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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 which 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 Photos

front: Lorra Almstedt reveals the beauty the semperflorens begonias produce so generously.

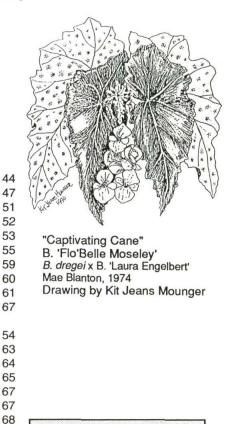
back: Don Miller shows us more semperflorens, this time in mass plantings at Ballaarat Botanical Gardens in Ballarat, Victoria, Australia, scene this year of the 40th Ballaarat Begonia Festival and the convention of the Association of Australian Begonia Societies (see Coming Events for dates).

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Check your mailing label - if it says 3/92 or 4/92, your membership is about to expire. Please renew!

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ABS Convention August 19-23, 1992

Anaheim, California

Orange County Branch, Hosts

Begonia 'Flat Rock'

by Mary Bucholtz

What an interesting growth habit this little-known cultivar exhibits. The swollen basal stem (caudex) is certainly deserving of its name, B. 'Flat Rock'.



Elda Haring hybridized B. 'Flat Rock' in 1980. A cross of *B. sutherlandii* and an unknown, it is described in <u>Begonias</u>, <u>1984</u> <u>Update</u> by Mildred L. Thompson. It is classified as tuberous, semi-tuberous.

A profuse bloomer with white inflorescence, B. 'Flat Rock' puts on a dazzling display May through the early fall. The blossoms rise high above the lacy-like foliage that is reminiscent of the foliage of *B. dregei* or *B. dregei* 'Suffruticosa'.

B. 'Flat Rock' needs to be underpotted in a a loose mix. It likes a lot of sun and wants to dry out between waterings.



I have only seen this curious charmer growing at the New York Botanic Garden, where these photographs were taken.

ABS 3rd Vice-president Mary Bucholtz lives at 2411 Hendricks Ave., Jacksonville FL 32207, where she grows and photographs prize-winning begonias.

Cane Hybrid Booklet

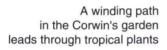
In connection with the 1992 National Convention, "Captivating Canes," host Orange County Branch is planning on publishing a booklet on cane-like hybrids that have been created *after* publication of the <u>Revised Buxton Checklist</u>.

The booklet will follow the same format as the <u>Checklist</u>, listing the new cane hybrid, its parents, its hybridizer, date, and color of flower.

To be sure your new hybrid is included, please send the above information to Elda Regimbal, 3117 San Juan Dr., Fullerton, CA 92635.



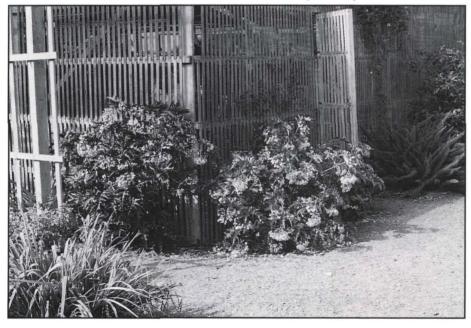
"Captivating Cane" B. 'Cosie' B. 'Lenore Olivier' x *B. lubbersii* Goldie Frost, 1975 Drawing by Kit Jeans Mounger





Below: Begonias 'Irene Nuss' and 'Sophie Cecile' welcome visitors to the first lath house.

photos by Tamsin Boardman





Mabel Corwin in her Begonia Garden

The Garden Gate is Always Open

Eight miles inland from the blue Pacific, tucked in a secluded countryside area surrounded by rolling hills and distant mountain peaks, is the famed "Corwin's Garden" of Vista, California.

In 1964 Vista, then a small, quiet southern California city, attracted Mabel and Ralph Corwin to purchase property. David Brinkley, on a government-sponsored television program, announced that the Vista area had the most equitable climate in the country, and this news confirmed the Corwins' opinion that they had chosen their retirement site wisely.

Plans to develop the property started in 1967. For the next three years they spent weekends planning and planting. Upon Ralph's retirement in 1970 they were ready for the move to their new home. Text and photos by Thelma O'Reilly

Together the Corwins created their beloved garden. The rare trees, roses, perennials, fruits, and vegetables are Ralph's domain. Mabel's beautiful begonias are famed world-wide, and attract visitors from near and far.

Today the city of Vista has mushroomed into a crowded, commercialized boomtown. Visitors seeking the Corwins leave bustling Santa Fe Avenue and meander north over the narrow country road of Monte Vista for about two miles to a right turn to Loma Vista Way. This narrow lane quickly leads to No. 1119 and a small sign, "The Corwins."

The driveway leading to the home is bordered by rare tropical plants. A wide walking path, leading to the Begonia Garden, allows one to enjoy bulbs, perennials,

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succulents, rare trees, and tropical shrubs and vines. In August a huge Cassia tree, with its pendulous chains of bright yellow flowers, is at its peak.

The original section of the enclosed lath and shade cloth house was 32' by 32'. Today this area is known as the Rex House. Opening the door, visitors are dazzled by one of the world's largest private collections of *Begonia rex* hybrids and cultivars. They range from seedlings waiting for Mabel's appraisal to large established plants, from old begonia treasures to recent introductions.

In season Tuberhybrida begonias fill the long table that divides this area, while *Begonias gehrtii* and *paulensis* thrive below on the ground.



Yellow-flowering B. 'Bumblebee'

When begonias overflowed this house, Ralph added a second structure of shade cloth, increasing the growing and showing area to 64' x 64'.

Wide gravel paths wind throughout the enclosed garden. The summer begonia display is enhanced by mass plantings of *B. pearcii*, Mabel's cultiver B. 'Bumblebee', and the Frosts' cultivar B. 'Rory'. Center posts supporting the two sections are encircled at their bases with brightly colored plantings of B. 'Christmas Candy' and B. 'Amigo'. The more recent addition is filled with an unbelievable display of rhizomatous, cane, shrub, and thick-stemmed begonias. Here are found specimen-sized U-numbers, species, and cultivars. An awesome sight is a giant, 6 foot specimen of B. 'Paul Hernandez' with masses of 20" x 20" leaves. The stunning collection of companion plants - orchids, bromeliads, and gesneriads - are an added attraction. Overhead a colorful canopy of hanging begonias adds the crowning glory to Mabel's magnificent Begonia Garden.

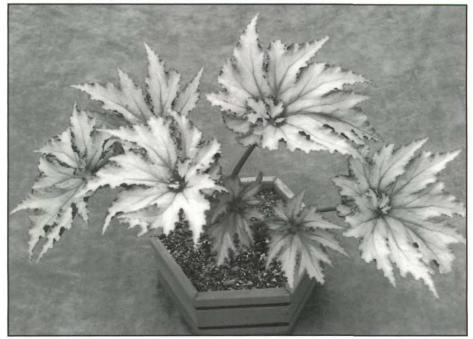


B. 'Fortune Cookie'

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B. 'Martin Johnson', Best New Introduction at 1987Convention





Thelma O'Reilly (left) and Mabel Corwin after Mabel received the Eva Kenworthy Gray Award at the 1988 Convention

A greenhouse, located at the rear of the original structure, is filled with treasures. Here are the rare begonias and those requiring special conditions. Many of the U-numbers thrive in the controlled environment, especially those native to the Philippines, Thailand, Malaysia, and Africa. Mabel grows young transplanted seedlings in this area before testing them in unheated conditions.

Finally, in a separate area attached to the far end of the Begonia Garden, is the potting shed. This work house includes a section to grow begonias for plant tables and test seedlings for cold tolerance and distinctiveness.

Looking back over her fifty year love affair with begonias, Mabel shared some special memories. She is grateful for her long-standing friendship with Belva Kusler and the opportunity to act as a tester for the popular Kusler hybrids, the friendships she still maintains with Round Robin members and other begonia friends, and her years of association with the ABS and begonias. The Rex begonias are her favorites, with the canes running a close second. Her favorite *Begonia rex* cultivar is B. 'Martin Johnson', one of her own creations. Other popular Corwin cultivars include B. 'Center Stage', B. 'Fortune Cookie', B. 'Gailord', B. 'Pachea', B. 'Royal Petticoats', and B. 'Tahara'. Her favorite cane type is B. 'Silvermist'. Irene Nuss gave seed of this cultivar to Mable who grew the seedlings and chose B. 'Silvermist' as the best of the lot, to be named and distributed.

Mabel's B. 'Christmas Candy', winner of the Alfred D. Robinson Medal in 1987, is now grown world-wide. Mabel is also the recipient of the Eva Kenworthy Gray and Herbert P. Dyckman Awards. Ralph has held numerous offices in ABS, and currently serves on the Audit Committee.

Today Mabel enjoys growing seed of the unidentified species, distributing seedlings to ABS members as gifts and supplying then to ABS branches for plant tables.

For many years association with Mabel and her beautiful begonias has been a spiritual experience for members of ABS, their families, and friends. She has created an atmosphere of goodwill by sharing her famed Begonia Garden with those who love, grow, and study begonias.

All visitors are welcomed with warm hospitality by Mabel, her gentleman farmer husband Ralph, and THE GARDEN GATE WHICH IS ALWAYS OPEN!

Thelma O'Reilly, like Mabel Corwin a winner of all three of the top ABS awards, lives at 10942 Sunray Place, La Mesa CA 91941.

One of the highlights of the 1992 ABS Convention, "Captivating Canes", will be a visit to the garden where "the Garden Gate is Always Open."

more "odd things begonias do" Another Case of Adventitious Growth



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Stephen Coppins, 30 Mygatt St., Binghamton, NY 13905, sent the photo above of adventitious leaf growth on an unidentifed begonia. Here's his October 1991 report:

I had to separate the plantlet from its "mother" because it was getting shaded by the larger leaves and started to look sick. I used some rooting powder and enclosed it in a plastic bag, and put it on my propagator. It's doing fine - it seems to get larger every day. I can't wait to see it when it's full-grown. I hope it is a true mutant and as such will have some unique characteristics, which hopefully it will pass on to offspring.

New in the ABS Bookstore

The Begonian: Earliest Issues, January, 1934 through June, 1938. \$25.00 No cover: shipped with 3 holes punched, ready for standard-size loose-leaf binder Tips for Begonia Beginners, by Dorothy Patrick.

