



**Almanac:  
Society for  
Pacific Coast  
Native Iris**

**FALL, 1997  
Volume XXVI, Number 1**

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## PUBLICATIONS AVAILABLE FROM THE SPCNI TREASURER

### Check List of Named PCI Cultivars

*Lewis Lawyer*, Editor: 59 pages. Lists and describes Pacific Coast iris and named hybrids through 1995. \$6.00 postage paid.

### Diseases of the Pacific Coast Iris

*Lewis & Adele Lawyer*: ALMANAC, Fall 1986. 22 pages, 9 photographs. \$3.50 postage paid.

### A Guide to the Pacific Coast Irises

*Victor A. Cohen*: The British Iris Society 1967. Booklet, 5.5 x 8.5, 40 pages, 16 line drawings, 8 color and 6 black-and-white photographs. Brief description of species and sub-species including their distribution. \$4.00 postpaid

### A Revision of the Pacific Coast Irises

*Lee W. Lenz*: Photocopy of *Aliso* original. Booklet 5.5 x 8.5, 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. \$6.00 postage paid.

### Hybridization and Speciation in the Pacific Coast Iris

*Lee W. Lenz*: Photocopy of *Aliso* original. Companion booklet to the above, 5.5 x 8.5, 72 pages, 30 figures, graphs, drawings, and photographs. Definitive work on naturally occurring inter-specific crosses of PCI, including detailed account of distribution. \$6.00 postage paid. If ordered together, both Lenz booklets may be obtained for \$10.00 postage paid.

## SEED AVAILABLE

Seed of species and garden hybrids is available for \$1.00 for the first packet and \$.50 for each additional packet from the Seed Distribution Chairmen listed in the column to the right.

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## MEMBERSHIP & SUBSCRIPTIONS

The Society for Pacific Coast Native Iris is a section of the American Iris Society; membership in AIS is a prerequisite for membership in the SPCNI. If you wish only to receive the ALMANAC (two issues per year), the annual subscription rate is \$4.00.

Membership	Individual	Family
Annual	\$ 4.00	\$ 5.00
Triennial	10.00	12.00
Supporting Annual	6.00	
Life	50.00	65.00

Please send membership-subscription monies to the SPCNI Treasurer.

## ALMANAC

DEADLINES: March 1 and September 1. Back issues are available for \$3.50 each, postpaid. Complete chronological index \$2.00, postpaid. Index by subject matter, or by author, \$4.00 each, postpaid. Please address the Editor

## PRESIDENT'S MESSAGE

It is with great honor that I have been selected to be the new President of the Society for Pacific Coast Native Iris. Just as when I chaired the 1996 American Iris Society Convention at Sacramento, however, the question of who is Jay Hudson must come up.

I am fortunate to live on the north coast of California where our *I. douglasiana* grow like weeds. We moved here almost thirty years ago following stress illness from managing a major department in an early Silicon Valley corporation, and being president of a new startup company. My roads have traveled from being a builder, owning a seafood company, to today's business (and love) of operating a commercial iris garden.

My wife, Terri, and I met at college in Santa Barbara and have since become a team in almost all of our accomplishments in life. We have two children, Janna, who with her MBA in marketing wants to expand our business [we tell her, No!], and Todd, who eleven years ago suffered a severe head injury in an accident. It was following Todd's misfortune that we became passionate about growing iris. We had previously been partners in the ownership of our local botanical gardens, but had never dreamed that we could be swept into the world of iris.

We were looking for a home business

in order to care for Todd, when on a trip to Oregon we met iris enthusiasts who encouraged us to start an iris garden. We brought home some newer varieties and were off and running. We called our nursery, *The Iris Gallery*.

After starting with mostly bearded iris, we soon developed a love and appreciation for the PCI's. Although we are gardeners and growers rather than scientific experts, we have, as laymen, experienced the many problems associated with their growth and development. Blessed with our native conditions, and through trial and error, we are now able to grow almost all varieties.

Two years ago, (following Terri's retirement from teaching), we augmented our operation by taking over Colin Rigby's *Portable Acres*, and planted thousands of new plants. With Colin's constant mentorship, we have been able to expand further and include in our garden various species, Siberians, and Spurias. That was when we truly found that the iris world did not consist only of bearded iris.

I will do my best to uphold the honor bestowed on me



## FROM THE EDITOR

I cannot but applaud Bob Ward's term as President of the Society for Pacific Coast Native Iris with enthusiasm! He represented us well, presiding at the AIS National Conventions, and was an inspiration to those attempting to grow PCI's in areas less conducive to their culture. In addition, he was always available with advice to the Editor and Secretary-Treasurer when contacted. As ALMANAC Representative for the Central United States, he will continue to be a valuable asset to the Society.

We welcome Jay Hudson with equal fervor. It was a pleasure to work with Jay and his wife, Terri, on the 1996 AIS Convention Booklet. They were prompt, efficient, cooperative, and pleasant throughout the sometimes tense and complex sit-

uations involved in Jay's position as Chairman of a major convention. Being President of SPCNI will be a piece of cake!

Another asset is the fact that Jay and Terri run a nursery which grows more varieties of PCI than any other, with both old and newly-introduced varieties represented. This gives him intimate acquaintance with the characteristics of growth and beauty of this group. Could we ask for anything more!

A list of the new officers, nominated by the board, is given on the next page.



## NEW OFFICERS

In accordance with the Bylaws, the board has selected the following slate of officers to serve for the next term of two years.

President: Jay Hudson, Fort Bragg, California. Jay's background is covered on the preceding page.

First Vice President: Richard Richards, La Mesa, California. Richard is a Charter Member of SPCNI and one of the authors of the original Bylaws. He has been active in guides to judging, test gardens, and compilation of the original Check List of Pacific Coast Irises. He is a hybridizer of PCI's suitable for growth in hot-summer climates.

Second Vice President: George Gessert, Eugene, Oregon. George works in Graphic Arts at the University of Oregon. He became interested in PCI after moving to Oregon "Because", as he says, "they were everywhere in the hills around me and

were too numerous to ignore". His first ALMANAC article was on the "Valley Banner" pattern and its connection with *tenax-chrysophylla* hybridization.

In the spring, 1990, he combined his talents in art and hybridizing in a featured exhibit, "Painting with DNA" displayed in the atrium at the University Of Oregon Museum of Art. There he arranged hundreds of pots of blooming native iris in interesting color patterns which demonstrated the artistry of nature in color, pattern, and form. He later arranged a similar demonstration, using the infinite variation of color and design in coleus leaves, while serving as guest curator at The Exploratorium in San Francisco.

Secretary-Treasurer: Adele Lawyer will continue in this capacity.

Editor Lewis Lawyer will continue in this position.

## ROBERT WISE

*Adele Lawyer*

With deep sorrow, we learned of the recent death of Bob Wise, a talented British hybridizer of Pacific Coast iris.

We first heard of his involvement with PCI's through an article written by his wife, Eileen Wise, in the May, 1995, issue of *The Garden*, the Journal of the Royal Horticultural Society.

Although Bob has been an iris enthusiast since 1950, and a member of the British Iris Society, his interest was initially in tall bearded iris. It has been only for the last eleven years that he has been experimenting with the Pacificas.

According to a letter Bob wrote to me in September 1996, "I was given a collection of some of her best cultivars by Mrs. Brummitt, and she included the old Ghio cultivar, SAN LORENZO. Mrs. Brummitt's crosses were largely between *I. douglasiana* and *I. innominata* and normally had two flowers per stem, whereas San Lorenzo was multibudded, although the stem was weak and frequently lay on the ground. As a beginner it seemed a good idea to cross San Lorenzo with all the Brummitt cultivars I possessed, with the

object of producing multi-budded plants with, hopefully, larger flowers."

His crosses between San Lorenzo and NO NAME, and with BANBURY BEAUTY first bloomed in 1988 and 1989 and were put in trial at Wisley. His introductions were prefixed by PINWOOD, since he lives about a half mile from the Pinewood Film Studio. These first cultivars were Pinewood Sunshine, P. Poppet, P. Amethyst, P. Prelude, and P. Charmer.

In 1990, Bob began combining his hybrids with Joe Ghio's varieties, finding IDYLVILD to be the best parent, with many promising progeny.

He had high hopes and plans for the progression of his breeding program, but writes: "How can I sum up my aims? They cannot be too ambitious because of my age. I should have started 35 years ago, thus giving myself more time for experimentation. I will therefore continue to raise plants with neat foliage, upright stems, carrying flowers of attractive colors with a good modern form."

Perhaps Eileen Wise will carry his dreams forward.

## NIGHT EDITOR WINS MITCHELL AWARD

Joe Ghio's NIGHT EDITOR won the AIS Mitchell Award for 1997 with 21 votes.

Runners-up were:

Foothill Banner, (Lawyer)	17
Smuggler's Cove, (Wood)	15

NIGHT EDITOR, (Ghio'87) combines beauty of form, (width of petals, gently ruffled falls), with a depth of purple approaching black, a velvety sheen, heavy substance, and a complete lack of a signal on the falls. It has been a sturdy variety, too.

Garland Bare reports it to have resistance to cold which is superior to other cultivars he has attempted to grow at Lincoln, Nebraska.

Its rich, dark color makes it a stunning contrast when planted alongside a bright yellow Pacifica like In the Money. But then, it doesn't need such a contrast to be outstanding!

Unfortunately, we have been unable to obtain a color print that does it justice. See Carla Lankow's print in the October 1997 issue of the AIS Bulletin.

## PACIFIC COAST IRISES IN AUSTRALIA

Barry Blyth, Pearcedale, Australia

When the Australian Iris Society was formed about 1947, two or three people were particularly interested in the Pacific Coast Natives, and from sources in the United States, obtained seed of the various species that were available from collectors. Two of these people, Mr. Fred Danks and Mr. Dan Hargrave were particularly keen and proceeded to hybridize what they had. It was not long before Hargrave seemed to disappear from the scene, and Danks was the main authority who distributed seed and seedlings to interested people. But not much was known about these iris and very few people grew them. Sometimes people would buy seed from Thompson and Morgan, the seed firm in England, and more often than not, the seed would not germinate. This often conveyed the idea that these Iris were very difficult. The main species were *I. innominata*, *I. douglasiana*, and hybrids of the two, with occasionally *I. munzii* in there somewhere. When I was a child, we knew them as Innominata x Douglasiana and that is how we sold them.

In the late 60's and early 70's, Joe Ghio sent me some seed from his lines and I grew about 1500 seedlings that I was delighted with, and I had them all in one long bed flowering to perfection.

As strange things happen in life, a man that I did not know came to the nursery for what reason I never did find out. Maybe it was just to see the Iris, as we have a very large range of Iris. It was

Dan Hargrave, who I had not seen since 1947 when I was 6 years old! In 1947 he had decided that he did not care to be in the Iris society and all that went with that. But he liked Iris and had kept breeding PCI's quietly at home, and no one knew that he was even still alive, let alone working on Iris. He said to me that he had some nice ones. So I said to him to have a look at what I had been growing. He did have a look and he just pointed to the shed where I kept a large tractor and said, "Plough them in and come and see mine."

