The Review

The Group for Beardless Irises

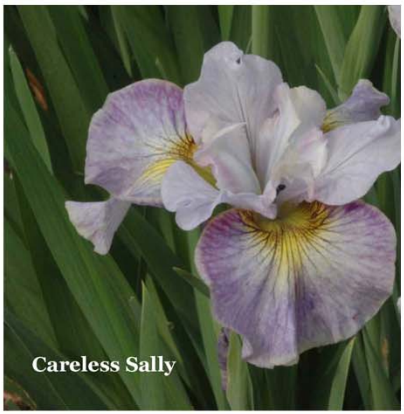
Issue no 4 Autumn 2007


S 96-37-7.1


Isabelle SC


The finished hybrid
Humors of Whiskey


Uncorked


Careless Sally

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NEWS FROM THE EDITOR
Brita Carson

Hybridisation is the strong theme running through most of the articles in this edition of the Review. We have regular and new contributors full of enthusiasm which can't help but inspire everyone to try their hand with some of their lowering irises. This is a fascinating challenge. And read everyone's different ideas.

The CD has some wonderful photographs. Please keep sending your photos to be included next time. It is easier and safer for us if you can send digital ones via email rather than slides through the post. Billy Carruthers from the nursery Binny Plants, near Edinburgh has, after bullying from me, supplied us with lovely photographs of the walled garden with some very beautiful irises he is growing originating directly from Tomas Tamberg. Edinburgh is not as cold as Germany in winter but they are positively thriving in large spectacular plantings.

Jeff Dunlop has written articles for us in previous Reviews and if you would like to read some new ones on his hybridisation programme, they will be added to the library and available if anyone would like to borrow them. Alternatively, Alun can email you a copy of them. Jeff is on the hunt for better reds, truer blues, and brighter yellows. There is advice on hybridisation. He also writes on the culture and transplanting of Siberian irises.

Philip Allery, your previous editor, always made new members write a short piece about themselves which, from personal experience, was quite a daunting task. However it was a really good idea for everyone to get to know each other and when you have been a member for a few years, you might feel more inclined to write about where you garden and any particular difficulties that you have had to overcome. Roy Harris is one of our members who admits to having a good bit of the blarney as you will see when you read his 'Tailpiece'. He walks his two Jack Russells every morning and has done for the last nine years since he retired. He reckons he has walked over 16,000 miles. Roland, one of his Jacks has taken to trying to eat hedgehogs. He carries them in retriever fashion around the place and Roy has to remove them from his jaws and de-flea both of them. I'm not suggesting members should feel they have to write as much as Roy has done (although I'd be delighted if they did) but any short pieces would be gratefully received.

Roy is interested in growing Evansias and he is looking for information on the cultivation of them. He is interested in the possibility of forming an online 'Robin' but I'm more interested in having replies so that I can include them in either the Review or the Newsletter! However, I'm sure that in the future we will all be communicating online, so if anyone would like to get in touch with Roy, I'll forward an email to him.

The next communication is the Spring Newsletter when I always like articles with a practical angle which I feel is what we like to do - get into the garden and work the soil. I would be delighted to hear from anyone. It is going to be a perfect year for hybridisation. The weather is going to be wonderful and the flowers are going to bloom for you at just the right time. I can feel it in my bones!

CHAIRMAN, CHAIRLADY, CHAIRPERSON OR CHAIR
Anne Blanco White

You know, a new word is long overdue for this functionary and if any one can come up with a suitable substitute I'll happily introduce it. No matter. I do think we may be set for a really good run over the next few years. We have had to part from a generous and helpful chairman, but we have an enthusiastic treasurer, an efficient editor and a nice new secretary who is also taking on the seed functions. Backed up, as they are, by the various specialist contributors we should do well. Now, if the rest of you shrinking violets would offer even the smallest contributions to Brita it would encourage all the others. It doesn't need to be a 2000 word essay – just relay the passing thought by email or by snail mail.

CARRY ON GARDENING

When I took on my new garden towards the end of the 2006 drought there were three bamboos, a rhododendron, a camellia, three or four oleanders and two of those horrid little standard bushes that you have to trim weekly with your nail scissors. Two of the bamboos went to my new neighbour along with a couple of undesirable containers which will keep them under control for a year or two; the third bamboo went to the recycling centre where another customer said 'ooh, please'. (A second swept up the discarded sink that had lived in the old garden.) The assorted shrubs, with the approval of the new owners were shifted to the old garden. Vast quantities of bright, white pebbles were removed by one of those dubious contractors – I wanted a flower bed, not a beach. The lawn looked depressed. Then the scaffolders moved in and the rains started. Three weeks later, on their combined departures, it became clear that the lawn was carefully laid rye grass which had grown to some 2ft tall. Very good stuff for parks and public gardens, but not for a lawn some 2½ by 5 yards. (That was replaced in spring with something that I hope will grow more slowly when it has exhausted the dung heap on which it seems to have been cultivated.) At all events my gardening over the wet winter fairly wrecked the lawn because I dumped plants all over it and trampled intensively.

The next thing was to start digging over the beds. Huh! The brickbats drove me to the recycling centre for compost and as each sack was emptied it was filled with assorted builders' rubble. Even so I only dug down one spit reckoning that the worms could bring the next level to the surface. My helper and I found what I think was a foundation for my predecessor's rose support and that took a good deal of breaking up; there must be another somewhere, but not on my patch. The helper was prevented from wrenching out the remains of a very sad clematis: there were a few live leaves so I decided to give it a chance and it repaid me enthusiastically in early summer. Now I have to learn how to prune a Jackmanii type properly. Unfortunately these gardens are a wind tunnel and everything over six inches has either to be staked or anchored to the fences and that includes the cut-and-come-again lettuce.

Most of my plants had come in pots, but there were sackfuls of Evansias and they had to be planted out in waterlogged clay. And, believe me, it is pure clay.

They flowered, but not very well and have grown with real enthusiasm so there will be trouble next year when they have to be replanted properly, but I didn't want to do it this summer after what they had been through. As the weather warmed up, many plants in pots were transferred to the flower beds. Flowering was poor, but some of them were not in good condition originally. A resolution not to acquire any new plants this year went by the board so several new ones have been installed. A generous scattering of *Papaver somniferum* produced an overwhelming show including one plant of the super-frilly form which is always fun as the demented bees try to home in on the secluded riches. The runner beans have done nicely too as did the second parsley plant. A narrow gap between some decking and the lawn was filled with thymes and they do smell nice when trodden on. The real problem is what to do about the honesty plants which are vast.

A longer lasting and truly devilish problem is the lost labels. I have one serious word of advice for anyone potting up plants before a removal: Use Two Labels; put one well down the pot – it will still be there when you plant out or repot – put the other in the conventional place – it may still be there later on or it may not.

WONDERS NEVER CEASE

For several decades I grew plants of Jack Ellis's Seuvers and they covered a good deal of ground in Sussex growing in a ditch and up its banks and in pots for plant sales. Never in all that time did they set a seed pod though there was an occasional apology for one. The only one that seems to have survived that transfer to London and on to here was 'Seuver Punch' which nobly flowered this summer. It did it in conjunction with a plant of *I pseudacorus* var. *mzchetica* which happened to be the only *pseudacorus* I had in flower. Well, I expected the yellow one to set seed in spite of the shortage of bug life here and it duly did. Only the first seed pod to catch my eye was not pseudacoroid. It was quite long and plump and rounded at the end. Also careful inspection showed that it belonged to 'Punch'. Time alone will tell if the seeds are fertile, but they will go into the Group and Society seed lists. But, please, if you buy any and sow them I would like to know if they germinate. As F^1s they may be poor doers, but then again they may not.

UNDESERVED LUCK

I'm known to have a liking for *I. foetidissima* in most of its forms. The white 'berried' one I brought with me has taken umbrage on a considerable scale and as soon as the seed pods are harvested it will be replanted. What also came was a small disaster in a large pot with an unbelievable label and a very nasty outbreak of leaf miners which were rather drastically treated. Anyway, it flowered compatibly with the label which did include a query mark. It is the yellow 'berried' form which I thought I had lost five years ago. It is looking much more cheerful so it shall be planted out to keep trying – ah, one of the honestys is definitely for the chop.

THRIPS

There was a late season outbreak of thrips in the wetland bed at Wisley, at the end of the season and I suffered an outbreak as well. If your plants died down really messily with heavy dark markings along the lengths of the leaves then you may need to take drastic action in the spring. Larvae are to be found moving

around the bases of the young leaves when the weather begins to warm up. I don't know of any effective 'natural' killer, but most systemic insecticides will work and, applied as early as this, are unlikely to damage the more valuable insects.

SECRETARY'S REPORT
Madeleine Bullock

I'm very pleased to be taking over the role of Secretary and Seed Distribution Officer from Anne Blanco White and hope that my enthusiasm and organizational skills (!) make up for lack of detailed experience with Beardless Irises. The more you learn the more there is to learn, and so with irises I find that I know very little and I am reading rather a lot.

Taking over the seed distribution is a delight. I've been growing plants from seed for many years, first with hellebores after meeting Helen Ballard the legendary hybridiser who happened to live in Colwall. This is near Bringsty, where I live, in sight of the Malvern Hills, in about three quarters of an acre of heavy clay on a south facing slope and with two whippets – Charlie and Zephyr - who keep losing their bones in my flower beds and vegetable patch - see www.bringstycommon.com. Later, having developed an insatiable desire to propagate - well, anything actually - I moved on to primula, hepatica and various hardy perennials.

