

LITERATURE REVIEW

- Barber, John. Mucilaginous seeds: Interactions with microorganisms. Abstract in *Plant Physiology* 59, No. 6, June 1977.
The author demonstrated that mucilaginous pellicles (coverings) surrounding certain seeds possess protease (protein decomposing) activity which are capable of attracting, entrapping and killing mosquito larvae in the laboratory. He presumes that the prey is digested and products of digestion are taken up by the seed. In the natural environment, the seeds may actually attract and digest nematodes, protozoans and motile bacteria.
- Cooper, J. & Williams, S. Decay of the activated state induced by stimulation of the trigger hairs of *Dionaea*. Abstract in *Plant Physiology* 59, No. 6, June 1977.
- Debuhr, L.E. Sectional reclassification of *Drosera* subgenus *Ergaleium* (*Droseraceae*). *Aust. J. Bot.* 25(2):209-218. 1977.
The new species of Australian *Drosera*, *D. fimbriata*, was placed into a new *Drosera* section *Stolonifera*.
- Lichtner, F.T. & Spanswick, R.M. Ion relations in *Dionaea*. Abstract in *Plant Physiology* 59, No. 6, June 1977.
These authors show that changes in ion concentration in the inner wall of the trap take place before and after stimulation. The monitored ions were K^+ , Na^+ , Cl^- .
- Marton, L. Early application of electron microscopy to biology. *Ultramicroscopy* 1(4):281-296, 1976.
Did you know that the very first biological electron micrograph made was that of a thick section of *Drosera intermedia* strained with OsO_4 in 1934?
- Schnell, D.E. 1977. Pitcher plants. *Plants Alive* 5:24-25.
A popular article on sarracenias. Six black and white photos accompany a brief discussion of natural history and conservation problems.
- Stauffer, R.E. Insectivorous Plants. *Swamp News* XX(3):1-7, September 1977.
General review article on insectivorous plants illustrated by five black and white photos.
- Tinaglia, S. *Drosera binata*. *House Plants and Porch Gardens*, Dec. 1977, pp. 17-21.
A description of the *Drosera* species with three color photos are given.
- Williams, Stephen E. The response of *Dionaea* traps to raindrops. Abstract in *Plant Physiology* 59, No. 6, June 1977.
Plants of *Dionaea* were observed both in clear weather and during heavy rain. The closure rate for the traps during the night with no rain was 0.16 closures/leaf/week with 40% containing insects. The same population of traps had a closure rate of 0.24 during the rainy night but had zero captures. Therefore, closure rate was 50% higher when it rained while the capture rate was 100% lower.



Nepenthes ampullaria ground pitchers.

Bark chips are about 1.5 cm at most. Plant was sent as a seedling/rooted cutting to California State University, Fullerton, by P.A. Morrow. Photo by Leo Song.