Well, I didn't get there as soon as he apparently wanted, so about 4 days later he called again, this time with a box of about 10,000 seed for me (I think I had passed some test that I didn't know about) and asked me to come and have a look at his Iris. I went and saw his Iris and came home and ploughed in what I had.

Dan's 25 years of crossing them back and forth had created an array of amazing colours and patterns that I had not even dreamed about and he said they included all the PCI recognized species as well as *Iris unguicularis*. [This has never been proved, but stranger things have happened, and there were seedlings that set seed pods right down on the rhizome]. He was adamant about this.

I grew his strain until 1987 and carried on crossing the lines he had as well as importing some of Joe Ghio's named varieties and comparing what he was do-

ing along with the Hargrave line. I also visited Joe's garden a few times to see them bloom, and some Hargrave seed Joe Ghio grew and incorporated it into his wonderful range, as well.

I named quite a few varieties after Australian towns with Aboriginal names and most of these varieties are still being grown today by 2 Iris growers commercially. Iris Acres in South Australia (Carol and Ivar Schmidt) and Red Hill Iris Farm (Alan Glen) in Victoria. Carol and Ivar Schmidt are continuing breeding and naming some varieties. They sell mainly named varieties in the spring. A few friends are growing and crossing some each year in their gardens just for their own pleasure and some lovely forms

are to be seen in shows occasionally. Helen and Graeme Grosvenor (Rainbow Ridge Nursery) in New South Wales have many thousands of seedlings planted at their country property and grow them just for their own pleasure. They are not good subjects in Sydney (New South Wales) because of their summer rain and humidity.

Pacific Coast Iris do best in Victoria and Tasmania. Inland cool areas of New South Wales and the hill districts of South Australia, (mainly east of Adelaide) and down at the southern portion of West Australia around Albany and Margaret River. Most other areas are too harsh either in dryness or summer rain and humidity.

## MORE BORER PROBLEMS

*Elyse Hill* Sebastopol, California

In mid-March I first noticed the inside of fans on my PCI seedlings turning white. As I pulled on the white part of the fan, it came away from the rest and had chaff hanging on it and was chewed off.

After pulling away the rest of the leaves on the fan and digging around the rhizomes, I found grubs (also called larva), light tan in color with about 12 segments with darker brown markings on each side of the segments and a rust brown head.

We sprayed with Lindane, and a few days later when I dug down and investigated several plants with white inner fans, I found 6 dead grubs; but a few days later when I dug down around white fans there were more live and healthy grubs. Apparently a re-infestation had occurred.

We then sprayed with Orthene, and after about a week again found more live grubs. They seemed to prefer the newer fans and left the flower stalks alone until seed pods began forming, and then also attacked these. Most would chew down to the rhizome, then apparently move onto another fan. I found one curled up in a rhizome. Also, some seemed to be a darker charcoal color.

After Lindane and Orthene failed to kill the grubs, I was forced to manually go over my PCI's and dig down to remove them with a fork. This infestation extended well into April.

I captured two grubs and put them in jars inside the house when they were about 1/2-inch long. After 2 weeks of dining on PCI stems and pods which weren't sprayed, they had grown to 1 inch long. In about 3 weeks the grubs started pupating on May 2nd, and within 48 hours were 1/2 inch long, a dark, brilliant rust color. On May 24th both pupas hatched into moths, apparently having a 3-week pupating stage.

The moths are brown with rust gold markings on their wings and head. They are about 1/2 inch long. After a few days, both moths were dead.

My PCI's seem to be recovering with no further infestation into June. Where the grubs had chewed a fan off, there are two new sprouts growing. I noticed when I was cutting off the bloom or seed stalks, that some already had full-sized fans growing on either side, and some new fans just beginning to sprout. Hopefully there won't be a repeat next year. I believe the unusually warm weather early this year may have triggered this invasion, but I will certainly be on the lookout for them.

Ed note: Identity of this borer has not been verified, but the borer doing the most damage, *Amphipoea americana* var *pacifica* is shown on the next page. Pictured are the adult and larval stages and typical damage.

PCI BORER *Amphipoea americana* var *pacifica*



Adult (2X)



Larva (2X)



Damage

A GALERY OF PACIFICA DIVERSITY



Calif Skies (T.Sage R '94) From Ghio seed



XP317A (Lawyers) Valley Banner type



Sierra Azul (Ghio '97) Munzii background



93-02A (Taniguchi) Pacific High X Ghio seedling

## HOW DO YOUR IRIS GROW, PART 2

*Compiled by Lewis and Adele Lawyer*

Response to this question, "How does your iris grow?" was so good that we had to divide the replies between two issues of the ALMANAC. The first part was published in the spring issue, and both parts

will be summarized at the end of this installment.

As we did in the previous issue, we will begin with Southern California which at one time was the hub of PCI breeding.

### SOUTHERN CALIFORNIA AREA

The San Gabriel Valley, where Duncan Eader resides, is a bit more favorable to PCI culture than the neighboring San Fernando valley, discussed in the last issue. As Duncan notes, winters are ideal, and summers, though sometimes hotter than the plants would like, are usually influenced by sea breezes. Water in some sections tends to be alkaline, but can be corrected by the addition of soil sulfur.

*Duncan Eader, Arcadia, California*

I live in Arcadia which is in the northeastern portion of the San Gabriel Valley at what I believe to be an elevation of less than 1000 feet. The foothills of the San Gabriels are directly north of me, and the TV towers and the observatory on Mt. Wilson are clearly visible in that direction. Normal rainfall is about 14 to 15 inches, temperatures seldom get over 100 in the summer and only get down to 32 degrees F. two or three times during the winter. Oranges, lemons, and avocados do well here. This area that once was wide and unsheltered, is now built up with homes and buildings that moderate the colder temperatures.

I grow some of my Californicas in beds which I have prepared with compost and acid [camelia-azalea] fertilizer. Most of these areas receive partial shade either from buildings or trees. [Plants in the shade of my fig tree thrive, at least I have to hand-pick the fallen fig leaves out of the foliage at the end of the season]. I have tried growing named PCI's in full sun, but with the exception of NOVIA DEL MAR, I have had very sad results.

Lee Lenz, was successful growing many of his hybrids in full sun at the Rancho Santa Ana Botanical Garden in Claremont. and some of my seedlings have tolerated full sun, at least for a time, but I do not recommend it.

When I receive new plants from a grower, they spend their first year under shade cloth in plastic pots, and are not planted out in the ground until they are actively growing. I have found that planting new arrivals directly into the ground is dangerously costly. When planted in pots, if they are going to grow at all, they will have started to put out new growth by the next spring, at which time they are set out in the garden, preferably in partial or filtered shade. I water regularly and keep the plants reasonably moist all year.

### VARIETY EVALUATION

For my evaluations of the named PCI hybrids that I am growing or have grown in my garden, I have grouped them in the following categories:

Good growth and bloom

Mediocre plant stamina

Poor performance

(In the case of those which died within a couple of years, it was sometimes my fault and not the plants. When high humus potting mix dries out, it requires soaking by immersion to wet it again.)

### GOOD GROWTH AND BLOOM

AMIGUITA: 1966 to present, one of the best; ARANA: 1985 to '94, good but poor increase; CAMPAIGNER: 1985 to present, reliable bloomer; CAMP CAPITOLA: 1984 to present, Reliable bloomer; CANYON ORCHID: 1972 to present, Reliable bloomer, good foliage; CANYON SNOW: 1982 to present, reliable, erect bloom; CAROLE CABEEN: 1969 to present, Good bloomer, species type; CHIMES: 1973 to present, Earliest to bloom, prolific; DEEPENING SHADOWS: 1985 to present, Fair bloom, slow increase; DRIVE YOU WILD: 1986 to 1995, Did well for 19 years, then died; FLAMENCO QUEEN: 1997 to present, Reliable bloomer; MAYOR: 1986 to present, Slow increase; NOVIA DEL MAR: 1976 to



present, faithful bloomer; OJAI: 1973 to present, Little increase; ORCHID SPRITE: 1973 to present, Extremely hardy; RIPPLE ROCK: 1972 to 1977, Poor increase, bloom-out; SIMPLY WILD: 1981 to 1988, Bloomed well; SOLID CITIZEN: 1982 to present, slow increase; STAGE WHISPER, 1983 to present, Good plant.

#### MEDIOCRE PLANT STAMINA

BIG WHEEL: 1984 to 1990; CHIEF SEQUOIA: 1992 to 1995, bloomed 2 years and died; CUPERTINO: 1986 to present, Moderate growth and bloom; DEL REY: 1980 to 1991, Fair while it lasted; DOCTOR PAULINE THOMPSON 1972 to 1980, Excellent flower, but untimely demise; PESCADERO: 1982 to 1985, Poor performance; SIERRA DELL: 1990 to present, Slow increase; WESTERN BLUEBIRD: 1992 to '97, Poor increase.

#### POOR PERFORMANCE

BIG MONEY: 1986; CALIFORNIA MYSTIQUE: 1984, Never flowered; GRAND DESIGN: 1985 to 1987, Poor performance; NATIVE LAND: 1988, Did not grow; REFLECTING POOL: 1986 to 1988, poor performance; REFUGIO: 1987 to 1989, Poor performance; RINCON: 1986 to 1989, Poor performance; RIO DEL MAR: 1986 to 1989, Poor performance; RUNNING WILD: 1985 to 1987, Bloomed well; SPRING DAZE: 1986, Didn't make it; STROKE OF MIDNIGHT: 1989, Did not grow; TUNITAS: 1986 TO 1988, Never bloomed; WILD TIME: 1987 to 1988, Bloomed and died; WESTERN WORLD: 1987 to 1988, Never bloomed; WISH FULFILLMENT: 1986 to 1988, Did not grow.

I have grown some of the species, but they did not do well, so I am not currently growing any PCI's other than hybrids. On your 1991 survey, I selected CANYON SNOW as my choice for best cultivar. I would still probably give it the most points in a contest; but for honorable mention, I would like to offer CANYON ORCHID, and it is also hard to beat AMIGUITA. Both of these have excellent green foliage, reliable bloom, as well as lovely flowers. Probably the most attractive foliage in my

garden is on ORCHID SPRITE. The leaves are quite wide, and are a bright green. It is an excellent bloomer, but the flower is certainly not spectacular.

#### SEED GERMINATION AND CULTURE

I have not maintained any numerical information on seed germination in the last several years; however, when I did, I usually had about 80% or better germination, when I planted seeds in 4 inch square plastic pots, 16 seeds equally spaced, after giving them a 10-15 minute bath in a 10% solution of Purex bleach. I used moist SUPERSOIL as a potting mix, covered the seed about 1/4 ", pressed down well. The pots were then set into a shallow pan of water to stand until the surface was wet. They were then inserted into plastic bags in a fairly warm shelter out of the sun until the seeds showed green growth touching the plastic. Then take off the plastic. When the seedlings have developed 4 leaves, they should be transplanted to individual 2 1/2 or 3" pots. It is essential that the seedlings do not dry out at any time. SUPERSOIL has a unique characteristic of dissolving or breaking down and releasing the roots of young seedlings when the plants are knocked out of their pots and placed in a pan of water. Carefully disentangle the white roots and plant the seedlings in SUPERSOIL or some other suitable medium. As they grow, they should be transferred to larger containers; but can grow in 6" or gallon cans until they bloom.

