

The
Begonian

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The **Begonian**

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American Begonia Society

Founded January 1932 by Herbert P. Dyckman

Aims and Purposes

To stimulate and promote interest in begonias and other shade-loving plants.

To encourage the introduction and development of new types of these plants.

To standardize the nomenclature of begonias.

To gather and publish information in regard to kinds, propagation, and culture of begonias and companion plants.

To issue a bulletin that will be mailed to all members of the society.

To bring into friendly contact all who love and grow begonias.

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Cover:

Front: Winter blooms in excess! Another reason we love begonias. **Johanna Zinn** captured the winter glory of this unidentified rhizome in January of 1999.

Back: **Kathy Goetz** got up close and personal with the blooms of *B. sericoneura* reminding us to look closely at our begonia flowers. Did you know that some botanic classifications are based on such fine distinctions as the number of tepals or the shape of the flower anthers? So grab your magnifying glass and enjoy the endless diversity of begonias.

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Begonias by the Beach... Alice M. Clark's lovely drawing of the easy care old-timer *B. 'Erythrophylla'*. **Virginia Jens** says it captures the spirit for ABS Convention 2000. See page 70.

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Quick

Check your mailing label.
If it reads
200005 or 200006, your
membership is about to
expire. Please renew! We
don't want to lose you.

President's Message..

The days are getting longer and spring is right around the corner. Rhizomatous begonias are blooming in all their glory in various shades of white and pink. Many of the rhizomatous varieties are fragrant; one in particular is B. 'Joe Hayden'. The dark pink flowers are a striking contrast to the chocolate brown foliage. The fragrance is quite heavy; those just walking past this beautiful begonia receive a heavenly whiff of its sweet fragrance. If you have not grown this variety, give it a try; its a must to any collection.

Members have now received the 2000 ABS convention packets. I hope everyone has looked over his or her packets and plans to attend. This past October the Convention Committee came to my home and took cuttings from my collection. They went home with 85 garbage bags full of cuttings. When they were planted, the plant sales committee had over 1,200 pots of begonias. Look for some great varieties at the plant sales. Great tours and speakers will also be at hand including a beach party. I'm looking forward to seeing everyone there.

The ABS Board is happy to announce that Gene Salisbury has been appointed to the Business Manager position for ABS. Gene will bring his expertise and dedication to the position and ABS will be in good hands.

Membership is always a concern for ABS and its local branches. Keeping members and acquiring new members can be an effort. The Palm Beaches Branch has doubled its membership in the past year. How did they accomplish this? By getting out and spreading the word about begonias. Members have presented programs on begonias to different plant

groups, the branch coordinated displays at garden shows which included information about ABS and the local branch and just plain word of mouth. Once these new members have joined, they need to be kept interested. Don't forget those basic programs; new members are there to learn. Plants! Plants! Plants! Members want plants. Have a raffle table, exchange table, sales table at your meeting. Acquire begonias from different areas. Finally get the new members involved. Place them on a committee; give them a job at the show or meeting; make them feel part of the group. Memberships are cyclical, with high points and low points, but don't ever despair. An ABS member once told me "even if you have 10 members in your branch, it's the job of the branch to keep those 10 members interested."

Good Begonia Growing and see you at the convention.

*Charles Jaros,
President*

Identify This Species...

It is rhizomatous, jointed at or below the surface, with erect stems. Its flowers are delicate pink in the fall or winter.

This species is among the earliest known begonias, collected in Java and described in 1792. Alice Clark painted it and noted that its name means "thin leaf".

The lobed leaves are about seven inches in length with a long drip tip. Alice said that blooms once open never close even at night.

The first writer to identify this plant will receive their choice of a small plant of this species or a seedling of B. roezlii from the editor. And look for the identification and a photo in the next issue. Do you like this feature? Would you like it to continue?. Let the editor know. -FH

Letters to the Editor...

Genetics

The May-June 1998 Vol. 65 issue of the *Begonian* has an article on "Basic Genetics for Begonia Hybridizing" by Tracy McLellan. It was introduced as a part of a series to come. Is there any plan in effect as to when that might be?

Howard Siebold
Tuberous Begonias
165 S.W. 6th Avenue #118
Oak Harbor, WA 98277

Howard, you and others who have inquired will be glad to know that Tracy is right now preparing another article. She is currently on sabbatical and doing genetic research in England. She has also put the editor in touch with students at the Royal Botanic Garden in Edinburgh who are also doing genetic research on begonias and hopefully we will have articles describing their work in upcoming issues. Note Howard's new address above for your records.
~FH

Membership Renewals

In response to the article about membership non-renewal in the March/April 1999 *Begonian*, I wanted to let you know what we have done several times now at the Santa Clara Valley Branch in CA. Some of our members don't renew mainly due to being too busy at times so we have made it easy for them. I mention in our monthly newsletter that they should bring a \$17 check made out to the ABS to the next meeting. We collect the checks, attach a note and send them off. For many of them, this gets them going and we don't have to worry about renewals at least for a few years. However, this could be a yearly activity/service. Hope this idea may

help others keep the renewals coming in.

Mary Ann Leer
Secretary and Newsletter Editor
1220 Webster St.
Santa Cruz, CA 95062-1626

From Romania

Thank you for writing about me in the *Begonian* of Sept/Oct 1999.

Because I am a junior begonia grower and because in our country there is no begonia association, I searched for connections with more experienced begonia growers from other countries. For the same reason I wrote to Mrs. Kathylyn Calvert requesting some help and she was very kind and paid for a one year subscription to ABS in order to put me in contact with your society. So I found Mr. Tom Keepin's name and address in an issue of the *Begonian*.

Unfortunately I haven't many financial resources to sustain my passion for begonias (in our country the average salary is 100-110 U.S.\$, and I have one of these salaries at the moment) and I cannot order many books and seeds from other countries. So I have a respectful request for you; please publish a small announcement in the *Begonian* with my need of literature, seeds, photos, and other information about begonias. I know the mail taxes are expensive, but I hope some of the ABS members will/can help me. Thank you.

The begonia with peltate leaves in the photo you publish in the *Begonian* (Sept/Oct 1999) is *B. incana* (a synonym for *B. peltata*) and it has no hairy leaves probably because she was grown under artificial light (fluorescent tubes) during the winter season.

I haven't a glasshouse, just an unheated balcony and during the winter we

From Romania

Thank you for writing about me in the *Begonian* of Sept/Oct 1999.

Adrian Popa
Aleea Episcop Popeea 27/B/2
Sacele-Rasov 2212
Romania

(below, taken in October). I hope you will be able to include it in an upcoming issue of the *Begonian*.

Mary Fuqua
President, New England Tropical Conservatory
P.O. Box 4715
Bennington, Vermont 05201

And More on B. luxurians

Our lovely *Begonia luxurians* grows taller by the week and has been in bloom since last August. I enclose a photo

Got a question, opinion, idea? Write your letter to the editor today. Unless you specify not, your letter may appear in this column!



Gondwana and Begonias

by Peter Sharp, Australia

Preamble

In the May/June 1996 Issue of the *Begonian* I wrote a very much tongue-in-cheek article titled 'How Old' in which I hypothesized that the Begonia Family is a very old one indeed. Only one reaction was forthcoming and that was to the effect that begonias are in fact a very recent plant family and that they spread across the world with wind assistance. This I found very hard to accept and have since been researching the matter as best I can with such limited background information as is available. A request to the Smithsonian as to whether any research had been undertaken on this subject met with *no response at all*. This article then is the result of much reading (I found Mary White's wonderful publication *The Greening of Gondwana* a source of much pertinent information) and the application of what little logical thought of which I am capable, for logic rather than scientific examination seems to be the only tool available in this matter! So, just how old is the *Begoniaceae*?

Where do we find them?

It is significant that, except in the case of Hawaii, all those lands in which begonias are found naturally were once part of the super continent, Gondwana. Hawaii, the exception, is apparently totally of volcanic origin and contains just one quite distinct begonia genus. Begonias occur naturally in South and Central America, Africa, India, South East Asia and many of the islands to the south and east of the Asian continent, Papua, New Guinea and, as mentioned, in Hawaii.

None have been found in Australia, New Zealand or New Caledonia.

How came they there?

