Carnivorous Plant Culture in Holland

by Larry Mellichamp

I have just learned in detail about an amazing operation in Holland at a nursery called Cresco. There they have over 50,000 sq. feet of greenhouse space devoted exclusively to propagating carnivorous plants which are sold wholesale to mostly European and Asian buyers. They are generally interested in propagating CP from seed and cuttings; but Venus' Flytraps, Cephalotus, and 15 varieties of Sarracenia are propagated by tissue culture.

The person in charge of this enormous effort is Mr. T. deGroot. He visited the US in March, 1985 and spent the day with me at UNCC looking at my CP collection and describing his interests in commercial propagation. Mr. deGroot says that he can supply the world with propagated CP, and that he would like to see an end to exporting collected (from the wild) CP. For example, millions of Venus Flytraps are dug every year and shipped to Hol-

land and Europe (he has even bought them to keep them from going to other nurseries who only want to quickly resell them). Mr. deGroot is interested in selling only propagated plants. Right now he has some 2 million Venus Flytraps growing in his greenhouses, of which about 1.5 million are from leaf cuttings, and ½ million are from seed. He roots the leaf cuttings on a moist absorbent felt-like fabric mat, just lying on an open bench. After rooting, they are planted in a peat mix. He says he can grow better plants than those grown from collected bulbs; and soon he will be able to propagate them cheaper than digging them!

Mr. deGroot has apparently done an outstanding job of mass production of Sarracenia species and hybrids also. As the photos show, he has thousands of specimens grown from seed or leaf cuttings. He says they are easy to root from leaf



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cuttings if a piece of the rhizome (stem) is attached. Sarracenia psittacina is the easiest to root from cuttings in this way, but others work, too. The rooting takes place without the application of hormones, and the resulting plants are grown entirely without fertilizers. Mr. deGroot feels that he has achieved an ideal growing environment for the plants and evidence for this is that Utricularia, which are not purposely grown, frequently appear and thrive in pots of other CP.

Mr. deGroot is currently interested in increasing his collection of "mother plants" as he calls them, the stock plants from which seeds and cuttings may be taken. Thus, year by year, more propagules may be obtained so that enormous numbers of saleable specimens can be routinely produced. And these are beautiful specimens! The fact that they have spent their entire lives in a greenhouse under controlled conditions may be a factor in making them better plants for the public rather than wild dug plants that have been through the shock of digging, transport, re-establishment in a new environment, and then sold. Currently, Mr. deGroot has some 2,500 large Darlingtonia which have provided material to produce 25,000 small propagated plants. After several vears of building up stock, many thousands of plants can be produced that would have otherwise been collected from the wild. I personally believe, from my own experience, that propagated plants are easier to maintain than collected plants of Darlingtonia. Mr. deGroot says that most of the Darlingtonia offered for sale now are collected plants. Think about this: if we allow today's collected plants to be used as stock plants for tomorrow's propagated specimens, it would be a small price to pay for future security.

It was fascinating to see the photos Mr. deGroot showed me of enormous beds of Sarracenia purpurea, S. leucophylla, S. rubra, and several interesting hybrids. Recently at wholesale trade shows in Holland, Cresco has set up an exhibit of CP to show the beauty and uniqueness of these plants. By distributing colorful brochures

and posters, and by allowing the public to view these trade exhibits, interest is being drawn to CP. We are thus on the verge of a dilemma. If we generate interest in CP, we must be able to supply the demand for plants. These plants can come either from wild collected specimens, or from propagated plants. It could be devastating for us if more and more Sarracenia are being collected from the Southeast to be shipped to nurseries in England, Holland. Germany, and Australia to meet the demand for such plants. We should encourage nurseries like Cresco, and dedicated professionals like Mr. deGroot, to begin NOW to propagate large quantities of plants to meet future demands. Even if nurseries grow wild-collected plants taken from habitats that are being destroyed, the plants are still inferior to propagated plants. Besides, we should all be wholeheartedly against the massive destruction of wetland habitats in the Southeast where uncountable thousands of plants are lost each year. Even in the US, some of the people who dig plants for a living could begin NOW to learn to propagate for a living, and export propagated plants instead of dug ones. Now it is cheaper to dig; but what about a decade from now, with dwindling supplies of wild plants?

Let me close by emphasizing that Mr. deGroot's plants are not available to retail customers; they are probably not even available in the United States. If US growers are wortied about the competition, it is competition outside the US (as with foreign cars). It would be good if there were more people in the US interested in buying other CP than just Venus Flytraps at their local store. With a little special knowledge, *Sarracenia* and *Drosera* can be grown as easily as tropical orchids, bromeliads, ferns, and peperomias that require a little extra care.

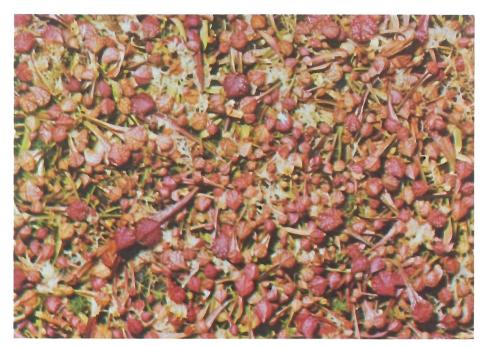
Above all, along with stimulating interest, the ultimate idea is to encourage propagation of CP so that people can enjoy them without sacrificing so many wild plants. (Please see photos on pages 14, 15 and 18.)



Mass production of Sarracenia purpurea at Cresco nursery in Holland.



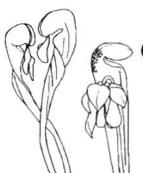
Sample of Mr. deGroot's some 2 million Venus Flytraps growing in his greenhouses.



Solid Sarracenia psittacina, from leaf cuttings, grown in Mr. deGroot's nursery without application of hormones or fertilizers.



Mr. deGroot, holding *Darlingtonia*, in his Holland nursery. Some 2,500 large *Darlingtonia* have provided material to produce 25,000 small propagated plants.



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COVER PHOTO

Commercial production of *Dionaea* at Cresco nurseries in Holland. (Feature article this issue.)

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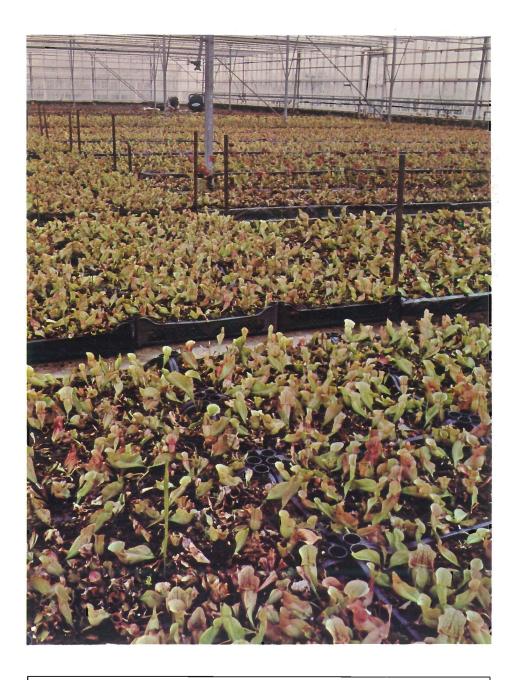
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Commercial propagation of Sarracenias in Mr. deGroot's large-scale nursery operation in Holland. Over 50,000 sq. feet of greenhouse space is devoted exclusively to propagating carnivorous plants for wholesale trade.