BEDNAR ANDBRAMBLETT HYBRIDS

*CATHY JO(LEESSII X. SPENDIANA) (BEDNAR/BRAMBLETT)

DISTILATORIA RUBRA X. VENTRICOSA (BENDAR/BRAMBLETT)

*EXCELLENS (ROKKO X. MIXTA SUPERBA) (BEDNAR)

HACHIJO X. (THORELII X. DYERIANA) (BEDNAR/BRAMBLETT)

*KHASATA (KHASIANA X. VENTRATA C) (BEDNAR)

*LEESSII (MIRABILIS "GOLD STAR" X. MIXTA SUPERBA) (BEDNAR)

*MARGARETEA (KAMPOTIANA X VENTRICOSA) (BEDNAR)

MARGARETEA X. HIBBERDII (BEDNAR/BRAMBLETT)

MARGARETEA X. MIRABILIS (BEDNAR/BRAMBLETT)

*MARY CRUZ (MARGARETEA X. SULLIVANII) (BEDNAR/BRAMBLETT)

MIRABILIS - AUSTRALIAN X. MIXTA SUPERBA (LANG/BRAMBLETT)

MIRABILIS X. TED PAYNE (BEDNAR/BRAMBLETT)

MIXTA X. FULGENT KOTO (BEDNAR/BRAMBLETT)

MIXTA X. VENTRICOSA (BEDNAR/BRAMBLETT)

MORGANIANA X. MIRABILIS (BEDNAR/BRAMBLETT)

OISOENSIS X. MIXTA SUPERBA (BRAMBLETT)

OISOENSIS X. WITTEI (BRAMBLETT)

RAFFLESIANA X. MARGARETEA (BEDNAR/BRAMBLETT)

*<u>REDLANDERII</u> (KAMPOTIANA X. MIXTA SUPERBA) (BEDNAR/ BRAMBLETT)

ROKKO X. SAVANAH ROSE (JOHNSON/BRAMBLETT)

*SPLENDIANA (KAMPOTIANA X. MAXIMA) (BEDNAR)

SPLENDIANA X. ACCENTUAL, KOTO (BEDNAR/BRAMBLETT)

SPLENDIANA X. MIXTA SUPERBA (BEDNAR/BRAMBLETT)

SPLENDIANA X. REDLANDERII (BEDNAR /BRAMBLETT)

SPLENDIANA X. SULLIVANII (BEDNAR/BRAMBLETT)

*SULLIVANII (KAMPOTIANA X. KHASIANA) (BEDNAR)

THORELII X. RAFFLESIANA NIVEA (BEDNAR/BRAMBLETT)

THORELII X. SAVANAH ROSE (BEDNAR/BRAMBLETT)

VENTRATA X. SAVANAH ROSE (BEDNAR/BRAMBLETT)

VENTRICOSA X. VENTRATA G (BEDNAR)

- *WEIGNERII (BLAMY KOTO X. D. INTERMEDIA (WEIGNER/BEDNAR)
- *YAROSIS (TRUNCALATA X. MARGTARETEA (BEDNAR/BRAMBLETT)

Literature Review

Conran, J. G. and A. Lowrie. 1993. *Byblis liniflora sap*. occidentalis(Byblidaceae): A new subspecies from northwestern Australia. Aust. Syst. Bot. 6:175-179.

This plant occurs in the western part of the range of the species along western Australia's northern coast, hence the epithet. Previously referred to informally as aff. 'Kununurra', it is herein described as the above named subspecies. The plants are characterized by a somewhat taller habit, more flowers on a. plant, prominently serrated petal margins, a deeper magenta petal color and prominent yellow color of the underside of the petal. The subspecies seems to grow in drier conditions than ssp. liniflora, and even where the ranges overlap somewhat, they do not appear to grow together as determined so far. The paper contains a rangemap, key and photo of the holotype herbarium sheet.

^{*} indicates unpublished Nursery & Cultivar Names

Determann, Ron. 1993. Bog plant conservation: The Atlanta Botanical Garden. Tipularia 8:6-8.

This a recounting of the Garden's efforts in conservation and particularly plant and site recovery. CP aspects are discussed in an article elsewhere in this issue, but at this point we should mention that other species such as the rare *Helonias bullata* which is endangered in Georgia and occurs in only one site, are also being raised from seed in the Garden with the ultimate aim of re-entry into nature when sites are recovered.

Folkerts, George and Debbie. 1993. Southeastern pitcher plant bogs: A natural history sketch. Tipularia 8:10-16.