#### CURRENT

The weather this year has been different. We had substantial early rain, then extremely warm weather, and then some cool weather; and the iris, particularly the TB's have been confused. All bloom this season has been sporadic from late February until mid-May. I had 3 PCI's open up this morning, May 18, Orchid Sprite, Canyon Snow, and a nice white seedling that has Canyon Snow in its background.

### NORTHERN CALIFORNIA

Santa Clara and Palo Alto represent the mostly-flat lands immediately south and west of San Francisco Bay. Climate is close to ideal for most PCI, and the soils, although often too heavy for best drainage, can easily be amended to suit the most persnickety of plants.

*Steve Taniguchi, Santa Clara, CA*

Most of the named varieties I have are Joe Ghio creations purchased from Bayview Gardens. I have ordered from a couple of different places, and I think the survival rate is inversely proportional to

the amount of time the plants have been out of the soil. The exception being those plants I ordered from Portable Acres. Only one of the plants, NATIVE WARRIOR, that I ordered from Portable Acres failed to establish itself. [I take personal blame for killing BOOM TOWN and PINK CUPID.] I've enclosed a chart of the plants I ordered and their current status.

As for species, my *I. douglasiana* seedlings all died this year from PCI crown rot, as well as all but one of my *I. tenax*.

Regarding the named varieties, I'm restricting my comments to those I have grown for 3 or more years. I really like the color of EAGLE EYES and FAULT ZONE, but I haven't grown them long enough to give a good evaluation. Anyway, I am listing my all around favorites first, followed by some comments on the other varieties I've grown.

**RARE REWARD:** Wonderful color! The standards are white with purple veins, the falls are rich reddish-purple with a light rim and a dark signal. The plant forms a nice clump, and the flower stalks are straight and sturdy.

**PACIFIC HIGH:** Lovely lavender-blue with a dark blue-violet border around the signal. Even the unopened flowers are a nice color. The flower stalks often have one branch. The plant is a bit "open", and it produces new leaves at a different time than the other plants. (I also think it has the best looking seeds.)

**BIG WHEEL:** A nice raspberry red. Looks great when the whole clump is blooming. Unfortunately, the stems and leaves have a tendency to grow out sideways instead of straight.

**IN THE MONEY:** Extremely bright yellow. An amazing sight when in full bloom. My only criticism is that the flower is "floppy" in form. This plant produced more than 100 seeds per pod when I made crosses last year.

**IDYLWILD:** This is always described as a white washed with blue, but to me it is blue. The flower has great form and the plant has formed a big clump. Of the plants I have, this one produces the largest seeds.

**CANYON SNOW:** White with a yellow signal. The plant I have has formed a big clump. It has nice green leaves and survives even if I forget to water it.

**MISSION SANTA CLARA:** Brownish-red with a lighter edge on the falls and a dark signal. A nice smaller plant with shorter leaves and stems.

Now for a few comments on a few of the other named varieties I have:

**OJAI:** I bought this because it won the first Mitchell Award. Anyway, I was disappointed, - maybe I expected too much from it.

**OLD MONTEREY:** This is a deep ruby-red with a light rim - a really nice color. This is a smaller plant and has nice, thin, green leaves. I have one complaint, - the light rim is thicker on one side of the falls. In fact it seems to pass this trait on to its children.

**AMIQUITA:** A very nice light blue-violet. The stems get long and "snakey", but I'm not sure this isn't because of its shady location.

**AUGIE:** Reddish, with a "classic" iris shape. It's been doing well in a pot, but it's probably time to separate and transplant it. The leaves are narrow and dark green.

**NAPA VALLEY:** A nice, velvety purple with a yellow and white signal - an interesting color combination. The plant, however, doesn't increase much.

**LA SELVA BEACH:** Another interesting color combination. The falls are yellow with a huge maroon signal that almost reaches the edge, (or maybe it's actually maroon with a yellow rim.

Although I am not growing the following varieties, I have seen and liked them at iris shows: **PACIFIC RIM:** Nice plicata; **BANBURY GNOME:** Species shape, but with dark, magenta-red falls below lighter standards. **CUPERTINO:** Red-purple with a lighter rim. **NATIONAL ANTHEM:** A really nice dark purple.

#### DAYS TO SEED EMERGENCE, 1996

I noted the number of days from planting to emergence for the 13 crosses made in 1996. A cross between Rare Reward X Night Editor was the quickest at 63 days. A cross between one of my seedlings, 93-02A and Rare Reward took the longest: 88 days. Average time to emergence for the 13 crosses was 72 days.

#### SEED PER POD

Counts of the number of seeds per pod in the crosses I have made from 1993 through 1996 range from 127 down to 12,

with an average of 48. By far the highest count was the average of 112 for the 4 pods in which IN THE MONEY was the pod parent.

Robert Kraus, Palo Alto, CA

My experience in growing Pacific Coast varieties is limited to two and three year old plants for the most part. I have lost a few the first winter after planting, but the survivors have grown well and bloomed nicely. My garden consists of amended adobe soil with shade part of the day, varying with specific location.

Those that grow and bloom best for me are:

**WILDER THAN EVER:** Best of all for growth, quantity of bloom and show.

**EL NINO:** Small, but blooms heavily over an extended period.

**WILDMAN:** Steady bloomer, nice flowers

**SAN LORENZO VALLEY:** Pretty but not as much substance

**SAN FELIPE:** OK, but not as eye-catching

**HANDS ON:** Also OK

**ESCALONA:** Still young, but gorgeous flowers

**IT'S WILD:** Also gorgeous

**BAT BOY, ULTIMATE SUNTAN:** First year

Also grown but not as showy: **SCHOOL BOY, SEE THE LIGHT, EARTHQUAKE.**

Also growing with good success:

*I. Douglasiana:* Pale blue-white with purple veins and gold signal. 5-6 years old

*I. tenax* 95125: Small but 1 stem this year, Blue flower

*I. innominata* 95114: Same but yellow

*I. munzii* 95120: No bloom so far

*Munzii* Hybrids: From Lawyer, 2 of 4 plants produced 2 stems each with large flowers, lovely blue fading to lavender

*I. chrysophylla* 95103 and *Macrosiphon* 95119: did not survive the first year

Note: Except for *Douglasiana*, the seed of all the species were planted in January 1996

I was at Point Lobos on April 3 and saw numerous clumps of dark blue-purple Douglas along the trail through the wooded area out to the point.

For the last several years our family has been spending Memorial Day weekend at Bass Lake which is just south of the

Wawona entrance to Yosemite. We always manage to find a few of the last blooms of what I have decided are *I. hartwegii* using the Lenz and Cohen guides as a resource. They have light blue flowers and are abundant in this area, which is near Miller's Landing.

#### WESTBAY AND SANTA CRUZ AREA

The hills between San Francisco Bay and the Pacific Ocean are ideal for PCI, and, in fact, are home to many scattered stands of native species. Margery Edgren and Lois Belardi should encounter few problems in their home gardens. Margery is also active in Strybing Arboretum in Golden Gate Park, San Francisco where she is an authority on seed germination, plant propagation, and plant sales. She includes some observations gleaned from her experience at Strybing, which is also located in an ideal area for the growth of PCI.

Margery Edgren, Woodside, California

Most popular Pacificas at Strybing Arboretum, San Francisco:

IDYLVILD (extremely popular)

AMIGUITA,

CANYON SNOW

MONTEREY GOLD

PEGASUS

We got our Amiguita from a Strybing planting. No ID was recorded so we don't sell it under the cultivar name, but its an exact look alike and we believe it to be Amiguita, so think it is worth a vote. I believe some others like Foothill Banner and Del Rey, etc. would be popular if we had enough stock to really offer them. We're working on it.

My personal favorites:

FAIRY CHIMES

FOOTHILL BANNER

SIERRA DELL

CANYON SNOW

BANBURY FESTIVAL

MOONLAD

PEGASUS

Just as a point of interest, as they are not cultivars, we have seedlings of two crosses (Joe Ghio seed) grown by our nursery staff man at Strybing. One is Pacific Rim X Sierra Dell, with seedlings that consistently have large white flowers with blue veining. The other is Idylwild X

Mendocino Banner that produced seedlings with white or cream-colored flowers with purple veining, often combined with purple stigmas. Both are exceedingly popular at plant sales.

*Lois Belardi*, Santa Cruz, California

I grow over 50 Pacifica varieties in the limited favorable areas I have to grow them. I have had to cut back on my tall bearded iris in order to have room for my PCI seedlings. I am getting more very blue PCI seedlings, going back 2 and 3 generations to Sierra Dell.

The PCI's that I like and which grow best for me are:

BAT BOY, BATTLE ALERT, FAULT ZONE, MANTRA, SCHOOL BOY, SEA GAL, SKYLASH, and UPPER ESCHELON.

#### NORTH BAY AREA

This is a flatland area with close to an ideal climate for PCI's. Soils tend to be heavy, but excellent when amended for drainage.

*Vernon Wood*. Pinole, California

I recommend only those varieties which I have grown in my own garden. All of these must possess the following characteristics:

- 1) They must transplant, grow, and increase well
- 2) Possess and retain attractive foliage and clumps after 2 years of growth. Upright growth and absence of brown leaf tips.
- 3) They should have good form and substance, - Pizzazz!

Outstanding are PACIFIC RIM and SEA ADMIRAL

Others which have the qualifying features are: AIR SHOW, COMET TRAIL, GORDOLA, HEAVEN KNOWS, HIGH SPLENDOR, IDYLWILD, LOS CALIFORNIO, NATIONAL ANTHEM, OSOCALES, RASPBERRY DAZZLER, REGAL CLASSIC, SIERRA DELL, SKY COVER, TIDY WHITE, VALET, WESTERLIES, WILDER THAN EVER,

#### SACRAMENTO AREA

Sacramento is in the center of the large interior Sacramento - San Joaquin Valley where, without a shady situation, summer temperatures are too hot for most PCI's.

*George Prue*, Sacramento, CA

In my garden I have SEA GAL, TWIN LAKES, UPPER ESCHELON, HANDS ON, and several unnamed hybrids which I purchased from the local nursery. All of these are growing well. Most of them only get about half a day of sun since my yard is enclosed with trees. I would say that of the hybrids I have, Twin Lakes has been the slowest to increase. I set all of these out in 1994, along with CARMEL MISSION, which I lost the first year. Since I have a small yard, I don't have room to grow as many iris as I would like.

#### MARIN COUNTY

The following two members live in Marin County, California, just north of San Francisco Bay. Since the PCI are native here and thrive with no outside help, it is obvious that the climate is close to ideal.

*Judith Hinman*, Bayside, CA

Here in Marin County I grow only 2 species. *I. douglasiana* (thrives), and *I. innominata* (survives).

I have had mixed success with the hybrids:

Strong growers: AGNES JAMES, AMIGUITA, BIG MONEY.

Survive: HONTA YO, SMOKEY WINE

Weak: CALIFIA, EL CENTRO, SIMPLY WILD

Died: BROADLEIGH SYBIL, DR. PAULINE THOMPSON, FORT POINT, SEA GAL

*Daisy Mah*, Marin

The Seed Exchange has been a wonderful resource. Unfortunately in the past, due to pesty dogs and cats, my flats of seeds often times became a mixed seed batch. I will try to maintain more order, and perhaps you will learn of my results.

