Review of Recent Literature

Heinrich, G. Laser micorprobe mass analyzer ion analysis of the trapping slimes of carnivorous plants. Biochem. Physiol. Pflanz. (BPP) 179(1/2): 129-143 1984.

Fingerprint spectra of the anions and cations in the trapping slimes of 7 Drosera species, of Drosophyllum, of 3 Pinguicula species and *Nepenthes alata* were analyzed. These slimes contained magnesium and calcium in higher concentrations than potassium and sodium. The predominant anion was chloride.

Karlsson, P.S. and B. Carlsson. Why does *Pinguicula vulgaris* trap insects? New Phytol. 97(1): 25-30 1984.

Plants were fed agar blocks containing different combinations of 3 nutrient solutions: nitrogen, phosphate and micronutrients. The controls were either not fed at all or with real insects. The result was that only phosphate had any significant effect on plant biomass. Nitrogen caused an increase in the root mass over the leaf mass while the reverse was found when all 3 nutrients were presented. The 3-nutrient solution affected the nitrogen-phosphate content of these *Pinguicula* plants. There wasn't any significant effect with the micronutrients alone. It was concluded that phosphate is the most important nutrient for growth of this plant.

Stewart, J. The Tender Trap. California Living Magazine. San Francisco Sunday Examiner and Chronicle. Oct. 14, 1984.

The author introduces three local Bay Area growers of carnivorous plants and describes the methods they use to find and nurture them. They are Judith Finn, a horticulturist at the UC Berkeley Botanical Gardens, Ray Triplett, a San Bruno grower of rare *Nepenthes* from Borneo and the Philippines and Joe Mazrimas, co-editor of CPN. They all have stories to tell on how they got started and what they think of their mysterious hobby.

Zachariah, K. 1983. Ascocarp induction in a natural auxotroph of a predatory fungus. Can. J. Bot. 61 :3262-3266.

Most predatory fungi have very simple culture requirements and can be grown in relatively simple acqueous solutions. However, *Arthrobotrys dactyloides* requires several specific amino acids to initiate the sexual process. DES

Zachariah, K. 1983. Growth responses of isolated knobs of *Dactylaria ellipsospora*. Can. J. Microbiol. 29:1295-1300.

The adhesive knob traps of this species can be detached from their hyphal stalks and cultured in isolation. This allows the sequence of various hyphal and reproductive structures regenerated to be studied as well as nutritional culture requirements at various stages. DES

Zachariah, K. and J.R. Victor. 1983. A natural auxotroph of a nematode-trapping fungus. Can. J. Bot. 61:3255-3261.

The nutritional requirements of *Arthrobotrys dactyloides* (see other review by principal author in this section).

Zachariah, K. 1983. Growth responses to nutrients of an auxotroph and a prototroph of a predatory fungus. Antonie van Leeuwenhoek 49:563-569.

In addition to nutritional requirements of *Arthrobotrys dactyloides* described in two other papers authored or co-authored by Zachariah and mentioned in this section, the organism grew best with sucrose as a C-source and responded strongly to phospholipids. DES

NOTICE

Due to technical difficulties, John Ladnier (N&V, Sept. CPN, p. 59) will be unable to fill orders for plants. The editors have been informed that money for unfilled orders will be returned. *Do not send any more orders.*