

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

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Cover: Diana Gregory

EXECUTIVE COMMITTEE

- President Duane Meek
1373 Coventry Road
Concord, CA 94518
(415) 685-6489
- First Vice President Robert P. Hubley
9230 Colorado Avenue
Riverside, CA 92503
(714) 689-1795
- Second Vice President LaRue Boswell
1821 Gross Lane
Concord, CA 94519
(415) 682-0777
- Immediate Past President Jean Erickson
2181 Blucher Valley Road
Sebastopol, CA 95472
(707) 823-9545
- Secretary, Treasurer Dorothy Foster
977 Meredith Court
Sonoma, CA 95476
(707) 996-6654

PUBLICATION STAFF

- Editor Joe Grant
1479 Hopkins Street
Berkeley, CA 94702
(415) 526-4146
- Associate Editor Jean Erickson
- Consultant Jean Witt

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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.

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.

President's Message

Dear Friends,

Before starting a monologue, I want to thank our past president, Jean Erickson, for her dedication and hard work handling the reins of the SPCNI for the past two years. She approached her work with professionalism born from respect for the people around her and love for the flowers we all love so much. I am inheriting a great group of people to work with, and I hope I can do as good a job as Jean has done.

Joining me as first vice president is Robert Hubley of Riverside, CA. Robert and I will work closely to keep current on what is happening in each other's area. Also, Joe Grant is joining us as editor of the *Almanac*. Please help make his job easier by supplying him with articles to edit and publish.

The Third Cumulative Checklist of PCNI is coming along, and should be ready soon.

My father used to say the best fertilizer is the farmer's footsteps. Just as I walk my garden to make sure everything is growing well, so, too, I will try to be vigilant to ensure all goes well for the SPCNI.

Tally Ho!

Duane Meek



SHE'S LETTING 'EM KNOW....

The Santa Rosa Iris Society, a productive and hard-working group of dedicated irisarians, has been very lucky to obtain the membership of a young woman, who, although new to the world of irises, has thrown herself headlong into the task of letting others know about the flowers we all love so much. Kathy Patterson has been a member of the Santa Rosa Iris Society for a short time, but is one of those members that all societies wish they could enlist. She is active not only in the activities of the Santa Rosa Iris Society but is a member of the Region 14 Planning and Development Committee. As you will see in the article below, she also takes it upon herself to communicate the joys of the Pacific Coast Native Irises to all she can. The following article first appeared in *The Press Democrat*, Thursday, May 24, 1984, and is reprinted here with their permission.

Iris is adaptable, beautiful plant

The Pacific Coast native iris is coming into its own, says Kathy Patterson of the Santa Rosa Iris Society.

Evidently the growing emphasis on water conservation and low-maintenance gardening has created an interest in this adaptable and beautiful plant. Compact growing habits make the iris ideal for rock gardens or on a naturalized hillside. The plants can nestle under trees or grow along garden pathways, she says.

Their grasslike foliage is a good contrast to ground covers of all kinds, too.

"Native iris require ordinary garden soil which must be well-drained and slightly acidic. The plants will tolerate full sun but are at their best with a little afternoon shade. Foliage stays crisp and green all year, and April and May bring an abundance of delicate orchid-like blooms," Patterson says.

Garden hybrids are available in gallon cans or can be started from seed. The hybrids include those that produce blooms in shades of lavender, yellows and white, many of them "wonderfully ruffled and veined."

Further information is available from the society, 813 Link Lane, Santa Rosa 95401.



Native Pacific Coast iris is blooming now

SIX MONTHS OF BLOOM

R.C. Richards

This essay could also be titled, "Lust, Greed and Avarice" because that is what it is about. Those who recognize the presence of these passions in their personality will undoubtedly feel right at home. Those who are curious may want to read on. Those who are shocked had better stop now since things will only get worse.

There are never enough flowers. My lust, greed and avarice is for bloom--not only for a few, short weeks of bloom, but for perpetual bloom.

Occasionally suggestions appear in this and other iris publications regarding the possibility of extending the bloom season. Those who feel as I feel may want to focus on hybridizing for a longer and longer bloom season. My own interest in tall bearded irises has focused more and more on reblooming clones since no matter how breath-taking, the Louisiana and spuria bloom season lasts only a few short weeks. That does not satisfy a soul filled with lust, greed and avarice.

While Pacificas do rebloom (Bob Hubley's clone ORCHID RESPRITE is reported to rebloom in some climates, and clumps of Joe Ghio's BRANCIFORTE rebloom in November in the hybridizer's garden), such reblooming does not occur for me. Hence my interest in a longer lasting season.

So far my hybridizing program has produced earlier and earlier bloom, as well as later and later bloom. This year the first seedling flowered on January 15, and the last one folded on June 19. I had almost daily bloom for six months in a flower bed measuring 4 feet by 20 feet with, perhaps, 50 seedlings in total. But this is not enough! I want more and more. I am filled with lust, greed and avarice.

At this point I can hear objections I grow my Pacificas in the very favorable climate of Southern California, and the objections are well founded. I am presently growing my seedlings in two gardens. Both are virtually frost-free encouraging early bloom. Thus I am free to lasciviously seek a longer bloom season, although I also know the disappointment of having a flower bloom in February or early March only to be buried beneath a foot of snow.

I am aware some people favor the rush of a sudden, heavy bloom season for a few short weeks and can minimally empathize with their desire. The preference is legitimate. But my equally legitimate preference is for the bloom to last and last with no obvious peak, and numerous clones in flower at different times over a long period of time. My one track mind gets confused with detail and I want

time to focus on and enjoy each new flower as it appears. I cannot do this properly with all the flowers simultaneously shouting for attention. So I lust for a long bloom season. Six months is just the start! I have plans for more.

Having been carried away on the wings of unsatisfied desire, I will now offer some practical suggestions. The experience of mankind indicates lust needs careful, well-planned fulfillment. After all, Romeo wasn't bilked in a day. Obviously the key to longer bloom is a carefully controlled hybridizing program. Such a program has produced a longer bloom season for me.

