

ALMANAC:

Society for Pacific Coast Native Iris



Spring, 2007
Volume XXXV, Number 2

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Prices listed are for SPCNI members

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Victor A. Cohen: The British Iris Society 1967 Booklet, 5.5x 8.5, 40 pages, 16 line drawings, 8 color and 6 black-and-white photographs. Brief descriptions of species and sub-species including their distribution. \$8.00 postpaid, \$10.00 out of US.

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Lee W. Lenz: Photocopy of *Aliso* original. Booklet 5.5x8.5, 72 pages, 9 line drawings, 14 photographs and 12 maps. Definitive work on the taxonomic status of the *Californicae*, with a key to the species and sub-species. Detailed maps and accounts of distribution. \$8.00 postage paid, \$10.00 out of US.

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Lewis & Adele Lawyer: ALMANAC, Fall 1986. 22 pages, 9 photographs. \$4.50 postage paid, \$6.50 out of US.

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(707) 964-3907

The charge is \$7.50 for either of the two sets. The first set deals with species: the second set is concerned with hybrids. **The combination set is no longer available.** The slides in each set will be contained in a Kodak carousel. The carousel will be convenient to use and less likely to be damaged in shipment. Payment (payable to SPCNI) should be sent to Terri Hudson, SPCNI Secretary/Treasurer. The person requesting the slides is financially responsible for return of the slides.

ALMANAC

DEADLINES: March 15 and September 15.

Back issues are available for \$3.50 each, postpaid. Please request from Secretary/Treasurer.

Chronological index \$2.00 postpaid, Index by subject matter, or by author, \$4.00 each. Contact:

Steve Taniguchi ST1732@aol.com

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MEMBERSHIP AND SUBSCRIPTIONS

The Society for Pacific Coast Native Iris is a section of the American Iris Society. Membership in AIS is **not** a requirement for membership in the SPCNI, but is suggested and may be of considerable benefit.

Membership	Individual	Family
Annual	\$8.00	10.00
Triennial	20.00	23.00
10 year	60.00	75.00
20 year	110.00	125.00

Please send membership monies to the SPCNI Treasurer. For foreign: annual or triennial please add \$4.00 per membership per year; 10/20 year membership, please add \$20/\$40 per membership.

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Membership in the American Iris Society is not required for SPCNI membership. However, AIS membership is suggested and may be of considerable benefit.

Send Membership renewals or inquires to the Membership Secretary:

Tom Gormley
 PO Box 38
 Cedar Hills, MO 63016-0028
 e-mail: aismemsec@earthlink.net

Annual,	Single:	\$25.00
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Calendar year memberships. May be paid by check, VISA or MasterCard. Overseas memberships include first class postage, and are payable in U.S. currency.

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SPCNI MEMBERSHIP LIST

SPCNI is offering its membership list of individuals for a slight fee to cover the cost of mailing and printing (approximately \$3.00 for the US, \$4.00 for overseas). This list can be used only for contact purposes and cannot be used or sold as a business mailing list. If anybody wants to be excluded from the list, please contact Terri Hudson.

PLEASE ADVISE SPCNI AND AIS OF A CHANGE OF ADDRESS



President's Message

Technically, Spring is here. Physically, it's colder this week than it was last week. Mentally, Spring has been coming since January 1. Ultimately, it'll get here! And then it'll be summer, and our favorite flower will be gone again---and seed pods will be coming, to be harvested and sent to the Seed Chair, to be sold and planted in the winter and germinated in the spring and.....

Spring is a time of renewal and growth. As you see from the front of this publication, SPCNI has renewed its commitment to the iris kingdom, developed a logo, and grown a new Almanac cover design. Kudos to Jay Hudson for taking a motif used previously by the organization and developing it into a clean, modern insignia, which will soon appear on our website, and to Jody Nolin for transforming that logo into a closely related new Almanac cover design. Your Executive Board hopes you are as pleased with the results as they are.

One place you'll see our new logo already is on the website of the USDA Forest Service. National Botanist Larry Stritch, aided and abetted by our Ken Walker (Recorder) and Steve Ayala (Webmaster), has recently completed a module on native irises for the Forest Service's "Celebrating Wildflowers" website. We're proud to have been able to contribute to such an effort, and you can view the result at <http://www.fs.fed.us/wildflowers> . It's been well vetted, but please let me know if you spot anything amiss and I'll pass it along.

On the SPCNI website <http://www.pacificcoastiris.org> the "teaser" photograph at the entrance is of Ryan Grisso's El Centro Gardens in bloom at his Open House last year, in advertisement of this year's event. Good going, Ryan, and what great exposure for PCI! If you have pictures that would also be a great "teaser" or know of another event or iris discovery that should be featured on our website, contact Webmaster Steve Ayala, stevayla@sonic.net.

There are a lot of Pacific Coast iris eligible for AIS awards this year, and I would urge all AIS judges to visit gardens and see as many as possible for at least a second time this year. Yes, they're all beautiful, but we want to be sure the toughest, most vigorous AND beautiful PCI are brought to special attention with the Mitchell Medal, the Awards of Merit, and the Honorable Mentions. There is a listing of the candidates elsewhere in this issue. Take a look---how many have YOU seen?

Speaking of the American Iris Society, its National Convention this year is in Oklahoma City, OK on April 30 thru May 5. Our SPCNI meeting there in the Oklahoma City Marriott Hotel is scheduled at (shudder) 7:30 am on Wednesday, May 2, with a program on "Growing PCI in Difficult Places." If you'll be in OKC come on in, whether to add your comments to the mix or just to wake us all up!

May your gardens be healthy, your bloom season beautiful and your explorations fruitful,

Debby

Resurrection

Richard C. Richards

This observation has nothing to do with Easter. It has to do with a situation I have encountered several times over the years, and I think it is worth passing on.

