

LENTIBULARIACEAE

Utricularia striatula Sm. [= *Utricularia pusilla* Graham; *U. orbiculata* Wall. ex. A. DC.; *U. glochidiata* Wight]

Description: Herbs; rhizoids up to 2.5 cm long, simple, few or altogether absent; stolons up to 9 cm long, simple, rarely branched, glandular. Foliar organs with pseudopetiole up to 15 mm long, orbicular to



Utricularia striatula Smith

Courtesy: S.R. Yadav

obovate, rosulate at scape base, scattered on stolons, expanded portion up to 5 mm across, veins dichotomously branched. Traps up to 1.5 mm across, globose to obliquely ovoid; mouth lateral; appendages glandular hairy, on expanded, divergent upper lip. Racemes up to 18 mm long, erect, often zigzag, glabrous, up to 10-flowered; scales if present 1-1.5 mm long, medifixed; bracts 0.6-2 mm long, medifixed, constricted at middle, limbs

unequal; bracteoles 0.7-1.5 mm long, medifixed, limbs unequal; flowers up to 10 mm long; pedicels 1.5-7 mm long, filiform, spreading in anthesis, spreading or recurved in fruit, papillose at least in fruiting. Calyx-lobes highly unequal, papillose; upper lobe 1.2-4 x 2-4 mm, obovate to obcordate, emarginate, truncate or obtuse at apex; lower lobe 0.6-2 x 0.4-2 mm, oblong to ovate, truncate, notched or rounded at apex. Corolla pink, lilac, violet, white to variously tinged, often yellow-blotched near base; upper lip 0.6-2 mm across, semi-orbicular to deltoid, bidentate, truncate or irregular at apex; lower lip 3-7 x 3-10 mm, 3- or 5-lobed, throat hairy, base raised or flat, rounded or truncate at apices of lobes; spur 1-6 mm long, cylindrical or conical, rarely reduced to a mound, obtuse, acute or retuse at apex. Stamens up to 1.2 mm long; filaments strap-shaped, curved; anther thecae subdistinct. Pistil up to 1.2 mm long; ovary obliquely ovoid, attached to base of upper calyx-lobe; style distinct; stigma 2-lipped, lower lip oblong to semi-orbicular, upper lip obsolete. Capsules 1.5-3.5 mm long, obliquely ovoid, attached to upper calyx-lobe, keeled on ventral side, dehisce by a longitudinal ventral slit; placenta c 1 x 0.6 mm, flask-shaped. Seeds 0.3-0.4 mm long, clavate, cylindrical or oblongoid, attached radially to placentum, glochidiate.

Fl. & Fr.: July-December (-February).

Habitat: Epiphytic or terrestrial; found on wet moss covered tree trunks, dripping rocks in shade, vertical face of wet rocks and less commonly on moss covered stone walls; from 150 m upwards, mostly in higher altitudes.

Pollen: 3-colporate, 18-20 x 27-29 μ (Thanikaimoni, 1966); 3-colporate, 16 x 27 μ (Huynh, 1968); 3-colporate, 20 x 25 μ (Taylor, 1989).

Distribution: **India** - Almost throughout the country. Tropical Africa to China and Malesia through Sri Lanka and India.

Notes: The allied species of *Utricularia striatula* Sm. are distributed in the Himalayas, Khasi hills and Malesia; *U. furcellata* Oliv., perhaps is the closest ally. The other species - *U. kumaonensis* Oliv., *U. brachiata* Oliv. and *U. multicaulis* Oliv. have comose seeds in contrast with glochidiate seeds of *U. striatula*.

The size and structure of corolla vary much in this species. The lower lip of corolla is either 5- or 3-lobed, the lobes are often obscure and the size always exceeds the size of calyx-lobes except in few extreme cases. The spur is completely reduced forming a saccate structure, in few specimens collected from Lonavla, Maharashtra, and these plants cannot be treated distinct due to imperceptible gradation. The occurrence of cleistogamous flowers is high in this species. According to Killian (vide Taylor 1964) the cleistogamous flowers are seen in the plants which receive sunlight for a period of less than one hour per day. It was observed during this study that such plants are abundant on vertical side of rocks facing north where the sunlight is comparatively less, and on tree trunks where it never falls directly.

This widely distributed species was recently reported from Saddle Peak of N. Andaman Island of Andaman group of islands by Mehrotra & Chakrabarty; *U. exoleta* R. Br. being the only other species recorded from the Kamorta Island of Nicobar group of islands.

References:

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Janarthanam, M.K. & Henry, A.N. 1992. Bladderworts of India. Pp. 106-112.
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Thanikaimoni, G. 1966. Pollen morphology of the genus *Utricularia*. *Pollen et Spores* 8: 265-284.