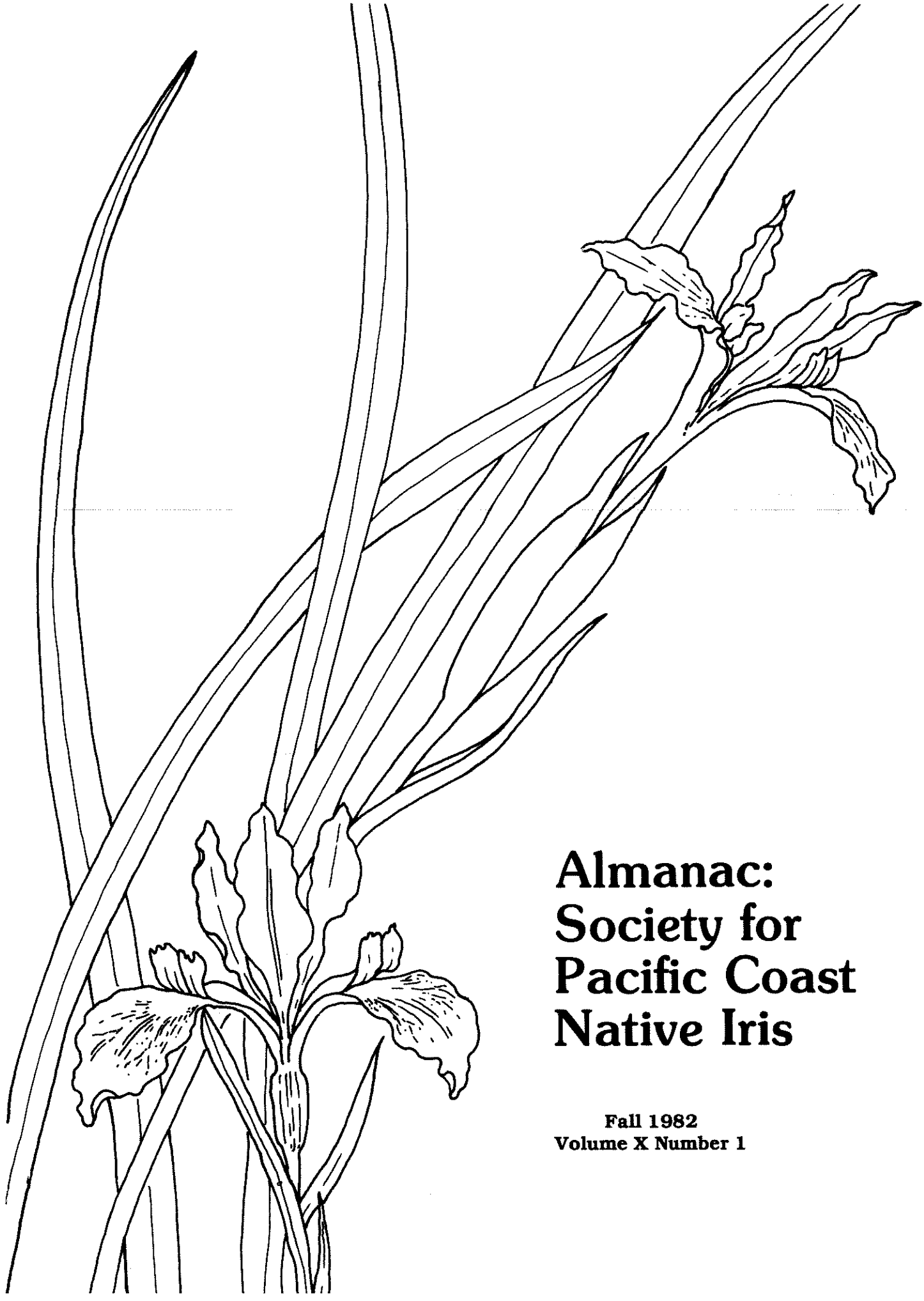
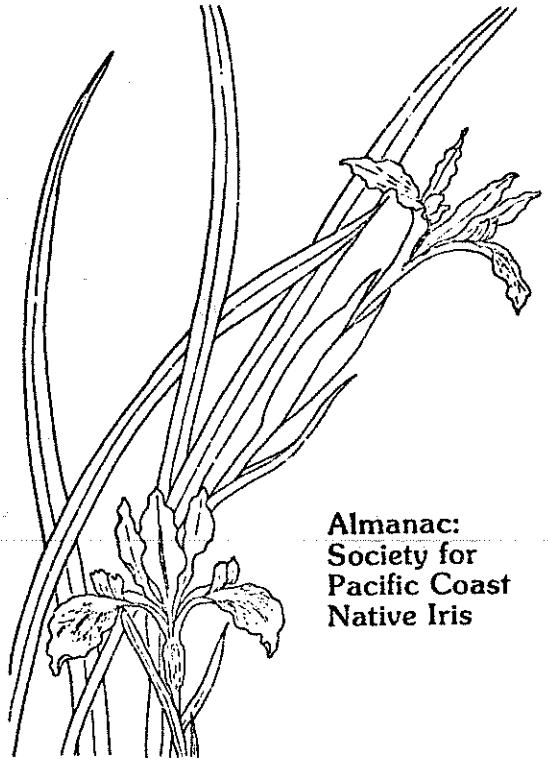


Almanac: Society for Pacific Coast Native Iris

Fall 1982
Volume X Number 1

cover: **Diana Gregory**



Almanac: Society for Pacific Coast Native Iris

PUBLICATION STAFF

Editor	Philip Edinger
Associate Editor	Jean Erickson
Consultant	Jean Witt

The *Almanac* is published in spring and fall; copy deadlines are February 1 and August 1, respectively. For information about availability of back issues, please address the Editor.

MEMBERSHIP, SUBSCRIPTIONS

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

Membership rate:	Individual	Family
Annual	$4.00	$5.00
Triennial	10.00	12.00
Supporting Annual	6.00	
Life	50.00	

Please send membership, subscription monies to the SPCNI Treasurer.

Executive Committee

President	Jean Erickson 2181 Blucher Valley Road Sebastopol, CA 95472 (707) 823-9545
First Vice President	Duncan Eader 111 W. Magna Vista Arcadia, CA 91006 (213) 447-0033
Second Vice President	LaRue Boswell 1821 Gross Lane Concord, CA 94519 (415) 682-0777
Immediate Past President	Virginia Del Judge 121-A Victoria View Road Sequim, WA 98382 (206) 683-9468
Secretary	Dodo Denney 477 Upper Mesa Road Santa Monica, CA 90402
Treasurer	Dorothy Foster 977 Meredith Court Sonoma, CA 95476 (707) 996-6654
Editor	Philip Edinger P.O. Box 637 Cloverdale, CA 95425 (707) 894-3225

PUBLICATIONS AVAILABLE

Seed Planting

Almanac, Volume VII, Number 1 (Fall 1980) contains several valuable articles on raising Pacific Coast native irises from seed. Copies are available from the Editor for $2.00 each, postage paid.