So far, CANYON SNOW has been a decent performer and *I. douglasiana* does well.

#### NORTH COAST

The note received from Jay Hudson, below, represents an ideal growing area for the PCI. Fort Bragg is on the northern coast of California, and for hundreds of miles in all directions except toward the Pacific Ocean, is surrounded by stands of

native irises. He sent us a list of 147 cultivars growing in his Iris Gallery Nursery, each graded for quality, but was kind enough to pick 14 favorites for his report.

Jay Hudson, The Iris Gallery, Fort Bragg, California

The enclosed growing evaluation includes only those iris which we have successfully grown. If a plant is displaying beautiful foliage, had good flowering, and satisfactory increases, it received an excellent rating. A good rating indicates average growth and increases, with some flowers. A poor rating indicates the plant is very slow to grow and bloom, but has survived. Plants that have died are not evaluated.

Following is a selected list from the 107 varieties which show excellent ratings in our plantings:

AGNES JAMES	NIGHT EDITOR
EASTER EGG HUNT	ORCHID RESPITE
FOOTHILL BANNER	RASPBERRY DAZZLER
HALF TIME	RUTH HARDY
JEAN ERICKSON	SILVER CIRCLE
JUNIPERO	SOMBRIEL
MIMSEY	ULTIMATE SUNTAN

We have two growing areas, our display area, and the growing fields. Most plants have grown better in our display area as they get more fertilizer and care. Originally I used a Camelia-Azalea food, supplemented by feedings of Miracle Grow. I have changed to a supplement of alfalfa pellets on the surface in the fall,

## OREGON, WASHINGTON, AND BRITISH COLUMBIA

Oregon is home to five species of PCI, and has a near-ideal climate from the Pacific coast eastward to the lower elevations of the Cascade Mountains. Molalla, where William Plotner gardens, is about 35 miles south of Portland, far enough north so that some winter mornings get a bit nippy. As you go farther north into Washington, you "freeze out" all the naturally-occurring species except *I. tenax*. In northern Washington and British Columbia, no species are native, and growing any PCI, species or hybrid, becomes more challenging.

William Plotner, Molalla, Oregon

along with regular feedings of Turf Royal (primarily a granular lawn food) which is:

21% Nitrogen, (11% Ammonical, 10 % Nitrate)  
7 % Phosphate,  
14 % Potash,  
5 % Sulfur

This practice came about because of seeing dramatic results in plants that, quite by accident, received this treatment from a whirling feeder on the lawns with a spread to the plants along the edge. I still supplement with a feeding of Miracle Grow about every 2 weeks.

One of my favorite varieties, JEAN ERICKSON, died in the field planting and seemed about ready to follow suit in the Display Garden. This fertilizing procedure not only brought the plant back to life, but it had many blooms and increases, and beautiful foliage. Even though I get greener and taller foliage, the blooms respond by growing above the plants. In fact, I can't think of a single plant with flowers in the foliage.

I seem to have controlled the rust on the plants by spraying with "Daconil Weatherstick". This also seemed to give better results than Rally on the TB's and Spurias.

Ed.: As noted above Jay sent along a list of 147 PCI varieties which he is growing in his nursery. Of these, 107 (73 percent) were evaluated as Excellent, and it was from these that he picked his 14 favorites. 25 percent were Good, and only 2 percent were rated as Poor.

I really enjoyed our trips around Roseburg. It was a real treat, especially the natural crosses that are occurring. We do our own crosses with different species and its nice to see that nature is also successfully doing the same thing.

Below is my list of PCI's rated in three categories. Each category is aligned further, with best of the group at the top

<u>BEST</u>	<u>GOOD</u>	<u>MEDIUM</u>
Blue Moment	Billy Blue Jay	Garden Delight
Pacific Rim	Big Wheel	Native Jewel
Carrot Top	Big Money	Endless
Canyon Snow	Western Queen	Susie Knapp
Junipero	Munras	Ami Royal

Listed below, are the best species to grow and perform for me:

1. *I. Tenax* - We have both dark and light varieties here and they seem to thrive
2. *Tenax* subs. *gormanii* - I brought some seed in and grew this one. Slow to start, but then thrives and takes pollen very well.
3. *I. missouriensis* - It grows well for me. It even took Queen of the Show at the Greater Portland Iris Society Show this year. How about that sports fans!
4. *I. pseudacorus* - (from Waddick seed brought from China.) Good growth and beautiful, small, slender flowers with about 9 buds per stem.
5. *I. douglasiana* - The old standby for any breeding program.

Debby Cole, Mercer Island, Washington

I walked around the yard and made a list, and I was shocked to find I grow 40 different named varieties of PCI's, plus at least twice that many from seed, SPCNI or other.

My favorite varieties for performance and attitude are UPPER ECHELON, WESTERN QUEEN, RIPPLE ROCK, and TULUM. PHILOSOPHY and DEEP BLUE SEA may be added to the list, pending further review. I have both Canyon Snow and Idylwild, and find my enjoyment of both spoiled by their reclining habit. Amiguita, super lounge chair that it is, was consigned to the club sales last year for the same reason.

Hybrid versus species? I think it depends on the species and the degree of competition it is facing. The species PCI's I've grown have been from SPCNI seed, *chrysophylla*, *innominata*, and *fernaldii*. I planted them in the same bed with plants from SPCNI garden hybrid seed. This was east-facing on a hillside terrace under a cherry tree. They all thrived, but for the first time now, ten years later, I can't find the *chrysophylla*; I fear it became overgrown by the taller hybrids and gave up. The *fernaldii* is still there, but perhaps less enthusiastically than before, and fewer *innominata* were visible this year than before. Overgrown, also? The hybrids from seed are grossly overcrowded, but haven't diminished in the least. *Tenax*, which I got first of all (potted) in a garage sale, I grow in both moist shady and hot, dry locations, and it still survives in both, as in situ seedlings of the original plant.

Hybrids? As transplants, I think their success depends partially on the health of the soil they came from, and partially on the situation prepared for them in their new home. The first batch of 7 to 8 hybrids I ordered from Joe Ghio (10 years ago) were planted in carefully prepared soil on a north-facing slope getting primarily morning sun, with a thick overwinter bark mulch; and they all thrived. The second batch was planted on the same slope, but closer to a pine tree and with less preparation. I lost half of them. The next year, John Weiler's earlier shipment of my order caught me unprepared; so not only was the soil unready, but also I put them in an area with more shade than they liked. At any rate, CANYON SNOW is the only blooming survivor. The other survivor, CHIEF SEQUOIA, remains unbloomed. The next year I went back to SPCNI seed, and the survivors have been a joy; but I notice they are no longer increasing. They are in an east-facing spot between a concrete patio and a rock wall, pretty flat.

Four years ago I ordered from Ghio again: prepared the soil, soaked the plants and watered them in Subdue; planted them in a flat 2/3 shady area, near but not under 25-year-old fir trees. Of a dozen, there are 4 survivors, 2 of them barely. His monoculture may have sent disease with the plants. Their foliage on arrival was mostly gray and crunchy. It could be that my chosen situation may have been inhospitable, or the fall-winter-spring may have been too wet. I always mulch deeply the first winter, so I doubt that cold was a problem.

Two years ago I ordered seed from Joe: 2 packets yielded 12 plants. (No, I didn't count seed per packet, but it wasn't generous.) No bloom this year or last (and none really expected), but no losses. Next spring should be fun!

Last year I went for SPCNI seed again, and after all the germination information provided, I decided to experiment a little. I prepared 2 identical sets of seed in peat pots. One set spent a week outdoors (just before the Christmas snowstorms), the other a week in the refrigerator. Then both were moved to a greenhouse tray in a southeast-facing window of the semi-shaded plant room. Two pots sprouted in February. They were from SPCNI seed of Clarice Richards and Gigi's garden hy-

brids, and both were from the "outdoor" batch. I moved them out of the "greenhouse" in March when they were bumping its roof (about 1.1/2"), and out onto the patio in just their peat pots. They almost died of dehydration before I planted them out, but all are doing well. Nothing else in the "greenhouse" hatched, even after moving them outdoors in the shade in May. I think I'll stick to leaving seeds outdoors over winter in watered, punctured milk -jug bottoms filled with composted steer manure. That works for me! Such total failure is too frustrating, a waste of materials and time...a whole year with so few new PCI seedlings.

A couple of last fall's imports have faded only in the last few weeks for reasons unknown. (Spider mites?).

I don't think I have ever lost an established PCI to cold, even the year we got down to 9°F for several days. I would think a late freeze after growth has started, would be the biggest threat; but don't have anything concrete to report.

Its probably worth mentioning that my PCI seedlings are somewhat sheltered. There are none in broad, flat, open areas, which the bearded irises prefer. And winter temperatures here average from 25 to 35 at night, and 35 to 50 degrees F in the day, Thanksgiving to Easter.

*Roland Kenitzer, Port Angeles, Wash.*

My garden at *Valley Haven* is located about 2 miles south of Highway 101 at an elevation of about 600 feet. The land slopes to the south; so southern exposure is good and the garden gets mid-day sun. The property is surrounded by trees which shelter it from the northwest winds, although southeast winds come through during winter storms.

We have about 20 inches of rain a year, mainly between October and May, and although snow falls sporadically, it is seldom more than an inch or two, which usually melts in a day or two. Freezing and thawing from our frosts, however, can be a significant problem. Summer temperatures can get into the 80s, but it seems warmer because there is no breeze.

I have added amendments to our native soil which improve manageability and drainage. Drainage is maximized by raised mounds of soil on which the iris are planted.

I grow mainly tall bearded iris. I have six Pacific Coast Native irises and plan on expanding this collection. The PCI's I have are:

CANYON SNOW (2 clumps), FORT POINT, SMALL TOWN, CHIMES, NATIVE BLUSH, and RHETT'S MEMORY.

One clump of Canyon Snow, Fort Point, Small Town, and Chimes are planted in one of the mounds. This mound gets full sun. It is watered only as needed during the summer. The others are in topsoil under some of the trees, which provide some shade during the middle of the day in summer.

I have not used any winter cover on the irises, I have thought of doing a light straw covering to reduce the freeze-thaw cycling, but have not implemented this yet. The PCI's were not bothered by either of the heavy snows I had.

I try to fertilize when growth starts in the spring. I use a granular, slow-release fertilizer, putting a third of a cup to a cup around the clump, depending on the clump size. I use a fertilizer light on nitrogen and heavy on phosphorus and potassium, - an 8-16-16 or a 10-10-10. I also fertilize after bloom season. I try, but don't always get it done, to supply fertilizer just as bloom stalks are starting.

I'm starting the second season here at our new home at *Valley Haven*, and had four years in a similar configuration in Sequim. When transplanting the irises from Sequim to *Valley Haven* two years ago in the late fall, I somehow managed not to lose any of the PCI's. However, Fort Point, Small Town, and Chimes were small clumps and small rhizomes.

In 1996, three of the six PCI's bloomed - Canyon Snow, Native Blush, and Rhett's Memory. The two clumps of Canyon Snow were spectacular. All clumps grew well in 1996, and I expect all will bloom this year.

