## **LENTIBULARIACEAE**

**Utricularia stellaris** L. f. [= *Utricularia stellaris* L.f. var. coromandeliana A. DC.; *U. macrocarpa Wall. ex C.B. Clarke; U. inflexa Forssk. var. stellaris* (L.f.) P. Taylor]



Utricularia stellaris L.f.

Courtesy: N.V. Malpure

Description: Herbs; rhizoids absent; stolons up to 60 cm long or more, glabrous, branched. Foliar organs up to 5 cm long; primary segments 3-5, semiverticillate; secondary segments 2 per point and repeatedly divided; ultimate segments capillary, terete, setulose; stipules if present up to mm across, auriculate, segments setulose, cordate at base. Traps 1-2 mm across, obliquely ovoid, slightly compressed; mouth lateral, oblique; appendages usually 2, rarely more altogether absent, simple or branched. Racemes up to 20 cm long, held above water level.by floats, up

to 12-flowered, flowers congested at anthesis; floats 2.5-25 x 2-5 mm, globose, ellipsoid to cylindrical, 3-10, verticillate, usually at middle of peduncle, rarely near base, reduced foliar-like segments attached at apex; bracts 1.5-3 mm long, basifixed, elliptic to ovate-deltoid, usually hyaline, 3-7-nerved, obtuse to truncate at apex. Flowers up to 8 mm long; pedicels 2-7 mm long, terete, distally thickened, erect at anthesis and recurved or reflexed in fruit. Calyx-lobes subequal, accrescent, fleshy, reflexed or rarely covering the capsule in fruit; upper lobe 3-3.5 x 2.5-3.3 mm (5-7 x 4-5 mm in fruit), ovate, acute to obtuse at apex; lower lobe  $2-2.5 \times 3-3.5 \text{ mm}$  (up to  $4 \times 5 \text{ mm}$  in fruit), suborbicular to transversely elliptic, rounded, truncate or retuse at apex. Corolla yellow, glandular hairy; upper lip c 4 x 3 mm, broadly ovate, emarginate, rounded or rarely truncate at apex; lower lip c 4 x 4 mm, more or less orbicular, hairy in throat, bigibbous at base, emarginate or crenate at apex; spur short, cylindrical, slightly curved, obtuse at apex. Stamens c 1.5 mm long; filaments dilated towards anther; anther thecae distinct. Pistil c 1.5 mm long; ovary globose; style short, cylindrical; stigma 2-lipped, lower lip semi-orbicular and hairy, upper lip 3-denticulate. Capsules (2-) 4-5 mm across, globose, circumscissile; placenta c 2 mm across, globose. Seeds 0.2-0.4 x 0.5-1 mm, prismatic, 4-7 angled, 2-4-times as wide as high, winged; hilum represented by a round scar, prominent; testa reticulate, cells elongate at sides and bottom of seed, and isodiametric at top. Fl. & Fr.: August - April with a peak during October - February; late flowering in eastern parts of India compared to western parts.

Local name: Bengali-Jhangi; Mundari-Dajatanri; Telugu-Natsoo.

**Habitat:** Submerged floating in still or slow running water in ponds, tanks, lakes and rice fields; from sealevel upwards.

**Chromosomes:** n = 21 (Subramanyam & Kamble, 1968).

**Pollen:** 15-18-colporate, 45-48 x 38-40  $\mu$  or 30-38 x 38-45  $\mu$  (Thanikaimoni, 1966); 14-16-colporate, 42 x 36  $\mu$  (Huynh, 1968); 15-colporate, 33 x 33  $\mu$  (Taylor, 1989).

**Distribution: India -** Throughout except northern most and north-eastern states. From Africa to Australia through tropical Asia.

**Notes:** *Utricularia stellaris* L.f. being a widely distributed species, shows a higher degree of variation in the characters like number of foliar organs per point, presence or absence of stipule-like auricles at base of foliar organs, size and shape of floats and their position of attachment on peduncle, and size of capsules. The specimens with large floats are often erroneously referred to *U. inflexa* Forssk. in Indian literature.

## 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. 102-106.

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. Thanikaimoni, G. 1966. Pollen morphology of the genus *Utricularia*. *Pollen et Spores* 8: 265-284.