While reviewing my notes on the propagation process for native plants used by Horticulturist Dara Emery several decades ago at the Santa Barbara Botanic Garden, I found his observation that occasionally a rhizome would be tardy in responding to his elaborate procedure for getting new growth quickly. Some of the rhizomes would begin to respond several months later than most of the rhizomes he was treating, occasionally at the very end of the process.

This correlates with an observation made by George Stambach, a Pasadena hybridizer of PCIs in the 1960s and early 1970s. I was in his garden with him one spring day, and noticed several cans of what appeared to me to be dead PCIs. I asked him about this, and he said that sometimes a rhizome would take as long as a year to start growing. If the rhizome were particularly important to him, he would simply wait out the year, though the rhizome appeared dead. He showed me a can with new growth starting. He said the rhizome had been in the can over a year, had appeared dead, and had just now started growing again. He claimed that such resurrection was unusual, but was worth waiting for if the rhizome was important.

This in turn triggered my memory of an experience I had recently. A clump of 'Clarice Richards', my own introduction, had appeared to be dying in the fall. It looked dead by early winter. I simply ignored it, being busy with other tasks. I thought I had lost the clump to those mysterious factors that will sometimes make an apparently healthy clump decline rapidly and die.

Late in the spring there were new spears of growth, which stayed small all summer, and then started active growth in the late fall. The clump is now flourishing again.

I don't know if anyone else has noticed similar happenings, but it does suggest that we not give up too quickly on a rhizome or a clump that appears to be dead, especially if that variety is important to us. We just might get a resurrection of the clone.

Welcome new members

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Almanac Readers, Share your Experiences!

Terri Hudson

I have been working on indexing the species and hybrids of the past Almanacs, thinking that an expanded Index would be helpful to some of you, the members.

I keep reading wonderful notes from members around the world telling of their successes and losses, why they think they have success and loss. All of this would be so helpful to new members as well as sometimes for you more experienced readers.

Our Almanac can have good color and some good past articles rejuvenated, but the Almanac can only be great if you, the members, write a short blurb periodically. Let me quote from the first ALMANAC which was published in March of 1973, written by Ray Chesnik, the first Editor." To be effective, a society must incorporate the diverse opinions of its disparate membership. Only in this way can we logically evaluate and then determine how best to grow and bloom, and then advocate the flowers for which we care so much. So this newsletter is our mouthpiece. As such our newsletter can and should be interesting and informative to all readers. The only way this can be so is for all members to contribute to it."

The word ALMANAC was selected by Ray because it means:"A miscellany of useful information, including entertaining remarks, pithy and scientific observations, together with remedies for sundry ailments, both grave and trivia"

Today (March 6th), Jay and I were both eager to tell each other that we saw our first bloom of the season,'Just My Type'.For years, I recorded very carefully first bloom, length of bloom time and unusual findings. It is not that I am not interested in doing this any more; time is of the essence with family responsibilities and our business. Some of you are probably keeping these records and not sharing them with others, SHARE, SHARE, SHARE....this was happening in the past, it should be happening again.

We are so fortunate to have Jody Nolin as our Editor but she needs your input, (She did not put me up to this!)

Diseases of the Pacific Coast Iris

Part 2, LABORATORY RESULTS

Adele Lawyer

Reprinted from the Fall 1986 SPCNI Almanac

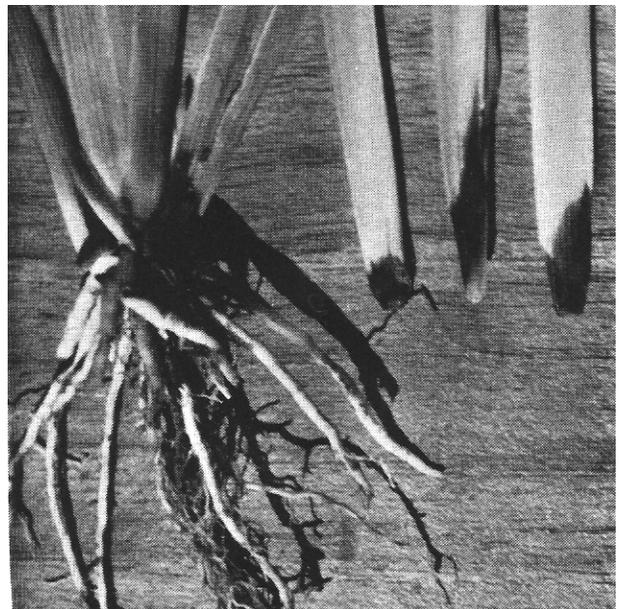
As you have learned from the foregoing section (ed. note: See SPCNI Almanac Fall 2006), by 1981 we began to realize that growing and hybridizing Pacific Coast Native Iris would include solving a few transplanting problems, and dealing with a couple of diseases. We also knew, however, that PCNs were beautiful and fascinating enough to be worth the extra effort involved in confronting the problems. We, therefore, set out to improve our cultural practices as well as to clarify the disease problems. In the case of PCN Crown Rot Disease, this meant defining the typical symptoms, finding the causal pathogen or pathogens, and evaluating control methods.

We have been continuously involved in this study with variable intensity since 1981, and with increased intensity since 1984, when I retired from Del Monte Corporation's Agricultural Research Department and came home with two borrowed microscopes, an alcohol burner, and a load of test tubes and Petri dishes. The research has been sporadic because it is not our only pursuit. Furthermore, space for pot tests has been

limited because we do not wish to infest our garden soil with pathogens, and there is a limit to the space available indoors for tests of this kind. Dr. Robert Raabe of the Department of Plant Pathology, University of California, (U.C.), has been helpful in this regard, offering his time, greenhouse space, and materials to whatever extent necessary. Although, to date, the University tests have been less productive than we would have wished, we appreciate the personal interest Dr. Raabe has taken in our problems. PCNs, understandably, are not on as high an economic plane as are Easter lilies and poinsettias, but he has managed to find space for as many plants as we could spare for tests.