*Elaine Bassette, Tacoma, WA*

Because so many varieties have been hybridized in California climate, I find quite a few that do not do well here; so my program has been to grow those that will survive without withholding water. My yard has a sprinkler system, and being on a city lot, it is hard to separate plantings into zones for water distribution. so that most PCI's get too much water for their good. My hybridizing has to use the same

strategy so that what I develop will thrive in our wet climate.

Those named varieties that have done well here are: ENDLESS, IDYLWILD, JUNIPERO, LAS FLORES, LOS CALIFORNIO, NATIONAL ANTHEM, NATIVE WARRIOR, NIGHT EDITOR, PACIFIC RIM, RIO DEL MAR, SANTA RITA, TUNITAS, and WESTERN QUEEN. As far as garden impact is concerned, Pacific Rim can't be beat. It has an eye catching color, distinctive pattern, and it clumps and blooms beautifully. Night Editor is a wonderful dark accent.

Some of the newer varieties that seem to be doing well in their second bloom season are BATTLE ALERT, CARMEL MISSION, EYE PATCH, MARINE MAGIC, MOCHA MELODY, and LUNAR ECLIPSE. Of these, "Garden Impact" awards would go to Marine Magic, a great blue, and Mocha Melody with distinction due to its form and color.

Concerning germination, I think I'm getting about a 75 percent germination rate or better by using the 2 to 3-day tea soaking method on thoroughly dried seeds, and planting directly into pots to over-winter under protected outdoor conditions.

Species have lasted two or more years, but have died off after that. I have had approximately the same results with species crosses. Seedlings showing the most "Doug" inheritance have fared the best. Those with the narrowest leaves have the lowest survival rate. Seedlings without signals seem to be weaker than the older forms.

One additional cultural practice which has worked well for me is that early spring is the best time for transplanting here. It works better than late fall.

*Paul Ikeda, Seattle, Washington*

First I want to mention that this year was very floriferous. I don't keep track of the number of flowers or the number of cultivars that bloom, but the sheer show of color was very impressive this year. I have talked with several others, and they also had good bloom this year. Why? I'm not sure. We got more rain than usual this year, and it stayed cool longer so that the bloom season started a little late. This year I did not remove the old leaves and I did not spray with a fungicide, but my plants did well. Curious indeed.

Another thing I wanted to mention is the decline of a clump of PCI's. Right in the middle of one of my beds, LA SELVA BEACH is dying. It has been in the same spot since I bought it in 1994 with all the other Ghio introductions. The clump is as large as the ones around it, and the leaves cross with the other clumps. It is turning yellow and brown. If I don't do something soon, I believe it will die. Why is this plant in the middle of the bed affected, while the other ones don't show any stress? Maybe the others close by will be affected later. It seems there is so much to learn about the factors that affect the PCI's.

My favorite and best growing PCI is PACIFIC RIM. It has been in the same spot about 5 years, and each year it makes a nice clump with beautiful bloom stalks that stand upright.

Other clumps that have prospered over the years include: SEABRIGHT COVE, WILDER THEN EVER, SEE THE LIGHT, EARTHQUAKE, and ON THE EDGE.

Although I ignored my PCI's this year, I never completely ignore them. One year I decided to let nature take its course and I lost almost all the plants in one of my beds.

*Jean Witt, Seattle, Washington*

Contrary to other reports, species and near species grow better for me in north Seattle than the named varieties. I'm sure this is due in part to my glacial soil, and the fact that I don't use a lot of fertilizer. We revamped one of my two big beds of PCI's last fall, adding commercial yard-waste compost, alfalfa pellets, and 5-10-10 fertilizer before replanting, and mulching with pine needles afterward. Everything wintered well, and following our extra-wet spring, all plants are green and lush (as of August).

Bloom was limited, but VALLEY BANNER, which I thought I had lost, reappeared. I seem to have more tenax and innominata types than the larger ones. COUNCILMAN was the first named variety to bloom. One plant that I am watching is a plain lavender with the wide foliage of *I. douglasiana* which does not water-burn.

I now have a new *I. purdyi* to replace Memoria Elwood, which rotted out several years ago. I wonder if anyone still has it? The new plant appears to be true to name, although it is quite a bit smaller than



Memoria Elwood, and has pink veins on a white ground instead of cream.

CREAMY CUSTARD, now properly registered, has attractive pale yellow flowers and continues to do well. An ivory and raspberry innominata that I inherited from Leona Mahood, makes large clumps and is an attractive garden plant. It is among the many innominata things that I grow. They are smaller in scale than most named PCI's and a good size for the rock garden. They come in a range of colors including white over violet, rose, pale yellow, lavender-blue, brick-red, and cantaloupe over raspberry bicolors.

This year I finally saw MINI-MA in bloom, and found it is quite different from my two little collected violet dwarfs. These possibly classify as *x thompsonii*; one has leaves nearly half an inch wide.

AGNES JAMES, which I had to retrieve from friends after accidentally digging it all for a plant sale, is increasing well, and bloomed. Its flowers may not be as wide petaled as newer things, but it is a very good grower and a good parent.

Seed germination is not a problem here. What nature provides outdoors seems to be just right.

*Helen Kennedy, Surrey, B. C. Canada*

Planting depth and texture are two aspects of culture I would like to understand better. We had tried "loose fluffy" soil with lots of leaves, pine needles, and such.. but think it allowed cold to damage roots. At the Portland Convention, the Oregon growers seemed to have quite dense soil. In winter, lack of drainage is a problem in our yard, (especially this winter).

The most disastrous problem and killer we have in our yard was and is

BORER! It came in with a TB I was given and nearly destroyed the TB's, and I'm sure it got in again on Japanese iris from a Michigan nursery.

For British Columbia, nearly full or full sun is needed for flowering. We lost all of our *I. tenax* to borer, but one douglasiana seems to persist. We are down to 7 PCI cultivars, having lost even CANYON SNOW - not to cold, but borer this last year!

I had sprayed with Orthene the previous year and that seemed to help. I react badly to it, unfortunately, so this year I tried Malathion granules, which is also a systemic. Either I (1) put it on too late, (March), or (2) plants didn't take it up as readily as "pot plants", or (3) I didn't apply sufficient amounts.

In regard to varietal evaluation: AGE OF CHIVALRY has done well and blooms in spite of considerable shade. DRIVE YOU WILD has increased and grown very well, but is a shy bloomer in considerable shade. BIG MONEY also does well for us, and these first three I would recommend highly. WESTERLIES blooms consistently, but doesn't increase as well as those above. NIGHT EDITOR and BLACK EYE have persisted for several years in the same bed as the others, but have not bloomed. Those reported in this paragraph are in a bed among rhododendrons and lilies, which has not been attacked by the borer.

In a sunnier but severely borer-attacked bed, BIG MONEY and LOS CALIFORNIO, and wild type species *I. douglasiana* persist. All the *I. tenax* in this bed were wiped out.

We made the mistake of planting PCI's in a former TB bed and lost nearly all. Some were moved to the sunnier bed mentioned above, and probably brought the borer with them, hence it's problem. It was a newly dug raised bed.

## SOUTHERN UNITED STATES, WEST TO EAST

The next three respondents have one thing in common, they all live in areas where, for one reason or another, PCI-growing is difficult. New Mexico, like Arizona, is too hot in the summer and too cold in the winter. Oklahoma has those two problems, coupled with higher summer rainfall and humidity. Although apparently experiencing a summer drought this year, North Carolina normally has

high humidity on hot summer days, something the PCI don't experience in their native habitats.

Nevertheless, the PCI have adapted naturally to widely divergent microclimates where they now thrive, and it is the persistence of members like these three who can eventually make them adaptable to all but the most extreme environmental conditions.

Audrey Roe, Albuquerque, NM

I have not tried growing any named varieties in this area, however I have five very successful clumps of species hybrids. The seeds of these originally came from the SIGNA seed list (back in the '80s), and from my intercrossing from those same plants.

This spring I attempted to separate two of those clumps, keeping some three divisions of each for myself, and dispersing the rest among those local society members willing to try to grow them. I have not yet had a chance to ask how those divisions are doing.

I have tried seed from Ghio, getting some germination, but lose the seedlings in a few months.

The main reason I have not tried plants of named varieties is because there were so many reports of the plants being lost in a short time. That may not be a problem now; perhaps I should order some and see what happens.

I have a nice clump from SIGNA 91K086, listed as " 'Creamy Custard' (tenax hybrid?)" This is its third year to bloom, the flower being an improvement in size and form compared to those of my fine clumps. The flower is lavender with a yellow line on the center of the fall. The standards are slightly paler lavender.

I am trying tenax, as so many articles suggest that it may produce hardiness, which is needed in this climate.

Unfortunately, I have not kept clear records of methods I have used for germination, although I have soaked some, and planted some seeds directly into pots, and have had germination from both methods. There are always losses of seedlings, however; some dying in 6 months or so and some growing well the first year, then giving up the following spring.

Needless to say, I think PCI's could have a place in gardens here, and I would dearly like to see them entered in our local shows. This would give our local judges a chance to become acquainted with them, if not to grow them.

Dorothy Hujak Tulsa, Oklahoma

We have had a very peculiar year. It was very cold up until May 1st. Now that it's into May, temperatures have shot into the 80s.

The PCI's have had very little bloom because of a late freeze in late March. Last year it went to 14° and 10°, and I lost several plants. I made the mistake of taking the mulch off too early because they looked so good, and then those very low temperatures hit them. I am having very late bloom now.

I would say my best bloomers are CANYON SNOW, SOQUEL COVE, OJAI, FAIRY CHIMES, BANBURY GNOME, and my seedlings. The species from seed don't do well.

Seed germination does very well. I have started them in the house in Styrofoam cups ever since I started, which was before anyone else. I lose some because of the squirrels, and cover all with hardware cloth when planted outside. I now have quite a number of seedlings pretty high up which were started in December. Strangely, I did not have very good luck from seed ordered from ASPM. Our daughter at Friday Harbor, Washington, sent me some of her seed (Pacific Rim, Cup of Tea, etc.) and I had excellent germination.

I did have some luck dividing and transplanting this year. I do not use any pre-plant treatment. The Styrofoam cups with holes poked in the bottoms, sit in a small dish of water until the soil is dampened for three days. In this way they are kept from drying out. And it is repeated every so often from then on. When germination occurs, I fertilize in this way, too.

Susan Lambiris, Raleigh, North Carolina

After a long, cool, wet spring and a hot, bone-dry summer, we seem to be settling in for a wet, moderate fall.

I delayed writing about PCI success in North Carolina because last fall I knew much more about PCI death than survival. Fortunately, things seem to have improved for me and I may have found some solutions. Emphasis is on may because the summer drought may have a lot to do with it, and a wet summer next year could put me back in square one! (But I'll still have all the seeds from successful PCI x *I. lactea* crosses already made.

Without a doubt, the toughest and longest lived PCI hybrid I have ever had was (and is) IDYLVILD, the last survivor of my original 1990 planting. A happy

camper it is not, but despite heavy competition from other plants and a site almost as shaded in winter as summer, it bloomed and set seed twice and continues to produce new fans in a bed where all my other PCI died from a soft rot long ago.

