

# LITERATURE REVIEW

**BRUGGER, J. and R. Rutishauser, 1988.** Diversity of vegetative development in epiphytic and terrestrial bladderworts (*Utricularia*, *Lentibulariaceae*). Submission 147, Bot. Soc. Am., UC-Davis, 14-18 Aug. 1988.

This study indicates that the generally held belief that a primordium in *Utricularia* can grow into any organ (stem, trap, rhizoid, flower) is not always true. SEM studies of development from seed to flowering were made of *U. alpina*, *U. longifolia*, *U. reniformis*, *U. pentadactyla* and *U. sandersonii*. Each species is characterized by its own developmental pattern, with variation in certain limits. The developmental patterns in the genus discloses several heretofore unrecognized taxonomically valuable traits, especially in primordial branching patterns.

**De RIDDER, F. and A. DHONDT.** Dynamics of long-leaved sundew *Drosera intermedia* populations at two extremes of a hydrological gradient. Holarct. Ecol. 10(4): 299-307. 1987.

Plants found on a path through a wet heath were compared to those around a pool edge. Low densities were found in both locations because of high mortality of seedlings due to summer drought and cover with algae after heavy rainfall on the path. At the pool site, the seedlings died off due to long-lasting inundation and neither population of seedlings survived to flower.

**HAEGGSTROM, C. and R. SKYTEN.** Two successional stages of the vegetation in a rock-pool in the Aland Islands, southwestern Finland. Ann. Bot. Fenn. 24(4): 311-316. 1987.

In the 1930s, a large rock-pool on Hertronklubb island was mapped and compared to a study in 1981. The rock-pool was once a marsh which changed towards a sphagnum pool and was dominated by *Typha* and now *Drosera rotundifolia*. The rock-pool became a fen-pool.

**KITCHING, R.L.,** A preliminary account of the metazoan food webs in phytotelmata from Sulawesi (Indonesia). Malay Nat. J. 41(1): 1-12, 1987.

In comparing the water bodies contained in bamboo internodes, stump-holes and pitchers of *Nepenthes maxima*, the author studied the food webs in each situation with a census of insects and larvae found in the corresponding water body.

**PAGE, O.T., et. al.** 1988. Apoplastic and ultrastructural characterizations of the trichomes from the carnivorous bromeliad *Brocchinia reducta*. Submission 110, Bot. Soc. Am. meeting, UC-Davis, 14-18 Aug. 1988.

Electron microscopic studies of the trichomes of this species disclosed that unlike other bromeliad genera, the cap cells of these trichomes remained alive and the cell walls of adjacent cells were in a labyrinth-like arrangement with periodic thin membranes present that had gaps. It was assumed that this unique structure allowed for absorption which was confirmed with lanthanum tracer studies that indicated that the material passed from the cap cells to the leaf mesophyll. Therefore, it is quite possible that these unique, encrypted trichomes are the absorptive site for nutrients. DES

**SANTOS, E.** The genus *Drosera* in Brazil: I A new species. Bradea 4(38): 305-308. 1986

A new species of *Drosera* namely, *D. pumilla* Em. Santos from Mato Grosso, Brazil is conspicuous by its tawny-hirsute inflorescence and size of the scape, up to 4.5cm.

## Coming in December

- CP in 3D
- *Sarracenia rubra*