From her Begonian articles 1987-1989. \$2 soft-cover

Prices include postage. Texas residents please add 7 1/2% sales tax.

Send check or money order in US funds to: ANITA RUTHENBERG 1016 W. ARLINGTON AVE. FORT WORTH, TX 76110

Begonias and Houston: Astronomical!

by Helen Spiers

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Houston has even more to offer than astronomical Begonias! Among the "musts" to visit during your stay in Houston is the Eighth Wonder of the World, the renowned Astrodome. Many of you will drive past or fly over it, but a quick glance will in no way convey the massiveness of this structure. To really experience its wonderment, you must stand at ground level and look up, Up, UP! Tours are available, and, if you are a baseball fan, you may be lucky and see an Astro game.

Houstonians are proud to have in the vicinity the Johnson Space Center of NASA. A tour of NASA is a memorable experience, one that allows visitors to view mock-ups of all the space equipment viewed on television. An opportunity to see the Mission Control Center of NASA is only about a twenty minute drive from your hotel. It costs nothing but time - but plan on lots of time if you want to see it all.

Near NASA is Armand Bayou Nature Center, with an impressive interpretive center, an old farmstead, and miles of trails winding along the bayou through native vegetation. Herons, egrets, osprey are among the avian inhabitants, and birders may catch spring migrants or a rare species from Mexico. Piney woods north of the city host woodland birds.

Historical Galveston Island, Houston's neighbor about 45 miles to the south, is one of the treasures of Texas. The City of Galveston has something in common with ABS: a desire to preserve for future generations precious treasures that *can* disappear. One such treasure is the famous Strand, a magnificent historical section of Galveston which now offers a variety of

shops, hotels, dining, and antiques, antiques, and more antiques. The arts and theater are there for day and evening pleasures. (And I didn't mention the BEST seafood!)

Packing to come to Begonias Astronomical? Throw in your swim suit, walking shoes, etc., because on the other side of Galveston Island the miles of sandy beaches and the activities common to busy boardwalks are inviting. While in Galveston visit the Moody Gardens; the present grounds and greenhouse are worth the trip, but a visit will allow also a glimpse into the future "in the making".

A tour of the beautiful Mercer Arboretum and Botanical Gardens is planned for the Get-Together.

These are just a few of the attractions awaiting you in Houston. Join us for "Begonias Astronomical" and stay awhile to enjoy more of Houston. Your hotel rates can be extended beyond the dates for the Get-Together.

Expect the weather to be warm and bring spring and summer clothes, with a "just in case" light-weight wrap. A raincoat or umbrella will probably come in handy, too.

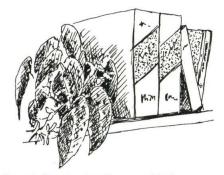
Packets for the May 15-17, 1992 Southwest Region Get-Together, "Begonias Astronomical!" were mailed to SWR members at the beginning of February. If you would like to receive one, please contact one of the Co-chairs: Helen Spiers, 1423 Laskey, Houston TX 77034 (713) 946-4237, or Tom Keepin, 4513 Randwick Dr., Houston TX 77092 (713) 686-8539.

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Office Magic

by Richard King

"They always called it Magic and indeed it seemed like it in the weeks that followed - the wonderful weeks - the radiant weeks - the amazing ones. Oh! the things which happened in that garden! If you have never had a garden you cannot understand, and if you have had a garden you know that it would take a whole book to describe all that came to you there."



The quote from <u>The Secret Garden</u> by Frances Hodgson Burnett describes the excitement I felt during the weeks after I took the first B. 'Orange Rubra' to my office. Because of the access requirements for the area in which I work, there are no windows allowed. My begonia was like a fresh breath of spring. Magic!

Not only did it like the fluorescent lighting, it took on a state of florescence. New growth on the existing canes and new canes rising up. Next came the flowers. First one little speck of color. Then a whole cluster. And then two clusters. And then three.

I had been a long-time vegetable gardener and was just a new member of the Dallas Area Branch of the ABS. Now I was hooked on begonias and my imagination was starting to grow.

After a branch program on growing begonias from seed I wanted to try that. I found my computer terminal to be an excellent source of bottom heat for my carefully planted seed container. In about two weeks I discovered some of the most wonderfully tiny plants I had ever see. I showed them off like a proud parent. I was a little careless, though. I took off the plastic wrap top for a closer look and left it off while I was away from the office a few days on a short business trip. What I came back to was a dried out pot and a lesson learned. I knew my technique was sound. though, and I started again. Now I have at least a dozen delightful seedlings of *B. dregei* and B. 'Joy Porter' doing well.

A branch program on propagation took me off in another direction. I brought in a clear plastic deli box with the cuttings provided by the branch. Soon I was sharing the rooted cuttings with my friends at the office. I put begonias on top of my safe, on top of my bookcases, and added a hanging basket of *B. convolvulacea*. I was running out of space and my interest in begonias was still growing. The only answer was to build a shelf for the wall. How nice it looks! With a little creativity I made it portable, so I could place it directly under my brightest lights and I can take it with me if I change offices.

Office friends come by on a regular basis wanting to see what's new and how the seedlings are growing. Even people I don't know have stopped to tell me how much they like "all the nice green and blooming plants." This has encouraged me and now when I spot a begonia I too stop in to a friend-to-be's office and introduce myself to talk about his begonias. This has stimulated a lot of interest in growing begonias, and some people have visited our Dallas Area Branch.

My office collection has grown to 13 different begonias, not counting the seedlings and cuttings. This includes, to name a few more, B. 'Ginny', B. 'Lana', B. 'Irene Nuss', and B. 'Yakagura', all doing well. So why not take a begonia to your office, and let it work a little magic there?

Richard King has a magic way with words as well as with growing begonias! He lives at 1809 Greenway Dr., Plano TX 75075.

LAURAY of SALISBURY

Begonias, Gesneriads, Orchids Cacti & Succulents 432 Undermountain Road, Rt. 41 Salisbury, CT 06068 203 435-2263 Usually open daily, 10 am - 5 pm 1992 Catalog \$2.00

In the News...

Logee's Greenhouses!

ABS members have known about and loved the Connecticut nursery for a long time. Logee's has been responsible for many of our loveliest begonia hybrids, and has helped keep many of our begonias alive and in circulation.

Now the family-owned nursery has been featured-twice-on PBS' "Victory Garden". One segment had **Joy Logee Martin** touring the greenhouses and discussing their history; in the other **Tovah Martin** talked about Logee's begonias. Watch for the programs in your area.

Tovah Martin has authored two new books: The Essence of Paradise: Fragrant Plants for Indoor Gardens (which she also illustrated) and <u>Victoria</u> Moments in the Garden, with photographs by Toshi Otsuki. Both are available from Logee's Book Shop.

<u>California</u> <u>Gardens</u> <u>Magazine</u> features a monthly article on growing begonias by ABS Parliamentarian and former President **Margaret Lee.**

"Begonias without Tears for Hobbyists" was the name of an article in the <u>Los</u> <u>Angeles Times</u>. Recommended begonias were 'Tom Ment', 'Pinafore', 'Orange Rubra', 'Bunchii', 'Baby Perfection', 'Ember', 'Dew Drop', and 'Regal Minuet'.

and On Parade ...

The Rose Parade in Pasadena, California, started 1992 off beautifully with a Begonia Queen, on a float sponsored by the Association of Australian Begonia Societies, the Ballaarat Botanic Gardens, and the city of Ballarat, in celebration of their 40th annual Begonia Festival.

Of Pollen and Seeds

This will be the third time this article has been printed. In July 1975; again, in December 1986, and again in this issue, to answer requests for information on seed production. Former Seed Fund Director Joy Porter had recommended the first re-printing, saying, "There was none better than that Dr. Doorenbos had already written."

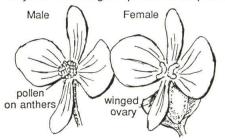
As everybody knows, begonias can be propagated by cuttings. Most species root very easily, only a few (e.g. *B. platanifolia*) are really difficult. Several species are also capable of regenerating buds. Such species can be grown from leaf cuttings, a very rapid way of propagation for such diverse species as *B. prismatocarpa*, *B. sudjanae*, *B. bogneri*, and of course *B. rex* and its hybrids.

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Begonias can also be reproduced from seed, but many amateur growers seem to find this difficult; they cannot get their plants to produce seed, and once they have it they don't know how to sow it or how to nurse the young seedlings. This is a pity, because propagation by seed has several advantages over propagation by cuttings. It may sound unbelievable, but it is often easier and guicker to grow a begonia plant from a minute, almost invisible seed than from a sizable cutting. In the second place, seedlings are generally troublefree, while cuttings always take all the troubles of the parent plant (virus, bacteria, nematodes, mites, mildew, as the case may be) with them. A third advantage is that a plant usually produces many more seeds than cuttings, so that the rate of multiplication is much higher. Moreover, seed is easier to ship.

In order to get seed, one must have both anthers and pistils. In *Begonia* these never (except as an abnormality) occur in the same flower. In other words, *Begonia* flowers are unisexual; they are either male (with anthers) or female (with pistils).

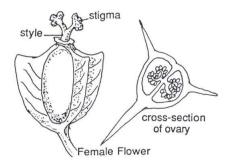
As a rule, Begonia are monoecious: the male and female flowers are found on the same plant. A few species, however, are dioecious: a given plant forms either male of female flowers, but never both. Examples are B. viscida and certain forms of B. micranthera. It is sometimes very hard to tell if a certain species is monoecious or dioecious. Some plants may form only female flowers for months or even years on end, and then suddenly male flowers will appear. I have observed this in several African species, for instance B. mauricei, B. molleri and certain forms of B. mannii. The opposite, male flowers and only occasionally female flowers is found in B. squamulosa. Apparently this not only occurs under greenhouse conditions but also in the wild. Several species have been described as dioecious which are in reality monoecious, for instance, B. squamulosa. Factors like plant age, temperature, light intensity, and daylength may play a role here, although this has not been clarified yet. It would also be interesting to see if the formation of male flowers is stimulated by the application of gibberellin and the formation of female flowers by auxin or by an ethylene-releasing compound like etephon.



In some *Begonia* (e.g. *B. herbacea* and *B. squamulosa*) the male and female flowers are borne separately, but in the

majority of species they are to be found in the same inflorescence. Invariably, the male flowers are the first to bloom. Often there are still male flowers on the inflorescence when the female flowers open, but there are also many species (*B. acida, B. vitifolia, B. fuchsioides*) in which all male flowers have been shed before the female ones appear. In these cases one may have a profusely flowering plant and yet be unable to produce seed, unless one has the foresight to store pollen, which will be discussed later on.

