1.5-3 \times 1.2-2.2$ mm, ovoid. Seeds c 0.4 mm across, subglobose to oblongoid; hilum terminal; testa reticulate, cells isodiametric to slightly oblong.

Fl. & Fr.: Throughout the year with a peak in August-October.

Habitat: Along marshy places and near perennial water sources from sea-level to 2,500 m.

Pollen: 4-colporate, 25 x 30 μ (Thanikaimoni, 1966); 4-colporate, 20 x 25 μ (Huynh, 1968); 4- or 5-colporate, 25 x 28 μ (Taylor, 1989).

Distribution: India - Maharashtra, Karnataka, Kerala and Tamil Nadu along Western Ghats and West Bengal. India, Sri Lanka to Japan and Australia.

Notes: Utricularia uliginosa Vahl is a highly variable species and often confused with U. graminifolia Vahl.

	U. graminifolia Vahl	U. uliginosa Vahl
Lower lip of Corolla	bigibous	unigibbous
Thickening on Capsule	presnt	absent
Testa cells	much elongated	isodiametirc or slightly
		elongated

The Tamil Nadu and Kerala specimens identified of late as U. praeterita P. Taylor are only an extreme form of U. uliginosa Vahl; U. praeterita is restricted to Maharashtra, Goa and Northern parts of Karnataka.

The variation in the size of foliar organs, racemes, pedicels, calyx-lobes and structure of seeds led the earlier botanists to erect numerous species. But, with the availability of a series of herbarium materials for study, the variation is recognised as continuous and hence many names are synonymised under *U. uliginosa* Vahl.

References:

Huynh, K.L. 1968. Etude de morphologic du pollen genre *Utricularia* L. *Pollen et Spores* 10: 11-55. Janarthanam, M.K. & Henry, A.N. 1992. Bladderworts of India. Pp. 113-117.

Taylor, P. 1989. The genus *Utricularia* – a taxonomic monograph. Kew *Bull. Add. Ser.* 14: 1-724. Thanikaimoni, G. 1966. Pollen morphology of the genus *Utricularia*. *Pollen et Spores* 8: 265-284.