The first important rule is: Always utilize the earliest blooming flowers. I do this in several ways. A single clone can always be selfed. Also, if two clones flower early they can be crossed. Too, pollen can be saved for over a month in the refrigerator and used on later blooming clones possessing superior features such as vigor and beauty, in the hope the early blooming gene will appear in the progeny. If not, another cross between siblings may bring the early-blooming gene out. Every year I automatically save the pollen of the first blooming clones for use on later clones.

Conversely, the same procedure is possible with late blooming clones. The choice of pollen parent, though, is usually greater late in the season due to a considerable stock of pollen in the refrigerator. By then my glass jar is quite full of anthers carefully wrapped in tissue paper labeled with pertinent information.

Often, the flower quality and plant characteristics of the early and late blooming clones will not be up to the standards of the beauties in the middle of the season. Judicious use of pollen on later, more desirable clones, or of pollen from midseason bloomers on late flowers, may remedy these characteristics and still produce early or late blooming clones.

My own hybridizing records do not show any clear trends regarding the species likely to produce extreme blooming tendencies in progeny, but I do have some hints. Clones with *Iris munzii* in their background seem to flower earlier in my garden. For years I believe Thornton Abell had early seedlings from his lines of *I. munzii* hybrids. In the wild the stands of *I. munzii* bloom early near Coffee Camp, though they seem to bloom later in other areas. An early blooming clone of *I. innominata* exists in the Santa Barbara Botanical Garden but I do not know if its March bloom is typical of the species.

NEW DIRECTOR NAMED FOR RANCHO SANTA ANA BOTANICAL GARDEN

As for late blooming clones, I believe they show a lot of influence from *I. douglasiana*. This species tends to bloom rather late in my climate, and I think it is a good candidate to extend our blooming clones.

Also, I have observed some clones may repeat bloom at different times in one season. This year one of my plants bloomed in mid-February and then came back for a late show at the end of May. I believe hybridizers should watch for this type of vigor and use it in their hybridizing programs.

Perhaps, also, we need to lower our standards a bit when evaluating bloom at the extremes of the season. We must encourage the introduction of very early or very late blooming clones, thus making them available for other hybridizers to use. When we evaluate clones hardy in a wide variety of climates we make certain concessions, and I feel this practice should be extended to include those flowers which extend our bloom season.

We should also keep these flowers in mind when planning flower shows. Most shows come in the middle of the season and award recognition to more mid-season bloomers, of which we already have a goodly number. In the case of early or late shows, I propose judges modify their standards and award more clones in the Pacifica category keeping in mind the service they perform and the encouragement their creators deserve.

I do not know if six months of bloom can be attained in all climates, but I certainly feel it is possible in many climates. For those of us seething with lust, greed and avarice, this will undoubtedly be a good thing.



As of April 1, 1984, Dr. Lee Lenz stepped down as director of Rancho Santa Ana Botanical Garden. The new director, Dr. Thomas S. Elias, is the former assistant director of the Cary Arboretum of the New York Botanical Garden and has a broad background not only in research, but also in the interpretation and communication of plant sciences to the lay audience. Elias is enthusiastic about developing the educational aspects of the garden and wants to make R.S.A. a center for botanical and horticultural activities.

A prodigious author, Dr. Elias has published over seventy-five papers and five books. His most recent book, *The Complete Trees of North America*, has been widely accepted as the only up-to-date manual treating all trees of the United States and Canada. Dr. Elias is also very active in conservation of endangered plant species and served as editor for the book, *Extinction is Forever*.

Presently Dr. Elias is investigating the relationship of woody plants of North America with those of Europe and Asia, with special emphasis on the Soviet Union. In 1973 the U.S. and the Soviet Union negotiated a bilateral agreement through the U.S. Department of Interior covering the field of environmental protection, and Dr. Elias is present coordinator of a botanical exchange program between the two countries.

Dr. Elias, a native of Illinois, received his B.A. and M.A. from Southern Illinois University, and his Ph.D. in botany from St. Louis University and the Missouri Botanical Garden. He was assistant curator at the Arnold Arboretum of Harvard University for two years before joining the Cary Arboretum in 1972. Dr. Elias will be joined by his wife and two sons.

Dr. Lenz continues his study of the Pacific Coast Native Irises, and Mr. Bob Hubley will present an article in the spring issue of the *Almanac* giving us a history of Dr. Lenz's work.

The staff of the *Almanac* wish to extend their congratulations to Dr. Elias for his new appointment and wish him the greatest success in all his endeavors. Likewise, we wish Dr. Lenz great success in his personal research which he will be able to attend more closely now that he no longer carries the responsibility of the directorship.



Meek
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Ghio
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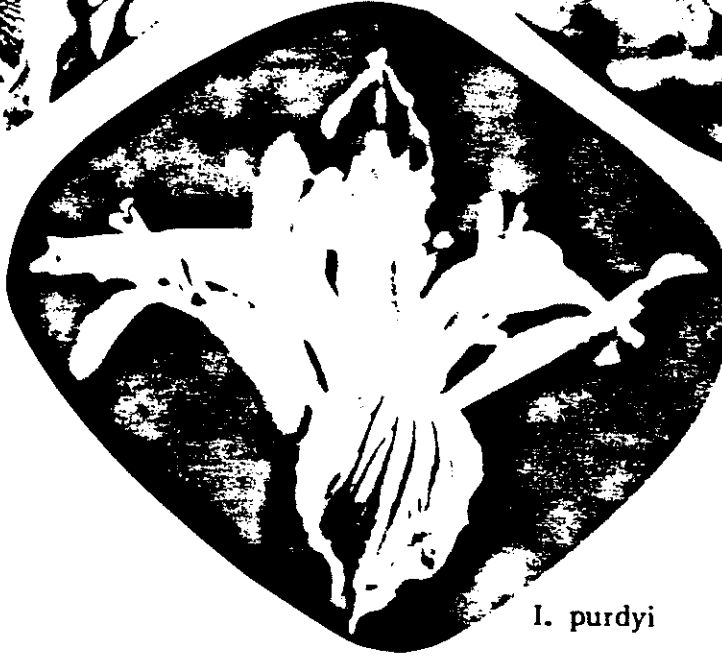
I. purdyi



California
Mystique



I. fernaldii



I. purdyi

PCN Species in the East Bay

Part I

by Joe Grant

Two botanical gardens in the East Bay, not more than a mile apart, feature some of the most beautiful specimens of Pacific Coast Native Iris species found in California. The Tilden Botanical Gardens will be the subject of the second part of this article and will be published in the Spring *Almanac*. Right now I would like you to sit back for a moment and try to envision a walk through the beautifully manicured botanical garden of the University of California at Berkeley. This garden is located on the gentle slopes of the hills just above campus, past the football stadium on Centennial Drive.