More recently I thought I would try my hand at plants which flower later than springtime and, having admired the Broadleigh PCI display at Chelsea for many years, decided that the time was right - I just 'had to have some'. What better place to start looking than on the BIS website and then the GBI. I'm hooked. So my first iris seeds have germinated, I'm reading voraciously and I'm organising my first seed distribution. Exciting times. Lots more to come.

SEED DISTRIBUTION 2007

As the new Secretary and Seed Distribution Officer to the Group can I first thank Anne Blanco White, Alun Whitehead and Margaret Criddle for their help in getting me started. I love growing plants from seed and am having a great time sorting out lists and more lists and have had an unexpectedly generous response to my requests for seed from members of the Group worldwide. Far from being a chore, I must admit that this is my idea of heaven.

The Seed Distribution list is enclosed with this Review. If I've made any mistakes do let me know – this is my first. The list offers members the opportunity to raise irises from seed. All seed is obtained from members. Some like Jeff Dunlop from the USA and Tony Huber from Canada send seed from their own crosses, offering us the opportunity to share in their work; some are nursery owners, all iris enthusiasts.

Do send in feedback on germination, development and photographs of plants and flowers. We can pass this feedback to the seed donors who will appreciate it. If you send me your email address, should we receive seed too late to include in the list, I can let you know by email.

Very many thanks to all the donors for the time you have spent collecting, cleaning and sending seed for the Seed Distribution. Do please send any amounts of spare seed next year. I look forward to growing into the role of Secretary, to receiving your seed requests and news of your successes.

TREASURER & MEMBERSHIP SECRETARY
Alun Whitehead

Taking my different hats in turn, as usual I'll take the easier first. As Treasurer I am pleased to give the figures for the year ended 31st December 2006.

Subscriptions	306.49
Donations	33.38
Seed Sales	6.00
Plant Sales	114.84
Newsletter Cost	0.00
Review Cost	-188.71
Interest Received	0.66
Total : Net increase at bank:	£272.66

Opening Bank Balance:	£1479.66
Plus net increase in funds	£272.66
Closing Balance:	£1752.32

subs paid in advance	@ 31.12.2005:	£154.61
and	@ 31.12.2006:	£215.27

The accounts reflect the dates payments are made and so the *Review Cost* relates to that in 2005. The cost for 2006 was £158.12 and this will be shown in the 2007 figures. Likewise the nil figure for the Newsletter Costs is deceptive, they amounted to £50.89 and were paid in 2007. However, from an overall perspective, the finances are sound and continuing in the right direction. As the amount of subscriptions paid in advance has become more material, I thought it advisable to show this figure. Where members have paid in advance, they are creditors of the group and accordingly the disposable funds are the bank balance less this figure. A similar figure for 31.12.2005 is also given for comparison. The accounts were kindly reviewed by Chris Towers, the BIS Treasurer, and a copy of his statement is available to members (just send a SAE or email). No matters arose which gave concern and we would like to thank Chris for giving his time so generously.

With the printing of the Group's leaflets, we had to make a decision about future subscription levels. Whilst the Group's assets are growing, this is largely due to managing our own printing. If the Group expands further, we may be forced to use a commercial printer and the subscription rate must reflect this to stay within the constitution. Accordingly, a slight increase in annual subscription has been made to £4.50 per annum for UK/European members. As previously, more than one member at a particular address need only pay one subscription, but only one

copy of each Review/Newsletter etc will be sent. As the Group gains some stability by members paying in advance, this facility will be continued and as an incentive where UK/European members pay for 2 or more years in advance this can be at the discounted rate of £4 per annum. The subscription rate for non-European members will likewise rise to £5 per annum, but again there is a discounted rate of £4.50 where 2 or more years are paid in advance.

Which brings me to my next hat. As Membership Secretary I am pleased to say that 17 new subscriptions were received in 2007 to date. This mainly arose from the distribution of the GBI leaflet with the recent BIS newsletter and we are grateful to the BIS for this support. Welcome to all the new members. Please feel free to contribute to the Review and Newsletter. It brings benefits to the group by sharing knowledge and experience. Among the new subscribers we are very pleased to welcome Madeleine Bullock who has enthusiastically volunteered to become our new Secretary and you are likely to correspond with Madeleine as she has also taken over the Seed Distribution. Although some members have fallen by the wayside, it is encouraging that membership is slightly up. I feel that it could be significantly increased with the right 'marketing'.

2008 SUBSCRIPTIONS ARE NOW DUE

Please send cheque, **£4.50 for U.K. & Europe; £5.00, elsewhere** payable to: ***The Group for Beardless Irises*** in respect of your subscription 2008 to: **The Membership Secretary, GBI, Aulden Farm, Aulden, Leominster, Herefordshire, HR6 0JT.**

If it is more convenient you can pay 2 or 3 years' subscription in advance at the discounted rate of £4.00 for UK & Europe or £4.50 for non-European members.

Please include your name, address, telephone number and email address. We will publish a list of members periodically. Please indicate if you would prefer that your details are not included.

APPRECIATION OF A WONDERFUL PROOF READER

I would like to say a very big 'Thank You' to Jennifer Hewitt for proof reading this edition for me. We are still living out of cardboard boxes at times. 'Posh camping' husband calls it, but it is difficult to find things and I feel that Jennifer has had to do a lot more correcting than usual. It is very reassuring to have a wonderful knowledgeable proof reader to check it all for me.

Iris lactea Pall. or *Eremiris lactea* (Pall.) Rodionenko comb. nov.

Anne Blanco White

I. lactea in its various colour forms is a rather surprising plant. It is found over much of the middle and far East usually in areas of climatic extremes which are desperately cold in winter and equally hot and dry in summer. There is a brief season when the snows melt and there is sufficient water available for plants to grow. Yet it grows happily in countries such as Britain where the climate is less extreme.

Then the species, which is very variable both in flower colour and plant size, has other curious characteristics: there is no nectary and the nectar is exuded at the base of the falls as it is in the spurias. Further the roots may well extend at least 36 inches into the soil to find the water which will keep the plants alive through the hot, dry months in desert conditions.

Dr. Rodionenko, of Russia, has been considering the species and is of the opinion that it should be reclassified into a Genus Eremiris of its own instead of being lumped as a Series in Section Limniris of Subgenus Limniris. His initial reason is that Section Limniris mainly includes species adapted to temperate climates and generous water supplies so the Ensatae should be elsewhere. (He has taken the same view of the Tenuifoliae which he wishes to transfer to a Genus Sclerosiphon.)

One of the main problems with these plants is that they are very useful to the nomads of Central Asia. The fibres of the leaves are valuable for ropes, the actual leaves are useful as cattle fodder and bedding, and the plant has at least 25 active pharmacological compounds of which 2 are unique.

Another problem with a species as widely distributed as this is that collectors finding it in a new site promptly gave it a new name and it has many synonyms, even having been confused with *Iris ensata* of the Laevigatae. All that has been more confused by the probability that a nomadic tribe moving to a new area would take specimens of their favourite plant along with them.

In 1846 E. Spach recognised the botanical peculiarities and assigned the plants to a Subgenus Eremiris. Dykes does not seem to have accepted this, but in 1990 V.M. Doronkin revived it and included three species: *Ii. lactea, biglumis* Vahl and *pallassii* Fisch. Dr. Rodionenko prefers V.I. Grubov's opinion that there are only two main forms: *Ii. lactea* and *oxypetala* which have overlapping habitats in the Shanghai and Inner Mongolia area. They are distinguishable by the colour ranges of the flowers, the lengths of the leaves and the lengths of the seed capsules. At the same time he accepts Brian Mathew's opinion, based on extensive herbarium researches as well as live material, that there is only one true species with a large number of variants. Dr. Rodionenko also hopes that modern research techniques will show that there are several true species since there are a number of outstanding localised forms.

Additionally, there are physical resemblances that suggest relationships from very very long ago with *I. anguifuga* and the spurias which also have the nectar exuded at the base of the falls, and the Sino-sibs with which Dr. Tamberg has established viable hybrids.

So for geographical and morphological reasons, Dr. Rodionenko considers that a Genus Eremiris should be established which would certainly include *E. lactea* (Pall.) Rodionenko comb. nov. and *E. oxypetala* (Bunge) Rodionenko comb. nov.

Ref: UDK 582.579.2 Bot. Mag. 2006, t.91, N11.

LOUISIANAS IN BERKSHIRE
Jane Cole

Results were mixed this summer. Some Louisianas flowered well whilst others still did not produce a stem. There was no difference in quality or timing between those kept in a cold greenhouse or those kept frost free. The ones overwintered out of doors were 2 weeks later. 'Her Highness' climbed out of a 14 x 14 inch container, looking really robust but no bloom. When I repotted it, it totally collapsed leaving me with two tiny shoots.

I planted one clump of 'Black Gamecock' in the garden and although it flowered, it hasn't done as well as the containerised one. 'Silent Woods' and 'Patient Record' did really well and helped by the early season were open for the Summer Show. It was good to see Louisianas on the show benches. Sidney Linnegar was also exhibiting them in 2 classes. I suppose we must thank the changing climate.

I have discovered, talking to BIS members, that many of them have been growing Louisianas for years. Some grow out of doors and some in cold greenhouses.

A cross I made in 2004, between 'Fulvala' and 'Black Gamecock' produced 12 seedlings. These have spent two years out of doors and flowered this year. They were various shades of dark purple to burgundy red. Two looked worth growing on for another year, hopefully they are hardy. This year I used a beautiful frilly purple self (ex Thompson & Morgan x no name) x 'Black Gamecock', hoping for a hardy Louisiana with a more modern form.

The seeds take ages to germinate, 9-12 months, but fresh seed gives the best results. I have a theory that irises thrive better in a climate and soil similar to that in which they have been bred, so why not try some hybridisation yourself.