Species Distribution, Recognition

A Guide to Pacific Coast Irises: Victor A. Cohen; forward by E.B. Anderson. London: The British Iris Society, 1967.

This 40-page booklet contains both colored and black-and-white photographs of selected species, line drawings and thumbnail descriptions of all species and major subspecies. There is general material on distribution and botanical affinities among the species, plus a map of western states showing distributions of the species in general. Copies are available from the Treasurer for $3.50 each, postage paid.

Up Front

Many readers may think of the editor as a very lucky person: "out there" is a captive audience available to be harangued, harrassed, persuaded, opined to - in short, to be bombarded by whatever the editor wants to get across. In fact, it can appear downright subersive. There is truth in those possibilities, but in reality an editor usually lives with a sense of anxiety rather than power. You see, there's not an awful lot of competition for the available space in a journal such as this; and if much material in an issue is obviously to transparently a product of the editor, you can almost bet that it was born not of ego but of despair. My editorial compatriot Peg Edwards ("The Siberian Iris") put it very succinctly: "I can't print what I don't get."

I'm not exactly happy to begin my editorial term with whining, but on the other hand this matter of material has been, and still is, a problem – so I see no need to beat around the bush about it. It is gratifying to receive interesting articles and tidbits from a few faithful regulars, but their patience must wear a bit thin when they perceive that they are furnishing the bulk of text for each issue. We need *new blood* circulating through these pages – bringing with it a broader range of topics and coming from a greater geographic range than that of our "regulars". I submit this point: if YOU engage a fellow PCN enthusiast in conversation about these irises, then YOU have material to submit to the *Almanac*. One of the most common conversations between two irisarians (doesn't matter whether TBs, PCN, Siberians, etc.) runs like this: "I think so-and-so's NATIVE CURSE is twice the iris that his/her PACIFIC UNDERTOW is; just look at the better growth, wider falls, etc., etc." Right there you have a telling varietal comment – without spit-and-polish phrasing – that could inform, guide, even provoke readers. And we *know* there is good hybridizing work being done throughout the Pacific states that deserves to be reported on.

That's just an example, an attempt to set some wheels in motion. Think about it. No – do more than that. ACT!

PHIL EDINGER

SEEDS AVAILABLE

For Pacific Coast Native Iris seeds, send a stamped, self-addressed envelope and $1.00 per packet to LaRue Boswell, 1821 Gross Lane, Concord, CA 94519. These are from open-pollinations (only seed parent known) and *supply is limited.*

From the President

Dear friends,
Our lives are ever-changing and with each change a different view and goal presents itself to challenge our initiative. Now, for me, it is the Society for Pacific Coast Native Iris.

The promotion of PCNs is important among our objectives which were set forth by our founders and first president, Ray Chesnick, in 1973. To promote them, to disseminate information about them, and to encourage their cultivation and appreciation of them and their hybrids is our primary concern. It is due to the dedication of our members and past officers that we have seen great progress. We would like to continue this policy and perhaps, with some new ideas from members, progress even further.

In line with this, the SPCNI is planning a meeting this fall to determine which direction the society will take in the coming two years. Information on this proposed meeting will be found elsewhere in this Almanac.

The Judge's Traning Program in conjuction with the Region 14 Fall Meeting to be held this month in Stockton, California, will feature PCNs and their hybrids. A panel will discuss judging criteria. You see, we are progressing.
Join us in renewing our efforts. May all your *Californicae* bring you joy,

JEAN ERICKSON.

FALL MEETING NOTICE

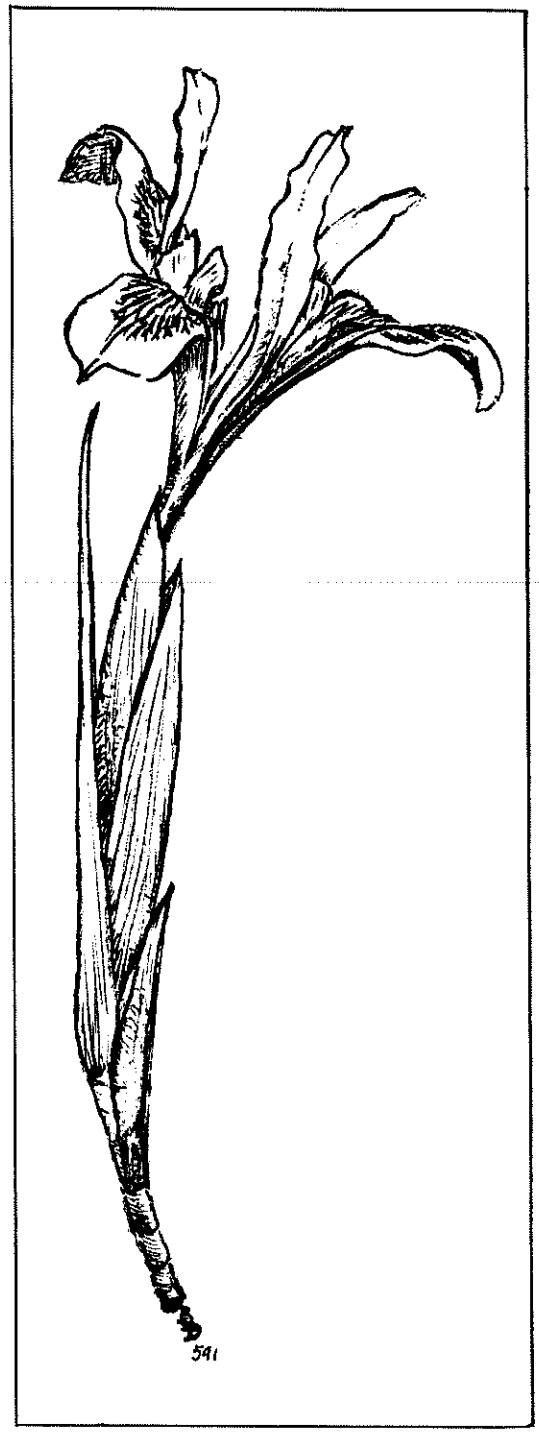
The Society for Pacific Coast Native Iris cordially invites all members to a meeting Saturday, November 13, from 11 a.m. to 4 p.m. Location will be the Hall of Flowers, Golden Gate Park, 9th Avenue and Lincoln Way, San Francisco. This will be an off-season get-together with business meeting attached – a fine opportunity to exchange ideas, fellowship, and plants. Luncheon will be provided by members of the Executive Committee. Do come!