As in most botanical gardens, the curators of the UCB's Botanical Garden collect interesting and unusual plants from all over the world. The garden is divided into sections representing different ecological habitats. The largest section is devoted to native California plants. The moderate climate of Berkeley allows a great variety of plants to flourish where otherwise only a few different habitats could be offered.

As you walk into the California Endemics section on the main path, one of the first plants to greet you is *Iris munzii*. These specimens were collected many years ago just off the Tule River in Tulare County and are tall, strong, and vigorous. The pale to medium blue flowers stand about 15" tall on thick, erect stems holding flowers high above the foliage. The large, striking flowers have slightly narrower petals than other varieties I have seen, but this does not detract from their inherent beauty. One plant has an unusual feature—the falls are noticeably pointed and slightly recurved. I have wondered if over the years the bees may not have been carrying on their own hybridizing program resulting in the unusual features of this particular plant. Many of the irises in the garden go to seed and the nearby plant could possibly be the pod parent of this unusual flower—good reason to heed the advice of Lewis Lawyer and keep those errant seedlings weeded out of the PCN patch!

Behind, and further down the path is the best collection of *I. douglasiana* I have seen in one spot. The curators have gathered a nice selection of different colors, shades and sizes from many different parts of California. One large section begins at the edge of the

main path and continues down the gentle slope. A side path diverges and snakes through white, cream, lavender and blue-lavender flowers. These well established clumps cascade down the bank and cause quite a stir when in full bloom.

A little further down the path on the left, tucked under a *Cercocarpus betuloides* is a small clump of the rarest of all PCN species: *I. hartwegii* subsp. *columbiana*. It is very easy to overlook this plant. The leaves are very narrow and grasslike, and the flower does not poke its head up over the foliage very much, and from afar the flower color appears to be a rather unexciting white. But what a shame it would be to overlook this little lovely. If you take time to stop, bend down and inspect, you will be captivated instantly by the enchanting, noble aspect of this rarely seen flower. The color is not just white, but that beautiful shade of creamy white known only to those who have had the pleasure of drinking fresh, whole milk which still retains the cream and has the slight hint of yellow belying the butter to be extracted. The flower parts are indeed narrow and not very full, but they are held so perfectly and symmetrically that one cannot but help be captivated by its beauty. Gazing at this flower fills me with joy.

If you are able to pull yourself away from this creamy beauty, just a few yards away are a couple of well-established clumps of *Iris tenuissima* (or so they are labeled). I am no authority on the PCNI species, but based on my reading and the few other specimens of *I. tenuissima* I have seen, I would think the two clumps in this garden are most probably not pure *I. tenuissima*. First, they are much taller plants than the literature describes. Second, the blue form has never been described in any literature I have read. The specimens in this garden were collected in Concow, Butte County, definite *I. tenuissima* territory, but it will take someone with much more expertise to decide just what category these flowers belong in. Whatever they may turn out to be, they make a wonderful display under the dappled shade of a *Salix hindisiana* along the path near the dry river bed area.

To see the next PCN species, you must walk about twenty yards to the end of the main trail and head off onto the Indian Trail. On the way a beautiful clump of *I. longipetala* from Petaluma, Marin County, sits just off the right side of the trail at the base of a little hill recently landscaped with more specimens of *I. douglasiana*.

At the end of the regular trail you come to some steps leading down the side of the hill. Here starts the Indian Nature Trail. Follow this trail for about fifteen yards until you come to a beautiful clump of *Arcostaphylos*

canescens var. *sonomensis* with its unmistakable smooth, maroon bark. Underneath one of these lovely shrubs is a clump of *I. fernaldii* collected from Mt. Hood in Sonoma County. Like *I. hartwegii* subsp. *columbiana*, this form of *I. fernaldii* has a clear, pure yellow-cream color which grabs the eyes and won't let go. Too, the form on this collected specimen is classic. The standards and falls are displayed in perfect symmetry and proportion. The flowers are held high over the narrow, grassy foliage. In *I. fernaldii* the proportions of all plant parts are perfect. The flower is just the right size and the stem is just the right height in proportion to the leaves and flower. There are some plants whose flowers are so appealing that the plant as a whole is overlooked. However, with *I. fernaldii* the entire plant is attractive and displays its perfect proportions with grace and beauty.

Leaving *I. fernaldii*, the trail continues around the south side of the hill, and it is easy to miss the patch of *I. hartwegii* half hidden under the litter of a large *Quercus* at the top of the slope. The clump is just across the path from a distinctive *Arcostaphylos pungens* var. *Montana* Munz which looks very similar to the *Arcostaphylos* shading the clump of *I. fernaldii*. This collection of *I. hartwegii* was obtained off Knox Road in Yuba County, and does not seem to be one of the better clones I have seen. The flowers are pale yellow and hardly make it out of the small fans. Many have bloomed at ground level, and some even seem to bloom below the soil level. I collected some seeds from this clump and am interested to see if the determining factor for the bloom position is genetics, or some horticultural idiosyncrasy. I have wondered if it may not have been the unusual weather this spring, or maybe the fact that the plants are newly established that caused the hidden bloom this year. At any rate, they deserve careful inspection for a good knowledge of the PCNI species.