Addressing the first of our goals, that of defining the symptoms, we have found that, in our garden at least, the first indication of PCN Crown Rot Disease is a yellowing of the outer leaves. The color is somewhat yellow-orange, distinct from the tan-into-brown which is normal for maturing outer leaves of PCNs. At this stage and later, when the central leaves start to die and turn a grayish-green, the leaves can be pulled free from the crown at the ground line. They offer no resistance to even a light pull, in contrast to normal dried leaves which pull free with difficulty, if at all. Affected leaves are often black at the base. The surface of the crown may also be black and, when the plant is dug, a limited portion of the roots immediately adjoining the crown are also frequently black to tan. The disease seemingly affects the crown tissues at the surface of the soil preferentially, and separates both leaves and roots from their nutritional sources. The disease organism may enter the crown through a root or from surface contamination, but if the plant is dug and examined before general decay has occurred, the bulk of the roots, and even the central tissues of the crown may still be white and turgid. If the plant is dug a little later it is nearly impossible to keep it in one piece, and the roots may fall away completely.

Plant with typical symptoms of PCN Crown Rot, showing how leaves pull away from the diseased crown and how most of the roots are still healthy.



Our first attempt to identify the causal organism(s) was in October, 1981, while I was still working at Del Monte. As you have read, three seedlings in bed Q had developed symptoms of Crown Rot Disease. From two of these seedlings I isolated a *Pythium*, and from one of the two, a *Rhizoctonia*. The *Pythium* culture was taken to U. C. for identification as to species, but a complete identification was never made. Neither of these two cultures was ever tested for pathogenicity. These were the only cultures made before I retired, although some microscopic examinations disclosed the presence of water-mold organisms in a few other plants examined during that time.

A few months after my retirement, we established a 'laboratory' at home, first in our dining room, and later in a spare bedroom where it still exists. In the latter area there is room to grow a few potted plants, set up the microscopes, and store cultures and equipment. Since 1984, many diseased PCNs from our garden have been examined here, and numerous cultures made. For microscopic examination, I take a tiny piece of

discolored tissue from the edge of the advancing diseased area for viewing. In this area you can see the thread-like fungus structures called 'mycelium', and also the sporophores and other organs which help in identification.

To make cultures, I take apparently still-healthy tissue just beyond the discolored area where the pathogen has not yet appreciably destroyed the cells. Here, the pathogen is more likely to be growing in advance of other contaminating microorganisms which quickly colonize diseased tissue.

The first isolations made in our home laboratory were taken from couple of diseased plants given to us by Joe Ghio from his garden in Santa Cruz. Our observations of these plants coincide with those made on similar plants from our own garden. In a preliminary microscope examination, water-mold fungi, *Fusarium* sp., and *Rhizoctonia* Type 1, were observed. All three of these fungi were also isolated. Among the water-molds, a *Phytophthora* and a *Pythium* were isolated.

In August, 1984, three of the above isolates, a *Pythium*, a *Phytophthora* and a *Rhizoctonia* were taken to Dr. Raabe at the University, and a pathogenicity test, using these three cultures, was planned. At U. C., the three cultures were added to soil mixes in separate bags and left to incubate in the headhouse. In early September we dug and washed the 214 discarded seedlings remaining in our seedling bed, and met Dr. Raabe at the University greenhouses where the inoculated soil mixes were supposed to be waiting. All but one bag had mysteriously disappeared, and the identifying tab had been removed from that bag. There was sufficient soil mix in the remaining bag to fill 60 3-inch clay pots; so we revamped our plans to include the following variables, with 12 plants in each variable. There was one plant per pot, watered-in with tap water unless noted otherwise. All dips were 10 minutes in duration.

1. Dipped in Subdue before planting.
2. Dipped in Subdue plus Benlate before planting.
3. Dipped in Subdue plus Benlate and watered-in with Subdue-Benlate drench.
4. Not dipped, but watered-in with Subdue-Benlate drench.
5. Plants undipped (untreated check).

The remaining 154 plants were planted without any treatment in separate pots in case the missing soils turned up later.

Whatever the organism was in the bag, the soil turned out to be non-pathogenic and the only thing learned from the test was that the best growth occurred in the pots in treatment 3, the combined Subdue plus Benlate dip and drench.

All other cultures with which we have worked were isolated from diseased plants in our own garden, and I will begin my discussion of these with those from diseased plants in bed P. Although many such cultures were obtained, those of most interest were taken from the plant of COUNCILMAN which had been moved from bed P to the standby bed, where it later developed symptoms of the disease. As mentioned in the first part of this article, this plant of COUNCILMAN had been transplanted from bed P after being dipped in a Clorox solution and soaked in Subdue. In spite of this, however, it became diseased and on April 3, 1985, it was removed from the standby bed for examination. Two types of water molds were seen under the microscope, and an *Aphanomyces*, culture 85-6B, was isolated. ("85" is 1985, "6" is the sixth culture made that year, "B" is the second of two organisms growing out of this sixth piece of tissue. *Rhizoctonia* Type 1, *Fusarium*, *Pesticola*, and several saprophytes were also seen and cultured.

The *Aphanomyces* culture, 85-6B, was tested for pathogenicity in pot tests at our home in July, 1985, along with cultures of the *Fusarium* and *Pesticola*. Cultures were mixed into a clean soil mix (Rod McClellan steam-sterilized "Super Soil"), placed in 4-inch plastic pots, and planted with 4 seedlings in each pot. Plants in the pots containing *Aphanomyces* 85-6B were dead within four weeks, but *Pesticola* and the *Fusarium* were found to be non-pathogenic. Both of the latter fungi, however, have a possibility of being secondary organisms which could impart the often-seen black coloration by colonizing tissue previously invaded by the primary organism.

Our culture of *Aphanomyces*, isolate 85-6B, has been lost since the experiment just described was conducted. *Aphanomyces* is extremely difficult to isolate, notoriously fragile in culture, and difficult to maintain. The soil

which we infested with 85-6B has been retained in pots, however, and PCN seedlings planted in this soil in August and November of 1985, and again in July of 1986, have all died. This *Aphanomyces* remains the only culture we have, thus far, proved to be pathogenic.