CONTRIBUTORS TO THIS ISSUE

B. Leroy Davidson..... Seattle, Washington
Ivor Knowles..... Sevenoaks, Kent, England
Lewis Lawyer..... Oakland, California
Lee W. Lenz..... Claremont, California
Richard Sloan..... Arcadia, California

The Noti Irises of Lane County, Oregon

Roy Davidson



As early as February, in favorable years, a little orchid colored iris may be found in the pastures northwest of Eugene, Oregon. Delora Thompson Smith apparently was the first to note that they were not merely precocious *Iris tenax*, the ordinary valley species of the area, and that they had the long perianth tube, the inflated spathe, and the very short stem of *I. chrysophylla* (which at the time was being confused with *I. macrosiphon,)* a creamy white species found in the foothills just above and existing in a variety of color forms elsewhere in Oregon. She also called attention to the curious ovoid, bright violet seed capsules of these little irises – capsules that occur almost at ground level, sitting on the turf of grasses and mosses, and that, if detached, would roll about on the ground to dry and release seeds later.

To describe and name all the variant populations of Pacific Coast native irises would only clutter up an already over-numerous list; yet this one population does have a distinct range, a definite set of diagnostic characters, and it does have garden value for its very early bloom. This populations is, in fact, quite as distinct as several that Dr. Lenz has published. For many years, seed of these plants has been offered as the Noti Iris or "notiensis," neither name having any botanical validity.

Mrs. Thompson and Dr. Quentin Clarkson concluded that those irises represented a very ancient hybrid population that had stabilized, filling the former glacial lake basin where they now exist. They published the results of their observations but unfortunately they did not apply any name to the irises. Both geographically and morphologically, these irises lie between *Ii. tenax* and *chrysophylla*, occupying pasture lands with some tree cover; part of the area has been utilized as a water-storage reservoir. Roughly, the range is delineated by the triangle formed if you were to draw a line connecting the villages of Elmira, Veneta, and Noti. Occasionally in this area you will find a typical, later-flowering *I. tenax;* but these surely are the result of seed or at least pollen being brought in from outside the area, for by far the majority of the population conforms to the iris illustrated – albeit all may not have the breadth of petal and most will have less stem. Leaves in the drawing have not been fully represented in order to reveal the short, very beet-root-red stem sheathed in short, bract-like leaves topped by the two sub-equal spathe valves that sheathe a pair of flowers.

You may find *I. chrysophylla* in several color phases, but typically none is anthocyanin colored Although the original describer of the species (Thomas Howell, 1887) did not name a type specimen, it is known that the plant he described had been taken from near Grants Pass in the Rogue

drainage of southwestern Oregon. Typical flowers in that area are butter yellow with radiating halo of orange and brown purple on the falls, while just to the southeast in the neighboring Applegate drainage the flowers are appropriately a faint apple green with more subdued patterning. To the north, flowers appear to be cream or white with faint lines. What appear to be very extensive hybrid colonies with *I. tenax* occur at considerable elevations as in the Coburg Hills and on Monument Peak and elsewhere; these populations are of *variable characters* and are quite recognizable as unstabilized hybrid forms, being pale (cream or white), with or without pattern or spot-signal, and late flowering. All of these are to the north of the Noti population except those in the Coburg Hills immediately to the east. To the south of the type-specimen area, in the Klamath-Illinois divide, you can find other hybrid individuals where *I. chrysophylla* seems to merge into the rather similar, ordinarily taller (and entirely Californian), *I. tenuissima*.

In color, in season of bloom, and in other minor respects, the Noti irises of Lane County, Oregon described here are very individual; therefore, the combination *Iris chrysophlla* var.*notiensis* is here proposed. They may be quite accurately summarized as constituting a very early, orchid flowered, and almost stemless form of the species.

A Visit to the Claremont Munzii Plots

Lewis Lawyer

Although I have been selecting and hybridizing *Iris munzii* material only the last seven years, I think I have acquired sufficient knowledge on the subject to state without any fear of contradiction that the Rancho Santa Ana plantings of the Dr. Lee Lenz *I. munzii* hybrids are breathtaking. Dr. Lenz showed Adele and me through his plantings, and also the original bed of SIERRA SAPPHIRE on the last day of April this year. This was the first time we had ever seen his plots.

Although Dr. Lenz answered all our questions on breeding, derivation, culture, and possible future objectives, we took no notes. Furthermore, he has already covered the important details of his breeding project in the spring, 1978, issue of the *Almanac*, Volume V Number 2. For these reasons I wish only to present a few impressions which we took home with us after our visit. Also it is appropriate for me to say some nice things about his "children" which he might be too modest to express.

First, the Rancho Santa Ana Botanic Garden was well worth the trip to Claremont, and the numerous scattered plantings of *Californicae* would be just an added incentive for the iris lover. Second, Dr. Lenz was an extremely gracious host despite his busy schedule as Director of the Botanic Garden. And, third, the row after row of *munzii*-derived violet and blue flowers in his increase plots are spectacular.

The plants are in long rows and are beautifully grown despite the fact that they are in full sun, in a sandy soil, and don't get a drop of water all summer in the 100-degree-plus weather. The flowers on his selected plants are large and well formed, with no vestige of the strap-shaped petals we observed last year in the wild *munzii* stands in the Sierras. One of his lines, not yet introduced, is as blue as any I have seen. This flower measured a true 2.5 PB Munsell Hue on my color fan, with somewhere between an 8/5 and a 7/7 density.

The primary difference between Dr. Lenz's material and mine, as I saw it, was in the attractive, sometimes spectacular, blend of blues and violets he has attained. They are not exactly lined, but more as if a wash of blue had been spread over a violet background and had settled out in patterns and veins. I have flowers similar in color to his, but mostly selfs, almost never veined. His flowers are larger than mine. Whether this genetic or environmental is yet to be determined.

And then, of course, there is a second big environmental difference. My plants have been selected in a regime of afternoon shade and, although they are grown in a well-drained soil, they are given about an inch of rain each month throughout the relatively cool summers of Oakland. I am curious to see how his selections, three of which I acquired this spring, will do in my environment. If anything does happen to them, it can't be blamed on transplanting shock. They have survived transplanting for three months, and all three are growing beautifully as this is being written.

It would be well worth the time of every PCNI lover who has not yet done so, to visit the Lenz plots and see this spectacular display. I don't know if it would hold true most years, but certainly in 1982, April 30 was an ideal and memorable time to have made such a visit.

PCNI Culture
Part 1: From seed through seed bed

Lewis Lawyer

As I sit down to write these cultural notes relating to my *Californicae* seed beds, I am in the final days of harvest of the seeds for next November's planting. The greatest problem related to seed harvest seems to be that the seed must be fully ripened, and yet you must get the pod cut and "in the bag" before it splits fully open and scatters its cargo all over the ground. I have made it a practice to walk through the growing area each day to check for pods which have started to split. All the pods which are ready to cut are brought into the house and placed in dishes to dry. In two or three days they are usually dry enough to be counted into labeled seed envelopes.