Considering the unisexual flowers and the way they are grouped in the inflorescence, one would expect *Begonia* to be typically out-breeding plants. However, there are some species (e.g. *B. hirtella* and *B. franconis*) which have developed mechanisms for self-pollination (see the **Begonian**, November 1970). Also species with dense inflorescences in which male and female flowers are open at the same time (e.g. *B. dregei*) may set seed without any outside help. Most species, however, need some agent, other than gravity, to transport the pollen to the stigmas.



It is still unknown how female begonia flowers are pollinated in nature. In view of the showy petals and the strong smell of several species it seems reasonable to suppose that insects play an essential role. In our greenhouses, however, the only insect that visits the flowers is the honey bee which collects pollen from the male flowers but does not bring about pollination as it never visits a female flower. (How it tells them apart is a mystery, but it must of course be remembered that the senses of sight and smell of a bee are quite different from ours.)

Some people have suggested to me that the wind would be the pollinating agent in begonias, but I am inclined to keep to the insect hypothesis. Two observations are pertinent here. The first is that the buds of Begonia squamulosa are covered with nectar. True, it sits on the outside rather than the inside of the petals, but nevertheless it is hard to see what its function could be if it is not to attract insects to the inflorescence. In the second place I would like to point out that the male flower of Symbegonia sanguinea has the shape of a half-closed shell (the petals are partly joined) and it is hard to see what other agent than an insect could bring the pollen to the stigmas of the female flower which are at the bottom of an inch-long tube.

The absence of natural pollinators in our greenhouses has the advantage that (unless one wants to do scientific experiments) no special measures are required to prevent un-desired cross-pollination. We ourselves have to be the pollinating agent.

The pollen is formed in the anthers. These are round or oblong, and usually numerous. They open by slits or pores to release the pollen, at least in the natural habitat. Under our greenhouse conditions the anthers often remain closed. To cause them to open, it often helps to let the flower dry out. Producers of hybrid seed of *B. semperflorens* pick the male flowers and leave them overnight under a strong lamp.

To see if the pollen is being released one can take a flower between thumb and second finger of the right hand and hold it above the thumb nail of the left hand. The flower is now tapped gently with the forefinger of the right hand. If all is well the pollen will be seen to descend on the thumbnail. To pollinate, the same procedure is repeated above the stigmas of a female flower.



If the anther does not open by itself, one can try to open it with a needle. This usually means that the pollen must be brought on the female flowers by mechanical means. One should take care not to damage the stigmas; the best instrument to use is a soft artist's brush.

In some cases, there is no pollen. Sometimes the male flower drops off prematurely. This is usually an indication that the plant in question is a hybrid, but bud drop may also occur in true species when these are grown under adverse conditions (too wet, too dry, too dark, etc.). Some species, for instance *B. brevirimosa*, *B. serratipetala* and *B. violifolia*, have never formed pollen with us yet. In *B. venusta* and occasionally in other Asiatic species the anthers are enlarged and spongy, and no pollen is formed. No doubt the growing conditions are at fault, but we don't know yet in which way. When the female flowers open later than the male ones, one can try to store the pollen. I am not aware of any serious work on this aspect with begonias but it seems safe to advise that if pollen is to be stored it should be kept out of the light in a cool and dry place. Perhaps it keeps well in a refrigerator (many pollens do) but if one starts to experiment in this direction one should take care that when the pollen is taken out it should warm up slowly and in a closed container, so that no water can condense on it, which would have a detrimental effect.¹

In most species plants will set seed with their own pollen. There are a few cases of self-incompatibility, however. Our plants of B. minor(syn. B. nitida) form clouds of pollen, but never set seed. The same holds true, unfortunately, for Symbegonia sanguinea. Before concluding that these species are incompatible we must of course consider the possibility that the external conditions are not right (although I have pollinated B. minor in all seasons.). We have been pollinating B. staudtii for years but only once obtained a good seed set. When a plant sets seed after self-pollination there usually is no sign of a decrease of vigour of the seedlings as a result of in-However, adverse effects of breeding. inbreeding have been reported for tuberous begonias, so it seems wise to cross-pollinate the plants whenever possible.

When the female flower has been pollinated fertilization can take place. The first outside indication that this has taken place is that the petals fall off. Unfertilized flowers drop off as a whole, although in some cases (e.g. *B. incarnata* and *B. malabarica*) they may remain on the plants for months. These species and a few others (e.g. *B. wollnyi*) are also exceptional in that in fertilized flowers the petals are retained (and sometimes even stay colored) until the fruit is ripe.

The fact that the fruit has set does not mean that it will also reach maturity. The developing seeds produce hormones,

which attract food substances to the fruit. If the number of seeds is too small, this food stream is not sufficient and the fruit aborts. The same happen when too small a number of fruits develops on a large inflorescence. In this case, the whole inflorescence drops off. Therefore, when pollinating plants with large inflorescences (B. vitifolia var. grandis, B. parviflora A.O.) one has to take care to pollinate a large number of female flowers. The shedding of fruits or whole inflorescences may be prevented by the application of an auxin (e.g. naphthyl acetic acid). In this way it is sometimes possible to obtain seed from plants where self- or cross-pollination would otherwise be unsuccessful. However, this technique is perhaps a bit too sophisticated for the amateur.

The fruits of begonias are very diverse Most species have dry fruits but there are also species with spindlelike or round fleshy fruits. The dry fruits open with slits at the bottom end (near the stem). These should be harvested timely, preferably just before they open, i.e. at the moment the fruit stem turns brown, otherwise the seed will be lost. The fleshy fruits of species like B. molleri and B. seychellensis have a green leathery coat which envelops spongy tissue (yellow in B. molleri, red in B. seychellensis) in which the seeds are embedded. These fruits split open lengthwise when ripe. The fruits of B. ficicola and others of the same section (Scutobegonia) do not seem to open at all. When they are ripe, the fleshy tissue just rots away and the seeds are liberated. These seeds are very difficult to harvest.

The seeds of begonias are usually round or elliptic, sometimes spindle-like (e.g. *B. eminii*) or beaked (e.g. *B. solananthera*). Their color is brown in various shades (yellowish, light, dark, etc.). The seed of *B. villipetiola* is orange, that of *B. olsoniae* (syn. *B. vellozoana*) is purple. In storage the seed of most species becomes dark brown in the long run. The seed can be kept for months without losing its viability. Even seed stored for over a year often germinates.

Shipping seed is more difficult than one would think. In the first place, the tiny seeds creep through every slit of a paper bag. These bags have therefore to be sealed off very carefully with tape. In the second place, the seed is very sensitive to the pressure that is likely to occur in mail bags. If the seed bags are not protected by cotton wool, plastic foam, or a similar shock absorber² seed is likely to lose its capacity to germinate. It may still look all right to the naked eye, but the microscope will reveal the cracks caused by pressure. I have received seed irretrievably damaged by the postmark!

Footnotes:

1. Since this article was written, we have found that refrigeration and freezing are viable methods of storing begonia seed and pollen. Care must be taken to avoid moisture damage.

2. Plastic film cannisters are used by the Seed Fund.

Professor Jan Doorenbos retired a few years ago from the Dept. of Horticulture, Agricultural University, in Wageningen, The Netherlands. He is well known for his work with begonia species, and has supplied seed for the Seed Fund and numerous articles and photographs for the **Begonian**.

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Know the Facts, Make the Most of Insecticides

by Mike Moeller

You don't have to be a biochemist to understand pesticides, but it helps. The science of insecticides is complex, and consumers find useful information hard to come by.

In self-defense, people often take an all-or-nothing approach to insecticide use. At one end of the spectrum are people who, for health or environmental reasons, totally oppose chemical pest control. At the other end are those who don't object to using any chemical available to do the job.

Both sides - and everyone in between - can benefit from knowing a few basic facts about insecticides and how they work.

Common Properties

Most insecticides are toxic to all animals because they are nerve poisons. Strange as it may seem, insects' and other animals' nervous systems are so alike that scientists so far have not been able to develop chemicals that attack one but not the other. However, that doesn't mean all insecticides are equally dangerous.

Insecticides fall into four major groups or families. Those in each group share certain chemical properties, including toxicity and persistence in the environment.

Organochlorines

The organochlorines, developed in the 1940s, were the first major class of synthetic insecticides to become widely used. Organochlorines are inexpensive to manufacture. They also do not biodegrade quickly, and therefore, remain active for long periods of time. Forty years ago, that made them very appealing.

It wasn't until organochlorines like DDT, mirex, chlordane, and heptachlor were used extensively that scientists became aware of these chemicals' unacceptable levels of

accumulation in the environment and their long-term health effects on people and animals. Today, almost all organochlorines have been banned or severely restricted for use as insecticides because of their non-reversible health and environmental effects.

Organophosphates

OPs, as this class of chemicals is called, are the most commonly used insecticides at the present time. Compared to organochlorines, OPs break down faster in the environment. Even though insects are much more sensitive to OPs than people are, it's important to remember that OPs may cause irreversible damage to animal and human nervous systems. Diazinon, dichlorvos, and malathion are organophosphate pesticides, although malathion is relatively safe for animals.

Carbamates

Carbamates are broad-spectrum insecticides. That means that, like organophosphates, they are toxic to a wide variety of insects. Carbaryl, also known as Sevin, and propoxur, more commonly known as Baygon, belong in this group.

As with the OPs, the toxicity of individual insecticides in the carbamate family varies widely. For example, carbaryl is not as toxic to mammals as is propoxur, which is moderately toxic to animals and people.

Pyrethroids

Pyrethrum is a natural insecticide made from the flowers of the chrysanthemum daisy and has been in use for at least 200 years. Pyrethroids are man-made chemicals that "mimic" natural Pyrethrum.

Pyrethroids biodegrade more slowly than Pyrethrum, but faster than organochlorines and organophosphates. Many pyrethroids are also less toxic to beneficial insects than broad-spectrum insecticides.

However, most pyrethroids are very toxic to fish, and many pests can develop resistance to this class of chemicals. Two pyrethroids - permethrin and cypermethrin - are listed by the Environmental Protection Agency as possible cancer-causing agents.