The question of how the begonias came to be so widespread throughout the tropics and sub-tropics of the modern world is one which has exercised my mind for some years. The length of their time on earth cannot be measured by any of the presently available scientific tools. They have left no fossil records simply because they are succulents, and succulents do not fossilise. They have built up no pollen deposits simply because they do not occur in vast numbers nor do they produce great quantities of pollen. Despite being perennials they are relatively short lived plants so there are no ancestors of great age. I begin to think that, scientifically, they do not exist at all! They do not figure in any of the folklore of ancient peoples so far as I can ascertain. So whence came they and how did they spread so far?

Gondwana was well vegetated prior to the continental break up in the cretaceous period (135 million years ago to 70 million years ago), being a period when seasons began and deciduous trees and flowering plants abounded. One genus of particular note is the *Proteaceae*, a plant family which *needed continuous land for migration* due to low dispersability. Plants of this family are found today in southern Africa, India, SE Asia and the islands to the south, Australia, and Central and South America¹. The only way in which this genus could have become so widespread is for it to have existed in Gondwana prior to the break

up of the continents.

Is this also the case with the *Begoniaceae*? Did it also require continuous land for migration. Let us consider the methods by which begonia seed could be dispersed.

Wind Blown? Certainly a possibility. Experience with *B. cucullata*, a species which self pollinates and seeds quite readily, shows that its seeds can disperse over quite surprising distances from the parent plant and this dispersal has seemingly been due to drifting on wind currents. But could dispersal by this means take place over the thousands of kilometres involved in intercontinental dispersal? Would those tiny begonia seeds still be viable after such a voyage at the freezing heights at which the constant winds blow? Could those seeds in fact be gathered up by the wind from so close to ground level to be carried to new lands? If this is considered the means whereby begonias have arrived at their present day locales then how is it that the winds have been so selective as to drop seed only on Gondwanan remnants, and in the process to have completely overpassed the great continent of Australia where many areas would be suitable for begonias to grow and flourish? Again, one would suppose the seeds could well have been carried from Central America into the northern hemisphere, but this does not seem to have occurred. Nor does this theory explain why begonias of such different types are found in various localities. Why are the *B. dregei* for example only found in South Africa? Surely wind dispersal would mean that they would occur wherever the wind dropped their seeds? And this applies to all the begonia species, each of which is found only in small areas of the world. Wind dispersal would surely result in the same species occurring in many places. No, it won't do! Wind dispersal across the vast distances involved and in such a selective

manner will just not explain their present day distribution and diversity.

Water borne? Another possible means of dispersal, but one which would only be feasible over reasonably short distances in fresh water for these tiny begonia seeds. Coconuts certainly drift on ocean currents for many hundreds of kilometres before reaching an inviting shore and there germinating and taking root. Surely a parallel cannot be drawn between coconuts and begonia seed?

Bird dispersed? Seeds distributed by birds are ingested and then cast out with the bird droppings. Certainly a feasible method for short distance dispersal, but not intercontinental! However, I can find no records of birds feasting on begonia seed - seed so small that a thousand would not be a beak full for a canary, and bird dispersal depends upon the seed being encapsulated in a bird-attractive fruit. Not the case with begonias!

Animal assisted dispersal? This may well be the way in which begonia seed was spread by clinging to the feet or hoofs of passing animals and later dropping off, or being ingested and later passed through the alimentary canal. Begonias are attractive food to some animals as I know to my cost - the local possums love them! Such a method requires that a continuous land mass exists, or once existed, between the localities in which the plants are found.

None of the above methods of seed dispersal can explain the present day dispersion of begonias throughout those tropical and semitropical areas which once were part of Gondwana unless such dispersal took place before the continental drift began.

From a logical standpoint then it seems quite feasible, and indeed highly likely, that begonias were present during the cretaceous period, originating perhaps in the present Brazil and migrating north, south and east from there throughout

Gondwana. The only portions of Gondwana not to have native begonias are Australia, New Zealand and New Caledonia which all exist on the one tectonic plate, and the disappearance of the *Begoniaceae* from these areas is no doubt quite easily explained when one considers the movement of this part of the continental mass during the great drift².

Why so diverse?

The present amazing diversity is explained by their having evolved to meet local climatic changes as the continents drifted to their present day positions. The rhizomatous begonias for example evolved into present form to meet dry periods through which the rhizome keeps the plant supplied with stored water and nutrients. Such explanations can quite easily be made for all the other begonia types when one considers the conditions of climate in which each thrives. Such very consider-

able evolutionary changes as displayed by the begonias must of necessity have taken a very long time, further evidence that the family has been on earth for many, many eons.

Conclusion

Begonias then quite evidently belong to a most ancient plant family which in my opinion originated during the cretaceous period some 100 million years ago. There are of course no fossil records to confirm this theory, nor are there any scientific grounds on which to refute it.

Peter Sharp writes from 2/238 Jersey Rd., Woolahara NW 2025 Australia. Or E-mail : peterssharp@bigpond.com

¹*The Greening of Gondwana* by Mary E. White, Kangaroo Press, p. 198.

²*Ibid.*

Order These!

The Catalogue of Registered Cultivars by Ivy McFarlane and Debbie Weber. \$28 including postage.

Tuberous Begonias and How to Grow Them by Howard Siebold. \$5. plus \$1.75 postage.

Raising Cane: Experiences Growing the Species Cane Begonias by Freda Holley. \$5. plus \$1.75 postage.

Proceeds from the last two above go to the **Millie Thompson Publication Fund.**

Order from:

Ann Salisbury
P.O. Box 452
Tonkawa, OK 74653
Ph: 580-628-5230

My Favorite Begonia: B. 'Lana'

by Charles Jaros

Begonia 'Lana' is my favorite begonia. I have had *B.* 'Lana' for approximately 17 years. During this period *B.* 'Lana' has been through freezes, heat waves, hurricanes, hail and other weather conditions. Even through these adverse weather conditions, *B.* 'Lana' has persevered and flourished, rewarding me with rosy-red flowers in profusion.

This grand superba type cane was developed by Paul Lee in 1973 and is also known as *B.* 'Encanto Lana'. *B.* 'Lana' makes a specimen plant in a short period of time and has won many Division Trophies for me throughout the years. As with all superba type canes, *B.* 'Lana' is a tall grower with dark green leaves, splashed silver, that branch readily. Propagation is easily done by stem cuttings and my *B.* 'Lana' has been shared with many people. What a joy to see a *B.* 'Lana' entered in a show and the exhibitor coming over to say that they obtained their plant from you and your *B.* 'Lana'. At the 1999 Miami Branch Show, *B.* 'Lana' again won a Division Trophy. The

plant was exhibited by Joyce Pridgen and she acquired her *B.* 'Lana' from mine.

When I moved to Sanford, Florida *B.* 'Lana' moved along with me. It experienced a hard freeze the first winter (1995). *B.* 'Lana' froze back to soil level. How sad I was when this happened, but I knew that I could obtain another plant from other growers who had *B.* 'Lana' from my original plant. Still I couldn't throw my plant of *B.* 'Lana' away so I cut back all the old frozen stems to soil level. Spring came and I noticed new shoots sprouting from my *B.* 'Lana'. How excited I was! *B.* 'Lana' grew more beautiful and lush as ever and rewarded me with its rosy-red flowers.

I will always have a *B.* 'Lana' in my collection and I recommend it to all begonia growers. Hopefully, you will enjoy *B.* 'Lana' as much as I have enjoyed mine.

If our President can confess he has a favorite, so can you! Write about it and submit an article soon! You can write Charles at his address shown on page 79.





Joyce Pridgen, right, and her B. "Lana", winner of Best Cane-Like Superba at the Miami Branch Show and the plant started as a cutting from Charles Jaros' B. 'Lana'. Joyce, incidentally, is also the photographer who took that lovely photo on the last issue's cover.

Startin' Out

by Jim Hannah

Many different pathways lead to begonias. The one I'm walking on began with some un-used fluorescent light fixtures hung over a table. Got a few moments to spare? Good! Stroll along with me and I'll explain.

I'm no stranger to plants. My Lady (Joan) and I developed and maintain the flower, vegetable and water gardens in our yard. Some years ago we built a simple table in the cellar and hung some shop-lights over it. We use this basic 'light garden' to grow seedlings for the outside gardens each spring.

