\times mirabilis) cross, it would be a N. (distillatoria \times mirabilis) cross and certainly not a N. (khasiana \times gracilis) cross. Although N. distillatoria is still a possibility instead of N. gracilis, nothing written or living can confirm it. Unfortunately, all we have left today are hybrids that were crossed with N. \times hybrida and N. \times sedinii. Both are now extinct. The familiar so-called "N. \times hybrida" is simply a mislabeled N. alata

green form, crowned a hybrid accidentally two decades ago.

REFERENCES

L.H. Bailey, Standard Cyclopedia of Horticulture, 1922.

R. Fleming, CPN Vol. 8 #1, March 1979.Many undated reprints of the Gardener's Chroncile.

H.J. Veitch, Journal of the Royal Horticultural Society, 1897.

200 MILES WITH MELLICHAMP

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It was August 4, 1985, when Dr. Mellichamp and Steve Broyles arrived in Mobile and called me from the motel that they were ready to see great fields of CP. Within an hour, we were on our way to the nearest CP stand.

It was like a football game with numbers being called out rapidly and recorded just as rapidly. When I finally regained my equanimity, I realized that measurements were being taken which sounded just like a good old football game. Each day we travelled fast and far so that each minute was utilized in the field. We travelled as far west as Gulfport, Mississippi, northward about 100 miles, and finally eastward to the Crestview-Defuniak Springs, Florida area. It was a seemingly endless zig-zag pattern. Although almost every location had been previously mapped, one or two we had to skip because of lack of time. By taking shortcuts when possible, we found several totally unrecorded areas.

Temperatures soared well above 100°F for several days and we were blessed with a cooling shower almost every afternoon. Humidity in the field exceeded the temperature until it rained. In the evening when we crossed the Mobile River, the steaming fog held to the tops of the forest like clouds in a South American forest, a haunting reminder that we were in the very limits of the tropical-temperate zone.

We obtained specimens for propagation, hybridization and herbarium use. Almost every field boasted at least two species and numerous hybrids in various stages of interbreeding. Often, there were more hybrids than pure species. Fortunately, we got a fleeting glance at a snake and evidently it was late to a meeting and did not so much as tip his hat as he hastened away. We were constantly plagued by red-bugs and ticks but only once did we encounter a group of carnivorous mosquitoes. They were starving when we stopped and overweight when we left. Every repellent we used was a wasted investment, and only a sauce for the mosquitoes.

On an interesting rest stop at the Perdido Vineyards in Alabama, we watched a 15-minute filmstrip and tasted the fine wines made from the native muscadines, one of which is the Rose Cou Rouge.

We met Ms. Beverly Bottoms in southern Baldwin Co., a new and very enthusiastic ICPS member who lives in Mobile. On one of our excursions, I was so tired that I waited in the van while Beverly, Larry and Steve dove into a cane-break fifteen to 20 feet tall. We had been sniffing out S. leucophylla \times S. flava for quite some time. Suddenly, my hair stood straight up as I heard a lot of loud yelling and screeching. I grabbed the "judge" (a 44 magnum pistol) and forgetting my troubles, I plunged through the cane and briar to the rescue. I could envision my friends up a tree and a 300-pound black bear daring them down. To my relief, I



Field of Sarracenia leucophylla and S. leucophylla \times S. flava. Baldwin Co., AL.



Mixed population of S. leucophylla and spectacular hybrids with "cut-throat" S. flava. Baldwin Co., AL.

Photos by J.C. Moore

saw everyone huddled around a colony of typical Gulf coast *S. flava*. A specimen was taken for pressing and confirmation.

If these plants were the hybrid, S. flava × leucophylla, they would be easily identified by the first spring tube and the last seasonal tube. It looks like almost all white with a good S. flava stripe across the throat while another form looks like S. flava with a very dark splotch in the throat but exhibits numerous small, light windows in the hood and tube.

These tubes, both types, do not trap insects; but the best trapping tubes are those with rich color form of *S. leucophylla*. There is much introgression involving both species.

Sarracenia alata, a very light yellow-green form has been noted in the mid western area of Baldwin Co., but there is no point where the two species (S. alata and S. flava) overlap. Many hybrids exist with S. purpurea and S. psittacina with S. leucophylla being the great adultress of them all. One would suspect that S. leucophylla would be all green with pale yellow flowers and total lack of anthocyanins. More mysteries abound: how did S. alata extend itself almost 75 miles across Mobile Bay and why do some Mobile Co. S. leucophylla have some S. flava shapes?

Sarracenia purpurea was observed in SE Jackson Co., Mississippi, and due north in Wayne Co. It's interesting that none have been found between these two points until well inside of Mobile Co. There is a gap in the range for S. purpurea although the habitats are liberally sprinkled with S. alata, S. leucophylla, S. psittacina and S. rubra ssp., a very hardy and prolific plant.

Our travels continued on to Crestview Florida area, noting along the way the copper-form of *S. flava*. (This writer is convinced that Copper *S. flava* is a form of *S. leucophylla* hybridization.) These forms are varied and beautiful and usually no two are alike; one particular field seemed to be devoid of *S. leucophylla* and *S. purpurea* and yet there were quite a few hybrids between the two. Moving further

east to Niceville-Crestview area, we found an isolated area of *S. flava* var. *maxima* that I and someone else had knowledge about. We located the prized *S. flava* maxima and a hybrid of *S. purpurea* × *S. flava maxima* (*S.* × catesbaei "maxima") that I had kept well hidden for several years. The large size of this hybrid is living proof that this strain of *S. flava maxima* is genetic. Only *S. flava* and *S. minor* are the two forms that pass the "maxima" influence on to their offspring.