More is not better

No matter which pesticides you use, you should follow label directions exactly. Extensive use of any pesticide may tend to sterilize the treated area, destroying the natural insects and microbial balance that actually helps control lawn and garden pests. That in turn often results in the need for heavy and continuous insecticide use what scientists call the chemical treadmill.

Mike Moeller is past deputy commissioner of the Texas Department of Agriculture.

Program review:

Use Pesticides Safely

Program by Linda Shires Review by Tamsin Boardman

1. Read the label!

Watch for the signal words: DANGER means highly toxic - 2 teaspoonsful will kill you. WARNING - 2 oz. will kill you. TOXIC

The antidote will be listed on the label also. If the label isn't legible, don't buy the product.

2. Follow instructions! Use only for recommended plants, for recommended purposes, in recommended amounts.

3. Don't buy more than you need. If you must store pesticides, avoid temperature extremes; keep them dry; keep them in locked cabinet in isolated garage or shed.

4. Mix OUTSIDE ONLY. Mix carefully. Measure carefully. Don't splash.

5. Don't mix combinations of chemicals.

6. Clean up carefully. When through, wash all containers with water. Reuse containers for pesticides only. Wash gloves with detergent and water before removing. Rinse your clothes - use detergent, not soap. Shower and shampoo with detergent **immediately**.

7. Spraying is the most dangerous way to apply pesticides. Never spray on a windy day, or when the air is stagnant (hot and still). Don't spray when you are alone make sure someone knows where you'll be, what you're doing, what product you're using. Always use appropriate protective equipment - here's what to wear:

goggles, rubber boots, nose mask (a chemical respirator would be better), rain gear or coverall (cuff the pants over the boots), rubber hat, rubber gloves (unlined - linings can become contaminated; test for leaks before using).

A chemical respirator is available for \$15-\$20. Change the filters often.

Put pets inside when spraying, and don't let them out until the spray is dry.

8. Stop immediately if you develop poisoning symptoms: fatigue, dizziness, blurred vision, nausea and vomiting, breathing difficulties. Most deaths occur from respiratory failure.

Alternatives to pesticides

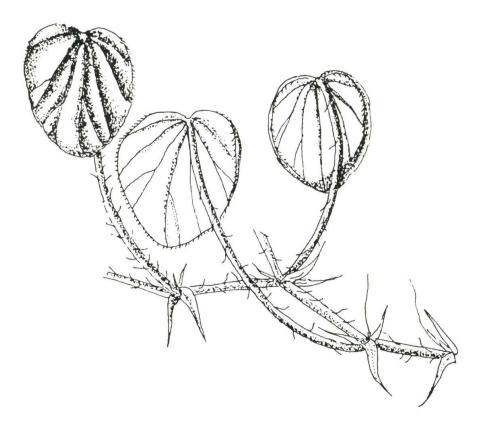
biological controls (dipel, soaps)
 predators (ladybugs, lacewings, praying mantis, etc.)

3. cultural practices (cleanliness, grooming; adequate light, air circulation, water & feed, drainage; balanced pH)

Horticulturist Linda Shires is Conservatory Manager for the Fort Worth Botanic Garden and a registered pesticide technician. Herprogram was given for the Mae Blanton Branch.



SPOTLIGHT ON: Begonia subnummularifolia



by Mary Weinberg

First discovered on Banguey Island on forested slopes of north Borneo in 1923, *B. subnummularifolia* Merrill was brought to this country by Elmer Drew Merrill, a botanist for the U. S. Bureau of Agriculture, in 1926. It is in section Diploclinum, and has 32 chromosomes.

B. subnummularifolia has creeping slender nearly glabrous stems (rhizomes) about 1/16th of an inch in diameter, with internodes well spaced to 1 3/16 of an inch apart. Leaves are small, orbicular to suborbicular, slightly heart-shaped, cordate, seven-nerved. The upper surface of the leaves is bright grass green and glabrous, the undersides light green blushed with pink. The leaf margin has short red hairs. Petioles are about 6 inches in length, medium red, sparsely hairy. Flowers are small, white, and appear on tall peduncles; blooms are profuse in spring to early summer.

I purchased *B. subnummularifolia* at the ABS Convention in Dallas, Texas in 1984. It was a small rooted cutting. I placed it in sphagnum moss and perlite mix in a 4" square plastic box. It wasn't long before it was touching the sides, and had to be moved to a larger terrarium. As I was experimenting with various growing mediums for terrariums about this time, I used a mixture of Jiffy Mix and perlite with a base of perlite under the mix. The plant bloomed profusely for several months after being placed in the 10" terrarium. Then it needed, again, larger quarters; I made cuttings and placed the plant in a taller terrarium, as the 10" terrarium was a little low for comfort.

NATIVE HABITAT

Borneo is a mountainous country formed from fractured continental land. It also has savannas and wet tropical evergreen forests.

Because Borneo is on the Equator, and equatorial air prevails continuously, accompanied by even temperatures and abundant rainfall at all seasons. January temperatures average 77° F., and in July the average temperature is 86° F. The annual rainfall in the equatorial belt is 80" to 120", with more in some areas.

Intensive leaching of the soils occurs under wet tropical forests, washing most minerals away and leaving a red-yellow to brick-red lateritic (leached and hardened iron-bearing) soil.



CULTURE

Terrarium culture required.

Temperature: Keep *B. subnummularifolia* warm.

Light: This begonia likes bright light, but the terrarium must not be placed in sun.

Water: Care in watering is necessary, as leaves rot if wet. As foliage is quite dense, a great deal of care is necessary.

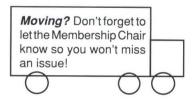
Propagation: *B. subnummularifolia* is an easy plant to grow. It roots readily from cuttings, and germinated in about 2 weeks from seed.

This article first appeared in the <u>Chicago</u> <u>Begonian</u> in August, 1985.

Artist/writer/begonia grower Mary Weinberg lives at 1527 W. Highland Ave., Chicago, IL60660.

Note: *B. subnummularifolia* is currently available in the Seed Fund.







From Our President:

Warmth, friendship, new ideas, sharing and help: these are a few of the words that describe what has been extended to me since my sudden promotion to President of your A.B.S. I find that this is most typical of "Begonia People". I have received such wonderful support from across the country in these two months since assuming the Presidency. I want to extend my gratitude for this assistance, especially to those who have stepped forward to fill these important posts: Gene Salisbury 1st Vice-President, Thelma O'Reilly Awards Chairman, Dale Elmblade Business Manager, Virginia Hamann Round Robin Director, and Tim Last for rejoining as Show Entries Chairman, But we still have several positions that urgently need to be filled. First is the Editor. Tamsin has been an outstanding editor for 5 years and has another very important project she wants to start working on. We also need a Members at Large Director, and a Research Librarian.

Broad participation is the key to a successful and vital organization. I encourage and need your recommendations to fill these vacant positions. Please let me hear from you.

Thank you.

Carol Notaras, President

Highlights of the January 18 Board

Meeting (Minutes will appear in next issue): New Branch: Satellite Branch, Houston, TX. Pres. Helen Spiers.

Re-appointed: Tim Last has agreed to stay on another year as **Show Entries and Classification Chair.**

Appointed:

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1st Vice-President: Gene Salisbury, P.O. Box 504, Tonkawa, OK 74653 (to fill unexpired term).

Awards Chairman: Thelma O'Reilly, 10942 Sunray Place, La Mesa, CA 91941 Business Manager: Dale Elmblade, 3418 McKibbon, St. John, MO 63114-4324.

Round Robin Director: Virginia Hamann, Needmore Land & Cattle Co., Chester, IA 52134.

Resigned:

Pat Sage, as Round Robin Director.

Lorra Almstedt, as Research Librarian. Marion Paris, as Chair of the Audit Committee.

Position Dropped:

Speakers' Bureau has been eliminated because of difficulty in providing speakers to different parts of the country. Board suggests branches in each area communicate and share local speakers.

Openings:

Begonian Editor, Members-at-Large Director, Research Librarian Contact President Notaras to volunteer.

Awards Nominations

Nominations are open for ABS' top awards. Please see the **Begonian**, March-April 1991, p. 61-2 for descriptions of reasons for consideration and for lists of previous winners. Send nominations to Awards Chairman Thelma O'Reilly, 10942 Sunray Place, La Mesa, CA 91941. Deadline is July 12.

CONSERVATION NEWS

"We have met the enemy, and it is Us!" - Pogo Possum

Six decades ago, it was suggested by some U.S. politicians that the Amazon basin could be made into pastures and the poor, backward tribesmen retrained to row crop agriculture. "Just look at all that land just going to waste!" All that open land with all that water; it just needed to be 'used' - somehow. But the lessons of the 'Dust Bowl' were still being learned: If you abuse the soil and don't tie it down, the land cannot continue to produce. With no rooted plants in the soil it loses all capacity to retain water, nutrients, and fertility. A war intervened and the grand scheme came to naught, fortunately.

A new science developed after that war called Ecology, the study of the 'home' and all of its related parts: the organisms, the physical circumstances, the interactions of the living things within that environment. A whole new dictionary of definitions was developed as ecologists asked questions about those observable, measurable relationships.

And ecologists speak of Succession: that many kinds of plants can grow in soil, but eventually a dominant plant type will fill the land because it can sustain itself in the physical conditions present. In the Great Plains of the USA it was grass; in the Equatorial areas, forests. There the daily rains would wash away soil, so large leafed plants eventually protected the soil from splashing away. And the fauna adapted to the rain, the edible greenery, and fruits, and predator/prey relationships, and the human tribes learned to survive - even thrive - in the rainforest. We are speaking in millenniums - not overnight. (And not at the whim of political expediency nor quickprofit greed. These latter are 'overnight.')

Plants can recover from temporary disturbances. When the archaeological site at Palenque (Yucatan) was discovered and work began there, machetes slashed through begonias so thick they obscured the pyramids. But the plants recovered! Begonias continue to grow at Machu Pichu (in Peru) despite the hordes of visitors upon the ruins. And deep-rooted begonias have survived streamside in Ecuador despite seasonal torrents out of the streambeds. But begonias cannot survive the bulldozer that removes every living thing around it. They cannot survive the tires and treads of heavy equipment continuously grinding upon them. Nor can the indigenous peoples when all that sustains them has been uprooted and taken away.

If you were able to find and read either of the two books recommended in the January- February '92 **Begonian**, you read of indigenous peoples being pushed from their homes, their culture obliterated, and the rainforests they lived in being converted to cash crops - the timber - or being destroyed by fire - slash and burn - for short-term agricultural uses.