About a year ago I finally realized (Duh!) that the lights were idle for 9 months out of every 12. The road to begonias began right there with that electrifying (sorry!) thought. Since then, things have moved right along - but not always in a straight line. As I write this there are named hybrids growing up a storm under the lights (which now run 16/8). These include shrub, cane, rhizomatous and Rex types. There are cane and shrub begonias on the window shelf in the kitchen. A folder on the dining room table holds the plans I've drawn for a small greenhouse for begonias, soon to be built. A shelf in the bookcase is filling up with begonia catalogs and literature.

In short, we're now getting into begonias in a big way. This little introduction is the first of a series of notes covering some of the problems we've run into and solutions for them. The basic methods we use for starting seeds, transplanting seedlings, growing and propagating begonias will also be described. In addition,

there will be side trips touching on light gardening, weed control in outdoor gardens, on-line sites of interest, cheap container sources, postage stamps and other odd byways. I promise I won't forget to talk mainly about begonias though. That's what these chats are really all about.

Our begonia mania started in earnest last fall. We wanted lots more tuberous begonias for the gardens than we had tubers. We decided to start some plants from seed. Several seed catalog houses list tuberous bedding begonias and after a bit of hesitation we picked the strain called 'Non-stops'. An order was written and mailed and the seeds arrived in mid-December. We were anxious to start them up right away. Luckily, we ordered two packets of the seeds - one as a spare in case something went wrong. It did.

One look at the seeds in the first packet and we stopped short! The seeds were so tiny that we had to rethink our procedures from scratch. Our rough and ready starter mix was far too coarse to use for those wee little specks. In addition, we had by then picked up information which suggested that begonia seeds didn't just pop up two days after you planted them. In fact, you couldn't *plant* them at all. The seeds needed light for germination and would have to end up on top (more or less) of the starter mix. There was a problem with temperature, too. Begonia seeds like it nice and cozy. Just like us. And this was December. In New York, at that. (New York isn't all that bad in winter. Many are cold, but few are frozen.)

Whoops! Time's up and I gotta run. Anyhow, that's a quick sketch of what lies ahead. Next time I'll get into the building of a seed starter box for begonias. Next will come information on how to slay the green and white monsters (mosses and molds) which can and will gobble up your precious begonia seeds unless you foil them right at the start. We didn't, and they did! Thank goodness we had the

spare seed packet.

See ya around again soon. If you're new to begonias, we're easy to find. Just look down your own path. We're nearby...and not all that far ahead of you.

Welcome Jim as a new columnist with material for beginners that many members have been asking for. You can contact Jim at 158 Fisher Avenue, Staten Island, N.Y., NY 10307. Or E-mail : jrhl58@aol.com

Tuberous Begonias

Growing Begonias All Year Round

by Mervyn Cox

Our thanks to the Begonia News, Canterbury Begonia Circle, New Zealand for permission to reproduce this and the following article. Ed.

Tuberous Begonias are amazing plants that can be kept growing and flowering continuously all year round if enough heat and light are provided in autumn, winter and early spring to stop them going into hibernation.

We have been growing about sixty stock plants of our selected basket varieties continuously for about four years. These plants which are used for cuttings have had no resting period during this time except for cutting back the old growth periodically to produce fresh cutting material and they have flowers most of the year. They are repotted every two years by removing some of the old mix to enable a limited amount of fresh potting mix to be added while they are still growing.

A minimum temperature of about 15°C (59°F) is maintained throughout the year and lighting is provided from the beginning of March through till early summer. Four hundred watt mercury vapour and sodium vapour lamps are used increasing from about five hours in March

up to eight hours per night from late May. I have not measured the actual light level at plant height but each lamp covers about 50 sq. m. (59.8 sq. yd.) and is hung as high as possible in the ridge of the glass-house. The nearest plants are between 3 or 4 metres away depending on whether on benches or on the ground, and at the sides of the house the plants would be about 7 metres away from the lamp. These lamps are also used for cuttings and seed raising as well as other Begonia plants in various stages of growth.

Begonias are plants that react to relatively low levels of extra lighting to keep flowering throughout the year compared to some plants.

The recommended minimum temperature is 16°C (60.8°F) to stop Begonias going into hibernation but they will stand lower temperatures for short periods. Our night temperatures outdoors in Christchurch (New Zealand) often get down to low single figures right up to early November.

I believe there is a correlation between temperature and light levels and if you can give them stronger extra lighting in winter they can stand slightly lower

temperatures. Also when providing extra lighting the same results can be achieved by giving longer lengths of low intensity compared to shorter lengths of high intensity.

It also does not seem to matter whether you run the lights to provide a continuation of daylight or have a darkness period before the lights come on.

It would take large complex experiments to measure the minimum light and temperature correlation requirements to keep them growing and not going into hibernation. However, it is better to err

on the high side as the other factor that has to be considered is the daylight intensity and if a long period of cloudy weather at the critical stage is experienced then this will also affect them. Anyone prepared to go to the trouble and cost of setting up proper conditions can make begonia growing an all year round hobby.

This article by Mervyn Cox of Christchurch, New Zealand appeared first in the Begonia News, Vol. 6, No. 6, December/1999; January/2000. The following article from the same source gives the editor's name and address.

Mildew

by Mike Stevens

In the previous issue we published two articles where growers from the Northern Hemisphere gave details of the problems they had experienced with mildew during their recent summer season. As it will not be too long before similar problems may well beset us here in the south and we have not dealt in depth with this for some time, I would like to examine some of the aspects relating to it.

Powdery Mildew is a fungal disease which attacks a wide variety of ornamental plants amongst which is the begonia. The damage due to infection of the fungi can be slight to severe, can affect some plants and not others and be worse in some seasons than others.

Usually the first symptoms of the disease are a white to pale-grey coloured fungus growth similar to small white stars which appears on the leaves, stems or flowers. Young plants and those under stress are usually more severely damaged than older healthy ones.

In order for mildew to occur there are three factors which must be present

and this is true of all diseases. Firstly, we must have the disease-causing organism, secondly a suitable plant to be infected and finally the right conditions to allow any attack to be successful.

The organism

The white mildew on the plant surface is actually comprised of the threads (mycelium) and asexually produced spores (conidia) of the powdery mildew fungus. These spores are wind blown to other parts of the same plant or other plants of the same species. Powdery Mildew is quite host specific so, for example, mildew of a petunia will not spread to a begonia and vice versa. Also they are obligate parasites, meaning they can only grow on living tissue. Some Powdery Mildew fungi survive the winter as colonies of mycelium but may switch over to sexual production in the autumn, producing brown to black specks amid the old mycelium on the dying leaf or other part of the plant.

In the previous issue we published two articles where growers from the Northern Hemisphere gave details of the problems they had experienced with mildew during their recent summer season. As it will not be too long before similar problems may well beset us here in the south and we have not dealt in depth with this for some time, I would like to examine some of the aspects relating to it.

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survive the winter as colonies of mycelium but may switch over to sexual production in the autumn, producing brown to black specks amid the old mycelium on the dying leaf or other part of the plant. These are able to survive the winter and in the spring release another type of spore to start the cycle all over again. It is therefore important to ensure that all dead dry foliage is removed from your site.

A suitable plant

As mentioned above there must, in addition to the organism, be a susceptible host. Some begonias are more susceptible than others to mildew. In particular are *B. sutherlandii*, *B. gracilis* var. *martiana*, and *B. dregei* amongst the species and *B.* 'Avalanche' and *B.* 'Lou Anne' among the tuberous hybrids. On the other hand there are many begonias which seem to be immune to this disease, even those grown among infected plants. There are a number of reasons for this -- genetic makeup of the plant, its physical characteristics such as hairy leaves that prevent the spore touching the actual leaf surface and seemingly some having the ability to kill the fungus which attacks them.

The right conditions

The third contributing factor in any mildew attack is, of course, the environment in which the plant is being grown, therefore both the weather and the time of year will have a bearing on this.

Generally speaking mildew becomes more prevalent in the autumn when high humidity is rapidly converted to moisture by the onset of cooler evenings. Moisture is the precursor for mildew for without it the spore would not germinate. Only the very thinnest film of moisture, which settles on the plant from out of the atmo-

sphere, is necessary for this to occur and powdery mildew will germinate on leaves that are damp for just one hour.