Whether it is best to plant your seeds in tin cans, pots, flats, or in a garden plot seems to be a matter of personal preference. I prefer a garden seed bed for many reasons, each of which could probably be refuted by a can or pot lover.

My seed bed is an irregular plot of gravely loam soil, 13 feet long by 3 to 5 feet wide. This is narrow enough so that hand weeding and cultivating can be done from the ends of the rows without having to get into the bed. This bed was first planted to PCN's in April, 1976 with 51 seedlings thinned out of another area. Some of these seedlings remained in place two years, until late fall, 1978.

In the spring of 1979 I decided that this slightly shaded area could be converted into an ideal seed bed with a little work on my part. So I dug all the soil and rocks in the bed to a depth of 8 inches, screened it all through a quarter-inch mesh screen to remove the larger chunks of gravel, blended it thoroughly with equal parts of compost, and spread it all back into the bed. The bed was kept well watered and cultivated until Novemer that year when the first seeds were planted.

The November-planted seed began to emerge January 3, and had finished by the end of January. Most of the plants were dug and transplanted on May 21, 1980. The remaining plants were dug and discarded a month later when I was certain I had no further use for them. The plot was kept fallow and free of weeds until November at which time 3 inches of peat moss was incorporated to a depth of 6 inches. The bed was ready for its next November planting.

The same routine has been followed for three seasons now. I have seen no deterioration in the quality of the seedlings, and no evidence that old seed from previous seasons is germinating at all, certainly not in any quantity that would skew my genetic studies.

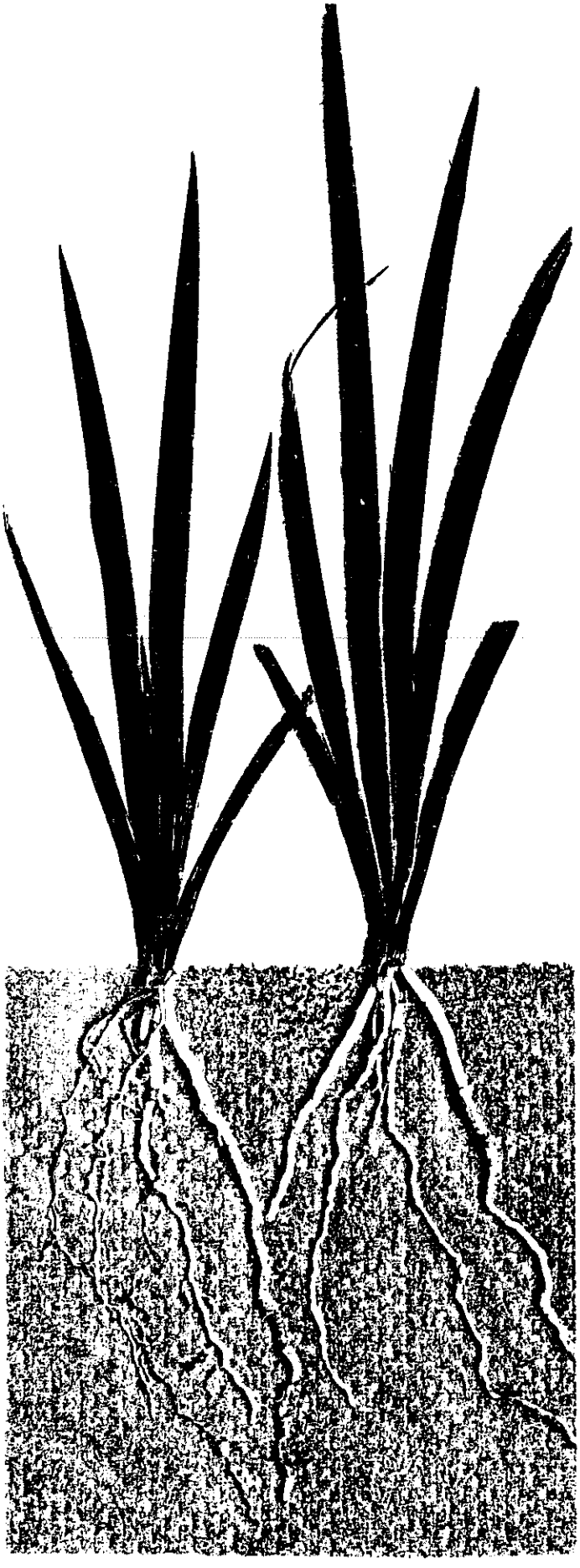
Seed rows are 4 inches apart and vary in length from 3 to 4½ feet. The seeds are planted ½ inch deep and are accurately spaced, 10 per foot, with a marked metal planting guide. With this spacing there is room for about 1270 seeds in the 38 rows across the bed. Since each year I seem to end up with a harvest of about 2500 seeds, this becomes a time of reckoning and sometimes painful choosing.

Winter rains usually take care of the watering, but once wet, the bed must not dry out. Small amounts of ammonium sulphate fertilizer are added from time to time after emergence to keep the plants actively growing. If the rains stop, the bed should be kept wet until the plants are lined out. Actively-growing white roots are essential for healthy transplants.

Germination within individual plots has varied from 0 to 90 percent, and has averaged 54.3 percent over all. This leaves me with around 600 to 700 plants each year. This year, for example, I ended up with 631 plants but since I had room to line out only about 350, this number was more than ample, and again I had to "play God" and reduce the number almost by half.

Choosing which seedlings to plant and which to eliminate is made considerably easier by the fact that, by May transplanting date, you have had one more complete season to look at the parents. Also you have had one more season to look at your progeny from perhaps similar crosses made the year before. Sometimes you are even fortunate enough to have found a plant that combines all the desirable characters for which some of the crosses were made, and they then become obsolete.

This year I gave top priority to crosses which were derived from the wild *I. munzii* pollen which Adele and I carried home from the Sierras last year. I had 66 of these seedlings from 6 different crosses. All were planted, and all but one are surviving. Second



priority was given to the 20 seedlings derived from open pollinated seed of SIERRA SAPPHIRE given to me by Duane Meek. Third priority, 85 plants total, was given a group of hybrids involving pale turquoise blue selfs. Fourth priority was given to a group of hybrids in a class I have called "neon". This pattern, a background of bright violet washed with a blush of equally-bright turquoise blue, originated in a seedling from seed given to me in 1975 by August Phillips. The final 19 seedlings were of the "halo" SOQUEL COVE type.

Eighty-three additional plants with high priority were planted in a separate bed. These were from crosses involving VALLEY BANNER and a lined-violet *munzii* hybrid. These crosses continue a project started in 1980 to get a more vigorous plant with VALLEY BANNER-type flowers.