Our colleagues in Australia are raising funds to send collectors into Queensland's Cape York Peninsula hoping to find an Australian species. Portions of Papua New Guinea will be searched also. Scott Hoover hopes to find begonias while island hopping in Indonesia. But finding a few species will only call attention to our inability to save the greater biological community in which they live, for Scott may be running just ahead - or behind - the forest harvesting equipment. 'Development' is rampant. and as we mentioned last month. indigenous flora and fauna carry small weight in the formula for natural resource usage.

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I feel tremendous indignation as I learn more of the terrible things that are happening globally. My congressmen and the various executive departments of our government hear often if I'm pleased or unhappy with some governmental action. If sometimes our leaders don't act with what I perceive as "Vision" I let them know; I also know how and when to say "Thank you!"

But "our begonias" are not in our country. The plants we love are a silent constituency. Have *you* any practical solutions? Has *your* indignation been focused in a positive manner on a political or economic answer toward a sustainable life for all the other silent constituencies on this planet? I'd like to hear from you.

> - Bruce C. Boardman, Administrator Conservation Committee

Barkley Grant

Southwest Region, ABS, offers the \$1,000 Fred A. Barkley Research Grant to students or teachers of botany or horticulture doing begonia research. Submit proposals for consideration to: Don Miller, 1010 Mt. Auburn, Dallas, TX 75223. Deadline is April 15.

The grant will be awarded May 16, at the SWR Get-Together banquet.

Update: Species Listing Project

February, 1992

One of the aims of the Conservation Department is to keep begonia species alive in cultivation as their native habitats are endangered. The Species Listing Project maintains a list of which species are being grown by our members. Species widely grown are considered less likely to become extinct; species which do not show up on the list, or which are grown by very few, are considered endangered and thus needing our help to survive. The list will give an accurate and useful picture of species availability only if member response is widespread. Your list is urgently needed.

Number of known begonia species: 1550

Number of species ABS members are growing *and reported* to the Conservation Committee Species Listing Project:

1990: 188 1991: 229 change: +41

Number of members submitting lists: 1990: 31 1991: 20 change: -11

Number of species for which seed is available in the Seed Fund:

1990: 325 1991: 340 change: +15

Number of species in the Species Bank at Fort Worth Botanic Garden:

1990: 357 1991: 425 change: +68

Encouraging news: lists of species grown have come in from Australia, Belgium, and Canada. Conservation is international.

Kingsley Langenberg sent the following list of species that members reported growing in 1991. The list begins with the most commonly grown.the begonias that we know are being kept alive in cultivation. There are more: to find out where, we need **your** input. Please read the list, and resolve to list your species. Send your list to King at 2141 N. Bonnie Brook Lane, Waukegan, IL 66087, so that next year our Update can be much, much longer. Note: The editor accepts responsibility for any spelling errors and for omitting the entire name; for example, *B. grandis* Dryander ssp. *evansiana* (Andrews) Irmscher is listed here as *grandis* ssp. *evansiana*, for space reasons.

11 growers: leathermaniae

10 growers: masoniana, reniformis

9: dregei var. dregei

8:echinosepala var. echinosepala, luxurians var. luxurians, obscura, partita, schmiditiana, wollnyi

7: carrieae, grandis ssp. evansiana, homonyma, venosa

6: albo-picta, coccinea, gehrtii, macduffieana, malabarica var. malabarica, thiemei

5: aconitifolia, bowerae var. bowerae, bowerae var. nigramarga, convolvulacea, crassicaulis, cubensis, fagifolia, foliosavar. foliosa, kellermanii, lubbersii, maculatavar. wightii hort., metallica, nelumbiifolia, prismatocarpa, radicans, rajah, sericoneura, sutherlandii var. sutherlandii, ulmifolia, versicolor

4: cardiocarpa, carolineifolia, diadema, dichroa, egregia, ficicola, fuchsioides, hemsleyana, heraceifolia var. sunderbruckii, herbacea, holtonis var. holtonis, incarnata var. incarnata, incisa, juliana, lindleyana, molleri, palmata, parilis, picta, pinetorum, polygonoides, pseudolubbersii, pustulata, roxburghii, solananthera, soli-mutata, taiwaniana, tayabensis

3: albo-picta var. rosea hort., aliceclarkiae, angularis, boliviensis var. boliviensis, brevirimosa, cinnabarina, dietrichiana, dipetala, domingensis, echinosepalavar. elongatifolia, fischerivar. fischeri, glabra var. glabra, goegoensis, gracilis var. martiana, grandis, hatacoa, heracleifoliavar. nigricans, heracleifoliavar. heracleifolia, kenworthyae, lanceolata, ludwigii, maculata var. maculata, mannii, multinervia, nigritarum, odeteiantha, paleata, paulensis, pearcei, petasitifolia, philodendroides, plebeja var. plebeja, rex, rhopalocarpa, salicifolia, sanguinea, scharffiana var. scharffiana, serratipetala, subvillosa var. subvillosa

2: acida, aconitifolia 'Hildegarde Schneider';

aequata, annulata chitoensis, conchifolia var. rubrimacula, crispula, cucullata var. cucullata, decora, deliciosa, dichotoma, dominicalis, edmundoi, epipsila, fenicis, fernando-costae var. fernando-costae, fischeri var. palustris, fusca, geranioides, glabra var. cordifolia, guaduensis var. guadensis, handelii, hispidavar. cucullifera, hydrocotylifolia var. hydrocotylifolia, johnstonii f. johnstonii, kisuluana, listada, loranthoides, luzonensis, manicata var. manicata, mazae f. nigricans, megaptera, mollicaulis, morelii, olbia, paranaënsis, parva, princeae var. princeae, purpusii, quadrialata var. quadrialata, sarcophylla, thelmae, tomentosa, triflora, urophylla

1: acaulis, acerifolia, acutifolia, alnifolia, annobonensis, augustae, barkeri. beddomei, bradei, bufoderma, cathayana, chlorosticta, convallariodora, cooperi, corallina, coriacea, cristobalensis, cucullata var. arenosicola, cucullata var. spatulata, cvathophora, dioica, ebolowensis, falciloba, filipes, fimbristipula, floccifera, foliosa var. putzeysiana, fruticosa, fuchsioides var. miniata, glandulosa, gracilis var. gracilis, heracleifolia var. longipila, heydei. hispidivillosa f. nigramarga, hookerana, humilis, imperialis, involucrata, isoptera, jussiaeicarpa, komoensis, ludicra, macrocarpa, mazae f. viridis, micranthera var. venturii, minor, oaxacana var. oaxacana, olsoniae, oxyphylla, oxysperma. peltata var. peltata, plebeja 'Tenuifolia', popenoei, raynaliorum, rostrata var. rostrata, rotundifolia, salaziensis var. salaziensis, scabrida, scapigera, scharfii, schulziana, sonderana, squamulosa, strigillosa. subnummularifolia. suborbiculata, subscutata, subvillosa var. leptotricha, sutherlandii var. miniscula, tonduzii, undulata, valida, violifolia, wallichiana, wilczekiana, xanthina var. xanthina, Hillebrandia sandwicensis.

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A Tribute to All Begonias

by Dorothy Borden

You're just a begonia plant (Rex), My friends all tell me so. Many things they'll never know.

I'm filled with fascination By your curli-cues and swirls From tiny leaves like fingernails To giant serrated whirls. Your colors are magnificent, Each one a work of art.

From greens and reds and oranges And gold, you've stolen my poor heart. I guess as we walk through this world We all see different things But Begonia plants will always be to me The Kings and Queens.

Dorothy Borden is a long-time member of Long Beach Parent Chapter renowned for her talent with rexes. She was a speaker at the 1987 ABS Convention in Long Beach, California.

Show News Around the Country

Fort Lauderdale Branch Show featured 113 entries by 16 exhibitors. Marilyn Goldstein took Sweepstakes with 10 blue ribbons and Georgia Humprhies won Best Species with *B. hatacoa* 'Spotted'. Cultural Awards went to plants entered by Katherine Bloschak, Frances Demare, Anne Fergis, Marilyn Goldstein, Georgia Humphries, and Charles Jaros.

Bill Voss entered *B. bogneri* in the *Buxton Branch Fall Show* and won Best of Show.

COMING EVENTS

March 4-8: Atlanta Branch participates in the Atlanta Flower Show at the Atlanta Apparel Mart/Inforum.

March 7-8: The Victorian Begonia Society will be hosting a convention of the Association of Australian Begonia Societies in Ballarat, Australia to coincide with the Ballaarat Botanic Gardens' Begonia Festival.

March 14-22: Knickerbocker Branch participates in the New York Flower Show, "Discovery '92," at Pier 92. Hours are 10 am - 8 pm weekdays and 10 am - 6 pm weekends. The begonia class will be Friday, March 13 through Monday, March 16.

April 4-5: Barkley Branch Show & Sale, Will Rogers Garden Center, 3400 NW 36th St., Oklahoma City.

April 11-12: Miami Branch Show at Fairchild Tropical Gardens. The theme is "Begonia Patterns."

May 15-17: Southwest Region Get-Together, "Begonias Astronomical", hosted by Astro Branch. At the Howard Johnson-Hobby Hotel, Houston, Texas. For more information, contact Tom Keepin, 4513 Randwick Dr., Houston TX 77092; (713) 686-8539 or Helen Spiers, 1423 Laskey, Houston TX 77034, (713) 946-4237.

April 3-Oct. 12: Ameri-Flora '92

International Floral & Garden Exposition, Franklin Park, Columbus, Ohio. United States' first international floral event, commemorating the Christopher Columbus Quincentennial.

August 19-23: American Begonia Society Convention 1992, "Captivating Canes", will be held at the Inn of the Park, Anaheim, California, with the Orange County Branch as hosts.

Deadline for next issue is March15

CLAYTON M. KELLY SEED FUND NOTES

March-April 1992 Diana H. Gould, Seed Fund Director

Please note: The Seed Fund no longer has any mixed shrub seeds, nor does it have any mixed rexes.

Germination times for this issue's selections range from 9 to 63 days, so please be patient.

