

plants. This means that for the effort expended, one must exercise extreme patience in growing your plants. Never try to hurry them up into fast growth since that would only result in abnormal growth or form. Some species only put out a few leaves (pitchers) a year, but that is probably normal under the circumstances and not to worry about this. All we ask is that you grow your favorite CP the best way you know how, and that's where all the fun of growing these plants begins!

NEXT: A series on PROPAGATION

BOTANIST'S CORNER

Flowers, Sex, and Hybridization in Carnivorous Plants (cont.)

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HYBRIDIZATION

I should make a final comment regarding hybridization. This is usually considered to occur when you successfully cross two different species. The more closely related genetically two species are, the better the chance of hybridizing them. It rarely occurs in nature because of the differences between habitats, pollinators, and flowering dates. It is much more likely to occur in cultivation where the grower can control all environmental factors, in addition to the actual pollen transfer. Some species will hybridize readily, others will not. *Sarracenia* are a classic example of species which are all capable of hybridization with one another, and the hybrids can then in turn be used in further hybridizations to produce some spectacular results.

Other species, such as in *Pinguicula*, are more difficult or impossible to hybridize because the species are just too different genetically.

Any attempts at hybridization in cultivation could be important and produce novel plants, as well as indicate something about the genetic relationships of the plants involved. It is worth the practice to become proficient at crossing (both within and between species) to produce seed for exchange and preservation, and for ornamental purposes. Whenever you make artificial crosses at home, keep good records indicating what the species are, which is the female parent (received the pollen), and what the success of seed production is. Any seeds of pure species made available for exchange should indicate whether they are from cross or self-pollinated individuals. (If cross-pollinated, make sure both individuals are good, pure, typical specimens for that species.)

Problems encountered with artificial crossing can usually be attributed to poor timing (old pollen or unreceptive stigmas); actually not getting pollen on the stigma; plant in such poor health that it cannot produce a seed crop (unlikely, if the plant produces flowers in the first place); the crossing of incompatible plants (either flowers on the same plant, or plants of the same genetic clone); or the two species involved just will not hybridize (you can never be sure of this until you've tried many times). If you are doing critical hybridization work, whenever you cross two plants it is best to put bags made of silk stockings (or similar lightweight material) around the pollen-receiving flowers to keep insects from bringing additional unknown pollen to that flower.

For additional practical discussion of hybridization in CP, see appropriate portions of D.E. Schnell's *Carnivorous Plants of the U.S. & Canada* and Pietropaolo's *The World of Carnivorous Plants* (see CPN VI(1) for publishers). A good introductory botany textbook would provide further information on flower structure and terminology.

NOTE: I would be pleased to receive comments from readers regarding the contents of this column. I hope I am presenting information that is useful and interesting in a manner that is understandable. Although I have ideas for future articles, I would rather have ideas from you, the Reader, as to what you would be most interested in knowing more about. How about: a list of the pronunciation of CP names; the meanings of the scientific names of CP; the history of the discovery, naming, and early horticulture of CP. Send your comments and suggestions on a postcard or in a letter; none of your questions or suggestions will be considered inappropriate. DO IT TODAY! (T.L. Mellichamp, Biology Dept., UNCC, Charlotte, NC 28223).