This is an excellent summary article on the history and nature of pitcher plant bogs with particular concentration on the Gulf coastal plain. CP plant, insect and other animal associates are mentioned. The usual pressures on the bogs are listed, including the almost hysterical anti-fire factor that was so prevolent until recently. Fire is a key factor in maintaining these bogs by destroying competing weedy vegetation. At this point, the authors conclude that throughout both the Gulf and Atlantic coastal plains, only 3% of the original pitcher plant bogland remains, which is indeed tragic. The article has five black and white photos by the authors.

Frank, Lisa. 1993. Vanishing pitcher plants: Drawings by Marcia R. Cohen. Tipularia 8:2-5.

Marcia Cohen is a professor at the Atlanta College of Art and has completed a portfolio of very fine sarracenia drawings in color and large format. This article is largely a recounting of her interests and experiences. Sarracenia oreophila is featured in color on the cover, and there are three additional black and white printings in the article in addition to one of the artist hard at work. The artist did the drawings at the suggestion of Ron Determann who advised her horticulturally while they were in progress. Marcia worked from plants in the field, including several stays in two tents in the Okefenokee—One tent to sleep in and a taller one to set up her equipment. She also checked points with the plants in the Atlanta Botanical Garden collection. I had the pleasure of meeting Marcia at the Garden in September, 1993 where her drawings are on display. They are most striking in their original large format and the plants seem to leap off the canvas.

Russell, Gail. 1993. Can pitcher plants still be found? Tipularia 8: 17.

The author, with the help of several state authorities, tries to compile a list of locations where the public can still view natural pitcher plant stands in Georgia. She mentions that this was a difficult job since good locations that are readily accessible are practically non-existent in the state. This reviewer can sympathize with the author. CP enthusiasts regularly write me to ask for an itinerary of locations in the southeast for a tour. Growing weary of hauling out the files and picking locations each time such a request arrived, I developed a general itinerary covering non-endangered sarracenias in an arc of the southeastern coastal plain which I kept o disc and would print and send out to everyone requesting such. These were generally well-known locations immediately accessible to paved roads since I did not wish to take responsibility for leading folks back into areas on the roads and tracks I take four- wheeling, and I was not certain I wished to popularize any of these latter locations which are the last best remaining, This past summer (1993), I happened to drive by many of these locations in my universal tour and was shocked with barely being able to recognize them in their severe decline. This decline is such that my entire canned tour on disk is already extinct after only two years? I am not really surprised given the rate of downfall of good CP areas. I will not redo another itinerary—The shelf life is too short. von Schmeling, Henning. 1993. Bog collecting pressures. Tipularia 8:9.

This brief half page article mentions efforts under way at the Chattahoochee Nature Center near Roswell, GA where the author is horticulturist, to propagate large numbers of CP through tissue culture in hopes of selling them, particularly abroad to relieve pressure on colecting from the wild to export plants. This is a noble undertaking, but it is already in place if all foreign importers would use it. Bob Hanrahan is capable alone of supplying the entire world demand for live CP from his CP farm in south Alabama. Also, the large Netherlands firm Cresco has a pretty good lock on the European market with its propagated plants in huge greenhouse ranges.

* Readers of the preceding five literature reviews above will note that they all came from the same issue of a journal called TIPULARIA which is an annual publication of the Georgia Botanical Society. Since this issue is rather pregnant with bog and CP articles, readers who want their own copies may send \$10.00 US to Sally Emory, 7575 Rico Rd., Palmetto, GA 30268, asking for a copy of the 1993 annual issue.*

Earley, Lawrence S. 1993. Life in deathtrap. Wildlife in North Carolina. 57:2-3. This is a good summary of the various organisms that inhabit traps of sarracenias successfully. It is illustrated by some nice drawings by David Williams. Besides the familiar activities of Exyra spp., mosquito larvae (S. purpurea), rhizome borer (Papaipema appasionata), and the wasp that builds alternate layers of nesting cut grass pieces in the tube where it lays its eggs alongside of paralyzed insects for the larvae to use as food, are all mentioned.

Nelson, EC. 1993. White-blossomed Pinguicula grandiflora Lam. (Lentibulariaceae) in The Burren, County Clare, Ireland. Watsonia 19: 273-275.

The author describes a single plant of the species with a white flower and green sepals among a stand of the usual purple flowered members of the species, and names it forma *chionopetra* (chion=snow (white flower); petra=rock (habitat)). The author also reviews the history of color variants, f. pallida having a purple throat in the flower, and ssp. rosea with a purple calyx and pink throat. A subvar. albescens mentioned in 1909 could be the same as f. chionopetra, but was not legitimately described. The author found his plant in a remarkable natural area in Ireland known as The Burren.

