

LENTIBULARIACEAE

Utricularia australis R. Br.

Description: Submerged floating herbs; rhizoids usually absent, if present up to 12 mm long, branches botryform; stolons up to 35 cm long, c 0.5 mm thick, filiform, terete. Foliar organs up to 2 cm long, primary



Utricularia australis R. Br.

Courtesy: S.R. Yadav

segments dichotomously divided; ultimate segments setulose. Traps 1-2 mm across, obliquely obovoid, on nodes and foliar segments, stalked; mouth lateral, oblique; appendages 2, simple or branched, often setae present on lips. Racemes up to 12 cm long, flexuous, up to 10-flowered; flowers at regular intervals; scales 2-3 x 1.2-2.5 mm, basifixed, ovate to suborbicular, auriculate at base, acute to obtuse at apex; bracts c 3 x 2 mm, basifixed, ovate to suborbicular, auriculate at base, acute to obtuse at apex; flowers up to 12 mm long; pedicels 10-15 mm long, filiform, terete, erect at anthesis and spreading afterwards. Calyx-lobes subequal, ovate to oblong; upper lobe 2-2.5 x 1.8-2 mm, obtuse to acute at apex; lower 2-2.5 x 1.9-2.5 mm, retuse or emarginate at apex, sparsely glandular without. Corolla yellow, c 12 mm long; upper lip c 5 x 3.5 mm, ovate to oblong, truncate at apex; lower c 6 x 12 mm, transversely elliptic, auricled and prominently gibbous at base, truncate at apex; spur c 4 mm long, conical, obtuse at apex, glandular within. Stamens c. 1.5 mm long; filaments dilated near anthers; anther thecae confluent. Pistil c 2 mm long;

ovary globose, glandular; style short; stigma 2-lipped, lower lip deltoid, ciliate along margins, upper lip obsolete.

Fl.: April-September.

Habitat: In still waters, ponds, lakes etc., normally at high altitudes.

Pollen: 12-13 colpi, 38-40 x 33-35 μ or 30 x 35 μ (as *U. aurea*) (Thanikaimoni, 1966); 14-colporate, 25 x 35 μ or 45 x 50 μ (Taylor, 1989).

Distribution: **India** - it is known by its sporadic collections from Jammu & Kashmir, Himachal Pradesh, Punjab, Uttar Pradesh, Madhya Pradesh, Rajasthan, Maharashtra and Karnataka. Western Europe to China and Japan, tropical and South Africa, Sri Lanka, India to southeast Australia.

Notes: *Utricularia australis* R. Br. is allied to *U. aurea* Lour. They can be differentiated on the basis of 2-primary foliar segments and auricled bracts in the former, and 3-5-primary foliar segments, non auricled bracts and presence of cylindrical gland tipped hairs on the corolla of latter. Habitat is similar to that of *U. aurea* but more common in cold regions.

This species occurs sporadically. Collections are made from wide range of habitats like snow covered hilly areas of Kashmir, Himachal Pradesh to the desert areas of Rajasthan. Taylor (1977) describes this phenomenon as follows "this widespread temperate Eurasian species apparently never sets seed and its somewhat sporadic occurrence, mostly at high altitude, in the African and Asian tropics is

probably due to transmission of small particles of its vegetative parts by migratory birds". The turions which are present often in this species are not seen in any of the Indian materials studied.

References:

Janarthanam, M.K. & Henry, A.N. 1992. Bladderworts of India. Pp. 34-37.

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.