LOUISIANAS IN JERSEY
Judith Quérée

Over 2,800 different species and varieties of mainly herbaceous perennials grow in my garden of no more than half an acre. The garden is set in a wooded valley in the north east corner of the beautiful Island of Jersey in the Channel Islands. Of those plants in my collection 164 are iris. But the iris that have really captured my heart are the bog loving iris.

I am very fortunate that the garden contains a variety of areas ranging from

hot and dry through to constantly wet, which allows me to grow a huge variety of iris requiring a diversity of conditions. The garden has a natural bog with numerous underground springs which even in the driest summers keep the garden constantly wet.

In the slightly drier areas of the bog garden the Sibirica Irises herald the season and they are closely followed by the beautiful Louisiana Iris. And then, of course, come the Japanese and *laevigata* irises which get the prize for showiness. I grow only ten different varieties of Louisiana Iris and it is not for the want of trying to grow more. Sadly they have proved difficult to track down in the UK which only makes looking at the American websites agony, so near and yet so far.

In Jersey the warmer weather and higher light levels make it less of a challenge than the U.K. I find they have a relatively long flowering period making them a very valuable iris. The colours are many and varied with a palette ranging from reds and yellows through to blues and purples and everything in between. They really are a fine addition to the garden.

This year, I have managed to get a fair amount of seed to germinate and I cannot wait to see the resulting flowers and to discover whether there are any that are particularly attractive. If there are I will make sure that I include them on my website.

If anybody spends time in Jersey then please do give me ring. The garden is open to the public and it would be my pleasure to show you round.

Judith Quérée
Creux Baillot Cottage
Le Chemin des Garennes
St Ouen
Jersey JE3 2FE

Tel:01534 482191

LOUISIANAS IN LONDON

Anne Blanco White

Since the LA species are leftovers from the last ice age, like most if not all irises, there has to be some cold resistance. I used to grow them in tubs of water which could have up to an inch of ice on top and they would come up grinning next spring.

I'm sure they do best in ground that warms up quickly - gravels in full sun and they do need as much sun as they can get.. That said, it stands to reason that intensive breeding and selection lead to plants with more flexible requirements.

And like the ensatas, they do need plenty to eat. In the wild they get a super mulch of nice fresh gunk every spring so probably trace elements are one of the essentials which is not to say that I recommend developing a special fertiliser for them. It was one of the big rose men who told Thomas not to use special rose fertilisers in the garden - or any others come to that - but to stick to the general ones like Growmore and compost.

Anyway, I'm experimenting with a few here again where they get seriously baked in the afternoons and chilled out for the rest of the day.

LOUISIANAS IN HEREFORDSHIRE
Alun Whitehead

From our experience the rhizomes are not tender if they have been well established before autumn. We've had pots frozen solid without a problem. It's the flowering ability which is the key. Ray Jeffs told me that they need a warm spring with early high temperatures to flower well, but I'm beginning to have my doubts. The Oxford Atlas here (pre global warming) says that we have approximately the same climate as south eastern U.S.A, except we do not get the high summer temperatures because of our temperate climate. Do they need a hot summer baking to produce the stunning colours in the Louisiana book? The flowers here normally disappoint. I wonder if they, like some daylilies, need the high temperatures to get the best colour?

LOUISIANAS IN SHROPSHIRE
Jennifer Hewitt

In Shropshire, it is a cold garden so Louisianas are in a cold greenhouse. *I. brevicaulis* and 'Black Gamecock' bloomed in 2007. *I.* x 'Fulvala' needs repotting and probably 'Clyde Redmond' concentrated on producing growth as it was repotted in 2006, and is already pushing at the sides of the (bigger) pot.

'AND IN DUMFRIESSHIRE
Brita Carson

In Clackmannanshire, I grew a few from divisions from a friend and from SIGNA seed but they may not have survived the move in the polybag. Or, which is more probable, I may not have lifted the correct clump but I'm going to try them again. Jane has discovered there are many other secret Louisiana growers. I think everyone likes the challenge of growing difficult irises but either we don't grow sufficient or the results aren't wonderful so we don't always admit that we do. Can we add yet more counties. Do you grow a few? Please write with your success stories or ideas to help other members who also want to grow them.

It isn't easy to find sources to purchase Louisianas. Once established they seem very vigorous and split easily. Would anyone who grows them like to sell divisions? Please get in touch with me and it can be advertised in the Spring Newsletter. Please list the names of possible plants for sale, with all likely costs. Jennifer will have a few rhizomes for sale. These will appear in the spring newsletter.

"The Louisiana Iris *The Taming of a Native American Wildflower*" was written by four members of the Society for the Louisiana Irises. My copy is the second edition but there is at least one later edition.

http://www.louisianas.org/welcome.html

British Iris Society Species Group
Species Iris Day
Saturday 16 February 2008
Hillside Events Centre
Wisley Gardens (10.00 - 4.00)

Lectures

Janis Ruksans - Iris in the Wild and in Cultivation (2 lectures)
Brian Mathew - Iris in the Curtis Botanical Magazine – a historical perspective on taxonomic change

Informal display tables
Sales table
Tour of the Alpine Yard
Morning and afternoon tea and coffee provided

Tickets £10.00 each are available from:

Tony Dickerson
HAS
The RHS Garden
Wisley
Woking
Surrey
GU23 6QB

(make cheques payable to: BIS Species Group)

Advertising

I will be pleased to advertise any coming event. Please get in touch by email with news of events like the one above. britacarson@btinternet.com

The Species Day will become an essential day in the Iris Calendar. Two great speakers not to be missed. Something to look forward to in the dull days of winter. Janis is a world renowned expert on bulbs of all kinds. He has the most tempting catalogue of bulbs nearly all of which he originally collected himself from all over Europe. He now produces and sells them from his nursery in Latvia. Brian Mathew is an equally renowned expert and needs no introduction to those of you who have already been fortunate enough to listen to his talks. A date not to be missed.

HYBRIDISING THE EXPERT'S WAY

Introductions

The following articles should carry an addiction warning. Once you read them and feel the enthusiasm and dedication you will all be madly pollinating this summer and dangerously close to becoming addicted yourselves. The first article is by Marty Schafer who has introduced an endless list of new Siberian cultivars. His nursery has the wonderful common name of the *Eupatorium* - Joe Pye Weed's Garden, which is in Massachusetts, U.S.A. Jennifer Hewitt, one of our home-grown experts, follows with her article on the history of *I.* 'Peter Hewitt' which will inspire anyone with even restricted space to still 'have a go'. Philip Jones has some experts' advice from Branklyn on pollination and we have Barry Blyth from Victoria, Australia on Spurias. Barry will have more time to enlarge on his methods for the newsletter in the spring (or the Fall in Australia). Joe Ghio has provided all his answers using 'New Blood' as an example.

I don't find that irises are the easiest flowers to pollinate but the challenge to produce a new flower affects many of us. I set some of our members, who are well known expert hybridisers, a questionnaire to try to find out some of their secrets. Was it all figured out using scientific deductions? Did old Mendel come into it? Who would mention recessive genes?

I wanted to know which irises they chose as prospective parents and why. Did they do backcrosses and would this weaken the line. All the answers can be found and much more besides. One of the essentials must be to keep records. The results often prove that you don't always get what you expect but, if you're lucky, something else just as interesting or more beautiful may appear.

HYBRIDIZING BEARDLESS IRISES

Marty Schafer

Let me start right off encouraging everyone to try their hand at hybridizing beardless iris. First of all, doing the actual pollination of iris flowers is simple compared to many other flowers. Second, there is ample room for improvement and innovation in all types of beardless iris – including my first love, Siberians. The third, and most important reason to hybridize is for the pure joy of it – to make and bloom your own seedlings. Every morning is a thrill when you go outside during bloom to see what is new. Do not be put off or intimidated by needing to know everything before you get started. I still make many crosses just to see what will happen or because two flowers happen to be open at the same time. If the results are promising, I pursue them. The flowers are a great guide. Most important is to have confidence and breed with your own seedlings. Don't just keep crossing two different named irises. Once you see something interesting in your own seedlings, explore it. This might be a color or pattern, a physical trait, or a behavior, or just a hint of one of these.

I don't usually do backcrosses, that is, cross a seedling back to one of its parents. And I rarely cross two siblings together. I prefer what I call cousin crosses, including half-sibling crosses. I think they allow you to concentrate characteristics (line

up recessives) without excessive inbreeding which can cause weakness or other poor qualities. One important consideration in choosing two parents for a cross is that the hoped for result may not be available in the first generation of seedlings. Instead it may more likely appear in the second generation, a second round of crosses made from the first batch of seedlings. From the first cross the feature you are looking for may be masked by more dominant traits. When you cross those seedlings with something else, a cousin or half-sibling perhaps, then the feature is more likely to appear. As you continue this process forward, more and more interesting features, variation, begin to appear. For example, when I first crossed "pink" siberians by yellow siberians I hoped to get a more pinky pink color. However, the results were generally purple siberians. One might be discouraged and give up, however, when you take two of these purples and cross them together – you get a few more purples, but also yellows, good pinks, and some pink and yellow blends.

I also don't usually make reciprocal crosses, that is, crossing the same parents both ways. This is mainly because it doesn't go with my pollinating habits. I choose something to be a pollen parent, take the anthers from that flower, and wander the seedling patch looking for promising partners. I will often pollinate up to ten flowers with the pollen from those three anthers. Usually I try to pollinate two flowers on any individual plant in hopes that at least one will take, so I often get up to five different crosses with that one pollen parent. I don't concern myself about which parents to make the pod or pollen parent, though I understand this might make a difference. I just haven't explored it.