One notable fact is the variation found in *S. psittacina*. Numerous colonies can be found that are all green with yellow sepals, varying degrees of bloom stem length, pink-and red-petaled, large and small head and wide and narrow wing. None of these characteristics can be attributed to environment (water or sunlight).

In general, none of the Sarracenia was in excellent condition and almost none of the hybrids had bloom stalks. The two Siberian blasts of cold arctic air, well below freezing temperatures, laid every field of Sarracenia low just before bloom season. This was followed by a very long drought. One- and two-year-old seedlings did not survive and flowering was reduced by 75%. Hopefully, a few well managed fires and a mild winter will allow a bountiful crop next year.

We all enjoyed the entire trip and I especially enjoyed our coined phrases of "Sinanyms, Antinyms, Homenyms and Omenanyms." Mrs. Moore (My Rib) and Ms. Bottoms prepared us a dinner of seafoods cooked every known style and we "pigged out" two nights.

On one occasion I attempted to pin down Dr. Mellicamp to a positive "yes" or "no" concerning the correct taxonomic identification of a group of plants. When he got through explaining the "Ifs-andbuts" and other evasions, I knew that he was not going to commit himself at that time. He did, however, properly affix the carrot dangling before my nose so I would keep on exploring, and we all agreed that all coo-coos are not found in clocks!

SUMATRAN EXPEDITION JANUARY 1985

by Greg Russell, 71 Melrose Drive, Flindersview, Queensland, 4305, Australia

It is difficult to describe the elation I felt as the Quantas 747 lifted off from Brisbane. What made the trip so enjoyable was the knowledge that within a few days, my friends and I would be trekking in the remote Sumatran jungles. The first week my wife, Lea, and I spent shopping and sight-seeing in Singapore. One trip to Sentosa Island, a tourist attraction in Singapore Harbour, rewarded us with the discovery of *N. rafflesiana* and *N. gracilis* growing near Fort Siloso. Lea returned to Brisbane, and on the following morning, I flew out to Jakarta.

I had not been to Jakarta before and my first impression when stepping from the airconditioned comfort of the plane into the thick, humid atmosphere is that it hits one like a hot, wet blanket. Fortunately, the customs and immigration checks were quick and I was met outside the terminal by Roger and Marjan Shivas who had arrived from Perth. The three of us had spent the previous twelve months planning, by cor-

respondence, our expedition to Sumatra. It was great to be together again and ready to commence the expedition that we had worked towards for so long.

The rest of the day was spent taking in the sights of Jakarta. The next afternoon we left by bus to travel north through Java, then across the Sunda Straits and along the Trans Sumatran Highway to the Padang Highlands. The 42 hour bus journey is an exciting trip and one not easily forgotten. Rice tropical jungles, monkeys, exotic birds, and a foreign culture and traditional architecture of the villages that we passed made the trip one of the highlights of our expedition. An overcrowded bus, sleepless nights, unfamiliar food and the occasional breakdown were small prices to pay.

On our arrival in Bukittinggi we found accommodation and made arrangements to climb Mt. Sago (2,762 m). The following

As a matter of clarification, Gulf coast bogs do not quake; you do the quaking! Our CPs thrive best where water bubbles up from subsurface streams, usually via crayfish holes. We call this type of water flow "artesian", and often it has a sulfurous odor. Where the subsoil water is not present, CPs are scattered and depend on rainwater and the sponge-like action of the soil. Rabies in the native animal population is common and to be feared.

I had a wonderful time, and if I ever recover I will write again about the *Drosera* and *Pinguicula* in the same area.

Dr. T.L. Mellichamp is an associate Professor of Biology, University of N. Carolina at Charlotte. A quiet and reserved person in public and an overgrown "Teenager" when in the field, he has a mesmeric attitude tht totally captures heart and sould of his students; he

is the typical "absent-minded Professor."

Mr. Steve Broyles is a graduate student at the University of Georgia at Athens. Steve is quite serious and business-like, very observant, sharp-minded as a razor blade and will hopefully be one of our future botanists. He is a former student of Dr. Mellichamp's. When in the "field" working, there is no play; and when he relaxes, that is also total, thoroughly enjoying himself at leisure time. An up-andcoming "Southern Gentleman" of the First Water. This young man I predict will be one of our most knowledgeable and respected Botanist-Biologists for the future. Dr. Mellichamp is very fortunate to have Steve for assistant, but I am the most fortunate in having the pleasure of observing them work together. I look forward to the next expedition. (See p. 102) for additional photos.)



Sarracenia flava "copper top" in a population of S. leucophylla and hybrids near Milton, FL.

Photo by J.C. Moore



Steven Broyles with a collection of tubes of Sarracenia alata showing varying color forms. Stone Co., MS. Photo by Larry Mellichamp.



Steven Broyles in field of *S. flava*, with a few *S. leucophylla* and *S. purpurea*. Near Milton, Fl. Photo by Larry Mellichamp.