

LENTIBULARIACEAE

Utricularia aurea Lour. [= *Utricularia flexuosa* Vahl; *U. fasciculata* Roxb.; *U. confervifolia* Jacks. ex D. Don]

Common / Local name: Janjee, Jhangi (Bengali); Itka (Mundari); Natsoo (Telugu).



Utricularia aurea Lour

Courtesy: S.R. Yadav

Description: Submerged floating herbs; rhizoids usually absent, if present always 4, up to 10 x 0.6 cm, verticillate at base of raceme, inflated, fusiform, covered with foliar like segments; stolons up to 1 m long, c 2.5 mm thick, glabrous, floating below the surface of water, branched. Foliar organs up to 6 cm long, lanceate when spread; primary segments 3-5 per node, semi-verticillate; secondary segments 2 from a point; ultimate segments capillary, terete, setulose; foliar scales rarely present, up to 13 mm across, dissected, setulose

along margins. Traps 1-5 mm across, ovoid to obovoid, at axils of foliar organs and on secondary foliar segments, stalked; mouth lateral, oblique; appendages usually 2 or more in number, capillary, simple or branched, often with a ring of setae around mouth. Racemes up to 25 cm long, c 3 mm thick, up to 10-flowered; scales rarely present, similar to bracts; bracts 1.5-2 x 1.3-2 mm, basifixed, ovate to suborbicular, 1-nerved, truncate at base, acute to acuminate at apex; bracteoles absent; flowers up to 12 mm long; pedicels 7-18 mm long, recurved and distally thickened in fruit. Calyx-lobes subequal, ovate to oblong, fleshy, papillose at base, recurved or spread in fruit; upper lobe c 3 x 2 mm (up to 7 x 5 mm in fruit), obtuse at apex; lower lobe c 2.5 x 2.2 mm (up to 7 x 4 mm in fruit), rounded to denticulate at apex. Corolla bright yellow; upper lip c 5 x 4 mm, ovate, hairy at base, obtuse to retuse at apex; lower lip c 6 x 9 mm, more or less obovate, hairy in throat, bigibbous at base, truncate, undulate at apex; spur more or less equal to lower lip in length, constricted at middle, papillose, glandular hairy at base, obtuse at apex. Stamens c 2 mm long; filaments curved, dilated above, papillose; anther thecae confluent. Pistil c 2 mm long, papillose; ovary subglobose; style thick; stigma 2-lipped, lower lip hairy, margins ciliate, upper lip obsolete. Capsules up to 7 mm across, globose with a long beak, circumscissile; placenta up to 5 mm long, ovoid. Seeds 0.8-1 mm across, polygonal, margin winged, hilum central; testa reticulate, cells more or less isodiametric.

Fl. & Fr.: August-April with a peak during October-February; flowering late in eastern parts of peninsula.

Habitat: In stagnant or slow running waters from sea-level to high altitudes. The stolons and foliar organs grow thick in ponds near coastal areas.

Chromosomes: $n = 21$ (Siddiqui, 1959; Subramanyam & Kamble, 1968).

Pollen: 17-19-colporate, $29 \times 39 \mu$ and 20-22-colporate, $29 \times 38 \mu$ (as *U. flexuosa*) (Huynh, 1968); 13-15-colporate, $30 \times 39 \mu$ (Taylor, 1989).

Distribution: **India** - Distributed almost throughout the country. Sri Lanka, India to Japan and South to Australia.

Notes: Rhizoids are usually absent in *Utricularia aurea* Lour., if present they give float-like appearance, often leading to the plants misidentified with *U. stellaris* L.f. However in *U. aurea* the rhizoids are fusiform, and always four in number at the base of raceme. Further, *U. aurea* can be distinguished by its long-beaked capsule, and hairs on spur with cylindrical glands. Taylor (1977) distinguishes it from *U. australis* R. Br. on the basis of absence of scales on raceme and 3- or more primary foliar segments from a node. But the scales are often seen on the raceme of *U. aurea* rendering the character not useful.

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. 30-34.
- Siddiqui, O.H. 1959. Meiosis in *Utricularia flexuosa* Vahl. *Sci & Cult.* 25: 319-321.
- Subramanyam, K. & Kambale, N.P. 1968. Chromosome numbers in certain Indian species of *Utricularia* L. (Lentibulariaceae). *Proc. Indian Acad. Sci.* 68B: 221-224.
- Taylor, P. 1989. The genus *Utricularia* – a taxonomic monograph. *Kew Bull. Add. Ser.* 14: 1-724.