The Seed Fund thanks Phyllis Bates, Roberto Brin, Julia Broadhurst, Michele Cole, Maureen Crowell, Jackie Davis, Lynda Goldsmith, Jan Goodwin, Jake Hafer, Martin Johnson, Eiichi Kawamata, Naomi Lynch, Evie McDuff, Phil Mudgett, Joy Porter, Pat Sage, our anonymous donors, and the international exchanges for making this listing possible. The 1991 Convention Listing will be sent free with all seed orders, or you may request it by sending a stamped, self-addressed envelope to the Seed Fund Director. About 80% of the begonia species on the Convention Listing are still available.

As your seeds grow, please check the mature plants against the descriptions given in the Notes. If there are differences, please notify the Seed Fund Director. Thank you!

Notes on Seeds Listed: Shrub-like

B. echinosepala (Brazil) has small green bare narrow leaves with red undersides and fragrant white flowers. B. engleri (Tropical Africa) has wide green hairy leaves and rose-pink flowers. B. heydei (Central America) has narrow hairy green leaves and pink-tinted white flowers. B. humilis (Brazil) has medium-sized bare green leaves and white flowers. B. incarnata (Mexico) has small bare green leaves and fragrant rose-pink flowers. Β. kellermanii (Guatemala) has felted green leaves. green petioles and stems. and fragrant pink-tinted white flowers. B. luxurians (Brazil) has large bare green palmate leaves with red undersides and fragrant vellowish-white flowers. B. merrittii (Philippines) grows 3 to 6.5 ft. tall, has lanceolate-ovate glabrous leaves pink flowers.B. and mollicaulis (South America) has wide velvety-green leaves and white flowers. B. obscura (Brazil) has smooth small waxy olivegreen leaves with red undersides and white flowers. Β. peltata (Central America) has felted green leaves and white flowers. B. sanguinea (Brazil) has

thick, leathery, mediumsized bare green leaves with red undersides, stems, and petioles; flowers are white. B. scharfii (Brazil) has wide hairy leaves of dark green which contrast dramatically with its light pink flowers with pink hairs. Β. tomentosa (Brazil) has felted, hairy, medium-green leaves with tiny white hairs on the undersides and pink flowers with white edges and red backs. B. U014 (Argentina) is also known as "Logee's Argentine species" and has small narrow satiny medium-green leaves flushed with red on the underside, a low growth habit, and bright orange flowers, B. U199 (Panama) has slender medium-green leaves 5"x2 1/2" and white flowers.

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Rhizomatous

falciloba B. (Central America) is an uprightgrowing species with medium-green leaves and white flowers. B heracleifolia (Mexico) has large medium-green leaves and fragrant pink flowers. B. kenworthyae (Mexico) has blue-green cleft leaves and white flowers. B. nelumbiifolia (Central America) has large mediumgreen peltate leaves and white flowers with deep-pink edaes.

B. philodendroides (Mexico) was given its name by Rudy Ziesenhenne because its

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large, medium-green leaves are similar to those of a philodendron. Flowers are white. This species dies down in the winter.

B. subnummularifolia (Borneo) has small mediumgreen leaves, a low growth habit, and will require higher humidity. *B.* tayabensis (Philippines) has creeping stems, peltate leaves whose subentire margins have a fringe of scattered hairs, and white or very pale pink flowers.

B. U025 (Philippines) has medium-green ovate leaves 5"x7" and yellow flowers.

B. U156 has medium-sized green leaves and white flowers.

Tuberous

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B. dregei 'Natalensis' (South Africa) has mediumgreen leaves and yellowishwhite, pink-tinted flowers in winter.

B. U253 (Mexico) has small round green leaves and white flowers. B. U256 (Mexico) has mediumgreen leaves which take on a red tinge when exposed to sun, and white flowers.

Thick-stemmed

B. egregia (Brazil) has large long hairy green leaves and white flowers. B. johnstonii (Tanzania) has bare, medium-sized medium-green leaves and pink flowers. B. ludwigii (Ecuador) has a trunk-like, non-ramified stem and cream-colored flowers. B. malabarica (India) has medium-sized hairy leaves: its fragrant flowers are blush pink. Β. paranaënsis has large green leaves with sparse, small bristles over the upper surface and white flowers. *B. reniformis* (Brazil) has large hairy medium-green leaves and white flowers.B. U186 (Venezuela) is hairless, with glossy-green ovate leaves and lighter green undersides, and has a distinctive reddish-purple spot at the petiole junction; flowers are profuse and white. B. U241 (Ecuador) may be *B. maynensis.*

Trailing-scandent

B. solananthera (Brazil) has medium-green leaves and fragrant white flowers with reddish centers.

B. U064 (Philippines) has leathery cordate leaves about 3" in diameter and pale pink flowers; it is described as a vigorous grower once established.

B. U204 (Panama) has medium-green leaves 1 1/2"x3", white flowers; it requires higher humidity.

Cane-like

B. leathermaniae (Bolivia) is an elegant, stately, tallgrowing species with dark green leaves splotched with silver; it has white flowers. *B. salicifolia* (Brazil) is of intermediate height, has medium-green leaves with white spots and red undersides, green stems and petioles, and white flowers. *B. U007* (Philippines) has silver-spotted mediumgreen leaves.

Unknown Classification

B. U250 (Panama) could be a cane or a shrub, has palegreen succulent leaves 4"x5", and grows to 4 ft.; it has white flowers year round.

Nomenclature Notes:

B. plebeja is a very variable species. Seed labeled B. tenuipila, a synonym of plebeia, comes from a plant with slightly different leaf color. Also, B. U155 and B. U157 have been tentatively identified as B. plebeja, and seed labeled RB #403 may be plebeja as well. This rhizomatous species from Central America grows with a creeping rhizome, has greenish-white flowers and entire-subentire leaves in varving shades of greens and browns. Seed is listed as B. plebeja 'Tenuipila', B. plebeja 'RB403', B. U155, and B. U157.

B. hypolipara is a synonym of *B. sericoneura*; an upright grower from Mexico, it has large, medium-green leaves and white flowers with rose-pink flowers. *B. pilifera* is another synonym of *B. sericoneura*; this variety has ovate-shaped leaves that are mediumgreen with hairy tops and sunken red veins. Seed are listed as *B. sericoneura* and *B. sericoneura* 'Pilifera'.

B. longipes is a synonym of *B. reniformis.* When tested this seed produced a small plant showing round leaves with a silvery coating due to countless tiny white hairs. Listing is as *B. reniformis* 'Longipes'.

B. thiemei is the correct botanical name for another variable species, but the later names *B. macdougallii* and *B. richii* hort. continue

to be used. This rhizomatous Mexican species is described in the Thompsons' <u>Begonias: The</u> <u>Complete Reference Guide</u> as having giant (generally over 12" at maturity) compound leaves and greenish white flowers. Seed is listed as *B. thiemei* 'Macdougallii' and *B. thiemei* 'Bichii'.

Seed sent as В. glaucophylla (Brazil) is described only as an easy-togrow trailing-scandent. B. glaucophylla is a synonym of B. radicans (which has also been known as B. procumbens, B. limminghei, limminghiana). B. Β. radicans has deep coral flowers in winter and early spring. Seed is listed as B. radicans.

Seed sent as *B. setosa* (South America) is described as having small green waxy leaves and white flowers. *Setosa* is a synonym of *B. fischeri*, another of the very variable species (it takes up three columns in <u>Begoniaceae</u>). Seed is listed as *B. fischeri* 'Setosa'.

Seed was sent as B. U095 (Peru) and described as a cane growing to 3-4 ft., rarely branching, and having bright green leaves 3"-4" x 6"-8" with prominent red spots at the petiole junction: the undersides of the leaves are flushed with orange-red, and the flowers are scarlet. Dr. Lyman B. Smith has identified B. U095 as B. roezlii, which is described in Begonias: The **Complete Reference Guide** as shrub-like with deep pink flowers, which is one variation. Nomenclature Director Carrie Karegeannes writes that "*B. roezlii* is a tall plant that some may call cane-like, though it is classified (horticulturally) as shrub-like; it may have scarlet *or* pink flowers." Seed is listed as *B. roezlii* (B. U095).

B. U197 (Panama), with tapering medium-green leaves 5"x2 1/4" and white flowers, has been identified by Roberto Brin as *B. seemanniana*; it requires higher humidity. Seed is listed as *B. seemanniana* (B. U197).

Seed we have no descriptions for:

Seed was sent as *B. lynchiana*, a synonym of *B. cyathophora*. We have no description for the plant under either name, except that it similar to *B. roezlii*. Listed as *B. cyathophora*. Seed labeled *B. parviflora*

came in with no description. B. parviflora (Brazil) is described in the Thompson's Update as thick-stemmed. bare-leaved, large leaved, with profuse white flowers. However, the name parviflora has also been applied to Begonias minicarpa, wallichiana (semperflorens). and parvifolia - the last also a name which has been applied to several different plants of varying classifications. As no description of the parent plant was supplied with the seed, we're not sure what you'll get on germination.

B. rostrata var. *rostrata* (West Africa) I have no description for, and *B. pubescens* came only with a note that it requires high humidity.

Begonias U161, 196, and 203 are all from Panama.

B. solananthera drawing by Nannette Watkins





CLAYTON M. KELLY SEED FUND LISTING

The Seed Fund is a service to members only. It is a privilege of your membership.

All packets of species seed are \$1 each, and all packets of hybrid seed are 50c each: a pamphlet on growing from seed is 25c. All orders must be accompanied by check or money order payable ONLY in US funds to The Clayton M. Kelly Seed Fund. Costs of mailing: U.S. only: 1-12 packets, 99c; 13-24, \$1.35; 25-36, \$1.71; 37-48 (2 cans), \$2.30; 49-60, \$2.66. Canada only: 1-12 packets, \$1.10; 13-24, \$1.46; 25-36, \$1.82; 27-48 (2 cans), \$2.35; 49-60, \$2.71. Mexico only: 1-12 packets, \$1.15; 13-24, \$1.51; 25-36. \$1.87: 37-48 (2 cans), \$2.50; 49-60, \$2.81. All other international mail: 1-12 packets, \$1.85; 13-24, \$2.68; 25-36, \$3.68; 37-48, \$4.68; 49-60, \$5.68. Two sets of planter dishes, in U.S. only: \$1.20; two sets & 1-12 packets, \$1.80; & 13-24, \$2.40; & 25-36, \$3; & 37-48, \$3.60; & 49-60, \$4.20. These mailing costs include the costs of postage, mailers, and glasine seed envelopes. California residents please add 7 3/4% sales tax. Please send your order with payment to: Ms. Diana H. Gould 9278 Mapleview Way Elk Grove CA 95758 U.S.A.

