



# JOURNAL OF BIODIVERSITY AND CONSERVATION

## *Utricularia aurea*

The genus *Utricularia* is one of the most compelling carnivorous plants from the family Lentibulariaceae, including around 275 species of carnivorous plants, with more than 38 species in India and about 16 species in Odisha. Among them, *Utricularia aurea* is the most common and an old aquatic carnivorous species found throughout the world, mostly grown in stagnant or slow-running waters, in association with diverse wetland herbs like *Nymphoides indica*, *N. hydrophylla*, *Salvinia cucullata*, *Nymphaea nouchali*, *Ceratopteris thalictroides*, etc. It is a submerged floating herb with very tiny traps and seemingly no roots. In structure, the traps of *U. aurea* are ovoid to obovoid in shape with 1-5mm in length, born by a tiny stalk and opened by a mouth. The trapdoor is surrounded by trigger or sensitive hairs and other appendages. The mouth can be closed by a thigmotropic moving door; when a small animal touches the sensitive hair, the door responds by opening suddenly and capturing its prey very actively. The trap functioning requires water surrounding it, when the trap opens, it aspires water for pushing the prey towards the trap. After firing, the trap maintains the under pressure by removing water outside, and by this process, the original compressed shape is reached. After this process, which lasts

about 30 minutes, the trap is ready to fire again. The secretion of hydrolytic enzymes helps them in the easy digestion of their prey. They produce root-like runners called rhizoids, arising from the base of the inflorescence stalk, numerous, capillary, glandular, rarely branched up to 3 cm long. The stolons and foliar organs grow thick in ponds near coastal areas. Flowers are yellow with the upper and lower lip. Spour on the flower is cylindrical on base and narrow and blunt on end. Fruits are capsule. This aquatic herb also has many medicinal and pharmacological uses. It was reported the anti-malaria activity of *U. aurea*. Ecologically this herb is very important for the water bodies in which they grow. They are the indicator of water quality and are most commonly found in water with low pH (less than 6), they have gained the ability to live and compete successfully in poor nutrition. The extraordinary developmental morphology of the vegetative body in various *Utricularia* species is still incompletely known and unexplored in spite of several recent studies on aquatic, terrestrial, and epiphytic species.

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