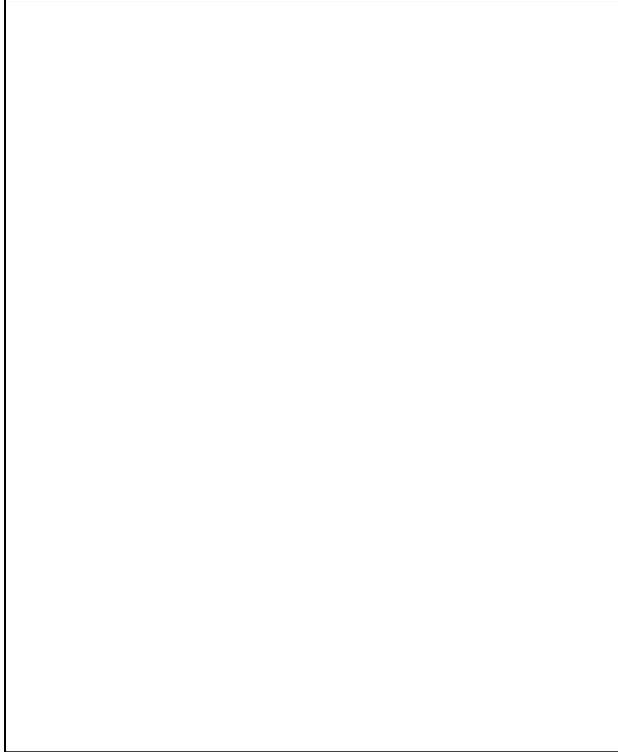


## LENTIBULARIACEAE

### *Utricularia subulata* L.

**Description:** Herbs; rhizoids up to 1 cm long, tapering towards apex, branches papillose; stolons up to 1 cm long, glandular, branched. Foliar organs up to 1 cm long, linear, 1-nerved. Traps up to 0.5 mm across, ovoid; mouth lateral; appendages 2, filiform, branched. Racemes up to 8 cm long, zigzag, terete,



papillose at lower half, 1-3-flowered; scales up to 1 x 0.4 mm, medifixed, linear-elliptic, papillose, ciliate along margins, acuminate at apex; bracts c 0.5 mm across, peltate, broadly ellipsoid to orbicular, smooth; flowers 5-10 mm long; pedicels 1-2 mm long, terete. Calyx-lobes subequal, ovate, obtuse to acuminate at apex, nerves prominent; upper lobe c 1.3 x 0.7 mm, lower c 1 x 1 mm. Corolla yellow; upper lip c 2.5 mm long, ovate to orbicular, obtuse to rounded at apex; lower lip c 3 mm across, 3-lobed, bigibbous at base, obtuse to truncate at apices of lobes; spur up to 4 mm long, glandular within, obtuse at apex. Stamens c 0.6 mm long; ovary obovoid; stigma bilipped, upper lip obsolete, lower orbicular and ciliate. Capsules c 1 mm across, subglobose, opens by a ventral pore with lid; placenta c 0.4 mm across, subglobose. Seeds c. 0.2 mm long, obovoid; testa reticulate, cells elongated.

**Fl. & Fr.:** August.

**Habitat:** On open moist sandy soil over rocks and

stones.

**Chromosomes:**  $n = 15$  (Kondo, 1972).

**Pollen:** 7-9-colporate,  $23 \times 20 \mu$  (Huynh, 1968); 8-9-colporate,  $19 \times 23 \mu$  & 8-colporate,  $30 \times 20 \mu$  (Taylor, 1989).

**Distribution:** India - Known from a single collection from Meghalaya. Pantropical.

**Notes:** *Utricularia subulata* L. is characterised by its branched appendages of traps, medifixed scales, peltate bracts, absence of bracteoles, prominently nerved calyx-lobes, and operculate capsule.

Taylor (1977) stated "-it is curious that the species (*U. subulata* L.), which is widespread and abundant in the New World, Africa, Madagascar, should never have been found in India. There can be no doubt that the Malesian plant is the same as the African & American ones". J. Joseph & Mani (1982) reported *U. stanfieldii* Taylor from Jarain, Meghalaya, India, which on critical examination showed characters identical to *U. subulata* L. and not of *U. stanfieldii* Taylor. Thus the report of *U. subulata* in India solves the problem of "missing link" in its distribution.

#### 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. 112-113.

Kondo, K. 1972. Chromosome number of *Utricularia subulata* L. *J. Jap. Bot.* 47: 31-32.

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