Species Seed \$1 per packet B. cyathophora B. dregei 'Natalensis' B. echinosepala B. egregia B. engleri B. falciloba B. fischeri 'Setosa' B heracleifolia B. heydei B. humilis B. incarnata B. iohnstonii B. kellermanii B. kenworthyae B. leathermaniae B. ludwigii B. luxurians B. malabarica B. merrittii B. mollicaulis B. nelumbiifolia B. obscura B. paranaënsis B. parviflora B. peltata B. philodendroides B. plebeja 'Tenuipila' B. plebeia 'RB #403' B. radicans B. reniformis B. reniformis 'Longipes' B. roezlii (B. U095) B. rostrata var. rostrata B. salicifolia B. sanguinea B. scharffii B. seemaniana (B. U197) B. sericoneura B. sericoneura 'Pilifera' B. solananthera B. subnummularifolia B. tayabensis

B. thiemei 'Macdougallii'

- B. thiemei 'Richii'
- B. tomentosa
- B. U007
- B. U014
- B. U025
- B. U064
- B. U155
- B. U156
- B. U157
- B. U161
- B. U186
- B. U195
- D. 0135
- B. U196
- B. U197
- B. U198
- B. U199
- B. U203 B. U204
- B. U204
- B. U250
- B. U253
- B. U256

Hybrid Seed 50 cents per packet mixed canes mixed "Frillies"

semperflorens mixed rhixomatous mixed semperflorens mixed tuberhybrida mixed Mickey Meyer hybrids

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In the September-October issue we showed a picture of Astro Branch newsletter's "Mystery Begonia of the Month" and promised to tell you its name in the next issue. Here's the (very late) answer: *B. luxurians*, a shrub-like species with large, bare leaves discovered in Brazil in 1848. By coincidence, seed for *B. luxurians* is available now through the Seed Fund.

Almost all branches held parties over the Christmas holidays, and many shared with the less fortunate. In the true spirit of the season, San Francisco members brought toys, Mae Blanton members brought non-perishable food, Astro members brought food and baby items to give to those in need.

Bright Idea: Sacramento Branch is looking into the feasibility of supplying rides to older members who no longer drive at night. This seems to be one of those "why didn't we think of that before?" ideas where everyone benefits.

Consider car-pooling. There are several benefits: a group of people walking into a night meeting are safer than one person would be; there's the friendly possibility of going for dinner beforehand, or coffee afterwards; carpooling saves gas and benefits the environment.

But there can be drawbacks, too, as Dallas Area Branch discovered the night that three of their members had a breakdown on their way to the meeting. Unfortunately, two of the stranded members were bringing the refreshments, and the third was presenting part of the ptrogram!

Begonias, Begorra!, newsletter of Orange County Branch, featured an article about Goldie and Doug Frost and their hybridizing program. The Frosts want strong plants that will not get too tall, and prefer to cross a species with a hybrid. Doug keeps records and Goldie spreads the pollen. (Doug said, "One summer she crossed everything but her eyes!")

The Frosts have created many popular and charming begonias, and are still busy bringing us new cultivars. One of the treats of the 1992 convention will be the introduction of several new Frost canes.

While in many areas of the country branches plant seeds in January, things are different in sunny Florida. Miami Branch held a seed-planting session in *their* best month, October, with president Edythe Ropeik guiding the workshop. The branch ordered seeds from the Seed Fund, suggesting that each packet be shared between several members.

Miami Branch reminds us that "fun" is part of the word "fund-raising." At their Christmas party they held a mini-bazaar: members brought baked goods, crafts, plants, and holiday items to be sold. Proceeds were split 50-50 with the branch. Then everyone played "Bingo for Begonias."

One reason Miami is so busy is that members will be hosting the National Convention in 1993. Besides raising money and starting early for show and sale plants, they are collecting members' recipes for a reprise on their very popular 1985 cookbook "What to Eat While Talking About Begonias."

It's always nice to have guests attend your meetings, and Palomar had one in September that charmed everyone:

"Our special visitor of the month was Joy Hummingbird. She did some acrobatics for us, swooping around and then resting on the beams. She repeated this several times, then swooped down and had a bit of refreshment from one of the colorful begonias on the Show & Tell table. She rested among the begonias before another performance...coming back to the refreshment table of begonias. Michael Ludwig finally persuaded her to leave by setting his beautiful begonia on a table in front of the open door. Goodbye, Joy Hummingbird. Happy traveling in the wide open world and do come back to visit us sometime."

Rexes are among the most strikingly beautiful of begonias, but no one ever said they were easy to grow. Potomac Branch asked member Bill Cox to give a program divulging the secrets of his success with these beauties, and here's what <u>Begoniac</u> editor Barbara Nunes reported he said:

First, one must have patience. Water - too much or too little - is the major problem with growing begonias. Be careful not to overwater, and never let rexes sit in a dish of water.

Bill uses the "finger in the pot" method to determine if plants need water. Soil, light, and clay pots are other important items.

Incidentally, Barbara and husband James had just returned from Spain, where they encountered lots of begonias, including some of those finicky rex hybrids in a florist shop.

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The newsletter of the Alfred D. Robinson Branch reported on an article in Golden Gardens, the official publication of the California Garden Clubs, entitled "Beneficial Spiders." Spiders make good pest control agents in our gardens, and the article suggested a simple way to tell the good spiders (almost all of them!) from the poisonous black widows: the good spiders create "beautifully constructed webs, that catch mostly destructive insects. The webs of the black widows, on the other hand, are poorly constructed and tangled masses, so beware!" This doesn't cover all spiders the trap-door and tunnel spiders, for example - but can serve as a starting point. Even black widows, of course, take part in the ecological system and eat their share of insect pests.

You've read of begonias being discovered in the wild growing on rocky surfaces. Have you considered trying to duplicate that habitat at home? Esther Nagelberg of Palm Beaches is always looking for new ways to propagate begonias, and her latest experiment involves rocks, at least in a modified form:

"I have had extremely good luck using something called "turface," a kind of lava which is supposed to be good for orchids and bromeliads. It consists of small brown pebbles into which I sink my cuttings. I then put the pot with the cuttings into a deep saucer filled with water up to an inch from the bottom of the planted pot. I do not cover the cutting, but I make sure that there is always water in the saucer. In about three weeks I have results."

If you have not had good luck with your own method, you might want to try this one."

Of course, you're probably using rock now. The Southwest Region <u>Begonia</u> <u>Leaflet</u> (Feb., 1991) explained that perlite is a volcanic rock heated to 1800° F., at which temperature each particle expands like a piece of popcorn. And vermiculite? It's expanded minerals, too; did you know it's used in insulation?

Jo Pangrazio, writing in Westchester Branch newsletter <u>Leaf Cuttings</u>, gave two helpful horticultural tips:

1. Fumes from oil-based paints are known to be bad for plants, but latex paints are no better! They give off mercury at levels high enough to cause serious leaf drop on many plants. Try to wait at least two weeks before introducing plants to a newly painted room.

2. Heating cables are great for providing bottom heat in propagating boxes. But remember that while seeds sprout at very high temperatures, roots grow best when it's slightly cooler. Seeds germinate in the range of 80°-90° F., and roots are happiest at 63°-77° F. Turn down the heat once your seeds have sprouted. If your propagating box contains only cuttings, keep it at the lower temperatures.



DIRECTORY OF BEGONIA SOCIETIES

INTERNATIONAL SOCIETIES

Australia

Association of Australian Begonia Societies Kevin Handreck, Pres. 2 Birdwood St Netherby 5062 S. Australia Associated Societies: Begonia Society of Western Australia, Inc. Lyla Kilpatrick, Pres. Lot 44 Canns Rd. Bedfordale WA 6112 New South Wales Begonia Society, Inc. Jean Whitten, Pres. 15 Carlo Close Kincumber 2250 NSW **Queensland Begonia Society** Elsie Paton, Pres. 35 Daisy Road Manly West 4179 Queensland South Australian Begonia Society Ted Williams, Pres. P.O. Box 116 Stirling 5152 S. Australia Victorian Begonia Society, Inc. Philip Wright, Pres. 74 Railway Place Macedon 3440 Victoria

Belgium

Societe Belge du Begonia Piron Gilles, Pres. Chemin de Lancre, 4 B-4970 Coo, Belgium

Canada

British Columbia Fuchsia & Begonia Society Lorna Herchenson, Pres. 2402 Swinburne Ave. North Vancouver B.C. V7H1L2

England & Wales The National Begonia Society Dr. Eric Caterall 3 Gladstone Rd., Dorridge Solihull, W. Midlans B93 8BX

France

Assoc. Francoise de Amateurs des Begonias Mme. Annie Danancher editor, le petit bégo-fil 11 Rue Myrha Paris 75018

Japan

Japan Begonia Society Mr. Tatsuo Suzuki, Pres. 2-1-11 Yakumo 2-Chome Maguro-Ku Tokyo 152

Scotland Scottish Begonia Society c/- 260 Bellfield Rd. Coalburn, Lanarkshire Scotland M11100NQ, UK



AMERICAN BEGONIA SOCIETY REGIONAL GROUPS

Eastern Region Maxine Zinman, Director Rt. 1, Box 73 Boyce, VA 22620 Southwest Region Gene Salisbury, Director P.O. Box 504 Tonkawa, OK 74653

BRANCHES

CALIFORNIA Alfred D. Robinson 2nd Tuesday, 10:30 a.m. Homes of members Edalee Harwell, Pres. 1055 Benecia St. San Diego, CA 92117 East Bay 3rd Thursday, 7:45 p.m. Northbrae Com. Church, Berkeley Rich Bishop, Pres. 1404 Cypress Berkeley, CA 94703

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1st Wed., 7:30 p.m. 12860 Euclid St. Garden Grove Ed Vogel, Pres. 9811 Oma Place Garden Grove, CA 92641 Long Beach Parent Chapter 3rd Thursday, 1:00 p.m. Huntingdon Nat'l, Bank 9025 Artesia Blvd. Bellflower Gil Estrada Pres. 7914 Springer St. Downey, CA 90242 Monterey Bay Area 4th Wednesday, 7:30 p.m. Monterey Senior Cntr. Lighthouse & Dickman Sts., Monterey (no meeting June, Aug.) William Schramm, Pres. 17 Calera Canyon Salinas, CA 93908 **Orange County** 2nd Thursday, 7:30 p.m. Fullerton S & L 2310 E. Lincoln Ave. Anaheim Anne Jones, Pres. 11357 Darcy St. Santa Fe Springs, CA 90670 Palomar 2nd Sunday, 2 p.m. Quail Botanical Gardens 230 Quail Gardens Dr. Encinitas Cay Yelverton, Pres. 650 Rancho Santa Fe Rd. #43 San Marcos, CA 92069 Palos Verdes 1st Mon., 7:30 p.m. S. Coast Botanic Garden Brad Thompson, Pres. 715 W. 220th #45 Torrance, CA 90502 Rubidoux 4th Thursday, 7:30 p.m. W. Riverside Mem. Auditorium 4393 Riverview Dr. Norma Pfrunder, Pres. 3484 Jefferson St. Riverside, CA 92504 1 .