About fifteen yards further along this path is an attractive clump of *I. macrosiphon*. From Camp Meeker in Sonoma County, this floriferous blue-violet variety forms a very tight, dense clump and puts on a long-lasting flower show in the spring. Unlike other *I. macrosiphon* I have seen in the past, this variety's perianth tube begins a good distance up from the ground level. The color is very clean. The clumping habit makes it quite valuable as a garden plant in mild climate area.

At the end of this path is another clump of *I. douglasiana* collected from Half Moon Bay in San Mateo County. This specimen is exceptionally large and tall, but the color is muddy and not extremely attractive. However, it is valuable to examine this plant to learn the amazing size *I. douglasiana* can obtain.

This completes the circuit and brings you back to the beginning of the first path. But it is not the end to your enjoyment of irises. Toward the south side of the park is a picturesque pond where a stunning clump of *I. confusa* covers one section of the bank, and where an impressive clump of *I. ensata* pushes its way through the water and blooms on and off almost all summer in Berkeley.

Unbeknownst to most people, an extension of the Botanical Garden is located across the street from the garden proper. The Stephen Mather Redwood Grove is a peaceful retreat where one can go for a refreshing lunch or stroll. On the north end of the grove is a clump of irises situated on a slope not far from the amphitheater. Here, an unmarked clump of *I. purdyi* hides in the quiet clearing among the redwoods. I must confess that of all the PCNI species, *I. purdyi* really made me exclaim in delight. The creamy yellow falls are wide and full (compared to species in general) and heavily veined in brownish purple. They are not too tall, about a foot high, but the flowers display themselves perfectly above the few, narrow leaves. This little beauty should be a sought-after part of anyone's garden collection. It offers the viewer a good example of just how well mother nature performs left all to herself.

Growing nearby is another clump of *I. macrosiphon* and a distinct hybrid of this with *I. purdyi* is growing between the two, the influence of both parents clearly visible. The color is a paler blue-purple than the *I. macrosiphon* and has its pointed falls. The falls, though, are heavily veined with the same color and pattern of the nearby *I. purdyi*.

Unfortunately, this is all the U.C. Botanical Garden has to offer in the way of the genus Iris. Unfortunate only for an addict like me who could go on forever viewing all the species given the opportunity, fortunate for us all to be so lucky to have such a wonderful collection in one spot. But for those who want more, my tale will continue in the next issue of the *Almanac*, as I take you over the crest of the hills, about a mile distant, to the Tilden Botanical Garden where we will tour even more species of the series *Californicae*. Till then, happy iris-ing.



A Revision of Pacific Coast Irises

Lee W. Lenz

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Director, Rancho Santa Ana Botanic Garden
Claremont, California

IRIS PURDYI Eastw. Calif. Acad. Sci. (ser. 3) 1: 78, 1897

Iris macrosiphon var. *purdyi* (Eastw.) Jepson. Fl. Calif. 1: 325, 1921.

Iris landsdaleana Eastw. Leaflet. West. Bot. 2: 186, 1939.
Type. — About 5 miles south of Richardson's Grove, Mendocino County, California. 20 March, 1939. A. Eastwood 18901. Calif. Acad. Sci. Herb. (Type seen.)

Rhizome moderately slender, 4-6 mm. in diameter, dark reddish-brown and covered with the remains of old leaves; leaves somewhat two-sided, dark green above, gray-green below; leaf bases flushed brilliant pink or red; flowering stems unbranched, 1.5-3.5 dm. tall, covered with few to many overlapping, inflated bracts which are often flushed with anthocyanin pigment and free only at their tips; spathes usually 2-flowered; spathe valves opposite, somewhat inflated, outer one broadly lanceolate-ovate, 8-13 mm. wide (aver. 10 mm.) and 50-77 mm. long (aver. 66 mm.); pedicel 11-22 mm. long (aver. 16 mm.) at anthesis; ovary narrow, 13-20 mm. long (aver. 17 mm.); perianth tube linear, 28-48 mm. long (aver. 40 mm.), sometimes slightly dilated near the top; sepals oblanceolate, 55-84 mm. long (aver. 63 mm.) and 16-27 mm. wide (aver. 20 mm.); petals lanceolate, widespreading, 50-72 mm. long (aver. 56 mm.) and 9-20 mm. wide (aver. 13 mm.); flower color pale creamy yellow conspicuously veined with brownish-purple lines, or often pale cream or whitish with light lavender wash on the sepals; style branches 21-32 mm. long (aver. 25 mm.); style crests 9-21 mm. long (aver. 16 mm.), narrowly ovate, lacinate margined; stigmas truncate, broadly rounded or bilobed but never triangular, edge of stigma flap often set with minute teeth; capsule oblong ovoid, somewhat beaked, 2-3 cm. long; seeds thick D-shaped to irregular, light brown, finely wrinkled.

Type. — Ukiah, Mendocino County, California. May, 1897. Carl Purdy. Calif. Acad. Sci. Herb. (Type seen.)

Distribution. — CALIFORNIA. Humboldt, Mendocino, Sonoma, and Trinity counties.

Representative specimens. — CALIFORNIA. Humboldt County: 5.4 miles west of Garberville, road to Briceland, Mrs. H. C. Cantelow; 2 miles north of Garberville, D. K. Kildare 4370; Summit, ridge west of Bull Creek, M. S. Baker 2431a; 2.7 miles north and west of Ettersberg along Old Coast Road, L. W. Lenz and E. K. Balls 20744. Mendocino County: Near Bell Springs, A. Eastwood and J. T. Howell 4610; Ukiah, A. Eastwood 3292; Road from Hwy. 101 to Rockport, L. W. Lenz 14421; Mountains near Ukiah, H. N. Bolander 3909; 1 mile from Alder Glen Springs, road to Boonville, L. W. Lenz 14425; Idol House, H. P. Chandler 1076; Near summit between Westport and Branscomb, L. R. Abrams 8199. Sonoma County: .3 miles south of Mendocino-Sonoma County line, Hwy. 28, L. W. Lenz and E. K. Balls 16535. Trinity County: 1.8 miles east of Humboldt-Trinity County line, road from Alder Point to Zenia, L. W. Lenz and E. K. Balls 22610.

