THE FORMATION, PUBLICATION, AND REGISTRATION OF CULTIVARS

by Larry Mellichamp
Biology Department
University of North Carolina at Charlotte
Charlotte, North Carolina 28223

In 1979 CPN (vol. 8, p. 79) was designated the official registration authority for cultivars of carnivorous plants. This was done in response to an increasing need for communication among people interested in growing carnivorous plants (CPN vol. 8, p. 51. June 1979). At that time and subsequently (CPN vol. 9, p. 20. March 1980) the proper procedure for describing and naming cultivars was discussed, and the first cultivar registration came in 1981 *(Drosera filiformis* (California grex) 'California Sunset' - CPN vol. 10, p. 95).

According to the International Code of Nomenclature for Cultivated Plants (1980)[1], the International Carnivorous Plant Society can become a nonstatuatory cultivar registration authority merely by agreement of the parties (the members) concerned. We received no notice of disagreement from anyone, and therefore the ICPS became the registration authority for carnivorous plant cultivars worldwide, and the periodic listing of cultivar registrations will occur in CPN. The statement [that there is no designated registration authority] on page 9 in the new book "Carnivorous Plants of the World," by James and Patricia Pietropaolo, is thus wrong.

The purpose of a registration authority is to see that the rules and recommendations of the Cultivated Code are followed in naming cultivars and hybrids of cultivated plants, and to maintain a listing of these cultivars in an easily accessible source.

To review, the term **"cultivar"** stands for *"cultivated variety"* and represents a highly desirable specimen with recognizably unusual or distinctive features that is propagated under cultivation by man. It may have *originated* in the wild or in someone's collection, either as a chance seedling of a species, or as a seedling of a natural or man-made hybrid. The point is that it is a *selection* of something and continues to exist only in cultivation. The plants are usually propagated vegetatively, by division (for example *Sarracenia),* cuttings *(Drosera* and *Dionaea),* or tissue culture (any cp); but, of course, annuals, like some *Drosera,* may be propagated by seed.

The cultivar name follows the scientific name, or hybrid name (see below), is in English (or whatever your native language is), is capitalized, and is in single quotes ('). The Cultivated Code states: "A cultivar name, when immediately following a botanical or common name, must be distinguished clearly from the latter, either by placing the abbreviation cv. before the cultivar name, or by some typographic device, preferably by enclosing it within single quotation marks."

In addition to the cultivar name of a selection, you may be dealing with a hybrid (either man-made or natural) between two, or more, species. If it is a natural hybrid, found in the wild, it should have a **"hybrid name"** in Latin according to the Code. For example, the hybrid between *Sarracenia flava* and *S. purpurea* has been given the hybrid name *Sarracenia* x *catesbaei.* The "X" (times sign) indicates that it is a hybrid. Hybrids that have not been given hybrid names may be referred to by their **hybrid formula,** such as *Sarracenia flava* x *S. oreophila,* in which the two parents are mentioned (in alphabetical order). Now, since these

latter two species could never hybridize in the wild (since they don't grow together), their hybrid should not receive a latinized hybrid name in cultivation. Instead, and this is very important, the hybrid combination should receive a **collective epithet,** or **collective name.** A collective name is the single designation -word or phrase of not more than three words in a modern language -that covers all the progeny of a particular hybrid combination. That collective name applies to the progeny no matter how often such a cross is made, or who makes it. The collective name is usually given after the genus name and is placed in parentheses (). The cultivar selection would follow. The collective name thus becomes a kind of "common name" given to a group of seedlings (a grex) resulting from crossing two or more parents. The parents may be species, or hybrids themselves. For example, the name *Drosera filiformis* (California grex) 'California Sunset' shows all of these elements, though you would have to read the published description to determine the details: a cross between *D. filiformis filiformis* and *D. filiformis tracyi* resulted in a group of hybrid seedlings [a grex] called "California;" a single specimen was selected and named 'California Sunset' as a cultivar. The purpose of the collective name is to identify a hybrid cross and to be able to trace back to the parents; the purpose of the cultivar name is to identify a specific selection and identify it in cultivation. The collective name could refer to many more individuals than a cultivar name. You would name the cross first (collective name) and then a cultivar (selection). This procedure has worked well for many years among orchid hybridizers, who have to keep up with thousands of crossed and selections a year. Rhododendron breeders, on the other hand, do not name crosses (no collective names), only selections (cultivars). In actual usage, the collective name may be very useful to identify the ever increasing number of CP hybrids; while the cultivar name may become more important as specific selections are made. The Cultivated Code recommends that both names be used when formally writing about hybrids and cultivars.