The temperature is also an important player in this formula. As I mentioned cooler evenings in autumn allow water vapour in a highly humid atmosphere to condense thus producing the conditions ripe for germination. Warmer areas, which often have a high humidity are no less susceptible when there is just a slight drop in the temperature.

How are we best able to control mildew?

In my opinion prevention is far better than trying to cure a later problem so by not growing those plants known to be highly susceptible to mildew you will reduce the chance of spreading the infection.

A second point to consider is adopting a preventative spray program from the

beginning of the season, before you have any mildew. We will look at what to use shortly.

The final environmental consideration is where you actually grow your plants. If you use a glass house then you **MUST** give adequate ventilation and of course control the humidity. Shade houses have the advantage of better natural ventilation. In both, plants should have some space between them. Jamming your plants close together will reduce the all important air flow around them thus increasing the risk. Those plants growing in the open garden are of course at the risk of the elements but good spacing here will also reduce the chances of infection. Always spray your plants in the morning and when watering endeavour not to wet the foliage, otherwise again do it in the early part of the day.

What to use as a preventative?

Something A Little Different

by Patricia Clark

It seems I have been a gardener of flowers and landscaping forever, but the secret of growing begonias has eluded me. Therefore because of my love for them, I decided to join the local club in Dallas, TX in February of 1998.

Probably it was my first meeting, not quite definite of the time, but during the raffle portion of the evening, I received a large leaf by the name of *B. 'Green Acres'*. As I shared this part of the meeting with a friend, she chuckled at the thought of a leaf being a part of the raffle. As it turned out, it became one of my prized plants.

Much to my not knowing or understanding a certain procedure to propagate, I did what I thought I heard to get this leaf to the plant stage.

I selected a pot, filled it with wet potting soil, inserted the stem into the soil and placed a plastic bag over it. I secured it with a rubber band to hold all the moisture inside and placed it under a fluorescent light at my desk. The leaf never wilted and after several months, I saw new growth beside the stem.

As I shared this with my fellow begonians, it came to them as a surprise. It was as if no one had ever tried this be-

fore. Whatever the norm is, leaf propagation has never been successful for me. Therefore, I have always said not everything works the same when it comes to gardening. If something different works, be excited about the discovery and share with others.

The joy of gardening creates a harmony within ourselves to cherish the moment, new ideas to entertain and marvel with something a little different. Keep growing!

Patricia, B. 'Green Acres' is also one of the editor's favorites. She likes them big and this one gets BIG. This lovely hybrid is typical of the wonderful rhizomatous hybrids of Bob Koehler of Florida who reports that it is out of a cross of B. 'Cowardly Lion' x B. thiemei (red). Patricia gardens at 1155 N. Clinton Ave., Dalas, TX 75208.



Above, the plantlet emerges from the leaf cutting. Below, the resulting plant of B. 'Green Acres'. Photo by Patricia Clark.



Begonias Outdoors in Sacramento, CA

by Robert B. Hamm

Back in early 1992 when my doctor informed me my HIV disease was progressing and I needed to go on disability, I gave up most of my begonias along with my business when I moved into an apartment in downtown Sacramento.

However, a few plants went with me and wound up being planted in the east facing flower beds. They were: *B.* 'Pink Jade', *B.* 'Corinthian', *B.* 'Shasta' (white), *B.* 'Charles Jaros', *B. deliciosa* and *B. formosana*. The first three are canes, the latter rhizomatous with upright stems. The canes were directly against the foundation and generally wintered well although they did freeze back if we got an unusually hard frost.

The other three, however, had a unique growth pattern they repeated every year. Each fall the upright stems would fall off where they were connected to the rhizome. The rhizomes (below ground) would sit dormant all winter.

Then in spring a whole new set of upright stems would develop and by mid-summer I would have a big blooming plant.

This growth pattern allowed these plants to come through temperatures as low as 25°F (-3.9°C) without damage since the below ground rhizome was protected.

They lasted the seven years I lived there, through mild and cold years.

After reading up on the group, I came to the conclusion this is the normal way for this group to behave. The underground rhizome is where the plant "retreats" when conditions are hostile to growth.

I would be interested in hearing other's experience with these plants and hope to experiment more now that I'm in better condition to see just how cold hardy the underground rhizomes really are.

Respond to Bob with a letter to the editor or your own article! Or you may write him directly at P.O. Box 189124, Sacramento, CA 95818-9124.

In Memory

Mildred Kirkpatrick

The Houston Astros lost a member and a dear friend when Mildred Kirkpatrick ended a difficult battle with cancer on December 8, 1999.

She had a very full life surrounded by a devoted family and many friends. She lived each day to the fullest and she did so with grace, dignity and a delightful humor. She loved her family, her church, and begonias. Mildred is the mother of past Astro Branch President Gail MacGregor. She will be greatly missed.

Cheryl Lenert

Begonia glabra in the Amazon Lowland Forest in Peru by Jacques Jangoux

This article accompanies the photos of B. glabra on pages 60 and 61 which are a departure for us as well as Jacques. Normally, we do not use photos transmitted over the internet because their resolution is not high enough for print. However, these were sent at a high resolution and we are going to try it and see.Ed.

At the end of September, 1998 I did a trip to photograph the rainforests of Peru. I was especially interested in the ACEER (Amazon Center for Environmental Education and Research) field station (www.aceer.org) where a canopy walkway 400 m. (about 1200 ft.) long has been built (to see a panoramic view of the canopy walkway, go to http://www.eds.com/community_affairs/jason/jX_vr_canopy_walk.shtml). You will need Quick Time 3 or 4, which can be downloaded at www.apple.com - images take a long time to load, so be patient! It can take many long minutes.)

It turned out that the ACEER field station is a combination research and education station/tourist facility. An e-mail sent to the address I had found in Tropinet, the newsletter of the Association for Tropical Biology, forwarded me to International Expeditions Inc., a tourist agency in Helene, Alabama (www.ietravel.com; 800-633-4734). They were very efficient at organizing an individual trip for me (They normally work with groups.) that took me from Iquitos to 3 forest lodges down the Amazon and up the Napo River: Explorama Lodge (50 miles, about 3 hours by boat), Explornapo Camp (another 50 miles down

the Amazon and up the Napo), and ACEER (1 hour hiking). (I usually plan my trips myself, but this time my time was too short for it.) I highly recommend this trip if you want to see the Amazon rainforest.

A funny thing is that to go from Belém at the mouth of the Amazon, where I live, to the Peruvian Amazon I had to fly to Miami. There used to be a combination flight Belém-Manaus-Tabatinga-Iquitos, but for some reason (probably economical) it was cancelled. Anyway I was able to do some shopping in Miami!

I found beautiful forest at all three places with large trees and a rich palmar flora, surprisingly little disturbed by the constant flow of tourists, but no begonias. (Contrarily to the Atlantic rainforest where I did most of my begonia photography in the past, begonias are not abundant in the Amazon rainforest.) Until the next to the last day at ACEER, that is. After a whole morning hiking in the forest with my guide and taking pictures, I was getting back to the camp; about 200 m. before reaching the camp, I finally ran into a scandent begonia, which I first thought looked somewhat like *B. convolvulacea* (but it was out of the Atlantic rainforest range, where I had seen and photographed it); however, after research in the Smithsonian book, *Begoniaceae* by Lyman B. Smith et al. (Smithsonian Contributions to Botany, No. 60) turned out to be *B. glabra*. The identification was further confirmed by consulting the *Flórula de las Reservas Biológicas de Iquitos, Perú* by Rodolfo Vasquez Martínez (Missouri Botanical Garden,





1997). Of course I photographed it, and as I was close to the lodge I went back the next morning before my departure to take a few more photographs in a different light.

In the past I used to send actual slides to the *Begonian* editor. This time I scanned my slides (using the Olympus ES-10 film scanner; it's the cheapest model, but for properly exposed pictures it does an adequate job) and I e-mailed the scans to the editor. So here you have a

mixture of one of the oldest forests in the world with some of the most recent technology.

Jacques Jangoux is a photographer and former botanist, who specializes in the photography of the Tropical Rain Forest. You may write him at Rua dos Caripunas 1360 Apto 1602, Belem, Brazil, or contact him via the internet at <jangoux@interconnect.com.br>.