Iris landsdaleana was described by Eastwood in 1939 from plants collected south of Richardson's Grove in Mendocino County. In describing the species she said that it approached *I. purdyi* but differed in the color of the flower, being mauve instead of yellow, and that it possessed obtuse perianth segments. The stem leaves were also farther apart than in *I. purdyi*. After an examination of the type specimen preserved in the California Academy of Sciences Herbarium, as well as a study of the plants in the field over a period of several years, I am of the opinion that this plant cannot be satisfactorily separated from *I. purdyi* and I am, therefore, including it with that species.

In its pure form, *Iris purdyi* is one of the most distinctive species in this series. However, this species, which occurs over a relatively small area, has hybridized with at least three other species and many of the plants now found show introgression with the irises which surround the area where *I. purdyi* occurs. For this reason it is often difficult to apply a name to many of these plants. The type specimen, the one shown in Plate II in Dyke's monograph, and the one shown in Figure 30 all display characters which are believed to be characteristic of the pure species, spathes broad in

relation to their length, sometimes slightly inflated, stems clothed with very conspicuous overlapping and inflated bracts, and finally, all with large, beautiful, light yellow flowers and the entire plant with a great deal of anthocyanin pigment on it. Other plants show most of these characters except that the bract-like leaves on the stem are not overlapping and the flowers are nearly white, often with a slight lavender wash on the sepals. Other than that, they are very similar to the yellow-flowered ones described above. In both instances the flowers have a truncate stigma which is different from any other species in the *Californicae*. Some of these whitish-flowered forms are here included with *I. purdyi*. The entire matter of introgression in this species will be taken up in Part II.

Iris purdyi has been called the Redwood Iris, but it is misleading to consider that it is a species of the heavy Redwood Forest. Within the redwoods it is found only in rather open places where there is considerable light. It is most abundant in the North Coastal Coniferous Forest which occupies the area between the Redwood Forest and the ocean. Here again, it is found only in relatively open areas with high light shade. In both of these plant communities the climate is mild and the rainfall generally heavy, being from 35-110 inches a year. In Trinity County, the plants are found in the Mixed Evergreen Forest.

Natural Hybrids. —

- I. douglasiana* × *I. purdyi*. CALIFORNIA: Humboldt and Mendocino counties.
- I. douglasiana* × *I. macrosiphon* × *I. purdyi*. CALIFORNIA: Mendocino County.
- I. macrosiphon* × *I. purdyi*. CALIFORNIA: Mendocino County.
- I. purdyi* × *I. tenuissima*. CALIFORNIA: Humboldt and Trinity counties.

Hybrids between *I. douglasiana* and *I. purdyi* are fairly common in western Humboldt and Mendocino counties. In Mendocino County I have studied a hybrid population located 10 miles west of the junction of Hwy. 101 with the road to Rockport on the west slope of the Coastal Range (*L. W. Lenz* and *E. K. Balls* 16522 RSA Herb.). In Humboldt County this same hybrid combination is common along portions of Hwy. 101 along the Eel River between Fortuna and Pepperwood. The finest single hybrid population seen is located in Humboldt County about 2 miles southeast of Petrolia along the Old Coast Road (*L. W. Lenz* and *E. K. Balls* 20472 RSA Herb.). This population will be discussed in detail in Part II.

One of the most complex hybrid populations yet found in the *Californicae* is one involving the three species, *I. douglasiana*, *I. macrosiphon*, and *I. purdyi*. This combination is known to me only from a single locality in Mendocino County, an area along the Faulkner Park road near Boonville (*L. W. Lenz* and *E. K. Balls* 16530 RSA Herb.).

Hybrids between *I. purdyi* and *I. tenuissima* have been found in Humboldt County a short distance west of Willow Creek, along the road to Blue Lake (*L. W. Lenz* 18320 RSA Herb.); in Trinity County near Forest Glen (*L. W. Lenz* and *E. K. Balls* 22565 RSA Herb.); and near the Mad River Ranger Station (*L. W. Lenz* and *E. K. Balls* 22572 RSA Herb.). A specimen collected by F. W. Gould (832) on Horse Mt. in Humboldt County also appears to be of the same parentage.

The hybrid combination of *I. macrosiphon* and *I. purdyi* has been found at several localities in Mendocino County. One locality was about 2 miles west of Hwy. 101 on the road to Glen Alder Springs (*L. W. Lenz* and *E. K. Balls* 16413 RSA Herb.). It is possible that the plants described by Eastwood as *I. landsdaleana* and here included within the limits of *I. purdyi* may have, through introgressive hybridization, acquired some genes of *I. macrosiphon*. This possibility will be discussed further in Part II.

