

## LENTIBULARIACEAE

***Utricularia bifida* L.** [= *Utricularia humilis* Vahl; *U. ramosa* Vahl; *U. wallichiana* Benj.; *U. alata* Benj.]

**Local names:** Chotajhangi (Bengali); Arak Jhawar (Santali).

**Description:** Herbs; rhizoids up to 15 mm long, capillary, branches up to 1 mm long, papillose; stolons up to 3 cm long, filiform, branched. Foliar organs up to 10 x 0.5 mm, linear, on stolons, 1-nerved, rounded at apex. Traps c 1 mm across, globose, on vegetative organs; stalk thickened distally; mouth basal;



***Utricularia bifida* L.**

Courtesy: S.R. Yadav

appendages 2, subulate, simple. Racemes 2.5-18 cm long, erect, 1-8-flowered; scales 1-1.5 mm long, basifixed, ovate, acute at apex, nerves 1 or 5, or absent; bracts 1.2-2.5 mm long, basifixed, ovate to linear-lanceate, 1- or 3-nerved, acute at apex; bracteoles 0.7-1.5 mm long, subulate; flowers 5-13 mm long; pedicels 2-5 x 1-1.5 mm, broadly winged, erect in anthesis, recurved in fruit. Calyx-lobes subequal, ovate; upper

lobe 2-4 x 2-3 mm (3-6 x 2.5-4.5 mm in fruit), rounded at apex; lower lobe 2-3 x 2-3 mm (3-5.5 x 2.5-4.5 mm in fruit), rounded and rarely bi-tridentate at apex. Corolla yellow; upper lip 2-6 x 1-2 mm, linear-oblong, rounded at apex; lower lip 2.5-6 mm across, orbicular to obovate, hairy in throat, gibbous at base, rounded at apex; spur 3-6 mm long, subulate, descending, acute at apex. Stamens c 1.5 mm long; filaments strap shaped, 1-nerved; anther thecae distinct. Pistil c 1.5 mm long; ovary ovoid; style short, distinct; stigma 2-lipped, lower lip slightly reflexed, upper lip represented by a semi-orbicular projection. Capsules 2-3 x 1.5-2.5 mm, ovoid, slightly compressed, wall uniformly membranous; placenta c 1.5 mm across, more or less globose, stalked. Seeds 0.25-0.4 mm long, ovoid, ellipsoid to obovoid, numerous; hilum lateral; testa reticulate, cells large, elongate, striated within.

**Fl. & Fr.:** July-December.

**Habitat:** In wet and marshy areas near perennial water sources, falls, streams, lakes and in rice fields from sea-level to 1500 m.

**Pollen:** 3- or 4-colporate, 26-28 x 34-35  $\mu$  (Thanikaimoni, 1966); 3-colporate, 24 x 30  $\mu$  (Taylor, 1989).

**Distribution:** **India** - Throughout the country except Northwest India. Sri Lanka to Japan and South to North Australia.

**Notes:** *Utricularia bifida* L. is allied to *U. recta* P. Taylor among Indian species, but can be easily distinguished by its recurved fruiting pedicel, rounded apices of calyx-lobes, uniformly membranous capsule wall and presence of striations within the testa cells. This species is used in Indian medicine for urinary disorders.

### References:

Janarthanam, M.K. & Henry, A.N. 1992. Bladderworts of India. Pp. 37-41.

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.