I grow a lot of seedlings – between 1000 and 5000 per year. I am lucky to have the space. It is not necessary to grow so many seedlings to enjoy breeding and/or get good results. I have not been able to limit myself to just a few goals. So many interesting things keep showing up in the irises. If my space were limited I would have to narrow things down. For now, I am looking to expand the color range of Siberians into bluer blues, pinker pinks, redder reds, orange and brown. I love smaller flowers and larger flowers, ruffled and plain, ornate and upright style arms, and tall and dwarf plants.

Evaluating seedlings is as important as making crosses. In the first year of bloom, decisions are based on the flower alone and many are saved for another look. Sometimes Siberian flowers improve in form in the second year, so a plant may be saved for its potential. We probably save about ¼ of the seedlings that bloom the first year. In the second year, we are ruthless. Plants are now evaluated on total performance – vigor, bud count, stalk carriage, number of stalks, foliage, etc. as well as flower. A few are saved for further evaluation and possible introduction. A few more are saved just to be used in breeding. From the original bunch there may now be about 20 to 30 and from those 1 to 10 may be introduced after more years of evaluating.

Lets look at the family tree of Humors of Whiskey (2007), a golden-brown Siberian. The pod parent (S96-37-7) was a glowing violet red. There was a quality to the color that I had never seen before – somehow richer and clearer – and just more red. This flower aged poorly – the petals were easily damaged by the weather, so it was never introduced. Its children did not have this fault. The pollen parent of Humors of Whiskey was Uncorked (2002). At the time of the cross it was

still a numbered seedling. Uncorked is a blend of blue and yellow, what I call an overlay of blue over yellow. The resulting colors vary in intensity depending on the weather (during the forming of the flower) from very spooky grayish blue to very pleasing soft blue, with bright yellow signals. The parents of Uncorked were Tom Schaefer (2000), a very bright yellow with simple form, crossed onto another blue overlay seedling (S94-57-1) which was my first grandchild from breeding with the white *I. sibirica* Snow Prince (Tiffney 1990).

One of my reasons for crossing with Uncorked was to try to tap into the bright yellow of Tom Schaefer which was "hiding" in Uncorked. I thought it might come back as an even brighter or deeper yellow and have fancier form. While there have been some lovely yellows in these second generation crosses from Tom Schaefer, the more interesting results have been the wonderful blending of all the parental and grandparental colors – such as Humors of Whiskey. It took advantage of the unusual red from its pod parent to combine with the very bright yellow hidden in its pollen parent to make golden brown. Though I don't always get the results I am looking for – the results can still be very good. Humors of Whiskey lightens as it blooms from a rich warm brown to a light golden brown. While all these colors are attractive, the challenge remains to stabilize and intensify these new colors.

For anyone interested in the extreme details, Humors of Whiskey comes from five generations of my breeding on top of several generations of other hybridizers. It contains many doses of Bee Warburton's ARV line: Atoll (Warburton 1975) x Ruffled Velvet (McEwen 1973), which appear 18 times, I think. Butter and Sugar (McEwen 1977) appears 10 times, Silver Illusion (Johnson 1987) appears twice and Snow Prince once, a Hollingworth seedling once and Crème Chantilly (McEwen 1981) once. It's history shows a variety of strategies, one backcross in the first generation, one sib cross early on, outcrosses sprinkled through the early generations and plenty of cousin crosses. There was something special in Silver Illusion and Snow Prince that added to the long line of ARVs and led to Humors of Whiskey. I think that having Silver Illusion in the background of both the pod and pollen parents was also significant. This emphasizes both the importance of line breeding and the value of outcrossing.

S96-37-7: (S92-75-11 [sibling to Dawn Waltz, Book of Secrets, Off She Goes] (S89-9-2 (Isabelle x Silver Illusion) x S89-16-1 (Mad Magenta x Reprise)) X Dandy's Hornpipe (Careless Sally (S87-10-1 (Percheron x Mad Magenta) x Sailor's Fancy (Springs Brook x Butter and Sugar)) x S90-48-3 (S86-18-1 (Percheron x Butter and Sugar) x S86-18-2 (Percheron x Butter and Sugar)))).

Uncorked: (S94-57-1 (S92-65-1 [sibling to Salamander Crossing, Sarah Tiffney] (S89-9-2 (Isabelle x Silver Illusion) x Snow Prince) x S86-2-1 (Crème Chantilly x W84-26-4 (Butter and Sugar x ARV90-55))) X Tom Schaefer (S90-48-3 (S86-18-1 (Percheron x Butter and Sugar) x S86-18-2 (Percheron x Butter and Sugar)) x Hollingworth seedling)).

I would like to thank Marty for all the time he has spent putting this questionnaire into an article. All the names and flowers can be seen on the CD and you can work out the fascinating relationships between them all.

The History of 'Peter Hewitt'
Jennifer Hewitt

Perhaps this should start with what got me into hybridising in the first place: having joined the BIS I read in the 1967 *Year Book* of members showing new seedlings they'd raised from planned crosses, and the whole idea of creating one's own plants really grabbed me, and has never left. There is hope in every seedling that comes to maturity even if only 1% is ever realised – even that may be overstating it.

The biggest problem with sibiricas, in my view, is that virtually every seedling is probably a good garden plant. It is finding something different, the one that stands out from the crowd, that is the rare reward. 'Personality' is an elusive factor.

There are the factual aspects: health, vigour, number of branches and buds, flower substance and form. The last is the one most likely to disappoint. I don't have an ideal in mind, and like most hybridisers am pleased that variety is acceptable in Siberians, but it must be attractive; the plant should show itself well, and contribute to the garden display. If all other characters in a seedling are favourable a further cross with a well-formed flower may be tried.

Though I've tended to work towards improved reds and pinks, it is overall quality as much as colour that determines whether a new flower gets me excited and a good seedling in any colour is kept. It may be entered for trials and if successful, named – though a few which haven't gained awards do get named for various reasons. I have no preference as to diploids or tetraploids but tets generally grow better here, so even if equal numbers of crosses are made, more tets tend to survive to flowering.

The parents of 'Peter Hewitt' are 'Coronation Anthem', a Hollingworth tet with bright dark blue flowers with white signals, and 'Golden Edge' from Currier McEwen, very dark violet-blue with gold signals and fall edges, also tetraploid. I did hope that the gold edge would be inherited. The pod parent was 'Coronation Anthem', chosen for its reliable flowering here and bold, attractive form. The reverse cross wasn't done – now, I don't know why, as more often than not it is. Maybe it was due to the weather – there were more failures than takes among crosses done later in June/July 1996 which was a very late season; the first cross was made on 23rd June.

There were only 16 seeds of which 12 germinated and 11 were planted out, from pots, in August 1998 (most seedlings are potted individually for their first winter as losses of small plants outside can be heavy. Gardening in a cold spot often demands special care). Nine survived, 2 flowered in 1999 and the majority including TE969/B1 in 2000. Most did have edged falls but only B1 had the firm KEEP added to its description. Others didn't show improvements in 2001 and were discarded.

In 2002 TE969/B1 was nominated for the RHS trial of sibiricas at Wisley – for those unfamiliar with the RHS trials system, if possible a specimen is shown to the Joint Iris Committee who will (or will not) deem it Referred for Further Assessment (RFA). But if, as in this case, the hybridiser can't attend a JIC meeting and/

or an iris doesn't flower at the right moment, it is possible to nominate it for inclusion in a trial. Iris trials run for 3 years and are 'permanent', i.e. there are always trials with new plants entered and unsuccessful ones discarded. This sibirica trial was held from 2002-5.

In 2003 I decided that, whatever happened, this iris deserved a name and registered it in memory of my late husband. Some preliminary assessment is done by the JIC in the second year of a trial and in 2004 some favourable comments were made informally. Then in 2005 came the accolade of Award of Garden Merit (AGM), proving 'Peter Hewitt' had grown well and bloomed well, with flowers of good quality, in conditions very different from its birthplace.

It is, of course, tetraploid, stems around 37 inches (94cm) tall in flower, with a branch and 4 buds. The standards, quite wide and semi-upright, are deepish violet-blue lightening a bit with age; style arms are predominantly turquoise but also show brownish lilac and violet, with slight fimbriations (small outgrowths from the midribs). Falls are semi-flaring with the lower blades arching downwards from fairly short, wide hafts, deep blue-violet also going a little lighter by the 3rd day, bluer areas around gold signals and quite prominent gold edges. Flowers are held well above the leaves and measure 2¾ inches high x 4¼ inches wide (7cm x 10.5cm), sizeable but in proportion to the stem height.

Gaining the AGM qualified it for the second stage of the BIS trials, the Dykes Trial. This also lasts 3 years and in 2008 judgement on its performance in up to 9 gardens will be made by the host gardeners who are BIS judges. In the meantime I enjoyed seeing it doing well during the 2007 BIS Convention in Kent.

To anyone who is thinking of trying hybridising, I'd say "do it". There's nothing quite like it and your chances of success, certainly of producing some worthwhile garden plants, are greater among beardless irises. Use two parents that perform well for you; whether you have a particular aim in mind or not, look for the essentials of healthy, free-flowering plants. Crossing within a section (sibiricas, tet x tet or diploid x diploid; Pacific Coasts; versicolors; ensatas, etc.) is easiest but it's also fun to try way-out interspecies crosses. Others as well as Tomas Tamberg have shown they will produce exciting plants, though you may need to persevere.

There's always something further to aim for: 'Peter Hewitt' is now, I hope, contributing towards more gold-trimmed flowers, preferably darker, but could help with another aim, gold-edged red flowers. I have named one such 'Redmarley' but the flower shape needs quite a lot of improvement. No results worth keeping to date but I keep hoping and trying to find the right combination of parents. I said 1% success rate might be too high but (I can't do arithmetic) 1 out of 16 is better than that. By luck or judgement, two good parents' genes came together in 'Peter Hewitt'. One can't ask for more.