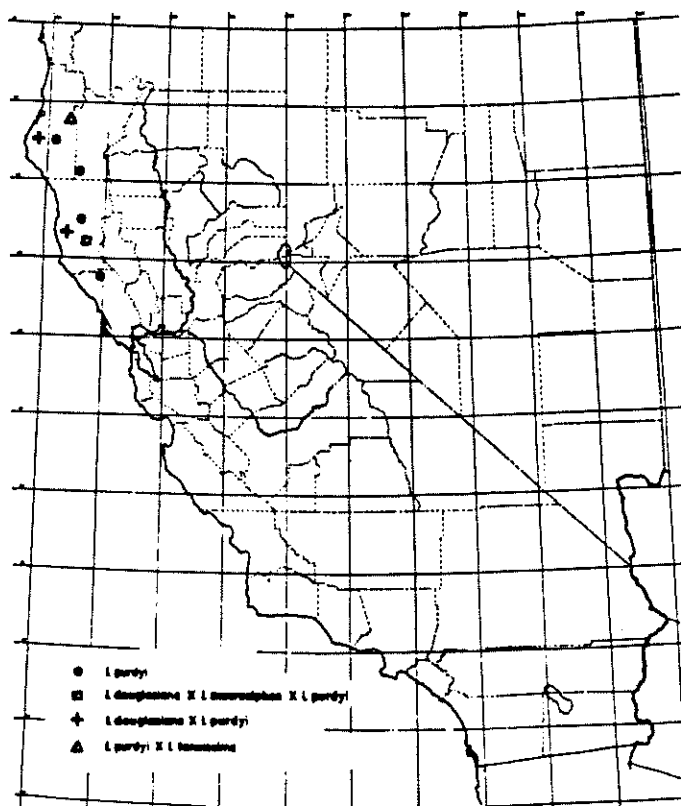
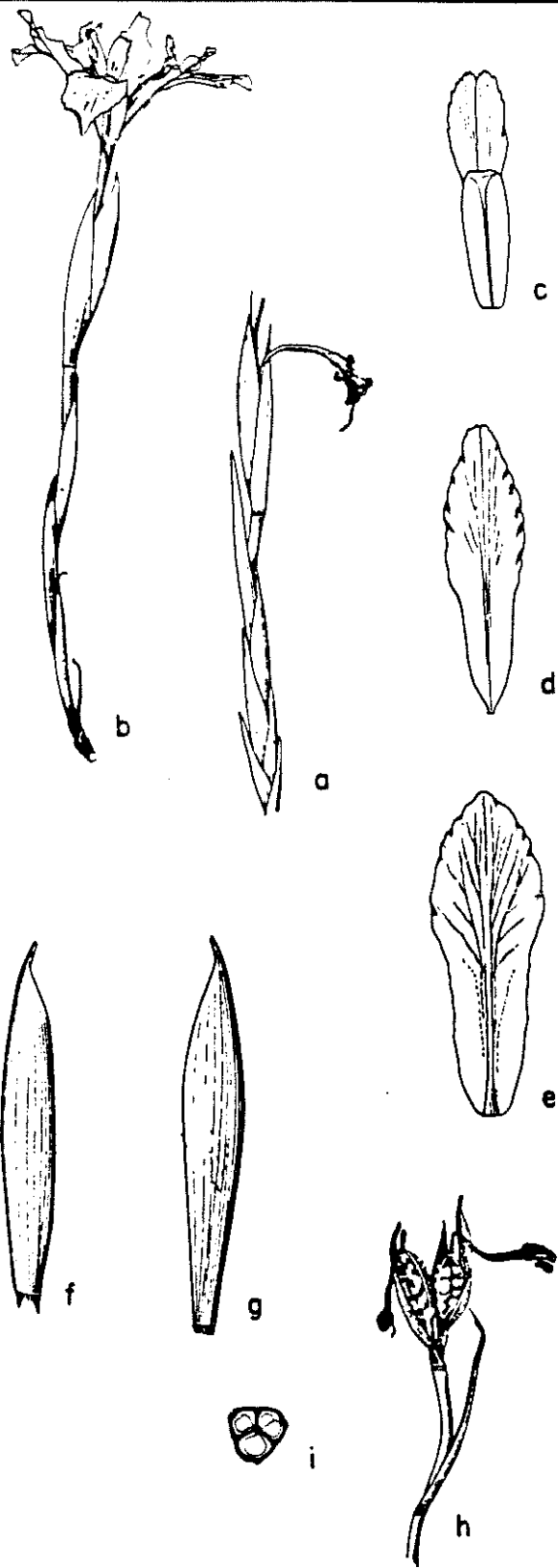
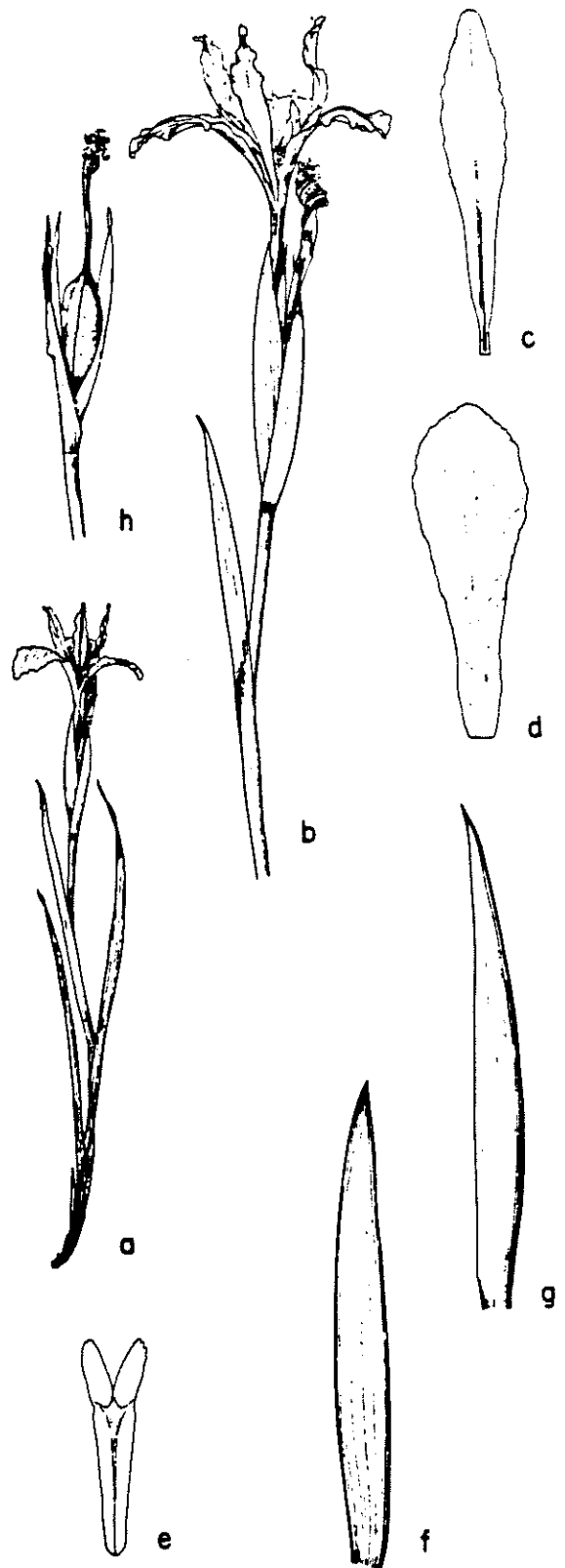


FIG. 28. Distribution of *Iris purdyi* and its natural hybrids.



