LENTIBULARIACEAE

Utricularia brachiata Oliv. [= *Utricularia christopheri* P. Taylor]

Description: Herbs; tubers c 2 mm across, globose; rhizoids up to 8 mm long, filiform, few, simple; stolons up to 1 cm long, filiform, simple. Foliar organs with pseudo-petiole up to 2 cm long, rosulate, expanded portion c 4 x 4 mm, reniform, nerves dichotomously branched. Traps up to 1.5 mm across, obliquely ovoid, on vegetative organs; mouth lateral; appendages representated by expanded upper lip terminating in radiating hairs. Racemes up to 8 cm long, filiform, erect, 1flowered; bracts c 2 mm long, medifixed, upper limb lanceate, lower limb oblong, irregular at base, acute at apex; bracteoles c 1.5 mm long, medifixed; flowers terminal, up to 1 cm long; pedicels up to 7 mm long, filiform, terete, erect in flower, erect or recurved in fruit. Calyx-lobes unequal, papillose; upper lobe up to 4 x 5.3 mm, broadly ovate, denticulate or shallowly lobed at apex; lower lobe up to 2 x 1.6 mm, more or less oblong, bifid or truncate at apex. Corolla white; upper lip slightly bilipped or emarginate; lower lip 5-lobed, throat yellow; spur c 6 mm long, slightly

obtuse at apex. Stamens and pistil not seen. Capsules c 3 x 3 mm, subglobose, oblique, attached to upper calyx-lobe at base, dehisce vertically at ventral side; placenta c 1.5 mm long, flask shaped, connecting apex and base of capsule. Seeds c. 0.4 mm long, elliptic; hilum indistinct; testa reticulate; appendages on both ends few, long, thick.

curved, linear, shorter than lower lip of corolla,

Fl. & Fr.: July-October.

Habitat: In Himalayas above 2400 m, epiphytic on moss-covered trunks.

Pollen: 3- or 4-colporate, $32-35 \times 46-50 \mu$ (Thanikaimoni, 1966); 3-colporate, $23 \times 30 \mu$ (Taylor, 1989). **Distribution: India -** Found in West Bengal, Sikkim and Arunachal Pradesh. Endemic to Eastern Himalayas; Nepal, India, Bhutan and Southwest China.

Notes: *Utricularia brachiata* Oliv. is allied to *U. kumaonensis* Oliv., but can be easily distinguished by the presence of tubers at the base of inflorescence, reniform foliar organs, 1-flowered racemes, subglobose capsule, and smooth, reticulate testa. *U. brachiata*, endemic to Eastern Himalayas, is meagerly represented in herbaria. This may be due to the rarity of expeditions of botanical nature at higher elevations.

Oliv., while describing *U. brachiata* quoted "In Himalaya Orientali temperata, pro. Sikkim, Lachen, inter muscos, alt. 8-11000 ped., J.D. Hooker". The protologue includes three different collections: 1. Sikkim, J.D. Hooker; 2. Lachen, 8000 ft., 4.8.1849; and 3. Lachen, 10000-11000 ft., 3.8.1849, which are studied by Oliv. and mounted on the same sheet. Taylor (1989) erroneously pointed out the collection number "3" (collected from Lachen, 10000-11000 ft., 3.8.1849) as "holotype" of the species. According to the "Code" this should be designated only as "lectotype" of the species.

The recently described *U. christopheri*, appears to be a minor variant of *U. brachiata* with corolla spur somewhat shorter than usual. As the length of the spur is highly variable in section Phyllaria (vide *U.*

striatula) it cannot be relied upon as a diagnostic character. Also the seeds (hitherto undescribed) of *U. christopheri* have to be studied for further elucidation.

References:

Janarthanam, M.K. & Henry, A.N. 1992. Bladderworts of India. Pp. 41-42.

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.