Now I am successfully growing PCI in two beds with dappled to full shade in summer and nearly full sun in winter. Soil type seems relatively unimportant providing there is no standing water. One bed is almost pure sand, the other is heavy clay-like loam, but domed so that water runs off if it can't soak in. Once established, all the PCI's I now grow seem to thrive if given shade in the summer. Those in moderate to full sun for most of the day are noticeably weaker.

WESTERLIES is the most vigorous and bloomed very well this spring. DEEP BLUE

SEA, (which was purple rather than blue here, perhaps because of the shade?), CLEVER DEVIL, HERALD, and BIG MONEY all had 2 or 3 bloom stalks. while ULTIMATE SUNTAN and VILLA MONTALVO faded away almost at once.

This year I kept notes on root/top development in the plants I received from Bay View Gardens. It looks like plants with relatively few new fans, but copious new and established roots do better than plants with roots that are just emerging from the rhizome, but with many tiny leaf fans. BAT BOY is doing especially well. EAGLE EYES looks dead and HEAVEN KNOWS is weak. SANTA CRUZ BEACH, FAULT ZONE, and SANTA ROSALITA are doing middling well. I will write an update after the 1998 season. Please note that all the plants were in excellent health when received.

## NORTH EASTERN UNITED STATES

Maine, as do all the northerly States, presents a challenge to PCI growers and hybridizers. The summers are too rainy and the winters too cold. Let's hope that with the help of some of Jean Witt's tenax genes and perhaps a large- and tough-rhizomed douglasiana, John White will eventually find the hardy plant he is seeking.

*John White* Minot, Maine

This spring I lined out about 500 PCI seedlings, but due to the long, cold, rainy spring followed by a very hot and dry summer, I have only 50 or so left.

A few douglasianas are growing well, as are "mixed hybrids" from Jean Witt. I also have 5 Amiguita hybrids

I have 6 seedlings, lined out in 1996, which survived the winter. One of these, a tenax growing in light shade, bloomed during several rainy days and I did not see it until the bloom was nearly gone. It appeared to be on the white side with blue markings. I left the flower on the bloom stalk and it apparently selfed. It set a seed pod, and I now have 12 good seeds. They have to be tenax, as no other plant bloomed this year.

Could I be lucky enough to have something develop from these seeds that is a little more hardy?

## OUTSIDE THE UNITED STATES AND CANADA

New Zealand, like Australia, has many areas near ideal for the growth of the PCI. Much valuable breeding work has been done there and exciting cultivars are available, but, because of opposite seasons, they are difficult to exchange. In the last issue we included two interesting notes from Australia, and elsewhere in this issue you will find an article of historical interest from Barry Blyth. The note from Gwenda Harris of New Zealand, below, hints that she may help carry on the work of Fred Danks, Jean Stevens, Dan Hargrave, Dora Sparrow, and Barry Blyth.

*Gwenda Harris*, Herbert, North Otago, N.Z.

First of all, I do not grow any named varieties. The only reason for this is that they are so difficult to obtain. Commercial growers in America seem reluctant to export them, and very rarely, if ever, does one see them offered for sale in New Zealand. Dora Sparrow has some; but you would know about these.

Mostly I just grow and sell unnamed seedlings in my nursery, *Otepopo Garden Nursery*. I have been at Otepopo just over two years, and although I have planted as

much Pacifica seed as I have been able to acquire, I have not had time yet to see the results. It is too early to guarantee that I will become a hybridizer of PCI's, but they are very popular, they do grow well here, and I enjoy them.

Because of the practice here of growing and dispersing unnamed varieties, there is also some confusion in my mind about how much of the seed in circulation is from a true species; and that is something I can't establish at this early stage. I know I have *I. munzii*. I have plants which I hope are *I. macrosiphon* and *purdyi*, but they have not bloomed yet. Until I can do a lot more growing on from seed I am not sure which of douglasiana, innominata, and tenax plants are true species, and which are rather early hybrids. Being able to see them in the wild would help enormously. Sometimes New Zealand does seem rather isolated from the main stream.

I have not tried any pre-plant treatments as Pacifica seed seems to germinate readily for me.

The unusual amount of rain over the last two years is rather a sore point with me. When I moved here, conscious I was coming from the drought prone North Otago region, the first thing I did was to put in a new water supply irrigation system. Ever since it became operational we have virtually had sufficient rain, - and sometimes too much! My neighbors find it very amusing.

This weather information may not be of interest to you except that when I came here, there were two large clumps of a rather nice lavender douglasiana hybrid already in the garden. It flowered all through the autumn and occasionally through the first winter, and really well again in my first spring. Since then, and since the really wet seasons started, it has flowered very reluctantly, if at all. My conclusions are that in this climate, PCI's prefer it a little drier.

## JAPAN

Japan's climate varies widely from north to south, In the north it is influenced by harsh winds from Siberia and the cold Oyashio current which flows southward into the sea of Japan. In the south, including the Osaka Bay area where Akira Horinaka resides, the winters are moderated by the warm Kuroshia current

but the summers can be hot and oppressively humid.

*Akira Horinaka, Nishinomiya, Japan*

I have obtained *Californica* cultivars from Mr. J. Ghio every year for many years. Although they arrived in very good condition, I lost them all.

The climate here in Nishinomiya is warmer than the places where they are native. In the summer we have very hot days: 35°C. (95°F.) or more.

Because I could not grow them, I sent some of these plants to a friend who was able to plant them in an area cooler than my garden. Fifty percent of the plants I sent him are growing well. Their flowers are lovely and he is hoping that the seedlings from these plants will also bloom well.

My latest interest is trying to locate an *Iris setosa* with variegated foliage and with close to deepest red flowers. Please send me the name and address of anyone who would be able to help me locate a source of a cultivar much like this.

## EUROPE

The two final contributions to this compilation are from areas seemingly as difficult as any imaginable in which to grow PCI's. PCIs grow in areas of California even hotter, but certainly not as humid. The cold temperatures, on the other hand, are well below those where PCIs are native. Both authors, however, are hopeful. Lech Comarnicki's note from Warsaw, ends with a footnote which reads as follows: "LEWIS: Warsaw's climate has a low of -37°F. with maximum summer temperature of around 96°. Early, hot summers and long rigorous winters".

*Jean-Louis Latil, Lazer, France*

I grow (or try to grow!) mainly the CA species (16 species, subspecies, and varieties) and have not had a long experience with them: only two years. I am a specialist in iris species and grow very few hybrids: only one CA hybrid: TROPEZIENNE, (Peyrard, 1996) that is a recent French introduction. It is a nice red-maroon color. This variety is grown in full sun without protection, and is heat and cold resistant here, (-15°C in winter, +30°C in summer).

*Lech Comarnicki, Warsaw, Poland*

This applies to the spring of 1996 because the winter was so long and severe that it was suddenly summer and there was no time left for writing.

Winter was extremely harsh this year. Hard frost (-10° F and below came when there was no snow, so in effect, soil was frozen five to six feet deep! Can you imagine my surprise when I uncovered the PCI plants and found six with fresh green leaves? I started at once to write to you, but decided to wait a week or so and then I saw with great pity that one after another the plants died. It seems the root system did not survive the frozen soil. However, one plant in the middle of the bed SURVIVED! It is a small one with very narrow leaves resembling *innominata*, as far as I can see after reading descriptions in books. It came from the mixed species seed from the British Iris Society (BIS). It is a slow grower and did not bloom in 1996; but during the fall it increased and may bloom next year. Anyway, it seems to me an achievement and I feel quite proud.

## SUMMARY AND DISCUSSION

*Compiled by Lewis and Adele Lawyer*

This is the second survey of our members regarding which *Pacifica* cultivars perform best in their gardens, and some of the problems they encounter in their growing area. As an introductory paragraph to the first (1991) survey, I wrote the following, which seems as appropriate now as it did then.

"We have never been very enthusiastic about printing lists of named iris cultivars. I suppose this is because the popularity of a newly introduced tall bearded variety is so fleeting that, by the time you type its name in your list, nobody wants to grow it. There seems to be a different feeling about the *Pacificas*. A much higher proportion of the older varieties are grown and appreciated over the years. This is certainly evident in the survey which follows. We must keep in mind, however, that a cultivar must have been grown for a period of years in order to be evaluated, and this no doubt skews the data in favor of the older introductions. So remember that one of those just-introduced beauties could have more going for

There has also been germination of seed from *Ghio* which did not germinate the year before. Strangely enough, seeds did not germinate during cold weather, but only after two weeks of temperatures much above 80° F in June! They were previously kept in a temperature around 50° for three months without result. Plants were weak and only two survived to the fall. From BIS seeds I obtained only one seed which died after a few weeks. It should be said that we had periods of heat alternating with cold weather during the whole spring and summer.

This year I ordered a lot of seeds again, and shall be trying again. If a PCI plant could survive such a bad winter there is reasonable hope that more should survive a normal one. This single plant gives me hope for further attempts. In addition, I shared the seed with a friend, and three other plants survived in her cold frame. If we have any bloom and seeds are produced, you will be informed of the results and perhaps we may succeed in finding more hardy clones.

it than anything we have ever seen, and could well be the star of tomorrow's survey."

As it turned out, however, there was good correlation between the leaders in the two surveys. As they did in our 1991 survey, Canyon Snow was the favorite and Big Money was second. CANYON SNOW (Emery '75) was recommended by 13 respondents but faulted by one as having a "reclining" habit. From seeing it grow in our garden, I would suspect that this might be caused by too shady a location. BIG MONEY (*Ghio* '84) and SIERRA DELL (Lawyer 88) were tied for second with 6 votes each. BIG WHEEL (*Ghio* '82), IDYL-WILD (*Ghio* '88), and PACIFIC RIM (B.Jones '91) tied for third, with 5 votes each. AGNES JAMES (Starker '35), AMIGUITA (Nies '51), NIGHT EDITOR (*Ghio* 87), UPPER ECHELON (*Ghio* '89), WESTERN QUEEN (Stambach'72), and WILDER THAN EVER (*Ghio* '93) tied for fourth with 4 votes each

Thirteen cultivars received 3 votes each: CANYON ORCHID, CHIMES, DEEP BLUE SEA, ENDLESS, FAIRY CHIMES, FAULT

ZONE, FOOTHILL BANNER, IN THE MONEY, JUNIPERO, OJAI, SEA GAL, and WESTERLIES.

Twenty seven cultivars were favored with 2 votes each: AGE OF CHIVALRY, BANBURY GNOME, BLACK EYE, CALIFIA, CHIEF SEQUOIA, DEEPENING SHADOWS, DRIVE YOU WILD, EARTHQUAKE, GORDOLA, HERALD, T'S WILD, JEAN ERICKSON, LOS CALIFORNIO, MANTRA, MUNRAS, NATIONAL ANTHEM, NOVIA DEL MAR, ORCHID SPRITE, PACIFIC HIGH, PEGASUS, RASPBERRY DAZZLER, SAN LORENZO VALLEY, SEABRIGHT COVE, SEE THE LIGHT, SIMPLY WILD, SOLID CITIZEN, TIDY WHITE, and TROPEZIENNE.

There were 70 cultivars which received one vote each. This may seem trivial, but it does mean that each performed admirably for someone. To help you in making selections for your growing conditions we will list them by area where they were selected.