Yesterday I dug the last remaining unused seedlings from the seed bed, watered and cultivated it, and set it aside until next November.

To summarize: Seed is harvested from early July through mid August. It is dried, counted into small seed envelopes, and stored in a cool room. I do not refrigerate, but perhaps this would be better. The seed is planted in a garden bed which has been fortified each year with added peat moss.

Each year I have had one or more seed lots that germinated 0 percent, but in all cases this was poor seed which I didn't expect to germinate but which I had planted "just in case". Transplants average 5 to 6 inches tall. A few have been as small as 4 inches. Success in transplanting seems to depend not so much on how large the plants are as it does on how vigorously they were growing on the day they were transplanted.

GERMINATION PERCENTAGES

Year	Lowest	Highest	Average
1978	40.7	87.2	59.0
1979	21.1	76.2	60.6
1980	9.7	88.8	49.9
1981	22.2	90.0	54.4

PLANTING DATA

Year	Date planted	Date emerged	Date transplant
1978	Nov. 14	Feb. 5-22	Apr. 18
1979	Nov. 9	Jan. 3-18	May 21
1980	Nov. 7	Jan. 15 - Feb 9	May 12
1981	Dec. 1	Feb. 4-23	May 30

A Xerox print of two transplants made directly from the two plants at transplanting time – and thus exactly life size. Note the white, actively growing roots essential for successful transplanting. These plants are 180 days from seed and just over 100 days from emergence.

The Pacific Coast Native Iris: The Popular Iris of the Future?

Ivor Knowles

Editor's note: Originally this appeared, as a longer discourse, in *The Iris Year Book 1979* of The British Iris Society. The ommitted text dealt with shortcomings of bearded irises as a prologue to this material which lauds our native species and their hybrids. It is possible, in fact, that Pacific Coast Native Irises may have a greater following in England than they do here in their own country. The Brummitt hybrid NO NAME referred to below received a Dykes Medal!

In 1964, Mrs. Brummitt delighted us and the Vincent Square public and received the R.H.S. Flora Medal with a table full of Pacific Coast Native Iris hybrids...and since then many of us have grown them: Dykes did too and thought them "a most valuable garden plant." I have heard of only one garden in which they were a failure. What then are their merits and demerits?

Their colour range is great, their patterns most attractive, they flower longer than most other irises and are very productive. Nearly all species and hybrids are ever-green. The hybrids, which are generally more attractive then the species, will stand most British weather conditions: the only plants which I nearly lost were covered with snow for nearly three months with only two short interruptions at a cold 650 feet in Kent on a northfacing slope. They seem to have no diseases and need little care. True they do have dead but rather attractive foliage after the winter but I find that a lot of this can be combed out with a gloved hand and in any case it is soon covered with new growth and will have rotted in a few months. They make attractive cut flowers. They associate exceedingly well with lilies and azaleas and are very happy at the edges of rhodedendron and other shrub beds. They are prolific of seed, much of which will produces lovely new variations.

Against these merits: they do not produce exhibition stems: indeed they are quite unsuitable for this purpose. They are reputed to need acid soil and to be difficult in replanting and in vending. Both these criticisms need examination. Some of the species are rather tender but this weakness seems to be over-come in the hybrids and need not concern us.

At Cannington, I gave a short talk on PCIs and several members protested that they grew the plants quite satisfactorily without acid conditions, including John Taylor at Moreton-in-the-Marsh in the Cotswolds. Perhaps we may dismiss this criticism, although I would not recommend anyone to attempt to grow them extensively in alkaline condition without some initial experiments. They like woodland soil and I use heavy dressings of two-year-old rotted birch and beech leaf-mould, exactly as for lilies.

I am far from convinced that replanting need be restricted to September and October. Dykes recommended April to July but gave no further details. Lee Lenz quoted by Clarke Cosgrove (*The World of Irises*, p. 222) states that division should take place before the new roots reach 6 cms. in length, while Clarke himself suggests careful exploration at the side of the plant in order to apply Lenz's criterion. He recommends that all the soil should be washed out. This may be appropriate to southern California but it seems to me better, if the soil is good and "woodsy" to retain all that clings to the roots for then more of the fine root hairs will be retained. As an experiment, I have just, at the end of July, divided a large clump of BLUE BALLERINA with minimum distubance of the soil in which it was growing and have potted it into seven 5-in. pots of similar soil...

Undoubtedly the roots should not be exposed for long and this has deterred some nurserymen from dealing PCIs, because the cost of posting plant and soil is so excessive. Mrs. Brummitt recommends that the plants should be grown for a time in sphagnum moss so that the postage on the plants will be reduced. I have in fact grown a plant in a pot of moss for six months without trouble, although growth was slow. But I believe that this is the wrong approach to the problem of selling PCIs to the general public. So many plants are now sold at garden centres and nurseries in containers that this seems the appropriate way to sell PCIs. In fact I understand that this is not unusual in California and I learn that Picton's Nursery near Malvern does likewise. Dr. Elliott told me that last year he could have sold every plant that he could have laid his hands on, in this case a species, *I. fernaldii* I believe.

There does seem a real opportunity in this way of popularising what has proved to be a lovely and trouble-free iris, which can be associated with ease

among many other plants. The advantages of this method of selling are the very considerable reduction in cost, that the plants may be sold in full bloom when they are so attractive, that they may be planted during a large part of the year for instant effect for bloom or foliage.

It must of course be recognised that the PCI is quite a different plant from the more familiar bearded iris and in most ways should be treated differently. But I do believe that for the "ordinary gardener" it has many advantages and that, in time and with some encourgement, it could become as popular as most of the bulbous plants which grace our spring. In fact I have known Mrs. Brummitt's NONAME to be mistaken for a rare daffodil.

Postscript. BLUE BALLERINAS potted up at the end of July, are in excellent condition with strong roots running round the pots. A half-dozen two-year-old seedlings from SIERRA SAPPHIRE , a *munzii* hybrid, transplanted a little later to an open border are in equally good condition and indistinguishable from the remainder which were not transplanted. In all cases, as little soil as possible was shaken off. SAN LORENZO, badly damaged during the winter and transplanted to a border is recovering nicely. On the other hand, pieces of NO NAME, almost pure *innominata*, transplanted to a border in early August look very unhappy, although they show some growth. Similiar pieces, potted up a little later are in better condition, but these all came from plants which suffered very badly and only just survived the winter snow.

Some small clumps of the same variety which were moved to another garden last year, flowered quite satisfactorily this year although they were given no particular care: so perhaps the trouble this year is due to the weakness of the stock. I believe that the Lenz criterion was met in every case and I also believe that it is advantageous to use loose "woodsy" soil as much as possible.