In Memory

Vale Philip Wright

Phil Wright, founding President of the Victorian Begonia Society (Australia), Editor of *Begonia Australis*, grower of the best Tuberous Begonias I have seen, top flight hybridiser of those wonderful flowers and good friend to so many begonia growers throughout Australia and overseas passed away on Tuesday, December 7th, 1999.

I had the good fortune to work closely with Phil in the early days of the formation of the Association of Australian Begonia Societies for which he worked tirelessly, first as Secretary and later taking over the Editorship of the Association's Journal. He did so much to

ensure the success of our National Association.

The truly magnificent tuberous begonias which he created will remain as a lasting memorial to this remarkable man. Our thoughts and sympathies go out to his wife Margaret and to his family.

Peter Sharp

Philip Wright was also a member of the American Begonia Society. His photo of B. 'Maplewood', one of his personal favorites of the hybrids he created, graced the September/October 1999 cover of the Begonian in which issue we learned more about his work and saw some of his other hybrids as well. He will be missed by his many friends in the U.S.

~FH



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Round Robin Notes

*Virginia Hamann,
Round Robin Director*

#43 Terrarium Growing. **Mary Bucholtz (FL)** was kept busy during the hot summer months watering her begonias; air conditioning also dried the plants faster. At the time of this robin, Mary's cutting of *B. staudtii* was still alive, but down to two tiny leaves. Yellow flowering begonias was the main topic, with members wanting to know where to find them. **Eleanor Calkins (CA)** has been researching them for the Seed Fund.

#53 Rizomatous Begonias. **Vickie Jackson (LA)** has cane begonias growing fast and blooming enormous panicles of flowers. This amazed her as the weather had been hot, in the 90's and no rain. Some of her plants are planted directly in the ground, and others, potted, were grouped near a pond. Vickie's courtyard is ideal for plants as she has a pond and waterfall built into her landscape, a gazebo that is lined with plastic serves as a greenhouse during cooler winter temperatures.

#20 Photography. **Daniel Haseltine (IL)** asks if anyone is using Kodak gold Max 800 self-adjusting film. He praised the 1 hour film processing. It is fast, you get your pictures in an hour and if they are not what you wanted, there is time to go home and reshoot the pictures using different lighting. Uncut photos can be put on a CD and E-mailed. **Mary McClelland (NE)** used Max 800 which is a fast film. She spent time focusing and her camera wanted to take two at once.

#25 Midwest Growers II. To help

B. 'Sophie Cecile' bloom, **Esther Griffith (KS)** top dresses it with composted manure in the spring and gives it a lot of light. This produces summer bloom.

#57 Begonias, Giants to Mini's. This is a combination of a hybridizing robin and mini-plant terrarium growing robin. **Mary Bucholtz (FL)** likes the cane begonias for their forgiving nature. They can withstand more neglect than the other begonias. **Virginia Hamann (IA)** agrees as her plants go outdoors during the summer growing even when temperatures are hot, and humidity is 100 percent. In the long cold winter weather the plants are indoors sitting in cool rooms, being watered only on sunny days. They still grow and have no mildew.

Virginia says that a number of robins are lost in the mail or grounded from lack of members. Remember, members often exchange seed via robins - the one thing E-mail cannot compete with! So check your robins or write Virginia to join one. You can reach her at 1169 Lincoln Ave., Chester, IA 52134-8508.

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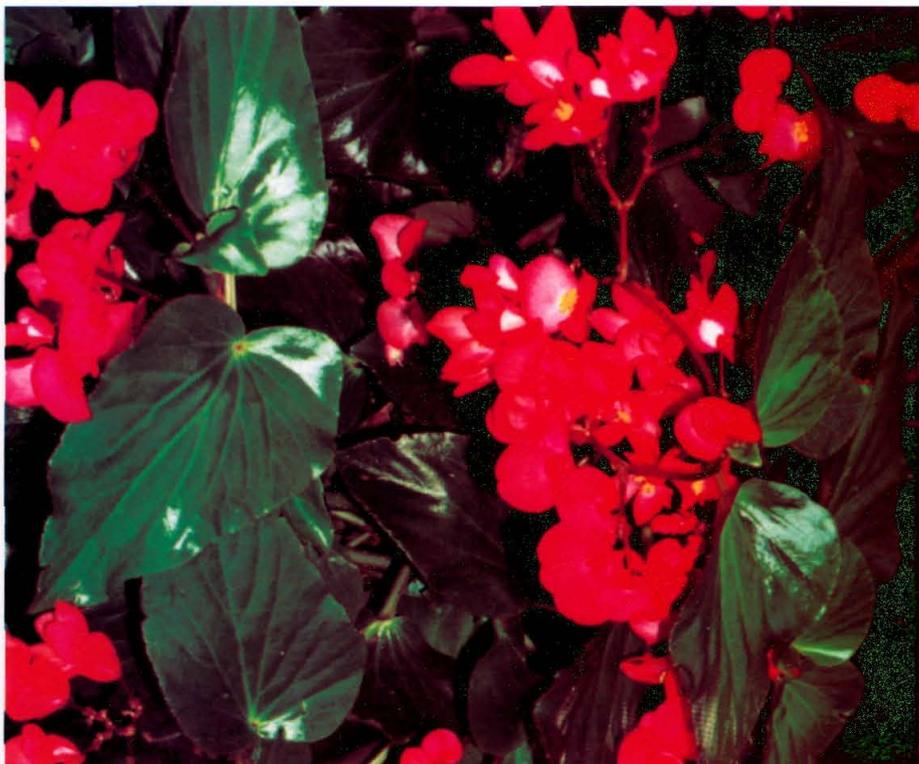
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Trenton, FL 32693

1-352-472-0082



B. 'Dragon Wings'

While you are enjoying the winter bloom of the rhizomatous and thick-stems, plan now for summer bloom! If you plant seed of Semp's right now, you can be assured of color this summer. While tech-

nically speaking, this one is not a Semp, still it behaves like one. Seed are available from Burpee and they germinate and grow easily.

In discussion over the internet, speculation is that this is a cross of *B. U014* and a Semp. Patrick Worley says that he made a cross of *B. U014* and a Semp many years ago, now lost, that was more beautiful, but still somewhat like this one. Mabel Corwin created *B. 'Christmas Candy'* from a similar cross and indeed it is difficult to tell these two apart.

It is a very hardy grower and must be pruned back vigorously to keep it in bounds. Cuttings root easily. Don't plant all your seed now, because seed started in May or early June will give you plants that are gorgeous for the end of the year holiday season.

This photo was taken by Johanna Zinn.
~FH

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In The Mailbox

Greg Sytch,

Horticultural Correspondent

The Internet has invaded my mailbox! Over the past half year, I have been chatting on-line with many begoniacs from all over the world. We have discussed such issues as seeds, sending cuttings by mail, disease, blooming, soils and general propagation. It has been fun hearing how other growers battle against mother nature to create ideal growing conditions for their begonias to thrive in. I am now in two on-line discussion groups and, who knows, maybe another is in the cards for the new millennium. Some of the discussions turned to problems growing begonias so here is a synopsis of what growers have been struggling with.

SOILS: Everyone wants Fafard! But, Fafard is not available to everyone. Here in Florida we have several suppliers, but the Sunshine State is also a growing hub. For growers unable to locate Fafard, most made their own. Combinations included the usual peat moss as a base, but amendments included pine bark, cocofiber, perlite, vermiculite and leaf mold. Additives included bone meal for bloom, blood meal for lush foliage, and magnesium sulfate for overall zest. An excellent homemade soilless mix would be: 1 part peat moss; 1/2 part perlite; 1/2 part vermiculite; 1/4 pine bark, with dolomite lime added as a few pinches in areas where acidity may be a problem. You may add additional pine bark, finely ground, for canes as they enjoy the drainage. Be careful with cocofiber as it breaks down rapidly and may deplete the soil of nitrogen as can pine bark. If using either of these amendments, use a higher nitrogen fertilizer.

FERTILIZERS: Time-release is the easiest fertilizer to use. Just sprinkle on top of the soil and work it in. Every time you water, your begonias receive a boost of food. I have used 18-6-12 Growers Gold supplied locally in Florida and have found it meets my needs well. If I need to increase blooming, I just use a liquid fertilizer. Incorporating bone meal into the soil helps with blooming, but it releases more slowly and results are not seen for a month or two. During hot summers, time-release fertilizers may be used up quickly so I always add a little extra during the middle of the summer season. Otherwise, I use it three times a year.

