Review of Recent Literature


Steve Williams referred to this older paper to us and wondered if anyone had followed up on the several *Dinamia* plantings made by the author and others earlier (she reviews these to date of publication) in the pine barrens. Her observations at the time indicated considerable seedling activity at some of the locations. She only lists the locations very generally, so someone who knew her would have to do the follow-up. (DES)


766-784.


Predacity of the eight species of test fungi was highly correlated to their ability to attract nematodes (r = .98). The presence of traps on the fungi increased attraction ability by a factor as much as 2. (DES)

Using Drosophyllum lusitanicum, the authors noticed that after neutral red staining, only mature sessile glands of a leaf took the dye while less mature glands were basal on a developing leaf did not (color photo in paper). E.M. disclosed that as the glands matured, gaps developed in the usually impermeable cuticle so that secretion and absorption could take place in the glands. (DES)

In CHO secreting cells of plants, connections between dictyosomes and ER were not observed. In protein secreting CP (enzymes), there are long trains of connections.

This is a well-written and useful review of work on sphagnum biochemistry and other ecochemistry in bogs. The following systems are discussed critically: cation exchange, atmospheric precipitation (particularly acid rain effects in ombrotrophic bogs), sulfur compound chemistry in the anaerobic depths, organic acids and the hydrologic regime. Each of these is reviewed in itself and in terms of a total ecosystem approach. The author proposes an outline of further research, particularly in terms of total ion and pH budget. The author feels that cation/hydrogen ion exchange in itself has been overly emphasized and may not even be the primary factor in bog chemical equilibrium. Finally, the primary equilibrium system may vary from one bog to another depending on various factors. (DES)

A portion of this paper (pp. 653-658) covers carnivorous plants and their mechanisms for alternate nutrition in the areas in the title. The main emphasis is on Australian species with a review and collation of several Australian CP physiology studies. (DES)

This is a very interesting, well-researched and well-written historical paper reviewing most of Darwin’s theories about Utricularia as presented in his famous 1875 book, Insectivorous Plants. As it turns out, current research has proved Darwin correct in most of his hypotheses and suppositions which in his time were probably beyond testing adequately. Darwin did err in assuming that prey entered the trap by forcing their way in, and the question of digestive enzymes secreted by the plant vs. prey autolysis by bacterial action is still unsolved.

Using EM, ultrastructural changes in gland cells are described as they mature. Golgi stacks form large secretory vesicles. (DES)


Carnivorous Plant Newsletter
This is a general discussion of ecologic and other biological aspects of the species as it occurs in marl fen bogs of the region. Detailed water and soil analyses are presented, along with comments on relationships to other CP in the same areas. It is concluded that the general landward placement of plants in lakeside fens is likely weather related. It is also concluded that the species grows where and how it does largely because of poor competitive ability as indicated by observations in the field and culture experiments. In culture, *D. linearis* appears to have more diverse capability in varying climate and pH environments than previously supposed as long as competition, soil moisture, light and solution total solids are controlled. (Reprints: D.E. Schnell, Rt. 1, Box 145C, Pulaski, VA 24301).

Systmsma, K.J. and R.W. Pippen. 1982. The Hampton Creek wetland complex in southwestern Michigan. V. Species of vascular plants. Mich. Bot. 21: 195-204. This fifth paper in a series on the ecology of the wetland in Kalamazoo County is a long species list among which are the following CP: *Drosera rotundifolia*, *Utricularia intermedia* and *Sarracenia purpurea*. (DES)

**THE 1983 LIST OF CP BOOKS**

Not available through CPN. Order directly from publisher or your local bookshop.

* - books intended primarily for children.

1. Insectivorous plants, Charles Darwin, AMS Press, 1893, 56 E. 13th St., N.Y., NY 10003, $27.50.
2. *Plants that Eat Insects: A Look At Carnivorous Plants, Anabel Dean, Lerner Publications, 1977, 241 First Avenue, Minneapolis, MN 55401. $5.95.
3. Plants of Prey in Australia, Rica Erickson, Univ. of W.A. Press, 1968, World Insectivorous Plants, 1347 17th St., Los Osos, CA 93402, Cloth, $75.00.
5. Nepenthes of Mt. Kinabalu (in English), Kurata, S., Sabah National Park, World Insectivorous Plants, 1347 17th St., Los Osos, CA 93402, $7.00.
6. Carnivorous Plants, Francis E. Lloyd, Peter Smith, 6 Lexington Ave., Magnolia, MA 01930, $10.00.