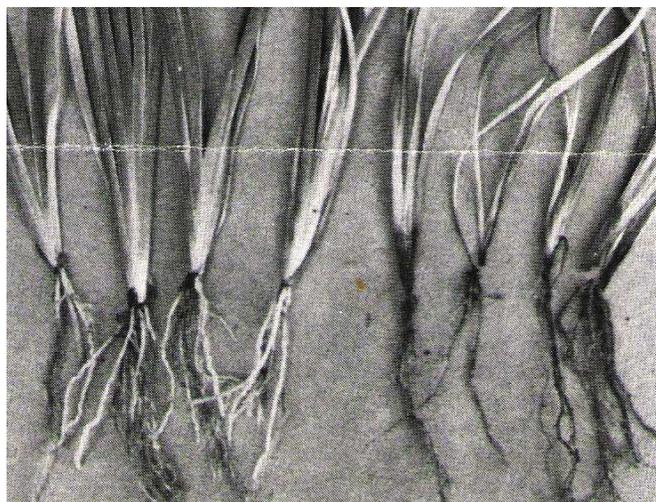
I have observed *Aphanomyces* in the tissues of other diseased PCNs, but, to date, have failed to capture it in culture for a second time. Because of its difficulty, however, this is not surprising. On the other hand, I have not observed it often enough under the microscope to conclude that it is the only pathogen involved in PCN Crown Rot.

Observations have been made, and cultures obtained, from every area in our garden where Crown Rot has occurred, and on the whole, the results have been comparable. I generally find one or more of the water molds; but the fact that I have found at least 4 diverse species is puzzling unless the PCNs are susceptible to a wide array of water molds. I have found *Rhizoctonia* often enough to speculate that it, too, is involved. Numerous *Fusaria* have been seen and isolated, but most have occurred after the plants were kept in a moist chamber for a few days. A *Fusarium* could be involved, since many in this group are pathogens, but we have seen no evidence to support their involvement.



Plants growing in pot test. On the left, those growing in non-diseased soil; on the right, in diseased soil from bed D.

Plants taken from a pot test. On the left, those grown in the clean-soil check; on the right, from soil infested with *Aphanomyces*, culture 85-6B.



A summary of the organisms observed under the microscope shows that common soil inhabitants which are non-pathogenic, were most frequently seen, followed by water mold fungi and two types of *Rhizoctonia*. Water molds were also the most frequently recovered in cultures, with *Rhizoctonia* less frequently isolated. The table below lists the frequency of each type seen or isolated. All figures are presented as a percentage of

the total.

MICROSCOPE AND CULTURE SUMMARY

February 1984 through January 1987

	<u>MICROSCOPE</u>	<u>CULTURES</u>	
WATER MOLDS	31%	54%	33%
RHIZOCTONIA Type 1	20%	33%	14%
RHIZOCTONIA Type 2	8%	13%	9%
OTHER (SAPROPHYTES)	41%		44%

In the 'OTHER' category were various bacteria, but they are not included in the count above. Included are the fungi *Alternaria*, *Cladosporium*, *Fusarium*, *Penicillium*, *Pesticola*, and *Trichoderma*. Nematodes and soil mites were also found, and may be contributing to the spread of the disease by injury to the plant tissues. *Fusarium* species were the most frequent representatives of this group, both observed and isolated. *Fusaria* are common soil inhabitants and are easily isolated; but they can be pathogenic as well as saprophytic. For this reason, some of the *Fusarium* cultures have been tested for pathogenicity, but, thus far, with negative results. Some of the 'other' fungi on the list, especially the last one, *Trichoderma*, are known to be antagonistic to certain pathogenic fungi.

The water mold fungi are in the class, *Phycomycetes*, a primitive class of fungi. Three of the water molds, *Aphanomyces*, *Phytophthora*, and *Pythium*, which I have isolated from PCN Crown Rot-infected plants, are all well known as plant pathogens, causing both seedling and major root diseases in many horticultural crops. They are called water molds because many of the species live directly in water, and all can survive, infect, and move to new infection sites in water with their motile, swimming spores. Without water they could not infect, but unfortunately neither could the plant exist.

Rhizoctonia, on the other hand, thrives under hot, dry conditions and although moisture is no deterrent, it is not necessary for its survival. Primarily it causes a damping-off disease of seedlings, but it attacks older plants as well. I have isolated two types of *Rhizoctonia*, one with hyaline (transparent) mycelium, 'type 1', and one with dark mycelium, 'type 2'. Although the dark one, which we are calling type 2, is widely prevalent in many crops, type 1 has been found associated with diseased PCNs twice as frequently as type 2. Type 1 has also been isolated by Dr. Raabe from plants we brought to him.

To summarize, it should be emphasized that this section constitutes an update on the procedures followed in our efforts to identify the cause of PCN Crown Rot Disease. The study is not complete, and additional, more comprehensive pathogenicity tests are needed.

To date, we would conclude that one of the water molds, an *Aphanomyces*, is pathogenic to PCNs. We strongly suspect that *Pythium* and *Phytophthora*, frequently seen in the tissues of diseased plants and often isolated during our studies, may be equally pathogenic; but this has not been proven in tests to date.

The hyaline *Rhizoctonia*, which we have arbitrarily called type 1, may well be playing a role in combination with the water molds to produce the symptoms of this disease. Tests now in progress at our home and at U. C., in which this *Rhizoctonia* is being tested alone and in combination with a water mold, may confirm this assumption. Although we have loosely called this *Rhizoctonia*, type 1, the actual anastomosis type of this fungus will eventually have to be identified by experts at U. C.