CUTTINGS: Sending cuttings by mail was a hot topic. Some root in water, then transplant once roots form. Others soak for a few hours, then root in an extra light soil mix. If cuttings arrive in good shape, either will work well, but the environment must be humid. It is also important NOT to add water to a baggie in which cuttings are sent as they are prone to rot. A well-sealed plastic bag will secure cuttings for 4-5 days with ease. In my humid climate, I simply stick them in soil and put them in my greenhouse. Nature takes care of the rest.

DISCUSSION GROUPS: I have been facilitating an on-line group for basic growing that includes members from Sweden, Oregon, Colorado, New Jersey, California, and Texas. If you are interested in joining this group or perhaps starting another, E-mail me at GSytch@cs.com. If you have a question about growing begonias, always feel free to E-mail me (or write/call me at the address and phone number below), and we can figure out a solution on-line.

As Horticultural Correspondent, part of my position entails giving advice and helpful hints for growing healthy, happy begonias which in turn provides for healthier

begoniacs! Therefore, here are a few growing tips which may help your begonias thrive and thus, you will be a happier begoniac. 'Nuff said.

PEANUTS: Those pesky styrofoam peanuts that come in packages and are so detrimental to the environment can become a boon to begonias. How? You know how newly potted plants can have the soil in the bottom of the pot become sour due to persistently wet conditions? Peanuts to the rescue! Add a thin layer of peanuts to aid in drainage and it will help to prevent sour soil so healthy roots can penetrate the bottom layer of soil. The result: Happy begonias mean happy begoniacs.

BOWLS: Yes, bowls! Rhizomatous begonias enjoy shallow root systems and require their rhizomes to spread along the soil surface. Sometimes, even azalea pots are too deep. The solution is...use bowls. Many retailers such as Lowes or Target offer low growing bowls easily one-third the depth of width, so a 14" bowl may only be 4 to 5" deep. Newly potted rhizomatous varieties, such as *B. theimei* and a few of my hybrids such as *B. 'Kissimmee'* and *'Wimauma'* can creep along and spread those beautiful leaves outward to admire. The soil dries out more rapidly ensuring a healthy plant. The reward: Happy begoniacs! See a trend here?

APPLES: Apples? Well, it is a bit of a stretch, but I use them in my greenhouse to aid in blooming. Apples and bananas give off a gas which helps to promote blooming by stimulating a trigger in plants that says, "Let's bloom now!" I cut a fresh apple in squares and leave it in the center of one of my greenhouses. Blooming is not a problem on Alaska Avenue. The conclusion: Begoniacs who are mesmerized by bountiful blooms with

huge smiles on their faces. There is no doubt their egos are receiving a boost at that very moment. Trend people! Bromeliacs, or whatever you are called, this trick works for those plants too.

THE OUT OF POT EXPERIENCE: Huh? No, not out-of-body, but out of pot. You know how sometimes, every so often, a begonia begins a decline due to wet feet? Well, there is an answer! If you pull the plant out of the pot, leave whatever soil accompanies it, and lay it on the ground or under a bench for a week to dry out the root ball. Then, once completely dry, repot in fresh soil with a little fungicide in the water. Voila! The plant will begin to return to its former glory as the fungus that feeds off wet feet is countered with good culture. Return to its former growing spot or try a new one! Just go easy on the watering for a few weeks. Begoniacs will be thrilled as they conquer this common dilemma. The id becomes satisfied, and the self is happy once again.

Yes, I am a behaviorialist by profession, but these simple tricks will delight any plant grower. Follow instructions for good mental health and you will dazzle your friends with beautiful begonias. See how connected two totally opposite sciences can become?

For those who do not have E-mail, snail mail is always an option. Just send your letters or questions to:

**Gregory Sytch,
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or call 727-841-9618. I'll reply with some assistance as quickly as I can. Otherwise - Enjoy Spring!

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SEED LIST

- MA00-01:** *B. conchifolia* var. *rubrimacula*
MA00-02: *B. cubensis* var. *lindeniana*
MA00-03: *B. dregei* var. *macbethii*
MA00-04: *B. grandis* var. *evansiana*
MA00-05: *B. hirtella*
MA00-06: *B. johnstonii*
MA00-07: *B. maculata*
MA00-08: *B. mollicaulis*
MA00-09: *B. versicolor*

Mixed Seeds

- MA00-10:** Rex cultivars

Bulbils

- MA00-11:** *B. gracilis* var. *martiana*

DESCRIPTIONS

- MA00-01:** *B. conchifolia* var. *rubrimacula* (Costa Rica, Sect. *Gireoudia*) often grown as *B.* 'Zip'. Compact, rhizomatous; peltate, flat, almost circular leaves, shiny dark green on top with a red spot above the attachment to the petiole; blooms in early summer.
MA00-02: *B. cubensis* var. *lindeniana*

(Cuba, Sect. *Begonia*) Var. *lindeniana* is considered a synonym. Shrub-like, compact plant; small, bare leaves; everblooming, pink to white.

MA00-03: *B. dregei* var. *macbethii* (South Africa, Sec. *Augustia*). Stem with enlarged caudex, referred to as semi-tuberous, 10 feet; small maple leaf like leaves; blooms early spring to late fall; very subject to mildew.

MA00-04: *B. grandis* var. *evansiana* (China, Sect. *Diploclinium II*) Erect stems to 1 foot; medium green leaves with purple veins narrowing towards pointed tips; bright pink flowers in summer; bulbils that form in the leaf axils drop to the ground to grow new plants in the spring.

MA00-05: *B. hirtella* (West Indies and S. America. Sect. *Doratometra*) Small plant with shiny green stems and petioles with entangled white hairs; upper leaf surface finely pubescent; annual habit.

MA00-06: *B. johnstonii* (East Africa, Sect. *Rostrobegonia*) thick-stemmed, glossy, pale green, medium leaves, red scalloped margins; large pink flowers in spring.

MA00-07: *B. maculata* (Brazil, Sect. *Gaerdtia*) Cane-like stem; leaves dark green, large white spots, narrow, long, pointed; flowers white to pink.

MA00-08: *B. mollicaulis* (Brazil, Sect. *Begonia*) 2 foot shrub-like; soft hairy leaves, profuse pearly white blooms summer to fall.

MA00-09: *B. versicolor* (China, Sect. *Platycentrum*) Rhizomatous, small, distinctive foliage, salmon pink blooms. requires terrarium care 70 to 90 days for germination.

Mixed Seeds

- MA00-10:** Rex begonia cultivars

Bulbils

Florida 2000...

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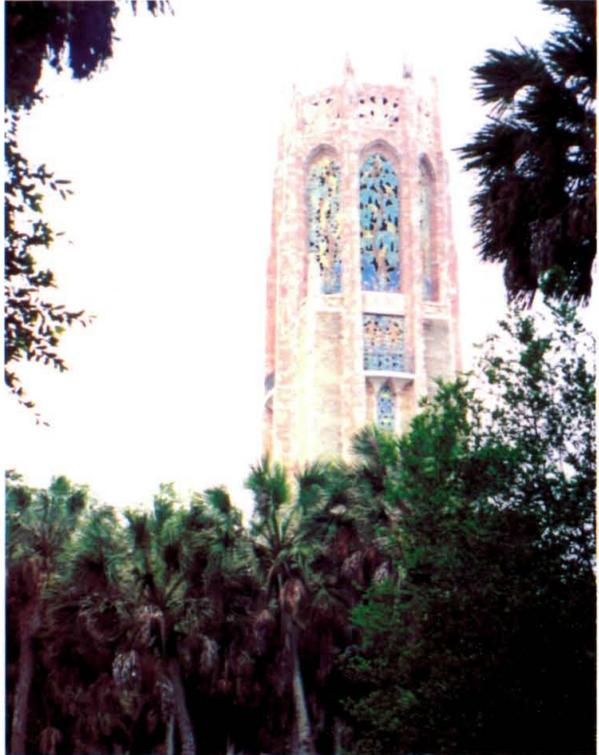
May 3-7, 2000

First, don't forget to submit your begonia poems (see *Begonian*, Nov/Dec 1999, p. 234). Send up to 5 poems with \$1 entry fee each to Virginia Jens, 922 Upland Rd., West Palm Beach, FL 33401.