The photographs are on the CD of 'Peter Hewitt' and its parents. Also of great interest are photos of 'Peter Hewitt' as it ages daily. If you would like to buy a plant of I. 'Peter Hewitt' *please get in touch with Alun Whitehead. He has a few for sale. I would like to thank Jennifer for all the work she has done preparing this article from the questionnaire.*

PACIFIC COAST IRISES

Philip Jones

Having moved from Birmingham to Perth last year I found that the PCIs were not too happy with their new surroundings and were still sulking during the summer. A few flowers appeared in July as a sign that they were still alive rather than flourishing. They now seem to be healthy and I am considering a hybridising programme for next year.

Branklyn Garden is just down the hill from us and there I was offered professional advice on the subject of crossing plants. Some of this I already knew but some important information was new to me. Two points were particularly helpful.

First, I learnt that the stigma plant which we can call the female is what determines the plant's strength and structure. The pollen is the male and is the flowery flamboyant element. (I am not sure why all this reminds me of Italy.) The two irises I am interested in have good structure and vitality. One is the first and last to flower and the other has narrow upright foliage with small neat flowers standing proud of the whole plant. The question now is which colours I want to cross with these two plants.

The second point concerns the hybridising process. This, I learnt, is a two or three year process. The cross is only complete after the offspring have flowered and have been crossed a second time with the mother plant. Only then is the exchange of the characteristics described in the first point fully realised.

Other information concerns the practical business of hybridising. The true professional goes to great lengths to ensure that no insect outsider has gatecrashed the party. This includes not just flying guests carrying pollen from other plants but also earwigs and other insects climbing up the stem and devouring the seedpods. The only insect proof way to banish the professional hybridisers' nightmares is to construct a light wired cone contraption covered in fine gauze. You get the lightest wire you can find and double a length of it and then you tie a knot in the middle. You now have the two ends and the loop. You cut the loop and you have a four pronged wire structure that can be placed round the top of the flower head. Once you have covered the gauze over the wire cone and placed some cotton wool round the stem to prevent bruising, you tie this contraption firmly in place. I found this could be difficult to do and I suggest further action is needed.

In practice the cone contraption tended to be too heavy and in strong winds moved up and down the stem. I noticed last autumn that most garden centres had U-shaped bamboo canes of various sizes. One can cut a groove in the cane and tie the cone into a firm position. I had tried heavy wire bent in two in the summer but was unable to make an effective groove in it.

In the bud stage it is usual to remove the petals. Cut off the standards and the falls and we are left with the three little petals in the middle which are called the style arm crests hiding behind which we find the pollen anthers and the stigmas. We cut off the petals and the pollen anthers leaving the stigmas to mature. The reason for the cone is so that there is some space between the gauze and the

stigma while it is maturing and becoming sticky and receptive of the pollen. Once the seed pod has begun to form one can simply cover it with gauze or muslin to protect against insects.

Pollen matures later than the stigma. It can be kept in a sealed test tube for almost a week. You know the pollen is mature when it has changed from light to beige and a darkish line is starting to appear. I personally found it much easier to use my hand to do the crossing. As long as there are plenty of flowers from the father plant this is no great problem. If you are using a paint brush or something similar place it in Isopropyl alcohol for a moment after hybridisation to neutralise the remnants of pollen and let it dry before further use because any moisture will ruin the pollen.

All this practical advice may seem over the top. There are fleece tunnels – I personally found them a shade too small - and jackets for medium and large plants (see Ken Muir's fruit catalogue) which may be less demanding, particularly if you have several buds maturing on a plant and you wish to repeat the same cross over three or four days in order to be quite sure that the stigma is mature and that fertilisation has taken place. There is always a danger of some earwig spoiling the party but you should nevertheless end up with a good amount of seed.

It would be good to hear from anyone who has any further suggestions. Compared with primulas, lilies and roses, irises are difficult to hybridise. When I first started I had to ask fellow members where the stigma and anthers were hiding.

SPURIA IRIS at Tempo Two Nursery Victoria, Australia
Barry Blyth

Being a commercial nursery and having to make a profit from whatever we grow, we find that Spuria Iris have a small niche in the garden consciousness of Australians in the southern part of the country, but it is hard work educating the general public that these lovely Iris are worth growing when the more colourful and ubiquitous Tall Bearded Iris are in so many gardens giving an unrivalled display in October and November.

There is a small band of dedicated growers who have seen the value of Spuria Iris and they do their best to promote them. We have been growing Iris in the family nursery since the business started in 1945 or even earlier if we go back to my great-grandfather's nursery, Prichard's Alpine and Perennial Nursery, in Christchurch (in Hampshire as it was then) which started in 1890. Listed in those days were early Tall Bearded, Siberian and Spuria species.

We started to seriously grow Spurias in quantity in the late 1950s when my father began a limited breeding programme. Over the next 20 years he introduced possibly 6 to 10 varieties. In more recent years we continued this programme, importing the latest varieties from USA and incorporating them into our breeding programme. We have introduced maybe 20 varieties since 1980 and today we have just a very few seedlings growing and not a lot of plans to continue breeding them as we look towards retirement.

I think the most amazing year we grew Spurias was in 1994, a couple of years

before the prolonged drought that is now in its 11th year began and we had what we called "normal" winter rain. We used to get about 25 inches of rain per year and most of it falling in winter. This particular year the Spurias were planted in 6 beds 150ft long and 4ft wide, built up into beds about 1ft high. That winter it rained and rained with more than 35 inches of rain and the furrows filled up and stayed filled with water for 6 weeks or more. We more or less wrote the Spurias off as we expected them to rot as they were growing in standing water all this time. Well, they loved it to the point of growing dramatically and they began flowering with the Standard Dwarf bearded in September and continued flowering up until December. Stems were up to 6 ft high, over my head. Just the most amazing bloom season for Spurias we have ever had. I do not expect it to happen again as we have not had water in the furrows since 1996 and virtually no rain to promote growth. In fact we are watering the Spurias and Tall Beardeds overhead this winter because of lack of rain.

Generally we plant spurias here from late January through till June. We don't expect any bloom until the second season and by then it is usually excellent. We would not advocate moving them for several years as well as ensuring that they do not get any summer water once established because with the summer heat and humidity, mustard seed fungus is just around the corner, so the water is held off until about April, when the weather cools.

We find them excellent cut flowers and we grew many thousands of plants for some years to harvest the flowers for market. The relaxation of quarantine regulations enabling Dutch Iris to be brought into the country in container loads put paid to that trade.

I think the Spurias have a great place in Australian gardens in some states where the summer rainfall is lower, generally southern states of Tasmania, Victoria (our state), South Australia, Southern part of West Australia and inland New South Wales. They are so drought tolerant and in some places the old *Iris ochroleuca (now I. orientalis)* and *Iris monnieri* can be seen growing where houses were built during the 1850's for the gold rushes. The houses and most everything else are gone but the Spurias and Arum Lilies are still there. Long live the Spuria.

Joe Ghio's 'New Blood'

Joe is another American expert who filled in my questionnaire. His hybridisation specialities are Pacific Coast Natives and he chose 'New Blood' to answer the questions. Joe and his team are looking for the elusive red, even redder than red, and to get this strain into his breeding programme he sought a very involved red seedling tracing it back several generations to the original "red" 'Emigrant' (Hargrave seed from Australia) x 'Epicure'. 'Epicure' shows a hint of a true red in its heart and the aim was to generally increase the red as much as possible. The pod parent was one of his own breeding which seemed to carry the "ruby heart" trait.

Joe tells me he is ruthless to the nth degree, only keeping probably 1 in 300 seedlings. "Our reselects are grown on for 2-year clumps before making intro selections. On first year selects we plant back just 6 (or less if that is all we have), these are grown on 2 years. Hence we have observed at least 3 bloom seasons be-

I asked Joe if he would like to recommend some examples that new hybridisers could use. He has suggested 'New Blood', red; 'Bowl of Fluff', pink; 'Lines That Rhyme', plicata; 'Pacific Miss', blue; 'Star of Wonder', blends; 'Bar Code', "Foothill Banner" types. These may not be available as plants but why not buy seed from Joe Ghio and hope for some exciting results.

JUNOS
Alun Whitehead

I mentioned briefly in the last Newsletter that Junos are not generally good garden plants. Of course, after making such a brash generalisation, I was bound to come across a shining example of them in a garden setting.

April Fool's day fell on a Sunday this year and taking advantage of the good weather, Jill and I went to see the restored garden at Aberglasney in Carmarthenshire, Wales. It has been hidden for about 400 years but now boasts that it is a rare chance to see the last surviving Elizabethan/Jacobean parapet walk in the UK as well as an outgrown yew tunnel. The latter is intriguing as it was made by planting the yews in a single line and bending them over to make the tunnel. After so many years of neglect, it is amazing that the original tunnel can still be seen. It really needs complete replanting, but we are fascinated to see if they can find a way of preserving the existing 'trees'. www.aberglasney.org

On the hillside above the house is a semi-wooded area where many treasures for spring interest have been planted. On its lower slopes, immediately behind the house, were two plantings of *I. bucharica*. One formed the point of a bed where two paths met at an acute angle. The other tickled my sense of humour as the narrow bed was bordered closely by a path on one side and a stream on the other. Another water iris! To be fair the stream looked seasonal and ran down the hillside at a reasonable rate of descent, but it did make me wonder the fate of any intrepid nursery who dared repeat this planting in a floral marquee. Some of the judges would have a field day, but here it was and the irises were clearly happy healthy plants. The clumps looked well established and it came as a surprise how high some of them liked their necks out of the soil. It was more exaggerated in one planting where up to an inch (sorry 2.5cm) of bulb was clearly visible in several cases. As the clumps appeared well established, we could only assume that they had grown that way. Usually when we see them growing in pots, the bulbs are completely buried.