The Emery Propagation Process

Richard C. Richards

Dara E. Emery, Horticulturist of the Santa Barbara Botanic Garden during the 1970s and 1980s, employed a process for the propagation of Pacificas that was nearly foolproof. I have found some old notes I took which describe the process, and since the information could be valuable for some of our members, I have written this account from my extensive notes, taken during several visits to the propagation unit with Emery in 1974 and 1975. The process is complicated and involves some equipment not normally available to the average gardener, but perhaps some part of the process can be added to someone's propagation techniques to improve the rate of success in transplanting.

Emery claimed that if he got rhizomes between September and March he rarely lost a clone. He said this was true for virtually all native California species, not just irises. I visited his propagation unit often enough to see for myself that this claim was accurate. Virtually all the material I watched him propagate was doing fine weeks and months later. He gave his permission for me to take extensive notes and to publish them in any way I wished. My account here is more complete than that given in the Almanac for March 1975.

Emery bare-rooted all material, and cut it into easily handled pieces of one or two, occasionally three connected rhizomes if they were small. He dipped these for a minute or two in a solution of the fungicides captan and malathion at the recommended strength. The pieces were then planted in a sterile medium consisting of 2 parts peat, 2 parts #30 crystal white sharp sand, 1 part perlite or sponge rock, and moistened.

This was followed by fertilizer at half the strength recommended in UC System Manual 23. All water used in the propagation and plant unit was de-ionized since the local water was very salty (800 – 1000 ppm total soluble salt content, most of which was manganese).

Then the material went into the misting unit, installed in a lath house, where it was kept moist by periodic spray of de-ionized water. While I was there misting occurred every five minutes, automatically adjusted for humidity. The pots were set on gravel, beneath which was a heating unit that kept the pots at 65 degrees F. The plants remained in this unit being heated and misted for four weeks. There was no other heat in the lath house. Winter temperatures in Santa Barbara rarely descend to near freezing.

At the end of that time the misting was stopped, but the plants were still bottom-heated for another two weeks. The purpose of this was to harden the rhizomes, and growth at that point was usually strong, with occasional flowering. Ghio's *Pasatiempo*, which has a reputation for flowering in November in Santa Cruz, flowered vigorously with this treatment. Other rhizomes of both Californicae species and hybrids were less eager to bloom, but many did.

The material was then given a shot of ammonium sulfate at normal strength, and the rhizomes were either planted out in the garden within a few days, held in the containers in which they had gone through the propagation process, or potted up into one-gallon pots for future planting in the garden. In the misting unit the rhizomes were in smaller pots, depending on the size of the rhizomes, and were kept in these pots if planting in the Garden was in the short-term plans.

Few people will go to the trouble of setting up such a unit. Emery was being paid, in part, to successfully

propagate all the material he acquired, and he used the best techniques he could find or modify. Some of the steps used by Emery might be emulated by others. He insisted on using a fungicide on the new material. His potting mix was light and well drained, but kept moist by the misting unit, obviously never drying out. He used ammonium sulfate at the end of the process on the vigorously growing rhizomes.

If he lost material during his propagation process, he left it in place until the whole batch had been removed from the unit. He stated that occasionally a rhizome would look dead, then spring into growth at the end of the process. I may have observed dead rhizomes on rare occasions. I did observe some rhizomes of the same clone in different pots growing at different rates on occasion, some vigorously and some not so vigorously.

What would happen to the irises when planted out in the Garden, with the hazards of gophers, the excesses of the great American public with their happy feet as well as sticky fingers, and a fairly heavy summer watering schedule, is another matter. No doubt other factors are involved. Some of the treated material simply did not survive when put out in the garden, but that hardly seems to be the result of what went on in the propagation unit.

SPCNI TREASURER'S REPORT

1/1/06 through 12/31/06

Income		Expenses	
'06 Convention Sales	1,747.55	'06 TREK-EXPENSE	1,650.16
'06 TREK - INCOME	2,850.00	AIS INSURANCE DONATION	300.00
BACK ALMANACS	161.00	ALMANAC	1,888.84
BOOK SALES:		CHECKLIST	93.50
CHECKLIST	13.50	MITCHELL MEDALS	3.50
LENZ-HYBRID	8.00	O6 CONVENTION EXPENSES	520.22
BOOK SALES – Other	<u>42.00</u>	PRINTING-INVITATION TO JOIN	537.00
Total BOOK SALES	63.50	SEC-TREASURE:	
DONATIONS	114.77	OFFICE SUPPLIES	92.51
DUES	995.00	POSTAGE	<u>252.26</u>
INTEREST EARNED	29.20	Total SEC-TREASURE	344.77
MISC INCOME	127.00	SEED EXCH EXP	74.77
PHOTO CD	206.99	SLIDE PROGRAM	5.35
SEED EXCHANGE	385.00	Taxes	<u>20.00</u>
SLIDE RENTALS	15.00	Total Expenses	<u>5,438.11</u>
Income - Other	<u>25.88</u>		
Total Income	6,306.91	Total Income/Expenses	868.80

Jay Hudson, Treasurer

Robert Hubley Remembered

Richard C. Richards

Robert Paul Hubley, or "Bob" as he preferred to be called, was a grower, hybridizer, commercial gardener, and enthusiastic advocate for PCIs during the period of the 1970s until his death in early 1991. His interests since the 1960s encompassed many parts of the iris world, and he served in many capacities as a result of those interests.



A brief biographical sketch can sometimes convey a bit about the person. He graduated from the University of California, and during his undergraduate years he worked in the orchid greenhouses of Armacost and Royston in Los Angeles. World War II he spent in the Naval Air Transport Service, and this led to a career in aviation, with TWA and then at Los Angeles Helicopter Service.

Retirement gave Bob the time he needed to pursue his iris interests fully. Moving from Los Angeles to Riverside, he founded Longview Gardens, his commercial PCI nursery, named for the somewhat narrow but very long city lot on which he grew PCIs, and reblooming TBs for his wife Ellie, an unfailing supporter of his efforts.

