Review of Recent Literature

Evert, D.S. 1957-58. *Dionaea* transplants in the New Jersey pine barrens. Bartonia 29: 3-4.

Steve Williams referred to this older paper to us and wondered if anyone had followed up on the several *Dionaea* 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)

Jansson, H. 1982. Predacity by nematophagous fungi and its relation to the attraction of nematodes. Microb. Ecol. 8: 233-240. *(Continued next page)*

766-784.

Erickson, Rica. 1968. *Plants of Prey*. Lamb Paterson Pty. Ltd., Western Australia.

Faroog, Mohd. 1964. "Studies in the Lentibulariaceae, I. The Embryology of *Utricularia Stellaris* Linn. F. var. *Inflexa Clarke*." Proc. Nat. Inst. Science of India 30B (5 & 6): 263-299.

Fernandez-Perez, Alvaro. 1964. "Plantas Insectivoras, I: Droseraceas de Colombia." *Caldasia* IX (43): 219-232.

Fernandez-Perez, A. 1965. "Plantas Insectivoras, II: Droseraceas de Colombia." *Caldasia* IX (41): 5-79.

Gleason, H.A. and Arthur Cronquist. 1963. *Manual of Vascular Plants of Northeastern U.S. and Adjacent Canada*. Van Nostrand and Reinhold Co., N.Y., N.Y.

Harms, H. 1936. "Nepenthaceae" in Engler, *Die Naturlichen Pflanzenfamilien* Band 17b: 728-765.

Harvey and Sonder. 1894. *Flora Capensis* Vol. I., L. Reeve & Co., Kent, England.

Khan, Reayat. 1954. "A Contribution to the Embryology of *Utricularia Flexuosa* Vahl." *Phytomorphology* 4: 80-117.

Laundon, J.R. 1959. "Droseraceae" – *Flora of Tropical East Africa*. Crown Agents, London, England.

Lloyd, Francis E. 1942. *The Carnivorous Plants*. Chronica Botanica. Waltham, Mass.

Mazrimas, J.A. 1976. "On Growing the Australian Pitcher Plant *Cephalotus*." *CPN*, V (1): 10-11.

McDaniel, Sidney T. 1971. "The Genus *Sarracenia* (Sarraceniaceae)." *Bull. Tall Timbers Research Station* No. 9.

Ohwi, Jisaburo. 1965. *Flora of Japan*. Smithsonian Institution, Washington, D.C.

Pietropaulo, James & Patricia. 1974. *The World of Carnivorous Plants*. R.J. Stoneridge. Shortsville, N.Y.

Steyermark, J.A. and L.B. Smith. 1974. "A New *Drosera* From Venezuela." *Rhodora* 76: 491-493.

Taylor, Peter. 1954. "Lentibulariaceae" in Hutchinson's *Flora of West Tropical Africa*, Vol. II. Crown Agents. London, England.

Taylor, P. 1967. "Lentibulariaceae, Botany of the Guayana Highland, Part VII." *Memoirs of the N.Y. Botanical Garden* 17: 201-228.

Taylor, P. 1975. "Lentibulariaceae." *Opera Botanica* Ser. B, No. 4: 9-21.

Uphof, J.C. 1936."Sarraceniaceae" in Engler, *Die Naturlichen Pflanzenfamilien* Band 17b: 704-727.

Wood, Carroll E., Jr. 1955. "Evidence for the Hybrid Origin of *Drosera anglica*." *Rhodora* 57: 105-130.

Wood, C.E., Jr. and R.K. Godfrey. 1957. "*Pinguicula* (Lentibulariaceae) in the Southeastern United States." *Rhodora* 59: 217-229.

Wynne, Francis E. 1944. "*Drosera* of Eastern North America." *Bulletin Torrey Botanical Club* 71 (2): 166-174.

Zeimer, R., J.A. Mazrimas and P. Taylor. 1974. "World Carnivorous Plant List." *CPN* Special Project Suppl. No. 1.

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)

Joel, D.M. and B.E. Juniper. 1982. Cuticular gaps in carnivorous plant glands. In: The Plant Cuticle, Academic Press, New York, pp. 121-130.
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 mare 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)

Juniper, B.E. et. al. 1982.The relationships between the dictyosomes and the forms ofendoplasmic reticulum in plant cells with different export programs. Bot. Gaz. 143: 135-145.
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.

Kilham, Peter. 1982. The biogeochemistry of bog ecosystems and the chemical ecology of sphagnum. Mich. Bot. 21: 159-168.
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)

Lamont, B. 1982. Mechanisms for enhanccing nutrient uptake in plants, with particular reference to Mediteranean South Africa and Western Australia. Bot. Rev. 598-689.
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)

Meyers, D.G. 1982. Darwin's investigations of carnivorous aquatic plants of the genus *Utricularia*: misconception, contribution and controversy. Proc. Acad. Nat. Sci. of Philadelphia 134: 1-11.
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.

Outenreath, R. and M. Dauwalder. 1982. Ultrastructural and radioautographic studies of the digestive cells of *Drosera capensis*. J. Ultrastruct. Res. 80: 71-88.
Using EM, ultrastructural changes in gland cells are described as they mature. Golgi stacks form large secretory vesicles. (DES)

Schnell, D.E. 1982. Notes on *Drosera linearis* Goldie in northeastern lower Michigan. Castanea 47: 313-328.

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).

Systsma, 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, $15.00.
4. *Animals & Plants That Trap, Phillip Goldstein, Holiday, 1974, Holiday House, Inc., 18 E. 53rd St., N.Y., NY 10022, $5.95.
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.
7. The World of Carnivorous Plants, J. and P. Pietropaolo, R.J. Stoneridge, Peter Paul Nurseries, 1974, $6.30.
8. *Insect-Eating Plants, L. and G. Poole, T.Y. Crowell, 1963, 666 Fifth Avenue, N.Y., NY 10003, $4.50.
9. *Plants That Eat Animals, J.H. Prince, Thomas Nelson, 1978, 407 Ave. S., Nashville, TN 37203, $7.95.
10. CP of the U.S. and Canada, D.E. Schnell, John F. Blair, Publisher, 1976, 1406 Plaza Dr., SW, Winston-Salem, NC 27103, $19.95 plus shipping.
11. Carnivorous Plants, Randall Schwartz, Avon Books, 1975, 959 Eighth Ave., N.Y., NY 10019, soft cover $1.25.
12. Carnivorous Plants, Adrian Slack, MIT Press, 1979, 28 Carleton St., Cambridge, MA 02142, $19.95.
13. Cultivating Carnivorous Plants, Allen Swenson, Doubleday & Co., 1977, Garden City, NY 11535, $7.95.
14. *Carnivorous Plants, John F. Waters, Franklin Watts, Inc., 1974, 845 Third Avenue, N.Y., NY 10022, $4.90.
15. *Carnivorous Plants, Cynthia Overbeck, Lerner Publications, 1981, 241 First Avenue, Minneapolis, MN 55401, $8.95.
16. *Secrets of the Venus's Fly Trap, Jerome Wexler, Dodd, Mead & Co., 1981, 79 Madison Ave., N.Y., NY 10016, $6.95.