At the BIS AGM in September, Tony Hall gave a lecture on the Western species of Junos. He recommended *I. aucheri as* one of the best Junos for garden effect. I have never grown that species, so I will try it the next time I see stock available. As always, Tony Hall's talk was very interesting; the care, experience and enthusiasm shows. Sadly, he will no longer be able to maintain the Juno collection at Kew. Whilst the collection will continue, the alpine house will probably have to rely on less time and experience than Tony has been able to give. If you want to see the Junos at Kew while still at their best, next spring looks like a date not to miss. On a brighter note, Tony's monograph on the genus is to be published soon.

INTERESTING PROBLEM–WRONG QUESTION
Alun Whitehead

The ensata lime experiments revisited

You may remember that this subject arose after reprinting the original article from the BIS 1959 Yearbook by Max Steiger. Max was reporting on his six years of work breeding lime-resistant ensatas. Unfortunately, soon after the article, Max died and his plants were lost.

With natural curiosity, I started my own modest lime experiments in the spring of last year. Five mushroom containers were planted with varying quantities of lime and when I reported in the last Review, the relatively healthy seedlings were left in the containers for over-wintering before being pricked out – of course assuming they survived the winter in such limy conditions!

Our concern was that the pH paper I had used to judge the alkalinity showed almost no variation between the samples despite one container having over three times as much lime as another. I would like to thank Ken MacLeod for the advice that calcium carbonate (limestone) is relatively insoluble and so the pH was likely to be very similar in the containers despite the large variations in the quantities added to the mixtures. So for a given amount of water, once it had taken into solution a small amount of lime, the solution was saturated and no more could be dissolved no matter how much extra was present. This seems to make sense – the white cliffs of Dover crumble into the sea rather than dissolving. This may explain what happened next.

What did I expect from the experiment? It seemed very straightforward. Most of the seedlings would be intolerant of lime and die and the few lime-tolerant survivors could be potted-on/planted out in a lime-rich soil to continue growing. Oh for the simple life! Imagine my concern in the spring when all the seedlings started and continued growing without a problem. Okay the leaves were yellowish rather than a good green or a dark blue-green, but growing they certainly were. A selection of a few lime tolerant irises became illogical as they were clearly all lime-tolerant. What had gone wrong? Back to the drawing board! As there was no point in pricking out a few of the plants without going back to basics, they stayed and remain in their mushroom containers. One seedling had the cheek to flower!
So what holes can we poke in the original tests:-

a) The seed came from a narrow selection of irises; those that flower and set seed in our garden.
b) The planting medium was the same in each case.
c) A question unanswered was how much a seedling could grow without taking nutrients from its surroundings.

I would like to thank Dr. Tomas Tamberg for kindly sending seed from two crosses he made for use in the experiment (these were crosses both ways between Dr. Rodionenko's 'Vasili Alfiorov' and 'Dersu Uzala' which helped answer the first concern. So that the results could be compared with those previously made, I used the same planting medium (composted shredded green waste usually available from

the council) with 500ml of garden lime added to each mushroom container. As you will see from the photos, the results were similar. This indicates that it wasn't just the seed from plants in the garden which gave this result. It would be good to try this with seed from a wider selection of sources to confirm the results.

What about the planting media? Composted green waste must be high in organic matter. Was this allowing the ensatas to survive? In February, foreseeing the potential problem to come (healthy seedlings), I sowed three more mushroom containers with seed from ensatas in the garden but this time in different media. All containers measured approximately 5"x 12"x 3" (12.5cm x 30cm x 7.5cm).

1 Our standard nursery potting mixture – peat based with a significant addition of grit and composted bark + 500ml of garden lime.
2 Straight fresh molehill soil from the garden (no we haven't killed them *all* off!) Our soil is a heavy clay. 500ml of garden lime was added.
3 To answer the last nagging doubt an inert mix of sharp sand, grit and vermiculite with **no lime** added.

It goes without saying that the lime was thoroughly mixed into the planting mediums. I don't think I need to over-winter the seedlings before drawing some conclusions as you will see from the photos on the CD.

Taking the last case first, these seedlings germinated but showed almost no growth whatsoever. Accordingly, it seems reasonable to conclude that the seedlings need nutrients from the medium very soon after germination to augment those available from the original seed. It is now clear that the seedlings in the previous experiments were using the medium for nutrients even though it was alkaline.

I'm afraid to say that our standard potting mix showed little better. Some seeds germinated and grew, but they didn't grow well. On the other hand the molehill soil was a veritable cornucopia. The explanation that I'm sure springs to your mind as well as mine, is that the trend is for organic rich mediums to produce good results and the others don't.
Case 1, the mixture is largely peat – an inert substance having no real nutrient value. Again the grit is inert and the composted bark is only likely to give any nutrients very slowly. So overall the mixture lacks nutrients.
Case 2, the molehill soil is principally clay soil which is also made of inert stone particles, but these are so fine (rub them between the fingers – you will not feel them) that their small size traps debris (organic matter) between them providing a ready source of plant nutrients.
Case 3, the other extreme is a sandy soil (higher particle size) which allows the debris to be washed through and retains little goodness. Norman Payne has always given the sound advice that ensatas like organic matter. Whilst coming to it from an oblique angle, this seems to emphasise his point.

So where to next? The experiments were started with the idea of selecting a few seedlings which were lime tolerant. The question being asked was "Which seedlings tolerate lime?" As there was so little variation in the seedlings' growth from the original batches, it seems that the question that should have been asked is

"Which alkaline soils can ensatas tolerate?".
Finally, let's put this in context. The original work by Max Steiger had the intention of breeding lime tolerant strains which would give the ensatas a wider appeal; they could be grown no matter what the soil, be it acid or alkaline. These latest experiments indicate that given preparation, ensatas are likely to be lime tolerant, but this doesn't necessarily make them good all round garden plants. The yellow leaves caused by the presence of lime would not endear them to many gardeners and their long term survivability in lime may be questionable. It could be like lupins which flower in alkaline soils for about a year, but then usually disappear the following season – not a very perennial perennial in these conditions. Additionally there is the question of reduced branching and consequently bud count on soils with higher alkalinity which again may make them less successful on lime.

SOIL TESTING
Brita Carson

Alun's experiments had been making me feel guilty that I hadn't done any soil testing in my new garden. I know it is heavy clay because my back complains bitterly every time I make an attempt to dig it but it was time to check out the alkalinity or acidity of the soil. After 24 tests from various parts of the garden I have decided that the pH is neutral! My reasoning— I found when I used tap water the result showed pH 7+ whereas when I used rain water it was just below 7. This is one of the softest water areas in Britain but the tap water has had additions to promote healthier teeth in children.

This should make the pH of the reed/iris bed an unusual topic of conversation. Will it change depending on the amount of rainfall we get? Which irises will flourish? What will the flower results be like? I removed most of the flower buds from those I planted last summer although I'll admit to enjoying a few flowers. I certainly didn't allow seedpods to develop. Because we hadn't moved into the house there was very little waste produced for the septic tank so the irises had an easy time. I even gave them some food. Next year will be the test and it should be interesting to see what the results will be.

The planting was done into washed river sand but nearly all the irises had some soil attached to their roots, in fact some were planted from pots. I expect the pseudacorus to become vigorous but I hope to add some Louisianas when they become larger in their pots next year. As the 'water' becomes cleaner I hope the other water lovers will thrive. Time will tell.

NEWS FROM THE SOUTHEAST
Olga Wells

Last year's drought affected the performance of plants that were not artificially watered last summer, even though they had been mulched and manured. One or two, notably 'Caesar' (a convention visitor told me was actually 'Caesar's Brother', although I had it on good authority years ago that it was 'Caesar' since CB, appar-

ently, has a branch and mine does not, so, who to believe?) and 'Wealden Summer' flowered very well. I would be pleased to hear from anyone who can clarify the difference between 'Caesar' and his brother. Bloom stalks were a bit sparse throughout most of the border and not just the Siberians; the spurias were also affected. I think they need more space between the clumps as well. Near the water source was the bed of convention Siberians and these looked very well. These had more attention than my own. Bob Hollingworth's tetraploid Siberian 'Bright and Beautiful' was beloved by everyone. It is a deep reddish-violet with a gold signal. My own favourite was a Spec-X 'Angenehme Seereise'. This is a tall and lovely lavender sibtosa by Winkelmann, out of Tamberg seed.

There were plenty of bee set pods this year but I had the greatest difficulty in making a particular cross that I wanted. I even resorted to anther gathering and paint brushes and eventually managed to get a pod with 3 seeds in it. I am not sure what the difficulty was...I must go back to basics I think. Maybe it was that one parent was in the garden and the other some way away on the allotment, though in all honesty I don't really see a problem there.

The beardless irises enjoyed the wet summer and have grown really well and I am hoping for lots of luscious Siberian bloom next year. Numerous seedlings which I hoped would flower in their pots mostly did not. Then I was left in a quandary whether to pot them on or hope they thought they might starve to death which would encourage them to bloom next summer. I have hedged my bets and done some and some to see what works and what doesn't. I just did not have room last year to plant all the seedlings out in open ground. Since then I have acquired the other half of my allotment and can line out more.

The PCIs that did not succumb to last year's lack of water have recovered a bit with this wet season. They hardly flowered. Some seedlings and splits have been kept potted and stood in shallow watering trays in a shady area. They have really flourished and prove the point that although PCIs grow well in light shade they definitely do not like dry conditions.