Seven Native Beauties

Richard Sloan

Editor's note: This commentary originally appeared in the Fall 1979 "Iris Notes," the official publication of the Southern California Iris Society.

I cannot resist a challenge, or a chance to think aout native irises. So when...asked...to list Seven Beauties, I put down my hoe and picked up my pen. To show no more favoritism than a list of this sort already implies, I listed the irises alphabetically.

AMI-ROYALE (Luhrson). This little jewel is vigorous, neat, and covers itself with lavender and purple flowers in the spring. The flowers are not large nor broad, as some contemporary tastes would prefer, but they are abundant. It has been around for years, and has not been formally introduced. A perfect argument that beauty is timeless.

CALIFORNIA NATIVE (Ghio '72). Another lavender and purple combination, but a flamboyant show-off. The plant grows well and the flowers are full-bodied with an unbelievably intense purple wash on the basically light lavender flower. It tends to get a little long-stemmed in the shade, which, while a good trait in chorus girls, is not all that nice in irises. The quality makes forgiving a minor vice easy.

CANYON SNOW (Emery '74). Full, beautiful white flowers with yellow signal; it grows very well with rich, broad green foliage. Prefers some shade which provides even more contrast with the dark foliage. A classical flower with perfectly proportioned width of petals.

CHIMES (McCaskill ('72). Another white, but hardly competes with CANYON SNOW since it blooms early and is usually gone before CS appears. Not as full-bodied, with light lavender veining on opening, appears muddy for a day, then becomes a beautiful ivory color. Has great vigor and is generous with bloom and increase.

NATIVE WARRIOR (Phillips '70). Another vigorous grower with abundant well-formed red-violet blooms, on the small side. It blooms over a long period of time, sending up stalk after stalk all through the season. That trait alone would make it valuable, even if color was not uniquely attractive.

OJAI (Walker '59). A big, bold, hardy plant that flowers and flowers. The blooms are large, broad, lavender and white. If anything the substance is a bit weak so that the blooms do not stand up to heat or wet weather too well, but there are plenty of them over a long period. Another older iris which is still an excellent garden subject.

RIPPLE ROCK (Lenz '63). Beauty is traditionally connected with temperament but this is the only one on my list where this is true. If RIPPLE ROCK is happy in your garden, it will cover itself with wide and showy yellow flowers with dark veins. It will, at best, be a transient guest, but transplanting a part of it every 2-3 years may be a solution to this problem. If some irises tell us that beauty is timeless, this one tells us that beauty is transitory. Whether resident or temporary guest, RIPPLE ROCK has class!

A Revision of Pacific Coast Irises

Lee W. Lenz

Director, Rancho Santa Ana Botanic Garden
Claremont, California

Reprinted with permission from *Aliso* Vol. 4, No. 1

KEY TO THE SPECIES

In the following key to the species no attempt has been made to key out hybrid forms. However, under the treatment of each species, all known natural hybrids are listed with localities given for each of them. The distribution maps also show the known locations for the hybrids.

A. Perianth tube short, not over 1 cm. long, usually thick . . . . . B.
AA. Perianth tube over 1 cm. long, slender to somewhat stout . . . . . G.
B. Spathe valves opposite, connivent, 6-10 mm. wide; leaves dark green above and pale yellow-green below; stems covered with short bract-like leaves; flowers yellow; Josephine County, Oregon, and adjacent Del Norte County, California . . . . . *I. bracteata*
BB. Spathe valves usually divergent and separated; stems not covered with bract-like leaves; leaves not distinctly two-sided . . . . . C.
C. Plants large; flower stems to 7 dm. tall, usually 3-flowered; leaves to ½ m. long and 2 cm. wide, distinctly glaucous; spathe valves 8-14 mm. wide; flowers lavender to purple; plants of low altitudes in Sierra Nevada foothills; Tulare County, California . . . . . *I. munzii*
CC. Plants smaller; flower stem seldom over 4 dm. tall, 1-3 flowered; spathe valves 3-9 mm. wide; flower color various . . . . . D.
D. Flower stem usually 3-flowered; leaves to 1 cm. wide; flowers yellow; Tuolumne County, California . . . . . *I. hartwegii* subsp. *columbiana*
DD. Flower stem usually 1-2 flowered; leaves less than 1 cm. wide . . . . . E.
E. Outer spathe valve linear to linear-lanceolate, 3-5 mm. wide; plants usually caespitose; sepals obovate to oblanceolate; flower color yellow to purple; Oregon and Washington . . . . . *I. tenax*
EE. Outer spathe valve 4-9 mm. wide; plants generally not caespitose; sepals lanceolate to broadly oblanceolate . . . . . F.
F. Spathe valves 4-7 mm. wide; flower stem to 3 dm. tall; flowers pale yellow to golden yellow or lavender; plants of middle altitudes in Sierra Nevada, California . . . . . *I. hartwegii*
FF. Spathe valves 6-9 mm. wide; flower stem to 4 dm. tall; flower color lavender to purple; Riverside and San Bernardino counties, California . . . . . *I. hartwegii* subsp. *australis*
G. Spathes separated and divergent; perianth tube not over 2 cm. long; 1-2 flowers per stem . . . . . H.
GG. Spathe valves opposite (occasionally separated in *I. douglasiana* and, if so, then 3-flowered); perianth tube more than 15 mm. long . . . . . I.
H. Perianth tube 11-20 mm. long, rather stout; sepals oblanceolate to broadly obovate; leaf bases brilliantly colored red or pink; style crests 8-16 mm. long, narrowly ovate, usually obtuse; flower color buff-yellow veined with brown or maroon lines; Humboldt County, California . . . . . *I. tenax* subsp. *klamathensis*

HH. Perianth tube 12-15 mm. long, divided into a short tube above the ovary, then dilated to form a broad throat; sepals narrowly oblanceolate; flower color pale creamy-yellow; style crests 9-13 mm. long, very slender; leaf bases slightly if at all colored; Plumas County, California . . . . . *I. hartwegii* subsp. *pinetorum*

I. Stigmas truncately flattened to bilobed; stem covered with short usually overlapping bract-like leaves; flower color yellow or whitish with lavender flush on sepals; Sonoma to Humboldt and Trinity counties, California . . . . . *I. purdyi*

II. Stigmas triangular to tongue-shaped or rounded; stem leaves tightly clasping, free for 1/2-1/3 their length, or if somewhat inflated, not overlapping . . . . . J.

J. Perianth tube not more than 30 mm. long . . . . . K.

JJ. Perianth tube over 30 mm. long, usually slender . . . . . L.