Iris purdyi. a, b, general habit; c, style branch; d, sepal; e, petal; f, g, inner and outer spathe valves; h, seed capsules; i, cross section of seed capsule. a, b, h, $\times \frac{1}{3}$; c, d, e, f, g, i, $\times \frac{2}{3}$.

Iris fernaldii. a, general habit; b, inflorescence; c, petal; d, sepal; e, style branch; f, g, inner and outer spathe valves; h, seed capsule. a, $\times \frac{1}{6}$; b, h, $\times \frac{1}{2}$; c, d, e, f, g, $\times \frac{2}{3}$.



Rhizome about 6 mm. in diameter, base covered with the remains of old leaves; leaves long, slender, to 7-8 mm. wide and up to 4 dm. long, usually brilliantly colored at the base, leaves gray-green and often quite glaucous, drying to an unusual gray-green color, nerves fairly prominent; flowering stem 2-4 dm. tall, shorter than the leaves, with 2-several cauline leaves free about 1/2 of their length, not inflated; spathe 2-flowered; spathe valves opposite, rather broadly lanceolate, 6-11 mm. wide (aver. 7.7 mm.) and 50-90 mm. long (aver. 72 mm.), often flushed with anthocyanin pigment; pedicels variable, 9-22 mm. long (aver. 13 mm.) at anthesis; ovary elliptical, 15-23 mm. long (aver. 18 mm.); perianth tube long, slender, 30-62 mm. long (aver. 48 mm.), in most specimens upper portion rather abruptly dilated to form a conspicuous throat; sepals oblanceolate to spatulate, 47-68 mm. long (aver. 54 mm.) and 12-21 mm. wide (aver. 17 mm.); petals narrowly oblanceolate 43-60 mm. long (aver. 51 mm.), and 6-14 mm. wide (aver. 9 mm.); flower color a soft creamy-yellow often variously veined; style branches 22-30 mm. long (aver. 27 mm.); style crests linear to narrowly lunate, 10-17 mm. long (aver. 13 mm.); stigmas triangular; capsule oblong, distinctly beaked, 2.5-3.5 cm. long.

Type. — Along the open roadside, 5 miles west of the Petrified Forest on the Santa Rosa-Calistoga Hwy. 17 May, 1937. R. C. Foster No. 203. Gray Herb. In the original description Foster places the type locality in Lake County whereas it should be Sonoma County. (Type seen.)

Distribution. — CALIFORNIA: Lake, Napa, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma counties.

Representative specimens. — CALIFORNIA. Lake County: Mt. Sanhedrin, A. Eastwood 12810; Mt. St. Helena, A. Eastwood 6822, Napa County: Suisun Valley to Wooden Valley, P. H. Raven and G. L. Stebbins 5301; Between Franz Valley and Calistoga, J. T. Howell 16164; Highway south of Monticello, M. S. Baker 3955; Burts Canyon, P. H. Raven 2872. Santa Clara County: Above Las Trancas Woods, L. W. Lenz and E. K. Balls 17098. Santa Cruz County: East side of Loma Prieta Ridge, W. R. Dudley. Solano County: Wooded canyons, Weldon Canyon, Vaca Mts., W. L. Jepson 7192; Wooded hillsides, Gates Canyon, W. L. Jepson. Sonoma County: 5 miles east of Mark West Springs, A. Eastwood and J. T. Howell 5516; Santa Rosa-Calistoga road, .5 miles from junction with road from Mark West Spring, L. W. Lenz 14427; Ca. 1 mile from Petrified Forest on road to Calistoga, L. W. Lenz 14426; 4.4 miles northeast of Mark West Springs road to Kellogg, L. W. Lenz and E. K. Balls 17110.

Iris fernaldii was described by R. C. Foster in 1938 from plants collected near the Petrified Forest in Sonoma County, California. Foster placed the type locality in Lake County, but this is in error. Earlier, Foster had labeled these plants as doubtful hybrids between *I. douglasiana* and *I. amabilis* (= *I. macrosiphon*), but he concluded, after a study of *I. douglasiana* in the field and herbarium, that the species did not occur so far to the east and that consequently, opportunity for the production of a hybrid of such parentage seemed lacking. Thus he regarded the plants as distinct, and called them *I. fernaldii*.

Certainly *I. fernaldii* is related to *I. macrosiphon*, but there are distinct morphological differences. In general, the spathe valves are broader than they are in *I. macrosiphon* and the perianth tubes tend to be different. In *I. macrosiphon* the upper part of the tube is somewhat en-

larged to form a bowl-like base below the perianth segments. In *I. fernaldii* the upper part of the tube is usually distinctly dilated to form a conspicuous throat much like that in *I. tennissima*. The leaves of *I. fernaldii* are broader than those of *I. macrosiphon* but not so broad as in *I. douglasiana*. In color they are quite unique, being a peculiar gray-green, often glaucous, and with very strong basal coloring, especially in the form from near the type locality. *Iris macrosiphon* seldom has colored leaf bases and never any with as much coloring as *I. fernaldii*. On drying, the leaves of the latter take on a peculiar gray color and because of their width and length, and their unusual color, they are usually quite easily distinguished from *I. macrosiphon* in most herbarium material.

The flower stems are taller than all but the very tallest *I. macrosiphon* and no stemless plants of *I. fernaldii* such as are common in *I. macrosiphon*, are known. Except for possible hybrids, the flower color is probably always a light yellow. In herbaria this species is usually included under *I. macrosiphon* or sometimes listed as a yellow-flowered *I. douglasiana*. During the course of this study, herbarium specimens have been seen from other areas than Sonoma County which are indistinguishable from material collected at the type locality. These specimens are here placed in *I. fernaldii* and include plants from a number of counties in west coastal California centering around San Francisco Bay. Collections from the Santa Cruz peninsula are almost identical with the Sonoma material with the exception that in some instances these plants lack the anthocyanin coloring on the plant parts such as is found on the Sonoma County plants. It is believed that many of the 'yellow macrosiphons' from the hills west of Gilroy and elsewhere are better placed here than in *I. macrosiphon*.