Then, make your hotel reservations by calling 561-863-4000. Tell them you are with ABS for a \$99. net rate. Arrive on Tuesday, May 2, to make the pre-convention tour on May 3. It leaves bright and early for the Grand Bahama Island to visit Garden in the Groves, a 12 acre garden with winding, shaded paths and waterfalls. After a catered lunch there, we will be off on a garden tour hosted by the Freeport Garden Club. You will look at your gardens with a different eye after seeing the challenges of island gardening.

Charles Jaros in his role as Speaker Chairman has lined up some wonderful speakers: Hugh McLaughlin on "There's No business Like Shore Business," Carrie Karegeannes on "Everything you ever wanted to know about Herbariums", Dr. Mary Fuqua of the New England Botanical Conservatory on their begonia collection and also collecting in Indonesia, and Evan Donaldson, General Manager of the Glasgow Botanical Garden, on the McIntyre Collection and collecting in New Guinea.

A tour on Sunday, May 7, will take us to the Bok Tower at one of Florida's highest points, Iron Mountain in Lake Wales. (Visitors to our state should remember that it's not polite to laugh at a vertically challenged state such as Florida! We call it a "mountain" so go with the flow and laugh in private! It is all of 298' tall.) Bok Tower (photo above) is a National Historical Landmark. Its 205' stone and marble tower houses the 57 bronze bells of the carillon, a gift from publisher and author Edward W. Bok to America. The purpose of Mr. Bok's gift was to give back to his adopted country by sharing the influence of beauty through the trees, shrubs, flowers,



birds, and music of the carillon and garden. Many beautiful specimen begonias are pleased to call this spot home. (See B. 'Orange Rubra', below, bloom there.)

Finally, take a look to the right and get prepared. You might be the lucky one to take home this lovely stained glass which was designed and made for this convention by Joan Patterson of Jupiter, Florida. Joan is a native of Glasgow, adding another Glasgow touch to the convention.

Convention packets should get to you by the time you receive this issue and remember every one is invited to the monthly meeting of your hosts, The Begonia Society of the Palm Beaches on Monday, May 8 at 7:30 p.m...a chance for one more begonia experience.

There will be many chances to buy begonias at Palm

Hammock Orchid Estates (*One of the Begonian's regular advertisers! Ed.*) and also at Tropical World and Johanna Kitson has been working very hard on making the convention plant sale memorable.

~Virginia Jens



Editor's Notes...

Jack Golding is in Florida for January, so this month's pronunciation guide will appear in the next issue.

There have been several address errors in the last Officer's Page entries; please note the changes in this issue. (Hopefully, I've got them right now!) Also, some branch newsletters are still going to my former addresses; please update your mailing list to the current address.

Charles Jaros mentioned wanting a vigorous drive for new members. Some of you may wonder why this emphasis. Current membership is low, but aren't we a cozy, elite group? Would that it could be that way, but with a smaller membership goes a loss of benefits. Currently, the *Begonian* costs almost \$4500/issue to publish and mail; multiply that by 6 and you will see that 1100 paying memberships of \$17 each don't cover that bill. This means we have been depending on other activities and particularly successful conventions just to pay for the overage, leaving just a small amount for other activities we want to support. If we could double our membership, we could pay for the *Begonian* and even add benefits! Besides, more members make it possible to grow and preserve more begonias, adopt more species, make more seed and have a greater voice in the plant world. It is becoming increasingly difficult to find begonias on the market because we don't have the growers to support it. So please, make it your goal too to recruit just one new member this year! If we all did that we could double our membership in no time!

This issue almost exhausts my supply of articles (**and thanks to all this month's contributors**). Won't you follow the lead of **Patricia Clark, Charles Jaros**, and others and share your experiences with our readers!

~FH

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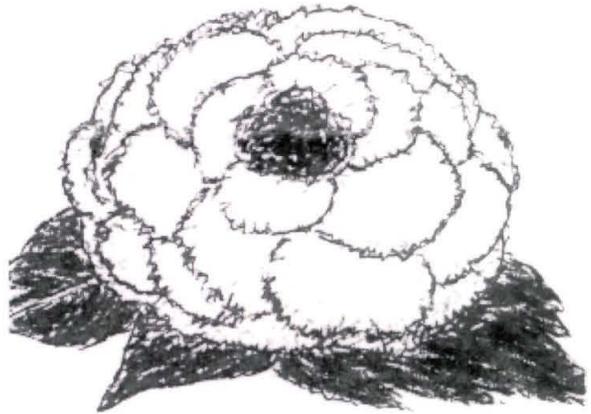
An interview with Local Gardener Roil Hatcher

By Kristyn McGuire

"I don't pretend to know anything about Begonias," he declared.

I was feeling a little unprepared as I slogged through the snow covering Roil Hatcher's walkway. Ten minutes earlier I had called him up to ask for an interview about his gardening, in particular his beautiful Begonias that I admire each summer as I walk by his house. I was expecting to set up an appointment sometime later in the week; however, he told me "just to come right on over." I quickly got my stuff together and hurriedly made up a dozen questions that I could ask him.

Standing on the doorstep waiting for him to answer the door, I felt like a real amateur; with one hand I clung to my mother's camera, the other held my pen and chicken-scrawled questions, and I had stuffed a small recorder in my jacket pocket. I began to have some doubts; I hardly knew anything about gardening, and



A drawing of a Tuberous Begonia, the type of begonia that Roil Hatcher clones.

there I was about to interview someone who had come across a type of plant that was thought by experts not to have existed.

My anxiety melted away, however, with the friendly older man's first words: "I don't pretend to know anything about Begonias," he declared. He then proceeded to give me a little bit of background on the work he does. "There are over two-thousand, four hundred types of Begonias in the world. I work with one of those types, the Tuberous Begonias," he began in his meticulous, but enchanting manner. He may not know a lot about Begonias, but I'd bet there aren't many people in the world who know more about Tuberous Begonias!

Right from the beginning it was obvious that he loved working with Begonias,

and indeed was very proud of his work. As many passions do, his passion for gardening took root during his childhood in Montreal. He learned to grow and care for roses, and did so for quite a while before moving to Ottawa where his roses contracted an extremely persistent virus. At this time he decided to switch his main gardening focus to the Tuberous Begonias because he found their beauty to be absolutely astounding. It suffices to say that he's been growing them every since.

A retired pharmaceutical representative, Roil is able to dedicate most of his time to cloning the beautiful Begonias. He has "been trying for the last five years to develop a scientific pro-

cedure whereby (he), right here (in his own basement), can propagate (a specific) flower and form a bunch of clones of that (specific) flower.” Out of the four to five hundred flowers he grows every year, he hopes to find one or maybe two outstanding specimens with which it is worthwhile to use his cloning process. By doing this he is able to consistently reproduce only the absolute ‘top of the line’ Begonias, which, for the most part, he gives away to various organizations.

Mr. Hatcher’s background in biochemistry helped him to develop the procedures he uses; nevertheless, a great deal of research was required. It took six months of pouring over back issues of horticulture magazines and cloning studies before he even began experimenting. In the end, the research was worth it; Roil is currently the only Canadian pursuing studies of this nature. Not only has he developed a foolproof method of cloning; but he has also discovered a new virus that attacks Begonias; and he has, through a chance mutation of one of his plants, created a ‘bearded’ Begonia (a Begonia with many tiny petals that grow, like a beard, from the main petals), a

plant which experts had thought could not exist.

Although the majority of people consider gardening to be a seasonal pastime, the cloning process takes up most of the year. When I interviewed him the plants had already all been cloned and were growing happily with the aid of artificial light. Nevertheless, he gave me a tour of his laboratory. “These are my gardening tools,” he exclaimed pointing to a table in the corner. I couldn’t help laughing, on the table were various instruments ranging from a calculator, ruler and pen to something that looked just like a dental pick. There were no spades or gardening gloves in sight. I soon learned that my friendly neighbour was more of a scientist than a gardener.

In a completely sterile environment, he takes a small piece of the flower’s stem, sterilizes it with chemicals, dissects it and puts it in a solution of gelatinous artificial nutrients. When little beads develop on the small piece of material, he manipulates the chemicals and hormones in the solution so that he is able to produce hundreds of plants; each one as magnificent as the original flower with which he started. Although from my description it seems as

though Roil has no trouble growing his flawless flowers, Begonias are traditionally very difficult to grow. Once he plants them in his artificial soil solution, they need a specific amount of light in order to grow properly, and he must also water them every day with a mister.