K. Stems usually branched, each branch with 2-3 flowers; spathe valves lanceolate acuminate, 7-12 mm. wide, 60-120 mm. long (occasionally separated and divergent); perianth tube 15-28 mm. long; ovary triangular in cross section and with nipple-like projection at tip; leaves to 2 cm. wide; coastal California and Oregon . . . . . *I. douglasiana*

KK. Stems not branched; spathes broadly lanceolate to ovate, 5-7 mm. wide, 33-60 mm. long; perianth tube 15-30 mm. long; flower stem 1-2 flowered; leaves narrow, grass-like; southwestern Oregon and adjacent California . . . . . *I. innominata*

L. Style crests long and very slender; flower parts usually very narrow, widespreading, fragile; flower color whitish to cream with dark veining . . . . . M.

LL. Style crests short, rounded; flower color various . . . . . O.

M. Perianth tube lacking distinct throat, upper part often with short bowl-like enlargement; western Oregon and adjacent Del Norte County, California . . . . . *I. chrysophylla*

MM. Upper part of perianth tube dilated to form a conspicuous throat . . . . . N.

N. Stems with short inflated bract-like leaves, not overlapping, free only at their tips; spathe valves broadly lanceolate; somewhat inflated; stigmas broadly triangular to rounded; Plumas and Sierra counties, California . . . . . *I. tenuissima* subsp. *purdyiformis*

NN. Stem with 1-3 bract-like leaves free for most of their length, not inflated; spathe valves lanceolate; stigmas triangular to tongue-shaped; northern California from Glenn and Trinity counties to Butte County . . . . . *I. tenuissima*

O. Spathe valves 4-9 mm. wide; linear-lanceolate perianth tube never with a distinct throat; flowering stem to 2.5 dm. tall; leaves to 5 mm. wide, leaf bases usually colorless; flower color variable, deep purple to golden-yellow; central California on both sides of the Great Valley . . . . . *I. macrosiphon*

OO. Spathe valves 6-11 mm. wide, broadly lanceolate, often flushed with pink or red; perianth tube sometimes showing a distinct throat; flower stem 2-4 dm. tall; leaves to 7-8 mm. wide, drying a peculiar gray-green color; entire plant often intensely colored with red pigment; flower color creamy-yellow, sometimes veined darker; west central California, Lake and Napa counties to Santa Cruz County . . . . . *I. fernaldii*

IRIS INNOMINATA Henderson. Rhodora 32:23. 1930

Rhizome slender, 3-4 mm. in diameter; leaves abundant, 2-4 mm. wide and up to 35 mm. long, dark shining green above, lighter green below; leaf bases colored pink to deep purplish red; leaves longer or shorter than flower stem; flower stem slender, unbranched, to 2 dm. tall, cauline leaves 2-4, free for about 1/3 of their length, not inflated; spathe 1-2 flowered; spathe valves opposite, subequal, broadly lanceolate to ovate, herbaceous with scarious margins, 33-60 mm. long (aver. 45 mm.) and 5-7 mm. wide (aver. 5.5 mm.); pedicels 4-13 mm. long (aver. 8.5 mm.) at antheses; perianth tube 15-30 mm. long (aver. 22 mm.), linear; sepals broadly lanceolate to oblanceolate, 44-63 mm. long (aver. 52 mm.) and 17-30 mm. broad (aver. 22 mm.); petals slightly shorter than sepals, 39-57 mm. long (aver. 46 mm.) and 9-16 mm. wide (aver. 12 mm.); flower color vari-

able, deep golden yellow variously veined with darker colors, or occasionally clear yellow with no veining, to lavender and deep purple; style branches 19-26 mm. long (aver. 22 mm.); style crests 9-14 mm. long (aver. 11 mm.), subquadrate to semi-ovate, irregularly and bluntly toothed; stigmas triangular; capsule oblong to oval, 2-3 cm. long; seeds round to irregular in shape, brown and finely wrinkled.

Type. – Dry sunny wooded banks of Rogue River, 5-8 miles above ferry. Curry County, Oregon, 23 May (flower), 14 July (fruit) 1929. L.F. Henderson 10086. University of Oregon Herbarium. (type seen.)

Distribution. – CALIFORNIA, Del Norte County. OREGON. Coos, Curry, Douglas, and Josephine counties.

Iris innominata is found in northern Del Norte County, California, and adjacent southwestern Oregon where it is often extremely abundant on sunny or slightly shaded hillsides. It is usually found in well-drained slightly acid soil rich in humus and in many places it is found in association with the Big-leaved Rhododendron *(Rhododendron macrophyllum)*, Western Azalea *(R. occidentale)*, and Bear Grass *(Xerophyllum tenax)*. The plants are normally covered with snow during the winter months during which time the leaves usually remain green, turning brown only in the spring after the new growth has commenced. During the spring months the soil is quite moist, but later in the season the plants are subjected to severe drying and relatively high temperatures. In cultivation this species has proven to be very adaptable and it grows well in a variety of soils and climates, even doing well in southern California when exposed to full sun.

This species was discovered in 1928 by Mrs. John R. Leach, a well-known Portland botanist, gardener, and explorer. It was introduced into cultivation about 1932; since that time it has become a very popular species with horticulturists and much has been written about it.

In the past, *I. innominata* has been considered as yellow-flowered species and colored forms have usually been referred to as *I. thompsonii*. However, field work combined with studies made in the experimental garden have shown that many of the plants referred to as *I. thompsonii* are actually hybrids between *I. douglasiana* and *I. innominata*. However, in northern Del Norte County, California, near High Divide on the High Divide-Low Divide road, there are plants with deep blue purple flowers which are impossible to separate from *I. innominata* in any way except flower color. These plants are here included with *I. innominata*. Riddle, (1948) in his excellent account of the species, also reports flower color variation which he says is not due to hybridization and he reports that "In the interior, colonies of brilliant violet and orchid colored flowers are found intersperced among the yellow forms." As has already been mentioned elsewhere, flower color **per se** is of little value in distinguishing many of the species in the *Californicae* and the color range of the yellow-purple-lavender is to be found in at least four other species, *I. douglasiana, I. hartwegii, I. macrosiphon*, and *I. tenax*.

Natural Hybrids. –

I. chrysophylla X *I. innominata*, OREGON: Curry County.

I. douglasiana X *I. innominata* (=*I.* X *thompsonii*). CALIFORNIA: Del Norte County. OREGON: Curry County.

I. innominata X *I. tenax*. OREGON: Douglas County.

Garden Hybrids. –

I. X *aureonympha* C.S. and E.H. English. Nat. Hort. Mag. 27:161, 1948.
Iris douglasiana ( ) X *I. innominata* ( ).
Type. – Garden hybrid. C.S. and E.H. English, 3037. C.S. and E.H. English Herbarium.

Iris innominata is known to hybridize in nature with *I. douglasiana* and *I. tenax* and other hybrid combinations have been reported or are suspected.