Ecologically, the species is usually found in somewhat more shade than *I. macrosiphon*, and they most commonly are found in the Mixed Evergreen Forest. Plants grown in the experimental garden have retained their rather unusual leaf coloring.

Natural Hybrids. —

I. douglasiana × *I. fernaldii*. CALIFORNIA: Marin and Santa Cruz counties.

I. fernaldii × *I. macrosiphon*. CALIFORNIA: Napa and Sonoma counties.

In places *I. fernaldii* occurs in the same general area as does *I. macrosiphon* and definite hybrids have been found. One locality where they have been studied is on Troutdale Creek in Napa County (L. W. Lenz and E. K. Balls 17119 RSA Herb.). A second locality is on the slopes of Mt. St. Helena in Sonoma County (L. W. Lenz and E. K. Balls 22620 RSA Herb.). These will be discussed in Part II. Undoubtedly some of the specimens from other areas which do not entirely fit either species represent hybrids between these two rather closely related plants.

Hybrids believed to be between *I. douglasiana* and *I. fernaldii* have been observed from several localities. These include plants collected at Corte Madera Ridge, Marin County, by R. C. Foster (241 Dudley Herb.), and one from Marin County collected by L. Constance and A. A. Beetle (2568 Dudley Herb.).

A TRIBUTE TO MARION WALKER

Marion Walker's first contact with the iris world was in the fall of 1937 when he ordered some iris plants from the Cooley Gardens in Oregon. Then in the spring of 1938 he visited Milliken Gardens in Altadena where he was enrolled as a member of the American Iris Society.

On April 22, 1939, the American Iris Society held their first meeting in Southern California. Marion met all the leaders of the AIS and he felt it a great thrill for a young man just out of college to make an acquaintance with the leaders in the Iris World.

In 1939, following the "California Trek" by AIS members, Region 14 of Northern California, Region 15 of Southern California, and Region 16 of Canada were established.

In June, 1940, the Marion Walkers were among the first fifty people to contribute to the formation of the Southern California Iris Society.

Forty years later Marion's career in the Iris World included his serving in leadership capacity in both the AIS and the Southern California Iris Society in many ways with special interest in the development of Pacific Coast Natives and Spurias.

As early as 1947 Marion was winning the Silver Medal in the SCIS shows and was competing with Roswell Johnson (one of the first native hybridizers) entering spurias, douglasianas, and other irises.

During the three decades or more the Walkers farmed a one hundred acre lemon ranch in Ventura, Marion and Dorothy, as well as his parents, had homes in a beautifully landscaped garden which at one time had 25 sections arranged for showing the various types of iris. His growing fields were between the lemon trees. Members of the Iris World knew and loved their hospitality on many treks to this lemon ranch in Ventura.

Eric Nies, a well known iris breeder in the Hollywood area recognized Marion's abilities and asked him to serve as a director of the AIS in 1950. Already advancing in the hybridizing of PCN's and Spurias, Eric had introduced Orchid Sprite, Blue Sage and Amiguita using douglasianas.

There was a growing interest in the use of his fine native hybrid introductions and in 1952 when he passed away, his hybrid program was left to Marion.

At this time Dr. Lee Lenz of the Rancho Santa Ana Botanical Gardens had introduced Santa Ana and Santa Paula and was studying embryo culture of the PCN's.

This season saw the introduction of Iris munzii and Marion spent hours gathering material for his breeding program and stimulated interest in the development of PCN hybrids.

His introduction of Ojai in 1959, winner of the 1973 Mitchell Award, was a great breakthrough in his hybridizing because of its fertility, vigor, size and greatly changed form.

Fairy Lantern of 1945 and Violet Elf of 1959, both native hybrids, were introduced but the advanced hybrids that won people's hearts at the 1956 convention were never marketed.

Marion Walker had extended the Eric Nies breeding program in both natives and spurias and by 1961 his seedlings brought to the Southern California Iris Show seemed to have unfolded the future of PCN's.

However, progress and misfortune turned the tide.

Having served as Vice President and Awards Chairman in 1953, Marion was elected President of the AIS in 1954. He was the first person west of Texas to hold the office and the Iris World came with him.

With interest and organization in specialty groups flourishing after the 1956 AIS convention in Las Vegas, members of the Iris World wanted to know more about them. Marion became a speaker in demand and conducted judges training sessions on PCN's.

He accomplished a significant milestone in promoting a special committee to establish the conditions under which a special interest group could become a section of the AIS. Thus he kept the study of all species of irises organized in groups within the AIS. This opened the door for the foundation of the Society for the Pacific Coast Native Iris in 1973.

Marion Walker ended his term as President with membership approaching 6,000, the largest number in AIS history.

He also arranged the affiliation status for the state and local iris societies so a closer functioning relationship would be promoted.

Marion Walker was honored for his many years of devotion and contributions to the Iris World with the distinguished Service Medal.

The Board of Directors of the SPCNI also thanked him for his years of dedication by electing him the first Honorary Life Member of the SPCNI.



TREASURER'S REPORT

NOVEMBER 30, 1984

Cash on Hand May 21, 1984 \$592.79

Dues and Receipts:

| | |
|-----------------------------|----------------|
| Dues Collected: | \$236.00 |
| Dues Collected by AIS | \$72.00 |
| Sale of Cohen | \$10.50 |
| Sale of Seeds-LaRue Boswell | <u>\$14.40</u> |
| | \$925.69 |

Disbursements:

| | |
|--------------------------|----------------|
| Engraving | \$9.80 |
| Postage | \$13.00 |
| Office Supplies | \$1.43 |
| Spring Almanac (balance) | \$180.95 |
| Spring Almanac (postage) | <u>\$74.11</u> |
| | \$279.29 |

CASH ON HAND NOVEMBER 30, 1984
\$646.40

Dorothy E. Foster
Treasurer

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.

APOLOGY

The editor apologizes for the tardiness of this issue. Unforseen problems and the inexperience of the editor were the reasons for the ALMANAC being printed so late in the year.