In the 'pond' I keep ensatas and some Louisianas as well as other moisture lovers. The ensatas set no seed this season but I found a bee pod on LA 'Clyde Redmond'. Would it ripen? No, it would not. I finally gathered it in the first week of November and brought it home to mature in a little sugar water. The pod is beginning to shrink and I am beginning to think it may be a phantom pregnancy.

One Siberian has sent up a series of sequential spikes over late summer and autumn. The last stem has just gone over. It was 'Atlantic Crossing', out of Mc Ewen seed. Maybe I should try crossing it with other notable rebloomers.

Some of the Siberians in the trial at Wisley took a beating from the wind and rain. Some stood up to it very well and a few did not and had flower stems lying at all angles. I am looking forward to seeing them flower in their third and final year in 2008.

GREENCOMBE
Jill Whitehead

As a garden-aholic, if this is a word, I had been hoping to visit Greencombe in Somerset for a number of years. I was particularly interested in seeing the National Collections of *Polystichum* and *Erythronium*. In early April we had an iris delivery to make to Dunster so I made sure that we could combine the two. They are only a few miles apart and I'm glad we did.

The garden stretches along a sheltered hillside with ancient woodland leading up to Exmoor and the most tantalising view across the fields to Porlock Bay. It was originally created by Horace Stroud in 1946 but was inherited by Joan Loraine 30 years ago. Much of the original structure still remains in perfect balance, especially around the house. Mr Stroud created a small lawn area surrounded by terraced borders full of lilies, roses and a host of other plants. Stone steps lead under the archway and give you a glimpse of the lower lawn enticing you to explore further. But it was the woodland area that felt like walking in a cathedral with the tall grey trunks of trees leading the eye upwards. The canopy consists of ancient oaks, hollies and sweet chestnuts, the under-planting is such a rich diversity that it appears like a jewelled floor. The 3½ acre garden is managed organically and the leaf mould pits made me very envious. They are situated on a slope, so that the leaves are tipped in from an upper path and with the aid of a removable wire mesh front can be emptied from a lower path once they have rotted down. Very ingenious and ultra practical.

There are numerous paths crossing the narrow strip of woodland and the advantage of the slope allows you to see the plants from above and below, which is especially beneficial for viewing small woodlanders. As the garden faces north, with low light intensity and no sun for two months of the year, I was interested in seeing what would grow. Camellias, hydrangeas and rhododendrons form the backdrop; giving a clue to the soil type. Forget the flowers for a moment and just admire the combination of leaf shape and the textures of green which contribute for a much longer period. Flowers play second fiddle in a shady garden.

Rhododendron giganteum has tough leaves which lie in decorative leaf litter without decomposing. The mosses and lichens give a sense of security, a sense of belonging and along with the ferns contribute greatly to the leaf diversity. There are over 50 varieties of *Erythronium* grown here; some were only small groups while others formed large drifts. The shape of the foliage gives them the common name of trout lilies. *E. revolutum* 'Knightshayes Pink' seemed very vigorous running along the path edge. Also *E. hendersonii* with pinky-purple flowers, the combination with native wood sorrel was quite distinctive. *E. tuolumnense* really shone out with deep yellow flowers and large leaves. I had a pang of jealousy looking at the trilliums which were long established and exceedingly well grown.

Along one of the lower paths Pacific Coast iris were growing but it was too early for them to be in flower. They had been used as an edging to the path and were like a river running down a woodland gulley. I immediately thought of the many times I had seen bearded iris used as a border edge in formal situations, like Spetchley Park garden. However here was an iris used in a natural, woodland situa-

tion and looking most effective. At one point an island had formed so that the mossy path went either side of the clump. Again leaf contrast, the strap like leaf of the iris seemed to accentuate the diminutiveness of the surrounding moss. I would love to see them in flower, another visit perhaps? Continuing along this path you enter a small glade with a large planting of *Iris japonica* flowering well with wood anemone and numerous ferns.

By the house near the excellent vegetable garden with lilies popping through unexpectedly, stood a large shrub of *Cornus* 'Norman Hadden'. Norman was a near neighbour and over the years gave a number of cuttings and seed to Joan. He had a particular love of winter flowering plants and had a large bed devoted to *Iris unguicularis*. Another neighbour was E.B.Anderson who lived there for about ten years and was encouraged by Norman to buy his house from Walter Butt. Anderson already grew *Iris unguicularis* 'Walter Butt' in his previous garden and had sent a piece to E.A.Bowles who said it was the largest and sweetest scented form he knew. It is interesting to read an account of the garden at Porlock in his book 'Seven Gardens' and also to discover that *Iris* 'Katharine Hodgkin' was named for the wife of one of his oldest friends, Eliot Hodgkin.

"*I.* 'Katharine Hodgkin' was the result of a deliberate cross made in 1955 in the open between *I. histrioides* 'Major' and *I. danfordiae*, the latter being the pollen parent. Only two seeds were obtained, the fate of one is unknown, the other flowered for the first time in 1960 and all existing stocks are derived from this one bulb. Back crossing has been attempted without any results. It gained the Cory Cup for me in 1979."[1]

It is always rewarding to know a little of the history of plants and also to see a garden which uses the site, conditions and environment in such a natural and yet atmospheric way. Next stop was the beach at Porlock Weir. Here amazingly growing right on the beach was a dark blue bearded iris standing up proudly amongst the pebbles with a group of wallflowers and what I took to be *Allium triquetrum*. It was quite incredible to suddenly stumble across this cameo, at the beginning of April with the sun shining down. All it needed was an ice-cream and a walk on the beach to make a perfect end to the day.

'Seven Gardens or 60 Years of Gardening' by E.B. Anderson

[1]Brian Matthew gives one parent as *I. winogradowii.*

Greencombe Gardens, Porlock, Somerset, TA24 8NU

TAILPIECE
Roy Harris

My gardening is done far from the madding crowd in remote North Devon where we have been for the last twenty-six years. The climate here is often referred to as Maritime which has meant wet and warm in the summer and very wet and mild in the winter. The gales which come in off the Atlantic just a few short miles away can be awesome. I used to grow cabbages amongst other things and after an unusually vicious sou'westerly gale, I had a call from a friend in Watchet, over the moor in West Somerset, to say he had found several good cabbages in his garden.

The soil here is wet deep clay and in winter we have problems with plants drowning. It is not universally known that the towns of Bideford and Barnstaple were renowned for their potteries. Bideford made various pottery goods including clay pipes and Barnstaple was famous for floor tiles. There is only one large pottery left these days. However for anyone visiting the area there are many smaller potters who produce some really good stuff. In particular in Bideford in Rope Walk (lots of old warehouses here, where they made and stored ropes for all the sailing ships) there bides a little pottery shop where they make and sell super Toby jugs unique to Bideford and a pot called a Teddypot. This pot cooks the most superb potatoes you have ever eaten. The best spuds for this job are quite small ones. You fill the clay Teddypot with these little Teddies and place the pot in the oven for about an hour with no water and no fat. Believe me, you will eat far more teddies than you should.

The area had, at one time, large areas of culm grassland (this is wet water-logged ground) which produces lots of good grass and various beneficial herbs and offers very good summer grazing. It is difficult land to work and in winter it is best to stay off the land, but, because the winters are so mild, the grass and the blessed weeds grow apace and in summer the ground dries out to become like concrete.

On the walk down to feed the fowls, *Iris pseudacorus*, which grows wild hereabouts, fills my wet ditch. It can be a bit brutish in a pond and will completely take over a whole lake if given the opportunity. In North Devon, I only seem to see them along watercourses and ditches. In my garden an annual chop back by a young chap on a tractor keeps them under control and indeed they seem to thrive on the annual massacre. In the border though it is necessary to thin 'em out occasionally. This got me a'thinking about other plants and creatures introduced into our country from abroad and which reside around my home.

I walk out with my terriers every morning as I have done for the last nine years since I retired. That period has seen the shedding of over three stones or so and worn out many pairs of boots. All these miles are covered in the Hartland forest area, Bucks Mills, Stoke and Hartland, with sorties onto Exmoor. One day, walking down through the forestry and over two small streams, which are in fact the starting point for the river Torridge, we met Mary Rose, a young friend who is the otter conservation officer for the area. I told her we had crossed those two leats hundreds of times and peered into the depths on both sides of the bridges but had never seen a thing; fish that is, for a Water Rail was spotted on several occasions. Mary Rose informed me that there were various fish in the stream, I think the small freshwater bullheads were mentioned and of course salmon. She very kindly clam-

bered down under the bridge, came back up and put a finger covered in a black, fishy smelling substance under my nose and triumphantly informed me it was otter spraint.

Strangely enough a short time later as we crossed the bridge, we heard a loud banging coming from the river and walking along the bank, observed three large salmon, a cock with a huge jutting jaw and two hens, presumably making their way upstream to spawn. It was tempting to jump in and grab one, but the effort of holding back the terriers (wild little creatures) filled my boots with water and the moment was lost. The only fish spotted in nine years.

The streams and the ditches which all flood together in winter are host to a rather beautiful flowering plant which is really taking over. The Himalayan Balsam is the name of the beast, it appears to thrive in the maritime climate hereabouts as does that fearsome blighter the Japanese Knotweed. We also have a growing herd of Red deer. These super creatures are often thought to be denizens of the Highlands and Exmoor, but in fact, they are very much woodland or forest creatures. They have certainly taken to the Hartland forest area. Are Red deer native to Great Britain? Roe deer are and Fallow deer, I believe, were an import by the Normans.