Stolzenburg, William. 1993. Busting plant poachers. Nature Conservancy 43:16-23.

This article in the Nature Conservancy's bimonthly magazine features efforts against plant poachers. The article mentions that most illegal activities against threatened and endangered species have been directed toward animals, but at last there seems to be an interest developing in plants among wildlife officers at various levels. Previously dismissed with a wave of the hand as being more interested in checking fishing and hunting licenses, wildlife officers have now swung in a botanical direction in some areas. Mentioning cacti and a few native orchids briefly, the great part of the article concentrates on CP, particularly Dionaea in southeastern North Carolina, and particularly in the Holly Shelter qamelands and Green Swamp sanctuary.

For those not familiar with North Carolina, there are ninety-some state reserves set up across the state ranging from a few hundred to many thousands of acres known as gamelands. As the name suggests, these regulated sites are intended mainly as public hunting preserves. There is management to encourage game primarily, and incidentally some interesting plant species may benefit. Roads into the qamelands are mostly gated and opened only during specific hunting seasons. Holly Shelter is 48,795 acres in Pender County, right in the middle of Dionaea country, or what is left of it.

The article features a rather colorful group of wildlife officers (black belts in marshal arts, ex-marines, run and work out every day, etc.) who look very protectively on Holly Shelter in particular. One large color photo features a sergeant peering

menacingly out from behind a tree, watching and waiting.

"Flytrappers" as Dionaea poachers are known, have grown in numbers and audacity over the years. A tolerated cottage industry of minor collectors in the past (wildlife officers "used to have fun with those old boys") to numerous, very serious mass collectors interested in big numbers; and indeed an industrious collector can make \$250 easily in one morning, but he had better not try it in Holly Shelter! In spite of gates, officers still catch poachers with fair regularity, or grimace at their holes. Modern poachers are armed, are also exmarines (nearby Camp LeJeune seems to be feeding the employment needs of the area), and use military tactics such as fatigues, night collecting, and flattening on the ground when they hear traffic approach.

What is left of the Green Swamp on a lot of mesic real estate along Rt. 211 is also closely watched by a different team. A pair of poachers came tooling out a dirt road on bicycles one morning into the arms of wildlife officers who discovered several thousand

Dionaea stuffed into their shirts! Talk about bulking up.

The article also features Ron Gagliardo in his greenhouse with large numbers of *Dionaea* he has propagated by tissue culture as a commercial alternative. The plants are magnificent.

Due mainly to short-sighted habitat destruction, the more agressive modern collecting poses a real danger to Dionaea numbers now, as those of us who have been roaming this part of the country for several decades can attest to. It is becoming more and more difficult to find accessible stands of the flytrap of the size we saw easily and commonly just twenty years ago.

Stolzenberg, William. 1993. Magic mesas—Venezuela's tepuys. Nature Conservancy. 43:10-15.

This article is in the bimonthly bulletin issued by the Nature Conservancy. The peculiar spelling of tepuy (compared to the more familiar tepui) is not explained. The article opens with a breath taking full color aerial view of an unnamed tepui. Apparently nearly the entire system of tepuis is part of a huge park called Canaima. There are five additional photos, but no CP. The director of the park is profiled, and he has his work cut out for him since over 2500 people climbed Roraima in 1992 alone! Mention is made of increased burning of the surrounding lowland forests by increasing populations of natives. This is resulting in erosion which is silting streams and wreaking havoc with the country's hydroelectric system. Other sources have also indicated that as the Gran Sabana below the tepuis is deforested, the source of massive transpiration and evaporation water that feeds the daily rains which supply water to the biologically amazing tepui summits is threatened.

Zauner, Phyllis, 1993. Fatal attraction. American Horticulturist 72: 22-27.

Carlock, Marty. 1993. Wooing pitchers. American Horticulturist 72: 2831.

CP are favored with an unusual back to back pair of articles in a popular gardening magazine, the October, 1993 issue of American Horitculturist. The first is the expected summary of all CP for those who have either never heard of these plants or have only a nodding acquaintance. However, the article is well written for this audience and reasonably accurate with a minimum of dramatics. There are seven full color photos of various CP across the spectrum, and I was particularly impressed by a fine photo of Pinguicula grandiflora. Some legitimate commercial sources are also listed at the end of the article, as is the policy for this magazine. California Carnivores and CPN are also mentioned.

The second article concerns our old friend, fellow physician and pathologist George Newman of New Hampshire. There is a nice photo of him in one of his greenhouses, and five additional color photos of CP including a near two page spread of Sarracenia oreophila in the field. The article is a good profile of George's history with CP, his experiences and his growing methods and philosophy regarding field botany, propagation and CP in general.