#### SOUTHERN CALIFORNIA

ARANA, CALIFORNIA SKIES, CAMP CAPITOLA, CAMPAIGNER, CAROLE CABEEN, FLAMENCO QUEEN, MAYOR, and STAGE WHISPER.

#### NORTHERN CALIFORNIA

AIR SHOW, AMI ROYAL, BANBURY FESTIVAL, BAT BOY, BATTLE ALERT, COMET TRAIL, CREAMY CUSTARD, CUP OF TEA, EASTER EGG HUNT, EL NINO, ESCALONA, FORT POINT, GOLD DUSTED, GREENAN GOLD, HALF TIME, HANDS ON, HEAVEN KNOWS, HIGH SPLendor, MIMSEY, MISSION SANTA CLARA, MONTEREY GOLD, MOONLAD, NAPA VALLEY, ORCHID RESPRITE, OSOCALES, PHILOSOPHY, RARE REWARD, REGAL CLASSIC, RUTH HARDY, SCHOOL BOY, SEA ADMIRAL, SILVER CIRCLE, SKYLASH, SOMBRIEL, TWIN LAKES, ULTIMATE SUNTAN, VALET, and WILD MAN,

#### OREGON, WASHINGTON, BRITISH COLUMBIA

BILLY BLUE JAY, BLUE MOMENT, CARROT TOP, DEL REY, DOROTHY V, LAS FLORES, NATIVE BLUSH, NATIVE WARRIOR, ON THE EDGE, POPPY, RIO DEL MAR, RIPPLE ROCK, SANTA RITA, SMALL TOWN, TULUM, TUNITAS, and VERA HAYS.

#### CENTRAL AND EASTERN UNITED STATES

BLUE SAGE, CLEVER DEVIL, DAVID WARD, HONTA YO, SHAMAYIM, SOQUEL COVE, SUSIE KNAPP, and WOLKENTANZ.

#### FOREIGN

BOTTOM LINE, CALIFORNIA MYSTIQUE, GRAND DESIGN, MIRAMAR, MONTERA, QUINTANA, and WILD TIME.

Although only 54 percent of the respondents reported growing their own seedlings, all who did so, even those where PCIs are easily grown, reported as good or better growth and flowering from their own than from purchased clones. The incentive for growing seedlings of their own, however, seems to have come more from necessity than from aesthetics. In the northern California area, where they are easily grown, only 22 percent had attempted their own hybrids. In Oregon-Washington the percentage rose to 38 percent, and in the more difficult areas 87 percent.

Of those who grew both hybrids and pure species, most found that the pure species, other than *I. douglasiana*, *I. tenax*, and some clones of *I. innominata*, were the most difficult and the weakest growers.

HOT SUMMERS In nature PCIs are usually found in partially-shaded areas. They are occasionally found in full sun on road banks and recently clear-cut timber areas where they have laid dormant for perhaps centuries in the deep forest shade. *Iris douglasiana* grows in full sun along the coast, but where it is in full sight of the ocean. Shade was found to be a must in hot summer areas, and some shade was recommended by everyone elsewhere who mentioned the subject.

COLD WINTERS: There are places on earth where no plant can exist, and there are cold limits for all plants. It is well documented, however, that cold tolerance can be altered genetically, in fact tolerance or adaptability to all climatically controlled conditions can be modified by selection up to the genetic adaptability of the species. John White in Minot, Maine, Jean Peyrard in Seyssinet, France, Jean-Louis Latil in Lazer, France, Lech Comarnicki in Warsaw, Poland, and to a lesser degree Kathy Millar of Duncan B.C, Audrey Roe, Albuquerque, NM, Bob Ward of Little Rock, Arkansas, Dorothy Hujak Tulsa, Oklahoma, and Susan Lambiris, Raleigh, North Carolina, are all breeding for freeze tolerance. Maybe some day they will be far enough along to exchange seed, 5 or 10 seeds would be enough to give each a broader genetic base. I have heard rhizome size suggested as a possible factor in transplanting ease, and perhaps it should also be considered as a contributor to freeze tolerance. An-

other thing we noticed, CREAMY CUSTARD and Creamy Custard seedlings were noted for their good performance in cold climate areas.

**TRANSPLANTS:** Loss during transplanting is the greatest deterrent to the wide spread use of Pacificas in areas where, once established, they can be grown successfully. Failure with transplants is directly correlated with the length of time between digging and replanting, and this is sometimes dictated by the delivery service or mandatory plant inspection. Best transplants have long, white roots, and young, new sprouts with roots, and, as noted above, more voluminous rhizomes.

**SOIL:** With few exceptions, soils needed amending, and this was usually accomplished through organic additions. Good drainage was stressed and raised beds or

mounds used if all else failed. Under alkaline conditions, soil sulfur was added and spaded in.

**FERTILIZER:** Several members gave their fertilizer practices, but we are not going to comment further since choosing the correct fertilizer is so dependent on your soil type. One thing we should mention, however: phosphorus does not move in the soil, and it is best to spade in single super phosphate before planting. This places the phosphorus in the root zone where it can be assimilated.

**POTS:** In cold winter areas it is best to start transplants in pots and set them out in the spring after all danger of killing frosts is over. Some feel this is the best practice under all conditions. We recommend it also as a quarantine against root diseases which you might otherwise introduce into your garden.

## GROWING PCI SPECIES IN COLORADO

Paul R. Martin, Golden, Colorado

Having started a large number of seedlings indoors the previous two winters, by June it was high time to begin preparing a bed for them. The bed was dug to a depth of 15 to 24 inches, and was lined with black plastic to prevent the intrusion of clay from the surrounding soil. A 'scree-mix' was prepared from coarse sand and sphagnum peat, with some composted pine needles, commercial compost, and a little greensand. The plastic was perforated at the bottom, and the soil mix 'bermed up' somewhat, for drainage. A list of species and sources follows:

- Iris bracteata*, SPCNI 95101
- I. bracteata*, NNS 93-392
- I. chrysophylla*, NARGS 94-5: 6417
- I. douglasiana*, SIGNA 93K180
- I. fernaldyi*, Archibalds' collection
- I. macrosiphon*, from Tilden Regional Park
- I. macrosiphon*, NNS 93-399, 400
- I. hartwegii*, from Cold Spring (personal collection)
- I. hartwegii*, from Pinecrest Lake (Personal collection)
- I. hartwegii* subs. *pinetorum*, (Archibald's collection)
- I. innominata*, SPCNI 95116
- I. purdyi*, NNS 93-401
- I. tenax*, SIGNA 93K190

*I. tenuissima*, NNS 93-408

*I. thompsonii*, SPCNI 95135

The bed is sheltered from excessive wind by our detached garage, a fence, and a large clump of chokecherry. A little mid-day shade is provided by neighboring trees, and some afternoon shade is provided by a large Siberian elm and the garage. Only one or two plants of *Iris tenax* did not adjust to their new situation, and there have been no significant losses to date. I have tried to water very sparingly during the summer, especially during hot weather, but I do water occasionally in the cool of the evening or early morning hours. Two to four inches of pine needles were used to mulch for the winter, which had been mulched only 1/2 to 1 inch before. Winter low temperatures in this area normally reach -10 degrees F., and this past winter was no exception. A double layer of the crop row cover, 'Reemay' was used on a couple of occasions this past spring to help insulate the plants after they had begun to grow again, when a hard frost was likely and there was no snow cover.

I was pleased to see at least a couple of *I. hartwegii* plants bloom (May 31 and about June 4), and *I. douglasiana*, also second year seedlings, (May 31 to June 17).

The douglasianas from Oregon were delightful, but the real surprise was the *Iris hartwegii* from Cold Spring, California. I had collected that seed in November, without having seen the plants in flower. I guess I was lucky to find any seed at all. The flower was a rich deep yellow and the form was garden worthy. The outstanding beauty of this plant came as a sur-

prise. The surprise was sweeter for carrying with it the memory of the trip on which the seed was collected. Time will tell whether other individuals grown from the seed collected at Cold Spring show similar characteristics. If they do, I hope to be able to donate hand pollinated seed from these plants to future SPCNI seed exchanges.

## IDEAS ON THE CULTURE OF PCIs

*Dorothy Rucker, Danville, California*

I've been growing Pacificas for about 10 years. Mine are almost entirely hybrids, and most of them from Joe Ghio's hybridization. I try to remove seed pods so that I don't have little strangers coming up.

I live in Danville, which is considered an inter-coastal valley, usually colder in winter and hotter in summer than the San Francisco Bay area, just west over the hills. Temperatures in the winter get down into the low 20s often, and get to the 30s regularly. In the summer our temperatures are hot with little humidity, ranging into the 90s and over 100 often. We rarely have fog, and when we do, it is the valley ground fog in the winter.

When I came home with my first plants, I prepared a bed in the rear of my house with plenty of humus and some sand so that it would drain well. This bed received morning sun, and shade from the house in the afternoon. I tend to fertilize infrequently, but when I do, I use Ghio's recommendation of an azalea-rhododendron-camelia fertilizer. I have never used a drench for prevention of fungi or rots, and I have had very little problem with disease.

Originally I chose my varieties by color, and still do to some extent, but I am trying to choose growth habit as well. Visiting gardens to see how plants grow is enlightening. Some plants with the most appealing blooms have terrible growth habits, with snaking stems or open centers. If one likes to enter shows, a crooked stem is pretty hard to display. I like my plants to be compact and with good vigor, and blooms that come up straight. I don't want plants that take over, or are too aggressive. Canyon Snow, Native Jewel, and San

Lorenzo Valley are too vigorous, or need to be put where they have more room.

It may be my imagination, but I think that plants with the munzii blood lines tolerate more sun than the others. Miramar, San Lorenzo Valley, and Sierra Dell are in more sun in my yard and seem to thrive. Most of the other 25-30 plants have partial shade during the day.

As for cold, I haven't seen much damage except for a little burn on the foliage. One year I had just planted my order from Ghio when we had very cold weather down in the low 20s. That year was my worst loss, for every one failed. They had not been established long enough for that much cold. I've lost other new plants at times, which still remains a mystery. Perhaps it was some soil borne disease, but plants on either side survived.

Each year in the fall I have divided plants (have taken side growth from the clumps) to bring to our society's raffle and auction. I try to see that white roots are showing. These indicate that the plant is ready to start its growth.

I water my plants in general all year round, except for rainy weather, just as I do for any other plants in my garden. I trim the foliage if it overlaps a walk or other plants. Trimmed foliage is less attractive, so give the plant sufficient room.

How I prepare my plants for raffles or sales might be of interest. I have a sort of production line. First I dig and divide the particular variety I'm working on, and see that at least one plant in a package has good roots. I then wrap the plants in a paper towel, then in a piece of newspaper, and see that they are wet. Then I put them into a fold-over sandwich bag. I wrap the bag around so



that I can fasten the neck with a strip of masking tape. I use a felt pen to write the name, hybridizer, and year on the masking tape before wrapping it around the package. One wrap around the neck, with the rest of the length across the

package makes it easy to read and secure. Sometimes I dunk the package after it is labeled and wrapped to be sure that the plants will be damp enough to last a few days. It takes time, but I have done over 100 plants for some auctions.

