

LENTIBULARIACEAE

Utricularia albocaerulea Dalzell [= *Utricularia ogmosperma* Blatter & McCann]

Common / Local name: Blue bonnet (English); Khajat Cha ghas, Sita chi asre (Marathi).



Utricularia albocaerulea Dalzell

Courtesy: N.V. Malpure

Description: Herbs; rhizoids up to 15 x 0.5 mm, thick at base, tapering towards apex, glandular, branches 1-2 mm long, arranged more or less alternately, papillose; stolons 2-5 cm long, capillary, c 0.2 mm thick, branched. Foliar organs up to 10 x 4 mm, linear to spatulate, at scape-base and on stolons, 3-nerved, nerves branched further. Traps 1-1.5 mm across, subdimorphic, those on foliar organs large, elsewhere small, subglobose; stalk c 0.3 mm long; mouth basal; appendages subulate, often recurved, glandular-hairy. Racemes up to 15 cm long, 0.8-1 mm thick, erect, simple, grooved, winged, glabrous, 1-3-flowered; scales 1.3-2.5 x 1-1.8 mm, basifixed, lanceate to ovate, 1-3-nerved, truncate at base, acute to obtuse at apex; bracts 1.5-2.5 x 1.2-2 mm, basifixed, broadly ovate, 3-nerved, truncate at base, acute at apex; bracteoles 1-2 mm long, linear-subulate, acute at apex; flowers 9-13.5 mm long; pedicels 6-12 mm long, winged, recurved in fruit. Calyx-lobes ovate, subequal, papillose without; upper lobe 3.8-

4.5 x 3-4 mm (7-7.5 x 6.5-7.5 mm in fruit), acuminate, rarely tridentate at apex; lower lobe 3.2-4 x 2.5-3.4 mm (6-7.5 x 5.5-6.5 mm in fruit), bidentate at apex. Corolla violet to dark blue, yellow in throat, papillose; upper lip 4.5-6 x 3-4.5 mm, obovate, emarginate to truncate at apex; lower lip 9-13 x 11-15 mm, ovate to obovate, often rectangular when spread, hairy along throat, white and bigibbous at base, truncate to emarginate at apex; spur 6-9 mm long, conical, slightly curved, acute at apex. Stamens 1.5-2 mm long; filaments broad, curved, 1-nerved; anther thecae distinct. Pistil 1.5-2.2 mm long; ovary compressed, ovoid; style distinct; stigma 2-lipped, lips obsolete or semi-orbicular. Capsules c 4.5 x 3 mm, compressed, ovate to orbicular in outline, dehisce longitudinally, thickened along dehisced margin; placenta 2.6-3.5 x 2-2.5 mm, compressed, ovoid. Seeds 0.3-0.4 mm long, oblongoid-ovoid, numerous; hilum subterminal, distinct; testa reticulate, cells compact, elongate.

Fl. & Fr.: September-October.

Habitat: On moist, gravelly laterite soil in open areas of hills.

Pollen: Isopolar, 4- or 5-colporate, 24-25 x 31-33 μ (Thanikaimoni, 1966); 3-or 4-colporate, 20 x 28 μ (Huynh, 1968); 3-colporate, 24 x 30 μ (Taylor, 1989).

Distribution: India - Endemic to Southern Maharashtra and Northern Karnataka parts of Western Ghats.

Notes: *Utricularia albocaerulea* Dalzell is allied to *U. reticulata* Sm., but differs in the erect inflorescence, 3-nerved foliar organs and absence of striations within the testa cells of seeds. Also allied to *U. ceciliae* P. Taylor from which it can be differentiated by the presence of thickening along the dehisced margin of capsule, latero-terminal hilum in seeds, absence of intercellular spaces in testa cells and recurved fruiting pedicel. The capsule including seeds of *U. albocaerulea* is similar to that of *U. purpurascens* Graham, but the sickle shaped, long spur of the latter is quite distinct.

Utricularia ogmosperma Blatter & McCann described from Panchgani, W. Ghats, was shown allied to *U. albocaerulea*. The former was distinguished from the latter on the basis of its broad, oblong-obovate bracts, narrowly obovate upper corolla lip, short and thick style, least recurved fruiting pedicel, broadly ovoid to almost orbicular, strongly flattened fruit, obliquely ellipsoid seeds and longitudinally and deeply multifurrowed testa. Bole & Almeida in 1985 and Taylor in 1989 treated *U. ogmosperma* conspecific with *U. arcuata* Wight (= *U. purpurascens* Graham). Critical study of the type specimens kept in Blatter herbarium (BLAT), scrutinization of protologues and studies on pickled specimens (including specimens from the type locality of *U. ogmosperma*) revealed that *U. ogmosperma* falls within the limits of variation of *U. albocaerulea* and hence treated conspecific.

References:

Huynh, K.L. 1968. Etude de morphologie du pollen genre *Utricularia* L. *Pollen et Spores* 10: 11-55.

Janarthanam, M.K. & Henry, A.N. 1992. Bladderworts of India. Pp. 27-29.

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.