His interests and service to the iris community can be illustrated by a few of the offices he held in iris organizations. He was a Master AIS Judge, an AIS RVP of Region 15, President of the Southern California Iris Society, a First Vice President of SPCNI, and President of the Reblooming Iris Society.

A listing of his offices cannot begin to convey the warm, friendly smile with which he greeted visitors to Longview Gardens, his firm handshake, and his unflappable personality.

In 1985 he moved the Garden further east to Yucaipa, well on the way to Palm Springs. Moving a large garden of any plants is not easy. Moving PCIs, with their special requirements, took patience as well as courage. If anything, Yucaipa is hotter than Riverside in the summer, and Riverside daily has temperatures in the 90's, often 100's for days on end.

Bob knew the old wives' tale that PCI will not thrive or even survive in hot, interior Southern California climates, but he continually proved it was a myth. A series of TIAs (Transient Ischemic Attacks, or "little strokes" slowed Bob up a few years after the move to Yucaipa, and a massive stroke took his life in early 1991.

As a hybridizer, he introduced a dozen PCI hybrids, of which two are known by the author to still exist: 'Orchid Resprite' and 'Smoky Wine'. That there are still two in existence speaks well for Bob's hybrids' vigor and hardiness. The fact that we know of only those two is as much the result of limited circulation of the plants as any other factor. The PCI community in Southern California has never since been as robust as it was in the period of around 1950 through 1970, when such hybridizers as Eric Nies, Marion Walker, Richard Luhrsen, The McCaskills, George Stambach, August Phillips, and of course Lee Lenz, were active. Hubley kept that tradition alive during the 1980s.

For years Longview Gardens was the only source for Lenz's exotic *I. munzii* hybrids. By duplicating the

exact conditions required for the Lenz hybrids, Hubley grew them successfully for years in Riverside and in Yucaipa.

If for no other reason, Bob should be remembered for his 'Orchid Resprite'. Introduced in 1971 as a chance seedling from 'Orchid Sprite', this iris is one of the toughest and most vigorous PCIs the author has ever seen. In 2001 the author was invited by Ellie Hubley Allen, Bob's widow, to dig some of Bob's plants that had been moved from Yucaipa to Banning, even farther east than Yucaipa.

Growing there in Banning, between two homes where it daily got hours of the hot summer sun, was 'Orchid Resprite', crowding the sidewalk, having taken over the entire bed. It has taken up vigorous residence in my garden in Corona, and continues its aggressively hardy ways. The author is using it in hybridizing since this kind of strength needs to be maintained in PCI hybrids. It takes sun, shade, drought, extensive watering in the crucial hot summer period, and the threats of transplanting about as well as any PCI I have seen. It is certainly in the top three in this regard in hot interior climates.

Bob also had a hand in compiling the first checklist of Pacific Coast Native Iris, a task involving much work and little recognition. Lack of recognition never seemed to bother Bob. He authored several articles in local iris publications on growing and transplanting PCI, plus his own booklet on the topic, and these articles are still valuable sources of information.

How do you sum up a human life? Bob certainly enjoyed his, and accomplished so many useful goals for the good of many people.

I want to thank his widow, Ellie Hubley Allen, who provided much of the information on which this article is based, and who presently resides in Mansfield, Texas, where she has undertaken germinating and raising seedlings from seeds of 'Orchid Resprite'. Latest report is that she has one very vigorous seedling in a 6-inch pot, now 9 inches tall. If this seedling is like its pod parent, it has a great chance of establishing itself in Texas just as its pod parent did in the hot regions of the interior of Southern California.

Seed Exchange 2006

Bob Sussman

As many of you know this was my first Seed Exchange experience. I made plenty of mistakes but the seeds are out! If your check has been cashed or card debited and you have no seeds, check your postal official's yard for small grass like shoots.

This year 632 seed packets went out to 29 members. This included members from 6 countries outside the US. The hottest seller was Debby Cole's, 'Dracularity', with 15 specific orders. This was followed by 'Mission Santa Cruz', 'Gold Dusted', 'Oxymoron', and 'Pretty Boy'. In total 124 different items were ordered by the members. Hybrids as well as species, mostly new but some of the older inventory items were both discovered and ordered. These included some of the Lawyer hybrids as well as others.

Next year I'll try to get the orders out faster and make the process simpler. I appreciate all the nice notes and email that I got with the orders.

So, save your seeds and take lots of pictures.

All the best in the new flowering season.

2006 PCI Registrations and Introductions

BLUE BOSSA (F. J. Webbing, R. 2006). Sdlg. FJW19/00. CA, 10.5" (27 cm), M. S. purple violet (RHS N82B) overlaid fine veining of violet (83B); style arms midrib purple-violet (N82C), violet margins (N88C); F. purple violet (N82A), fine violet (83A) veining radiating from violet (83A) signal; lightly wrinkled at margins; slight fragrance. Parentage unknown, seed from Ghio.

BROADLEIGH ANGELA (Broadleigh Gardens, R. 2006). CA, 26" (67 cm), M. Pale blue self, F. washed deeper blue-purple, signal yellow veined blue. Parentage unknown.

BROADLEIGH CHARLOTTE (Broadleigh Gardens, R. 2006). CA, 18" (45 cm), M. S. pale lilac veined deep lilac; style arms lilac; F. pinkish purple, signal yellow veined purple. Parentage unknown.

BROADLEIGH CHELSEA YELLOW (Broadleigh Gardens, R. 2006). CA, 19" (49 cm), M. Pale straw yellow self, S. faint brown veins, F. prominent brown veins, signal deep yellow veined brown. Parentage unknown.

BROADLEIGH EMILY (Broadleigh Gardens, R. 2006). CA, 14" (35 cm), M. S. creamy white veined light blue; style arms cream; F. cream washed blue purple, signal yellow, brown veins. Parentage unknown.

BROADLEIGH FENELLA (Broadleigh Gardens, R. 2006). CA, 18" (45 cm), L. S. straw, light brown veins; style arms straw; F. deep rose, narrow straw edge, signal straw veined deep rose. Parentage unknown.

