When everything was set up, I turned on the instrument and the audio oscillator (part of
the instrument) emitted a constant sound, always at the same pitch. When the plant's
electrical current changed, so would the pitch.

I touched a trichome once. The pitch went up, down, and leveled off. Now it sounded
the same as it always did. I touched it again and it repeated the same oscillations as
before; this time, however, the trap closed.

I tried this using a live insect in the trap, and I could hear two distinct touches of the
trichomes and then the closing of the trap. For quite some time then the insect stood
still. Then suddenly violent thrashing around was heard through the instrument. Repeat-
edly, the insect touched the trichomes. Little did the animal know he was only signalling
the plant to close tighter.

SPECIAL NOTICES

CP PHOTOS FOR SALE--JOE ISLEY (Box 2774, Duke Hospital, Durham, NC 27710), in the interest
of conserving CP, has become a photographer of them rather than a collector. His photos
are quite good and some have been published. These are in color, on 3 1/2 x 5 inch bordered
glossy paper, and the original slides were made with a Pentax camera. The prints are
35¢ apiece and are made up to order, so allow 3-6 weeks for delivery. Presently available
are: Sarracenia formosa, S. purpurea (venus), S. leucophylla, D. flava, D. intermedia,
D. filiformis, and Pinguicula caerulea. All photos were made in the field or in the habitat
gardens at the North Carolina Botanical Garden in Chapel Hill.

TREVOR KUCHEL is looking for seeds in large or small quantities of Sarracenia, especially
the different forms of species (either home grown or preferably collected in the wild).
Also, hybrid seed and homemade crossings are sought. Contact him at P.O. Box 110, Murray
Bridge, S.A. 5253 Australia, and please state what seeds you have and approximate price.

JOE MAZRIMAS has received relatively few requests for Nepenthes cuttings for the spring
of 1975. He thanks everyone for sending in a letter requesting the cuttings and their
description on how they intend to root and grow them. This is one last chance for the
year to acquire various species of this pitcher plant. There will be many cuttings to
send. See the notice on page 51 of #3 CPN. He also has several copies of Randall
Schwartz's book left for sale at $5.50 domestic and $5.75 for foreign orders postpaid.
This is the last chance for acquiring this book at this low price.

RECENT LITERATURE


A flexible length of silver wire was attached to a leaf with a mixture of electrode
paste and glue. Action potentials were produced in closed flytraps after prey had been
trapped and only if prey were still active. Continuous recordings could be made for
fifteen hours or longer.


In this book Dr. Carlquist discusses in one of its chapters the adaptive radiation
of plants in Western Australia. Among the plants mentioned are the tuberous Droseras
and their adaptation to fire and dryness. Also, the vining types of Drosera such as Drosera
heterophylla, one of the ten species, show adaptation with twining stems.


The author believes there is little evidence to support a taxonomic relationship of
this family with Droseraceae and Nepenthesaceae, and suggests that placement as a suborder
of the Theales would be best.

Forsyth, A., Robertson, R.J.: "K" reproductive strategy and larval behavior of the pitcher

The number of S. purpurea leaves limits the density of the insect larvae so that
only one larva per pitcher leaf utilizes the food present. As a result, few larvae are
produced but they are very large so that it is suggested that this larva is a "K"
strategist relative to other sarcoptagid flies.

Hashmi S., Siddiqui, S.: Trichomes on the floral parts of Utricularia. Bangladesh J.

Ontogeny, structure and distribution of four new types of trichomes of taxonomic
importance in U. bifida, minor, stellaris, dichotoma, and cornuta are described.

Ishizu, Hiroshi: Insectivorous Plants. Jour. of Medical Reports of Ohtsuka. No. 274,
pp. 30-41, 1975. IN JAPANESE

This little review contains some three dozen color photos of various CP and a brief
description of types and function of each one.
The mature utricule (bladder) can be characterized as having four different types of trichomes ornamenting the following regions: the external surface, entrance, threshold and cement epithelium, and the internal utricle surface. All were seen using the scanning electron microscope.

The authors found that Pinguicula alpina has a carbon dioxide metabolism more like the succulent plant, such as Sempervivum. This means that dark carbon dioxide fixation makes greater contribution than the light reaction.


Designated Prosera felix, this new species was found in the Geand Savanna. The plant small ("can be covered by a quarter") and the peduncle is quite short.


Good full color article mentioning the fifteen species of CP in Texas with excellent photos of four. County range map.


Chloroform and aqueous extracts of S. Flava roots (sic) showed antitumor activity against human epidermoid carcinoma of the nasopharynx in cell culture. Betulin was identified as one constituent responsible for this activity. There is also a brief review of folklore medicinal uses.

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