## HELP NEEDED

### *Adele and Lewis Lawyer*

Adele and Lewis once had a beautiful garden, with bulbs, succulents, plants from many areas of the world, and a generous proportion of iris: arils, spurias, siberians, medians, tall bearded, and species. But now these are surrounded and interspersed with Annual Sowthistle (*Sonchus oleraceus*), with grasses, and Prostrate Spurge, (*Euphorbia supina*). The fruit trees and azaleas need pruning, the honeysuckle, ivy, and clematis have gone wild and are strangling less aggressive shrubs. All this because we are too busy with written work to be more aggressive than the weeds and vigorous vines!

We are officially Senior Citizens now and enjoy certain privileges such as discounts on entry to museums, art galleries, and in certain eating establishments. What we want most at this stage of our life, however, is to have time to work in the garden!

When we had 8 AM to 5 PM jobs for which we were compensated with dollars and cents, we were able to easily keep up with the garden in addition to editing 4 issues a year of the Region 14 Bulletin. Now we have no sense in any definition of the word and spend most of our time indoors. Our present working hours are 9 AM to 10 PM.

We are presently authoring a large part of the book on PCIs, which has required continuous writing and re-writing for a long time, and is likely to continue for another year. We want to fulfill this commitment.

We would also be willing to edit the Almanac temporarily: but we would welcome a committed person who could take over this twice-yearly responsibility. This position includes mailing the issues with the accompanying job of sorting, stamping, and sealing envelopes. It would also be nice to have a proof reader. I don't think we have ever sent out an issue without an embarrassing error.

The category of MEMBERSHIP could be cut off from the Secretary-Treasurer's responsibilities. We have developed the software for this operation, which includes Current Members, Delinquent Members, and cards to send out as dues reminders. Each month the notices should be sent out requesting that checks be sent to the Treasurer.

The SECRETARY receives letters of inquiry about the nature of SPCNI, and on specific aspects on the care, feeding, and sources of supply of PCI. Adele has developed an affection for, and a friendship with many correspondents whom she has never met face to face. This was an enjoyable aspect of this position.

The category of TREASURER, (for which we have also developed software), would receive the checks, and at the end of the following month, send a list of those who renewed to the MEMBERSHIP CHAIRMAN. He or she would deposit the checks at least once or twice a month (we don't like to keep member's checks dangling) in a Savings or Checking Bank. He would also make out checks, as requested, for the Almanac, Seed, Expedition, supplies, and other expenses.

PUBLICATION CHAIRMAN. This job would require storage facilities for the Lenzes, the Cohen, the Check Book, and all back copies of the Almanac. When the book is completed the publisher will, hopefully, be the distributor. The publications job involves sending out all publications requested and also printing additional copies of back copies as supplies become low. An inventory of publications should be kept up to date, as well as an index of major articles in each Almanac issue. [Software available]

Please contact the Lawyers if you can share a portion of SPCNI responsibilities. Also, since we are well beyond retirement age, one of you will have to consider eventually taking over the ALMANAC.

## NEW MEMBERS and ADDRESS CHANGES

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Gornley, Thomas, Rita, & Kevin  
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## RECOMMENDATIONS: SEED AND SEEDLINGS

### PLANTING, GERMINATION, SPROUTING

People have devised all sorts of complicated ways to germinate PCI seed, in plastic bags, in little cups, or on paper towels. You can use any method with which you are comfortable, but no method has yet been proved better than planting in pots in a mostly organic planting medium such as can be purchased in a garden supply store. I use a home-made mix consisting of 1/3 sphagnum peat and 2/3 oak leaf mold fortified with a high-phosphorus complete fertilizer. This mix is not sterile, and perhaps a purchased sterile mix would be better.

Container size is somewhat optional, but PCI roots grow lengthy enough to consider 5 to 6 inch depth as minimum. Optimum covering depth is between 1/4 and 1/2 inch, but should be deep enough to keep the seeds continuously moist until germination is complete.

Gene Loop's germination tests (ALMANAC fall, '94, '95) show that PCI seeds germinate (sprout) best at temperatures around 50° F. Germination will not occur in temperatures above about 70° F, and is slowed to a halt around 32° F. Seeds will germinate at these cool temperatures in as little as 30 days, but should then be moved to a warmer regime to accelerate emergence and growth. Plants will take from 40 to 90 days from planting to emergence, depending on temperatures prevailing after germination.

Seed can withstand freezing but can be killed if held near freezing (32° F) for longer than 20 days or so. No pre-plant treatment (freezing, refrigeration, etc.) has proved to be beneficial.

Ideal temperatures for both germination and sprouting occur out doors during the winter in most areas of the three Pacific states, but must be provided in harsher climates. This can be done by keeping them for a month or so in any space where temperatures range between 35 to 65° and which average somewhere near 50°. After a month or so, they should be moved to a warmer area.

### LINING OUT

If several seeds are planted to a pot, the roots become entangled and must be carefully teased apart. We have always done this by dipping the root ball in water, but last year we did it with no washing, and had 100 percent survival of the replants.

The seedlings can be moved to larger (5" to 8") pots where they will bloom, or can be lined out in the garden. We line out, 6 inches apart, in rows 1 foot apart in a garden soil containing 1/3 sphagnum peat by volume, usually in May or June. It is essential for the soil to be adequately settled around the roots; therefore plants should be well-watered individually at time of planting. They should be kept continuously moist after planting.

# 1997-1998 SEED EXCHANGE LIST

Seeds are available on a first-come, first-served basis. All seeds are priced at \$1.00 for the first packet, and \$.50 for each additional packet. Please order by number. Make checks payable to SPCNI, and address orders to Colin & Teressa Rigby, 18341 Paulson SW, Rochester, WA 98579

Unless otherwise specified, all seeds are open-pollinated  
 Lot numbers of all Garden Hybrids begin with "970", all Species with "971"  
 Lot numbers are followed by the donor-symbol, and the item.

## SEED FROM NAMED GARDEN HYBRIDS

<u>LOT# DONOR VARIETY</u>	<u>LOT# DONOR VARIETY</u>	<u>LOT# DONOR VARIETY</u>
97001 F Agnes James	97017 J Idlywild	97030 H Napa Valley
97002 J Air Show	97018 H Idylwild	97031 J Native Warrior
97003 A Amiguita	97019 A Improved Valley Banner type	97032 J Old Monterey
97004 A Augie	97020 H Joey	97033 A Pacific Rim
97005 H Augie	97021 H La Selva Beach	97034 H Pescadero
97006 F Big Money	97022 A Las Olas	97035 V Rincon
97007 A Califia	97023 A Little Jester	97036 F Ruth Hardy
97008 J Canyon Orchid	97024 A Little Toby	97037 A Sierra Dell
97009 J Casa Pacifica	97025 A Lompico	97038 A Sierra Stars
97010 J Chief Sequoia	97026 A Mendocino Banner	97039 H Simply Wild
97011 J Drive You Wild	97027 F Mini Ma	97040 J Spring Daze
97012 A Foothill Banner	97028 H Mission Santa Clara	97041 J Valley Banner
97013 A Garden Delight	97029 H Munras	97042 J Western Queen
97014 A Gold Dusted		97043 J Wild Party
97015 A Harland Hand		97044 J Wish Fullfillment
97016 F High Splendor		

## SEED FROM MIXED GARDEN HYBRIDS

<u>LOT# DONOR VARIETY</u>	<u>LOT# DONOR VARIETY</u>
97051 A Mixed Garden Hybrids	97051 V Mixed Garden Hybrids
97051 F Mixed Garden Hybrids	97051 N Mixed Garden Hybrids
97051 M Mixed Garden Hybrids	

## UNNAMED GARDEN SEEDLINGS

<u>LOT# DONOR VARIETY</u>	<u>LOT# DONOR VARIETY</u>
97060 A Lawyer blue-violet blends	97071 A XP325 "Late Doug" X XP251A Very late bloom, good branching
97061 A XP210 Selections bulked	97072 A XP326C: XP252A X 'Late Doug'
97062 A XP1F - Sierra Sapphire-type flower on a 15" stalk	97073 A XP326B: XP252A X 'Late Doug'
97063 A XP60B - Good branching, 5 to 9 flowers	97074 A XP215A Blue blush, 13" branched stalk
97064 A XP64E Foothill Banner sib	97075 A XP224A Blue-violet, vigorous, 14" branched stalk
97065 A XP91 Lawyer seedling x Lenz seedling, neon type	97076 A XP224F Violet
97066 A XP143B Veined blue-violet blend	97077 A XP264B Blue blush
97067 A XP157A Lenz flower type	97078 A XP280 Good deep blue, 18" branched stalk
97068 A XP181A Lenz flower type	continued
97069 A XP202B Blue blend, 10" stalk	
97070 A XP214A Blue lined self, 17" branched stalk	

HAND POLLINATED CROSSES

LOT# DONOR VARIETY

97091 H In the Money X Munras  
 97092 H In the Money X Osocales  
 97093 H Munras X Big Wheel  
 97094 H Night Editor X San Andreas

LOT# DONOR VARIETY

97095 H Canyon Snow X Munras  
 97096 H Rare Reward X Idylwild  
 97097 H Idylwild X Night Editor

PCI SPECIES

LOT# DONOR VARIETY

97101 E *I. bracteata*  
 97102 A *I. douglasiana* "Late Doug"  
 97103 A *I. douglasiana* From the Univ.  
 of CA Botanical Garden  
 97104 A *I. douglasiana* Garden grown  
 97105 D *I. douglasiana* Mixed  
 97106 R *I. douglasiana* - Collected  
 Sandy, OR  
 97107 O *I. douglasiana* - Garden  
 collected  
 97108 O *I. douglasiana* -Garden  
 collected  
 97109 G *I. hartwegii* Hale Road,  
 Amador County, CA  
 97110 G *I. hartwegii* Shake Ridge  
 Road, Amador County CA  
 97111 Q *I. hartwegii* - collected by  
 John Weiler  
 97112 C *I. innominata* China Flat, Coos  
 County, OR  
 97113 F *I. innominata* - garden OP

LOT# DONOR VARIETY

97114 J *I. innominata* - garden OP,  
 lavender/white  
 97115 E *I. innominata*  
 97116 E *I. innominata* Coquille Falls  
 97117 L *I. purdyi*  
 97118 E *I. tenax*  
 97119 B *I. tenax* Benton County, OR  
 97120 E *I. tenax* Pale forms, Eden  
 Valley, OR  
 97121 V *I. tenax* Various shades  
 97122 O *I. tenax*  
 97123 E *I. tenax* x *I. innominata*  
 hybrids  
 97124 E *I. tenax* sbsp. *klamathensis*  
 97125 P *I. tenax* var. *gormaii*. Hagg  
 Lake, OR, collected at site of  
 1995 expedition  
 97126 B *I. tenax* Botkin Creek, Benton  
 County, OR  
 97127 E *I. thompsonii*

LIST OF DONORS

A Lewis and Adele Lawyer	G Bonnie Bowers	N George and Carla Lankow
B Bill and Jeanne Ferrell	H Steve Taniguchi	O Mary Rose
C Gene and Joanne Loop	J Al Lind (Mrs. Ted)	P Roger Brewer
D Claude and Joanne Derr	K John Weiler	R John and Kay Ludi
E J. V. Lawrence	L Nick DeOrio	
F Colin and Teressa Rigby	M Carole Breedlove	V Various