The cultivar is called a "selection" because it was chosen from among a group for its distinctive features, and is one of the "best" for some reason. The old saying "select the best and discard the rest" may be applied to many plants grown from seed in cultivation. While you may not literally discard all of your *Sarracenia* seedlings, certainly only the most outstanding specimens should be given cultivar names after a rigorous evaluation procedure. These cultivars then may become the plants that will be propagated *en masse* (normally by tissue culture) and be released for sale to the hobbyist grower or even the general public in some cases. Pitcher plants sold now to the public in the U.S. are generally wild-collected plants.

The value of having a cultivar is that you will know exactly what you are getting because it will be an exact duplicate, or clone, of the original selected specimen. And of course, it will cost more than just any old seedling. One may also select better-than-average seedlings from among a batch and offer those for sale under a collective name, but that is still not the same as offering named cultivars of outstanding selections. It is becoming more likely that tissue-culture will be the method for mass-producing CP. A single piece of a unique specimen would be very expensive if you had to wait and just divide the plant every year as it grows.

In order to accomplish valid publication of collective and cultivar names, you must:

1. publish the name so that it becomes distributed to the public (like in CPN)
2. publish it in a dated publication (not an undated nursery catalog, for example)
3. give a description of the plant.
4. it is recommended that you try to indicate how it differs from related cultivars, and that a color illustration be provided.

5. oddly enough, the Cultivated Code states that publication is NOT valid if it is against the expressed wish of the originator of the plant, or if the cultivar does not really exist.

The Cultivated Code recommends the following guidelines for the guidance of registration authorities [realize that cultivar names and collective names may be *published* in any suitable publication; **registration** is a separate process]:

New names submitted for registration should be accompanied by the following particulars:

1. name and address of the originator or introducer
2. name of the describer or namer, if the cultivar has been previously described, together with full reference to the date and place of publication. [A cultivar may have been named and described in the past, and just now be registered by someone else.]
3. the parentage, when known
4. details of observations or tests for distinctness, including date and place of testing.
5. a description, if not previously provided.

James T. Robinson (Box 1625, Connecticut College Arboretum, New London, CT 06320) is official registrar for CPN and information should be sent to him.

[1] A copy of the Cultivated Code is available from The American Horticultural Society, Mt. Vernon, Virginia 22121, USA. Inquire as to price.

NEW CULTIVARS OF *SARRACENIA*

Larry Mellichamp
Biology Department
University of North Carolina at Charlotte
Charlotte, North Carolina 28223

and

Rob Gardner
North Carolina Botanical Garden
University of North Carolina at Chapel Hill
Chapel Hill, N.C. 27514

We are presenting here a five cultivars of species and hybrids from various sources (as indicated) that we have been observing and evaluating seriously for at least two full years. One should not select cultivars haphazardly; they must prove themselves to be outstanding plants and the evaluator must consider the criteria carefully. Our evaluation criteria consisted of a consideration of:

Plant habit: good growth form with the leaves stiffly erect, not affected by wind or rain;

Plant size: was it compact; could it be grown under lights or in a small terrarium.

Leaf coloration: was there distinctive venation, good colors, interesting contrasts, a fall color change, etc.

Winter form: did the leaves retain color and substance better than average under cold but non-freezing winter dormancy.

Propagation: was the plant a vigorous grower, easy to divide.

Leaf production: was it constant, or seasonal.

Flowers: were they attractive, were they fragrant.

(Cont'd.)