BROADLEIGH JEAN (Broadleigh Gardens, R. 2006). CA, 14" (35 cm), M. S. yellow, faint brown veins; style arms yellow; F. deep yellow, brown veins, signal yellow. Parentage unknown.

BROADLEIGH PENNY (Broadleigh Gardens, R. 2006). CA, 19" (48 cm), L. S. and style arms purple; F. deep purple, signal white, yellow central line, purple veins. Parentage unknown.

BROADLEIGH ROSE (Broadleigh Gardens, R. 2006). CA, 15" (37 cm), M. S. and F. old rose; style arms buff rose; signal yellow veined red. Parentage unknown.

COIN OF THE REALM (Joseph Ghio, R. 2006). Sdlg. FP-272CR. CA, 14" (36 cm), ML. Light orange self, muted violet signal. DP-260N2: (BP-251N: (Tiki x PA-51L3, Lifeline sib) x BP-239F: (PB-360D: (PD-252U: (PF-173F3, Eye My Eye sib, x PF-147N2: (PI-201Q, Villa Montalvo sib, x PH-278spot: (It's Wild x Pk-327K, San Felipe sib))) x PD-218spot: (PF-159E, sib to Artful Dodger pollen parent, x PF-154U, sib to Big Smile pod parent)) x Baby Blanket)) X Weather Eye. Bay View 2006.

FATHER FIGURE (Joseph Ghio, R. 2006). Sdlg. EP-213B. CA, 11" (28 cm), EM. S. gold, lined pale tan; F. gold, heavily lined with henna lines to near solid band, signal heavily dotted deep brown. Lines That Rhyme X CP-108C, Clincher sib. Bay View 2006.

FAUX AMIGUITA (Colin Rigby by The Iris Gallery, R. 2006). CA, 12-15" (30-38 cm), M. S. pale lavender streaked darker lavender with turquoise near base; style arms pale lavender, center line darker lavender with turquoise; F. light lavender, lightly streaked outward from blaze, faint turquoise streak below blaze, signal white veined violet surrounded by dark violet, defined yellow streak. Parentage unknown. Iris Gallery 2006.

INNER FAITH (Joseph Ghio, R. 2006). Sdlg. FP-244J. CA, 12" (30 cm), EM. S. and F. crimson; style arms bright gold. DP-229bo: (BP-192D2: (PA-105J2: (Common Sense sib, x Umunhum sib) x PA-107bo: (PD-239O3: (Xewe x PF-156br: (PI-Mix-S, unknown x (Hot Blooded sib, x PH-277C2: (PK-280L: (San Gregorio x (Running Wild sib, x Reflecting Pool))) x PJ-171R: (PL-233K, Bottom Dollar sib, x Wild Time sib))) x unknown)) x AP-310F2: (PC-

189P2, Face Value sib, x PB-285S, Spreadsheet sib))) X DP-257J3: (Night Gown x BP-192D2). Bay View 2006.

INSIDE JOKE (Joseph Ghio, R. 2006). Sdlg. FP-276H. CA, 14" (36 cm), EM. S. and F. pure white; style arms blue purple; yellow line over blue black dime signal. Ocean Blue X DP-248X3: (Figment x BP-246H2, Star of Evening Sib). Bay View 2006.

IONAT ZURR (George Gessert, R. 2006). Sdlg. 1042. CA, 12" (30 cm), M. S. and style arms pale buttery gold, S. darker central vein; F. pale buttery gold fading to cream, splash of pale purple dusting and brown veins around gold signal; tailored form, upright stems. Big Money X 92-14A: (Canyon Snow x 87-23A: (C84-1, collected Valley Banner type, x C85-5, collected innominata)).

LEWIS LAWYER (Adele Lawyer by Terri Hudson, R. 2006). Sdlg. XP224D. CA, 15-18" (38-46 cm), M. S. light violet, darker violet veining; style arms lavender; F. violet, darker violet veining, signal greenish yellow over cream, rimmed dark violet, thin turquoise line downward from signal. Sierra Dell X Laguna Creek.

LIFE FORCE (Joseph Ghio, R. 2006). Sdlg. FP-241H. CA, 11" (28 cm), M. Heather pink self, deeper heather pink signal. DP-226X: (BP-184E3: (PA-96G2: (Jacks Are Wild x Playbook) x PA-118F: (Adept sib, x Playbook)) x BP-224bo, English Rose sib) X Pretty Boy. Bay View 2006.

LIKE CLOCKWORK (Joseph Ghio, R. 2006). Sdlg. FP-263R. CA, 14" (36 cm), EM. S. and style arms blue, reverse side white; F. white, blue plicata edge. Bar Code X Ocean Blue. Bay View 2006.

LOW DOWN (Joseph Ghio, R. 2006). Sdlg. FP-215Y2. CA, 12" (30 cm), EM. S. and style arms maize, slight violet tinge; F. solid maize gold, slight neon violet signal. DP-203I, Jolon sib, X Weather Eye. Bay View 2006.

MARRIAGE PROPOSAL (Joseph Ghio, R. 2006). Sdlg. DP-250K3. CA, 14" (36 cm), ML. Deep dusky rose self, neon violet signal. Pretty Boy X English Rose. Bay View 2006.

NEW YORK MINUTE (Joseph Ghio, R. 2006). Sdlg. FP-243P2. CA, 13" (33 cm), EM. S. and F. mahogany red, slightly lighter edges on all petals; style arms ochre; webbed violet signal. DP-230W2: (BP-193F2: (PA-105J: (PD-235B2, Common Sense sib, x PC-228U3, Umunhum sib) x PC-189E3, Face Value sib) x Night Gown) X unknown. Bay View 2006.

NOW SHOWING (Joseph Ghio, R. 2006). Sdlg. EP-225Q. CA, 14" (36 cm), ML. S. and F. black crimson, gold hairline edge on all petals; style arms gold suffused red. CP-125ruffled, sib to New Blood pod parent, X Epicure. Bay View 2006.