Rabbits owe their presence in England to the Normans and what a pest they have been over the years. Although their presence was welcomed in the last war when they formed a good part of the meat diet. Did you know that in the London restaurants during the war, the more fortunate amongst the population dined on Devonshire Badger hams. These were the hind legs of the unfortunate Brock, who is a real ancient Englishman. He was revered by the ancients and along with the hare had a strong religious connection as did the Oak and the Ash. If you ever see Clovelly Dykes you will notice the presence of many old oak trees. Clovelly Dykes is a celtic encampment, which there is reason to believe was used to gather livestock for export from the port of Clovelly but to where I have no idea.

I grow many of my plants from the seed exchange and I am most grateful for the folks all over the world who have given me the opportunity to experiment and to discover what grows best for me in this part of the world. When one receives such a wonderful variety of seeds, one also notices the few donors and it seems always to be the same generous people. I determined that I would try to find something worthwhile to donate this year. I guess that most folk imagine that compared to the experienced people around the world, one's own offerings are not worth a candle. So this year I was determined that I would give it a go. Unfortunately, all of my plants have lived in pots since germination. This must provide one of the most hostile environments in the world - too hot, too cold, too wet, too dry - and then the compost turns very acidic. The reason for so many plants in pots was because I have a very large garden. Over a hectare in new money, or around two and a quarter acres in sensible measurements. Now when I was forty this was not too much of a problem, at fifty it was getting bigger and at sixty it had grown to be enormous. At sixty-five we decided to find a smaller place, so everything started going into pots.

With a move in prospect one can go rather over the top with pots. The garden started to disappear under black weed suppressant fabric and the pots multiplied, three hundred, four hundred and on and on. I must take a piece of that plant and I

don't want to leave those violas and what about Penstemon, I know, I'll just take a few cuttings of each of those, they really do look good. Another three hundred pots appeared and as for the cost of compost!? Well, we started to look for alternative accommodation, and each trip we returned home to discover that what we had seen didn't quite come up to what was at home.

To keep up with watering the pots, I had a borehole drilled to take the pressure off the spring in the hot weather. This helped somewhat. But the garden had disappeared due to all available time being spent struggling to keep plants alive and the field had also vanished under a thatch of weed and brambles and I was finding it difficult to find where my poultry houses were.

So the black weed suppressant came up, I sold my redundant cultivator, bought a new bulldog fork and dug like a man (old man) possessed and this spring I got shot of all my pots; planted out all of my irises and started weeding again. I had some flowers, the Ensatas loved the wet clay, however I didn't produce any worthwhile seed pods. But next year I know I shall because the plants will have settled in by then.

Talking of alien invaders, there is that villain the grey squirrel. Many will remember that as boys, we could get a shilling a tail for shooting these tree rats. For those folk who seem to take to feeding them, it should be remembered that the beautiful English native, the red squirrel, has now been driven to the far corners of our islands by the grey and may yet become extinct. I certainly hope not, for a sight of this little treasure is a rare and wonderful experience. The grey carries a virus, which does not affect it, but is deadly to the native. Perhaps we should take a leaf out of Elvis Presley's book. As a very poor young man he ate many a squirrel along with the local poor people's staple, corn bread.

Perhaps the most extraordinary of sightings on our rambles have been the Hen Harrier gliding over the orchids of Burlsdon Moor or the maybe once in a lifetime sighting of a European Crane, which must have lost its way by a big margin, and should have been in Spain. Some years ago a lady in south Devon spotted a Lion meandering through the leafy lanes. The old Westward TV company sent out a team to try and spot this dangerous beast and indeed they did find him. The camera showed a large golden, unkempt old fellow, pushing through the undergrowth, not quite a Lion, but a very elderly Golden Retriever. Then a friend who farms near Launceston had two calves mauled and whatever it was attacked them chewed off and ate their heads. Sightings were made on Bodmin Moor and various other places. On the 7th March last year, returning with the terriers from a long ramble on a very quiet lane with forestry along both sides, only thirty yards in front of us a large, black, lithe creature emerged from the forest and walked towards us. Thankfully, the dogs were busy sniffing out rabbits and hadn't seen it. It padded along for about ten seconds in our direction and then turned and bounded over a four foot wide ditch and was gone. My estimate was an eight feet long, from head to tip of tail, black Panther. Various other sightings have been made in the vicinity. Come to Devon and look for it yourselves. Whilst you may not spot the big beast, you can be sure of a good welcome by the folks of Marwood Hill Garden.

Now then what was it I was doing .....

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PHOTOGRAPHS & CREDITS

I would like to thank all the photographers for kindly allowing us to use their photographs not only on the cover of this ***Review*** but also on the CD which accompanies it. Subjects range from the BIS convention; the ongoing lime experiment; interim photos of the Siberian and Wetland Trials; members own contributions and then a miscellany of lovely flowers and beautiful gardens.

Front Cover
The photograph was taken by Billy Carruthers in his walled garden in Edinburgh. These Sino-sibirica seedlings came from the stable of Dr Tomas Tamberg, Germany. Tomas will write an article for us for the next newsletter on his interspecific crosses for which he is so renowned.

Back Cover
Photographed and grown by Billy Carruthers are another two beauties bred by Tomas Tamberg — 'Viel Schnee' and 'Blaue Milchstrasse'.
VIEL SCHNEE (Tomas Tamberg, R. 1990)., Sdlg. SSTT177. SIB (tet), 37" (95 cm), M White. Mc Ewen white tet. sdlg. x Tamberg white tet. Sdlg. Schoeppinger 1988

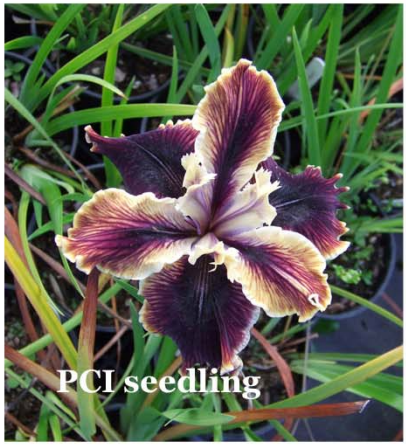
BLAUE MILCHSTRASSE (Tomas Tamberg, R. 2000), Sdlg. SSTT 313. SIB (tet.) 28" (70 cm), M "S. light blue; style arms lighter blue; F. dappled medium blue, whitish signal. Regency Belle x sdlg."

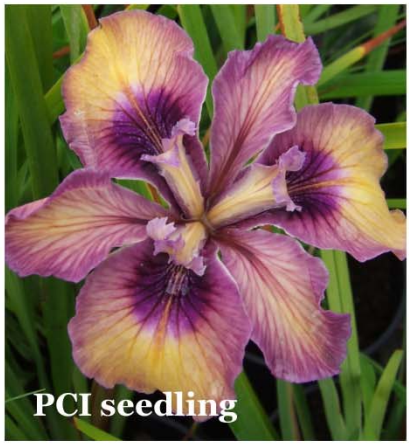
Inside front cover
The photographs of S 96-37-7.1, 'Isabelle SC' (no SC in the cultivar name), 'Uncorked' and 'Careless Sally' are just a selection of different colour and forms of the many sibiricas that Marty Schafer has used to produce the beautiful subtle colours of **'Humors of Whiskey'**. It is such a delightful flower that as a Scot, I can forgive him his American spelling of whisky.
See his article on **Hybridisation** (page 13). And on the CD are his photographs of all the various ancestors that have gone into producing the 'Humors of Whiskey'.

Inside back cover
Two photographers and two irises. The ensata seedlings are new ones from Willy Hublau showing his continuing soft silky trend with six petals on this versatile iris. There are more seedlings on the CD.

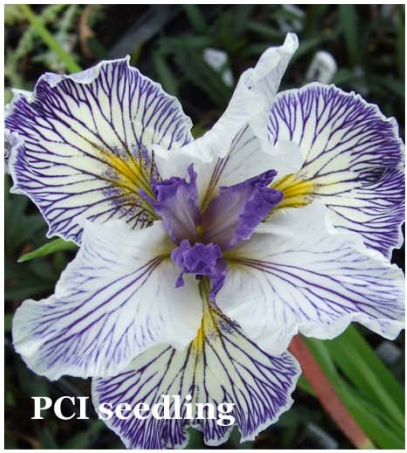
Photographs of the PCI seedlings belong to Alun Whitehead. They demonstrate the exciting possibilities with this charming Californian iris. Alun has provided most of the photographs on the CD.

We would like many more members to send their photos in for future CDs. Take shots of your own flowers and gardens or any you visit. All things horticultural are interesting.


PCI seedling


PCI seedling


Ensata seedling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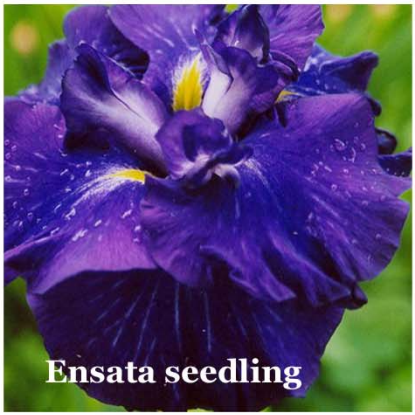
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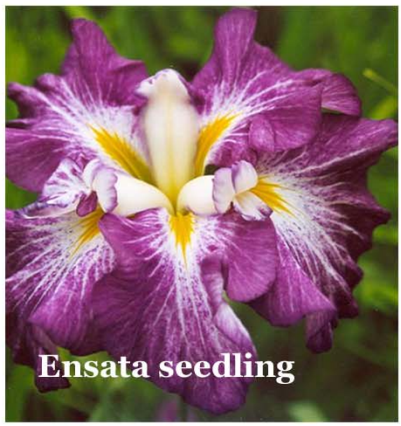
Ensata seedling


‘Viel Schnee’


‘Blaue Milchstrasse’