You’d think that with all he’s accomplished he’d take a break and bask in the glory, but instead he has teamed up with a fellow ‘amateur’ Begonia gardener to clone a scented Tuberous Begonia. Because Tuberous Begonias have been hybrid ever since their discovery in the eighteen-fifties, they no longer possess any fragrance and are simply grown for their aesthetic qualities. Each year Roil receives seeds from a researcher in the States (Howard Siebold) who is trying to produce Tuberous Begonias that have a fragrance. In the future, he hopes to grow these scented Begonias and then clone them.

His only regret in regards to his work is that he was not able to clone the bearded Begonia, his favourite flower out of all the ones he has grown. All he has with which to remember this flower is a picture “that doesn’t do the flower justice.” Despite this, it is a beautiful pic-

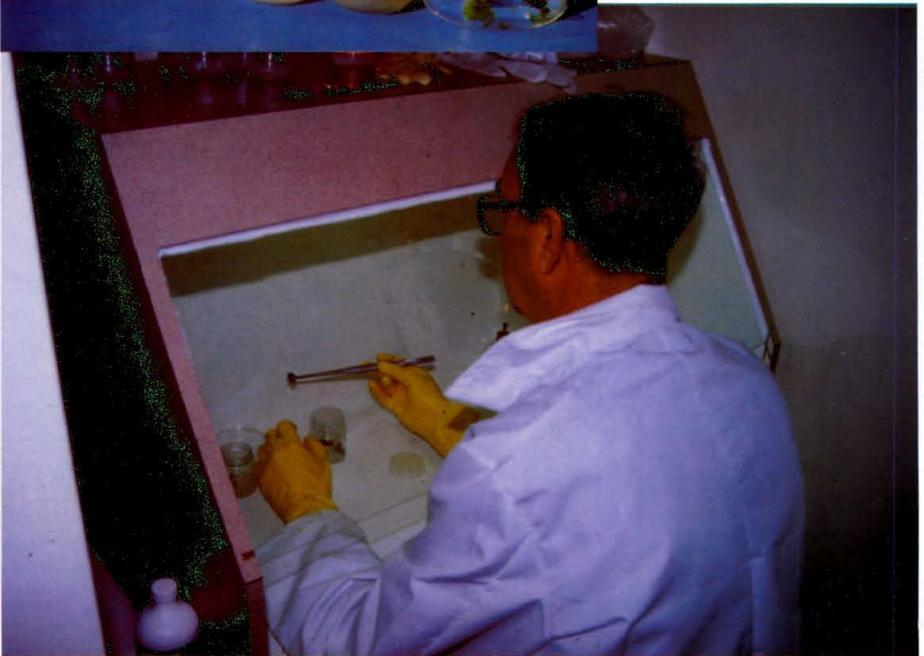
ture, one of the many ones at which I could not help gazing as I was heading up stairs after the interview. Indeed Mr. Hatcher has reason to be proud of his work and although he says his most rewarding experience was publishing research about the virus he discovered, I think what is most important to him is the joy his flowers give to others. I became more certain of this when, with a smile, he recounted the time he was unable to pull out of his driveway as the

garbage collector had parked and gotten out of his truck in order to get a closer look at the blossoming flowers in his garden.

Roil Hatcher submitted this article by his 16 year old neighbor done as an "original newspaper story" assignment for her eleventh grade English class. The slides below are Roil's and not part of her story. The larger photo shows him handling plant materials aseptically in the sterilized environment of a specially designed transfer hood. In

the inset photo, he explains that six months can elapse and several subdivisions of the developing plant material are necessary before tiny shoots are ready for harvest. Roil says there are a few technical errors in the article, but "Of greater importance is the effort put forth by a young high school student, the catalyst for which was a display of tuberous begonias." In this spirit, I have tried to reproduce her letter size article as she prepared it complete with layout and a graphic despite the limitations of our different page size and space.

You may write Kristyn or Roil Hatcher at 4 Sheahan Crescent, Nepean, Ontario, K2H 8M2, Canada.



NEWS: ABS, Branch, International

Marty Korobkin who did that beautiful stained glass work for Begonia Kaleidoscope has had extensive heart surgery and remains very ill. **Louise Korobkin** who also worked very hard for us at that convention has been by his hospital bedside; you may write them at 23126 Kent Avenue, Torrance, CA 90505.

Janet Brown reports in the Westchester Newsletter that the September 1999 issue of the Royal Horticultural Society's journal *New Plantsman* has an article describing a new species from the Philippine Island of Luzon, *Begonia chrloroneura*, described by P. Wilkie, M.J.S. Sands and M. Mendum with a beautiful painting of the plant by Mary Mendum.

Thanks to the continuing sales of the **Howard Siebold** and **F. Holley** books and their contributed proceeds, the **Millie Thompson Publication Fund** has risen to over \$3000. Remember that contributions from you or your group to this fund are always welcome. Also, the Fund is looking for publications to support. It would be particularly receptive to supporting the publication of articles in booklet form including research studies that would be too long for inclusion in the *Begonian*. Color publications are very expensive, but black and white print materials are relatively inexpensive and if you have expertise in a topic perhaps you would wish to share it with other growers. (The fund supports only original publications and not reprints.) Send inquiries to the ABS Publications Committee in care of the *Begonian* Editor, 1716 Gardenbrook, Nacogdoches, TX 75961-2107.

Note that among this month's advertisers is a relatively new supplier from Florida. **Mary Miller** (see page 63) is a member of ABS and says she advertises only in the *Begonian*, doesn't want to become too large a supplier, and sells only begonias. Remember to support our advertisers!

Note that Charles Jaros announces on page 44 the appointment of **Gene Salisbury** to the position of ABS Business Manager.

Please remember to send your nominations for the three ABS Awards to **Michael Ludwig** by March 25, 2000. Full details on these awards and how to submit nominations can be found in the January/February 2000 *Begonian* on page 14. **Send your nominations today to Michael Ludwig, Awards Chairman at 6040 Upland St., San Diego, CA 92114-1933.**

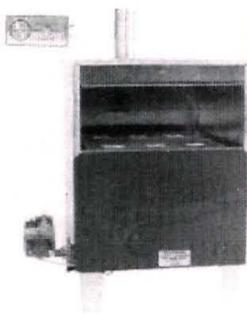
Arlene Ingles asks that everyone remember to make their checks for membership out to the **American Begonia Society** and *not* to Arlene or John Ingles.

*If you have not lately, or never, visited the ABS Web Page, you **must** see it soon. It keeps on changing and getting greater and greater. If you don't have a computer, its worth visiting someone who does just to see it! It has all the information on joining ABS, teasers for the latest *Begonian*, and lots of photos. Our congratulations and heartfelt thanks to our talented internet creators. The address is <www.begonias.org>.*

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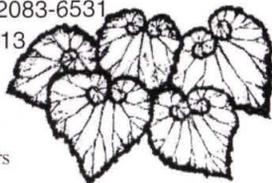
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COMING EVENTS

March 4, 2000: The Knickerbocker Branch will have a bus trip to Logee's and Country Greenhouses. For more information call Barbara Berg at 203-966-7693.

March 25-26, 2000: 6th Australian Begonia Convention, Adelaide, South Australia, the Haven Hotel, Glenelg. Contact: Convention Secretary Myrnie Jennings, 4 Kinnard Crescent, Highbury, South Australia 5089, Australia.

May 3-7, 2000: Begonias by the Beach/ABS Convention 2000. Fly into West Palm Beach (If you go to an airport nearby such as Ft. Lauderdale, you may get better rates, but you will have to rent a car and drive a ways). Hotel is the Radisson Palm Beach Shores Resort, rooms are \$99. net, call 561-863-4000. Come Tuesday May 2 for the pre-convention tour on May 3. Show ends at 5 p.m. Sunday. For more information see page 70 or call Virginia Jens at 561-835-3845.

September 20-24, 2000: Southwest Region/ABS Get -Together, San Antonio, Texas Seven Oak Resort. More information to come.

Closing date for next issue is March 15!

The Begonian

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Enter your poem; page 70! Send your nominations; page 76!