ORON CATTS (George Gessert, R. 2006). Sdlg. 1378. CA, 8.5" (22 cm), E. Deep purple-blue self, signals gold, dusted purple blue, ringed darker, white half moons outside of the signals crossed with dense network of dark veins. Gold Dusted X Olaf Stapledon.

PACIFIC DOME (Lois Belardi, R. 2006). Sdlg. MDM-02. CA, 15" (38 cm), EM. Medium blue self, lighter at edges. (Mascot x Deep Magic) X (Pacific Miss x Magic Sea). Bay View 2006.

PUBLIC EYE (Joseph Ghio, R. 2006). Sdlg. FP-249B3. CA, 13" (33 cm), ML. S. white, blue line down

midrib; style arms deep blue; F. white, blue lines overall to precise blue plicata edge, deep blue signal. DP-248Z, sib to

Inside Joke pollen parent, X Bar Code. Bay View 2006.

URBAN LEGEND (Joseph Ghio, R. 2006). Sdlg. EP-214D. CA, 11" (28 cm), L. S. gold; F. gold, red lines and dots radiating overall from gold signal. Lines That Rhyme X CP-108L, Clincher sib. Bay View 2006.

Lois Belardi, Accomplished Hybridizer, Will Be Missed

Garry Knipe

I am sorry to report that Lois Belardi, a fine hybridizer of Pacific Coast Iris, passed away recently at the age of 89. She was a member of the SPCNI and of many local iris societies around the San Francisco and Monterey Bay areas.

She was an accomplished gardener who grew a wide variety of iris, orchids, and other flowers in her beautiful garden in Santa Cruz, California. Her great skill as an iris exhibitor is legendary, as evidenced by how often her name appears on most trophies in the area.



'Air Show', Belardi 1995 SPCNI CD

Lois loved the challenge and excitement of breeding Pacific Coast Iris and had great success producing the following beauties:

'Air Show' (95), 'Deep Magic' (98), 'Just My Type' (03), 'Letter Perfect' (03), 'Magic Sea' (99), 'Marine Magic' (94), 'Pacific Dome' (06), 'Pacific High' (86), 'Pacific Miss' (98), 'Sea Gal' (93), 'Skylash' (93), 'Spanish Bay' (89), 'Steamer Lane' (02)

In 2002, her beautiful 'Sea Gal' won the Mitchell Medal, the highest honor awarded by the American Iris Society for a Pacific Coast Iris. Last year, her dramatically patterned 'Air Show' was runner-up for the Mitchell Medal.

Though I will miss her friendship and the joy of viewing her latest seedlings, I will always remember her hospitality, spark for life, and the advice and encouragement she gave during my yearly visits to her garden.

Pacific Coast Iris Candidates for AIS Awards in 2007

Debby Cole

The Honorable Mentions, which are the first rung on the AIS ladder of awards for introduced irises, naturally have the largest pool of candidates. The *I. californicae* introductions eligible this year are 'Admiral's Pride', 'Bar Code', 'Battle Line', 'Beckoning Beauty', 'Bold Beacon', 'Bubble Gum', 'Buffed', 'Chalk Hill Road', 'Civic Pride', 'Clincher', 'Close Eye', 'Contest', 'Devil's Cauldron', 'Enchanting Lady', 'Epicure', 'Gravitas', 'Hidden Asset', 'Idle Chatter', 'Jolon', 'Just My Type', 'Lake Quinalt', 'Lash', 'Letter Perfect', 'Light Winds', 'Lines That Rhyme', 'Little Survivor', 'Loyal Trust', 'Ocean Blue', 'Peeps', 'Pichina', 'Quiet Glade', 'Rodeo Gulch', 'Rose In Prose', 'Ruby Eyes', 'San Ardo', 'Seeing Eye', 'Star of Evening', 'Steamer Lane', 'Sunol Grade', 'Violet Vixen', 'Weather Eye', 'Web', and 'Wild Pitch'. These were all properly introduced in North America, at least three years ago.



Beckoning Beauty



Admiral's Pride



Buffed



Devils Cauldron



Epicure



Little Survivor



Bar Code



Rose in Prose

PCI candidates this year for Award of Merit received an Honorable Mention two to five years ago. They include 'Ciao', 'Different Strokes', 'Dot The Eyes', 'Drip Drop', 'English Rose', 'Extra Credit', 'Frisly Fancy', 'Magic Sea', 'Mocha Melody', 'Oxymoron', 'Pinole Princess', 'Silver Bowl', 'Sojourner', and 'Star of Wonder'.



Magic Sea



Pinole Princess



Oxymoron



Sojourner



Dot the Eyes

The Sydney B. Mitchell Medal will go to the Pacific Coast iris voted best of the following, which all received an Award of Merit two to five years ago, and an HM at least two years before that. In other words, judges and other gardeners may have viewed them for at least seven years, and should have a good idea of their appearance, behavior and reliability. Eligible cultivars include 'Baby Blanket', 'Big Smile', 'Charter Member', 'Easter Egg Hunt', 'Mendocino Blue', 'Pacific Miss', 'Pacific Snowball', 'Rancho Corralitos', 'Umunhum', and 'Velvet Lady'.



Baby Blanket



Rancho Corralitos



Mendocino Blue

'Cozumel', which won the Mitchell Medal last year, is eligible for the Dykes Medal, as are 'Sierra Azul' and 'Raspberry Dazzler' which won the Mitchell Medal in the two previous years.

An iris remains eligible for any of these awards for a period of three years.

All photos, SPCNI CD

Mug Shots



LaNina Richards



Skylash Richards



Gold Digger' Seedlings Bob Sussman



'Canyon Snow' Seedling Sussman



Laureles Richards



Clarice Richards Richards

The new SPCNI Logo,
courtesy of Jay Hudson



Blue Plate Special Richards



Three Seedlings from Ryan Grisso