Hybrids between *I. douglasiana* and *I. innominata* are common in a number of areas where the ranges of the two species approach one another. *Iris* X *thompsonii* belongs here. This hybrid combination already referred to under *I. douglasiana* and treated in detail under *I.* X *thompsonii* has been found at Saunders Creek along the Rogue River, Curry County, Oregon, and Henderson in his original report of *I. innominata* says, "*Iris douglasiana* was in places up the Rogue River associated with *I. innominata*, and wherever this was the case it had much more yellow than usual, showing the beginnings of hybridization." Hybrids between these species have also been found near Brookings, also in Curry County, and near the mouth of the Smith River in Del Norte County, California.

Clarkson (1955) in discussing flower color variation found along the Rogue River stated that where *I. douglasiana* and *I. innominata* are hybridizing he found no red or maroon colored flowers such as are common in garden hybrids. In 1951, the author collected material at one locality on the Rogue River (the Doyle Ranch) which showed all the range of color variation found in garden hybrids, including reds, bronzes, and maroons. A discussion of these hybrids will be found in Part II.

Hybrids between *I. innominata* and *I. tenax* are known to me only from a single collection made by L.F. Henderson (13026 Univ. Oregon Herb.) on "moist sandy banks of West Fork of Cow Creek, Douglas County, near bridge, Oregon." According to the label on the sheet, one of the plants was found growing associated with *I. innominata* and was probably a hybrid. From the appearance of the plant, I would assume that it was of hybrid origin.

I have seen no material that I would interpret as representing hybrids between *I. chrysophylla* and *I. innominata*. However, in the University of Oregon Herbarium, there are two sheets which have been annotated by Clarkson as possibly such a hybrid. These are discussed under *I. chrysophylla*.

Correspondence

Dear Editor:

In reply to Nancy Axelrod ("Letters....", Spring 1982) about using "albino" when you intend "white flowered," I guess I am as guilty as most. But I do not think that I do it without deliberate intent. We know that most irises are found in yellow or "blue" (and of course we also know that the blue is never the pure pigment but is really in the blue-violet range), and we also know that a good many species may be one or the other color or both, and that these last are the blended colors. We also know that there are certain irises that are neither blue nor yellow, but always are white or essentially so; our Oregon *I. tenuis* is one such. I would never speak of *I. tenuis* as being albino because white is its natural, mormal condition. But when an abnormally white *I. innominata* was found in an otherwise colored population, I feel it was perfectly OK to refer to it as an albino. Is that OK? (I am not a geneticist).

Roy Davidson,
Seattle, WA

Treasurer's Report

CASH ON HAND FEBRUARY 28, 1982		*$891.35*
DUES AND RECEIPTS:		
Dues Collected	*$235.00*	
Dues Collected by A.I.S.	*114.00*	
Sale of Cohens	*49.00*	
Sale of Seeds - LaRue Boswell	*5.00*	
Sale o, Almanacs	*4.00*	*407.00*
		$1,298.35
DISBURSEMENTS:		
Postage	*$ 13.00*	
50 copies of Cohen	*59.00*	
Engraving	*8.73*	
Membership renewal cards	*14.36*	
Spring '82 Almanac		
Great Graphics	*183.00*	
Printing	*177.65*	
Postage	*64.75*	*520.49*
BALANCE ON HAND AUGUST 31, 1982.		*$ 777.86*

DOROTHY E. FOSTER
Treasurer

REGION 15 SPRING TREK

Saturday, April 22, 1983, is the date set for the AIS Region 15 (southern California) garden tours. For Pacific Coast Native Iris enthusiasts, the optional tours on Sunday April 23 will be of great interest. The PCN plots at Rancho Santa Ana (Claremont, CA) will be open for viewing with Dr. Lee Lenz on hand to explain the work in evidence. And the garden and commercial establishment of Robert Hubley (Riverside, CA) will receive visitors; there you will see current introductions of numerous PCN breeders. For more complete information, contact Duncan Eader (complete address on page 2) or John Wight, 320 E. Locust, Ontario, CA 91761.

Sighted South of the Border...

Although it is not included among the species that constitute the section *Californicae* (all of our Pacific Coast Native Irises), *I. missouriensis* nevertheless occurs in many of the parts of the West in territory also occupied by PCN species. Among the North American irises it is unique in having been found growing wild south of the United States. But this extension into Mexico was based on one sighting reported in the last century and has been subjected to considerable doubt in the years since. Now, this doubt can be erased, according to recent evidence provided by Roy Davidson:

"...he (Dr. Homer Metcalf, Montana) has definitely verified *I. missouriensis* in Mexico on the Sierra Madre Orientale, near Monterrey -- not the same station for sure where Palmer had collected it a hundred years or more back but near enough, say by a few miles as the crow flies. Elwood Molseed had looked for the Palmer station on one of his *Tigridia* trips one summer but found the terrain, as interpreted from the old record, to be in no way suitable. Last year an entomologist looking at pine trees apparently quite by coincidence photographed the iris and got a bit of year-old seed still in the capsules. This information came second-hand to Homer through the USDA office in Washington, D.C.:.. 'alongside an intermittent stream and wet meadow', just like it grows up north; or, as Homer put it so well, 'in the often very narrow zone between the sagebrush and the sedges' - and that is where they all appear on their marginal occurrences as in Wyoming".

Contents

New Members and Subscribers

Thomas & Ellen Abrego
Rt. 1 Box 154
Newberg, OR 97132

Miss Joanne Anderson
7038 Delco
Canoga Park, CA 91306

George Gessert, Jr.
1230 W. Broadway,
Eugene, OR 97402

Mr. David S. Hollombe
6223 Vicente Blvd.,
Los Angeles, CA 90048

Mrs. Winifred Kershaw
2215 Whyte Park Avenue,
Walnut Creek, CA 94595

Sally S. Krakow
215 Warren Road
San Mateo, CA 94402

Mr. Barrie Kridler
Rt. 3 Box 244,
Mt. Pleasant, TX 75455

Aaron E. Logan
967 East King Street,
Tacoma, WA 98445

Alan McMurtrie
22 Calderon Cres
Willowdale, Ontario
Canada M2R 2E5

Robert & Carol B. Michener
319 Grande
Davis, CA 95616

Mrs. Jean Near
14909 Tomki Road,
Redwood Valley, CA 95470

Mr. Louis Prestage
1700 Cottonwood Road,
Bakersfield, CA 93307

Mrs. Bessie H. Smyth
19 Wanda Way,
Martinez, CA 94553

Raymond Sutton, Jr.
P.O. Box 330
Williamsburg, KY 40769

Dr. and Mrs. Edward Valentine
1750 Woodard Road,
Elma, N.Y. 14057

Bob Ward
54 Belmont Drive,
Little Rock, Ark. 72204

Mrs. Michael Wheaton
5505 Dry Creek Road,
Napa, CA 94558