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Garden Grove

3rd Tuesday, 7:45 p.m. Garden Center 3330 McKinley Blvd. Sacramento Bob Hamm, Pres. P.O. Box 161361 Sacramento, CA 95816-1361 San Francisco 1st Wednesday, 8 p.m. Garden Center Golden Gate Park. 9th Ave. & Lincoln Way Susan Muller, Pres. 124 St. Charles Ave. San Francisco, CA 94132 San Gabriel Valley 2nd Tuesday, 7:45 p.m. Los Angeles State & County Arboretum 301 N. Baldwin Ave. Arcadia Kenneth Dahlquist, Pres. 696 E. McKinley Ave. Pomona, CA 91767 San Miguel 4th Saturday Members' Homes Thelma O'Reilly, Pres. 10942 Sunray Place La Mesa, CA 91941 Santa Barbara 4th Sunday, 2:30 p.m. The Cottage 1130 N. Milpas St. Santa Barbara Rudolph Ziesenhenne, Pres. (address same as above) Santa Clara Valley 3rd Thursday, 7:45 p.m. Rm 2, Kirk Com. Cntr. 1601 Foxworthy Ave. San Jose Jackie Davis, Pres. 170 Wingfoot Way Aptos, CA 95003 Theodosia Burr Shepherd 1st Monday, 7:30 p.m. American Commercial Bank 6401 Telephone Rd. Ventura Pam Hantgin, Pres. 94 N. Santa Rosa St. Ventura, CA 93001

Sacramento

Westchester

1st Thursday, 7:30 p.m. Univ. Christian Church 5831 Centinella Ave. Stephanie Snyder, Pres. 6035 South Croft Ave. Los Angeles, CA 90056

Whittier

1st Friday, 7 p.m. Room 1. Civic Center 7630 Washington Ave. Whittier Bill Scarborough, Pres. 4960 N. Bleeker St. Baldwin Park, CA91706

CONNECTICUT Connecticut

4th Monday homes of members Arline Peck, Pres. Eagle Peak Rd., R 1, Box 478 Pascoag, RI 02859

DISTRICT OF COLUMBIA AREA Potomac

4th Sunday, 2 p.m. Green Spring Farm Park 4601 Green Spring Rd. Alexandria, VA Barbara Nunes, Pres. 6025 Greelev Blvd. Springfield, VA 22152

FLORIDA

Fort Lauderdale Area

1st Tuesday, 7:30 p.m. 3245 College Ave. Davie, FL Nan Scoble-Burbles. Pres. 209 SE 21st St. Fort Lauderdale, FL 33316 Jacksonville

3rd Monday, 7:30 p.m. Garden Club 1005 Riverside Ave. Jacksonville Ed Harrell, Pres. 1628 Broward Rd. Jacksonville, FL 32218

Miami

4th Tuesday, 8 p.m. Simpson Garden Center 55 SW 17th Rd. Miami Edythe Ropeik, Pres. 6110 SW 93rd Ave. Miami, FL 33173

Palm Beaches

2nd Monday Horticultural Center 531 N. Military Trail Helene Jaros, N. Dir., 2621 NW 23rd Ct. Miami, FL 33142

Pinellas County 3rd Tuesday, 7:30 p.m. Fellowship Hall, Church of Christ 6045 Park Blvd. Pinellas Park

William O'Geary, Pres. 10968 105th Ave. North Largo, FL 34648

Tampa Bay Area 3rd Wed., 7 p.m. Members Homes Contact: Dora Lee Dorsey 8110 N. Edison Ave. Tampa, FL 33604

GEORGIA

Greater Atlanta

2nd Sunday, 3 p.m. odd-numbered months Atlanta Botanical Garden Russ Richardson, Pres. 1854 Chancery Lane Chamblee, GA 30341

ILLINOIS

Greater Chicago

4th Sunday, 1:30 p.m. Oak Park Conservatory Earth Shelter 621 Garfield St. Chicago Daniel Paulson, Pres. 6339 S. Kenneth Ave. Chicago, IL 60629

MASSACHUSETTS Bessie Buxton

Call for meeting info. Frank Green, Pres. 102 Richardson Rd. Ashby, MA 01431

MINNESOTA Minnesota

2nd Wed., 7:30 p.m. Homes of members

NEW JERSEY

Elsa Fort Helen Green, Pres. 2100 Hunter St. Cinnaminson, NJ 08077

NEW YORK

Knickerbocker 2nd Tuesday, 7:30 p.m. Hort. Society of NY 128 W. 58th St. New York Sue Hessel, Pres. 14 Sutton Place South New York, NY 10022 Brooklyn-Queens-Nassau 3rd Sunday Clark Gardens Albertson, NY Phil Seiden, Pres. 733 East 93rd St. Brooklyn, NY 11236

OHIO

Greater Cincinnati Douglas Hahn, Pres. 7736 Stonehill Dr. Cincinnatti, OH 45230

OKLAHOMA

Fred A. Barkley 3rd Sunday, 2:30 p.m. Will Rogers Garden Cntr. 3400 NW 36th St. Oklahoma City Diane Horne, Pres. 3601 Oakhurst Midwest City, OK 73110

PENNSYLVANIA

Edna Stewart Pittsburgh 3rd Wednesday, 7:30 p.m. Pittsburgh Garden Center Melissa Jones, Nat'l Dir. 5220 Beeler St. Pittsburgh, PA 15217

William Penn

4th Tuesday, noon Homes of members Mrs. Jacques Le Roux, Pres. Dove Lake House Gladwyne, PA 19035

RHODE ISLAND Roger Williams

3rd Monday night Homes of members Arline Peck, Pres. Eagle Peak Rd., R 1, Box 478 Pascoag, RI 02859

TEXAS

Alamo 3rd Saturday Homes of members John Howell, Pres. 129 Trillium San Antonio, TX 78213 Astro 1st Sunday, 2 p.m. home of Pres.

Tom Keepin, Pres. 4513 Randwick Dr. Houston, TX 77092

Dallas Area

3rd Thursday, 7:30 p.m. Northaven Gardens 7700 Northaven Rd. Dallas Maurice Amey, Pres. 1015 Mt. Auburn Dallas, TX 75223

Mae Blanton

4th Wed., 9:30 a.m. Homes of members Martha Curry, Pres. P.O. Box 1232 Weatherford, TX 76026

Satellite

4th Tuesday League City Bank & Trust League City Helen Spiers, Pres. 1423 Laskey Houston TX 77034

THANK YOU!

to all Branch Officers who sent updated information for this Directory. Please check your Branch listing and let us know of updates and corrections.

BEGONIAN MINI-ADS

Mini-ads are a service to our members. The charge is \$1 per line per insertion with a minimum of \$4. Payment must accompany order. Make checks payable to ABS and mail to:

> Martha Curry P.O. Box 1232 Weatherford, TX 76086

BEGONIA CUTTINGS AND PLANTS. Send \$2 for expanded 1992 list. Kay's Greenhouses, 207 W. Southcross, San Antonio, TX 78221.

BEGONIAS: THE COMPLETE REFER-ENCE GUIDE by Mildred L. and Edward J. Thompson. 884 pages, 850 illustrations (165 in color). Culture, classification, and history. \$20.00 to ABS members. To order autographed copies write: THE THOMPSONS, P.O. Drawer PP. Southampton, NY 11968. BEGONIAS: 1984 UPDATE \$6.75. Prices include shipping. Foreign orders \$5 additional for shipping via Surface Mail.

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SOUTHWEST REGION, ABS: Annual Get-Together, show, sale; newsletter. Membership \$7, family \$10. Send to Marie Harrell, Rt. 3, Box 689, Elgin, TX 78621.

The Indoor Gardening Society of America, Inc. Dept. B 944 S. Munroe Rd., Tallnadge, OH 44278 Dues \$15 a year *INDOOR GARDEN* issued 6 times yearly. Seed exchange, round robins, cultural guides, slide library.

GROW GREAT FERNS JOIN LAIFS Annual membership \$15.00 LAIFS Journal with Fern Lessons Spore Store, Books, Educational programs Los Angeles Int'l Fern Society P.O. Box 90943, Pasadena, CA 91109-0943 "VICKI'S EXOTIC PLANTS" Beautiful Begonias, Episcias, and Hoyas. Large variety of each. Please send \$1 for list to 522 Vista Park Dr., Eagle Point, OR 97524; (503) 826-6318.

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Rare, Distinctive Begonias. Sym. U012, bogneri, U089, x Kew, etc. Send SASE for list, USA only. **Bill Voss**, 3805 Louise Ave., Chantilly, VA 22021.

BEGONIAS, FERNS, SHADE PLANTS. We are now open to provide you with quality plants...Come visit. Golden Hills Nursery (Cynthia Bishop) 4150 Auburn-Folsom Rd. Loomis CA 95659 (916) 652-7311.

Begonias, episcias, & hoyas, cuttings only. Send \$1 for list to B & K Tropicals, P.O. Box 28182, Kenneth City FL 33709.

NEED: *B. veitchii* (= *B. rosiflora*) plants (preferable), cuttings, or seeds for hybridization program. S. Coppins, 30 Mygatt St., Binghamton NY 13905 USA.

BEGONIA HEAVEN: 10 acres S. Texas, 2 greenhouses, 5 bedroom country home with large deck, orchard, pasture, trees. \$55,000. Call Larry 1-800-443-3795.

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MINUTES OF THE BOARD OF DIRECTORS MEETING

November 23, 1991

The Board of Directors of the American Begonia Society Meeting was held on November 23, 1991 at the home of Rudolf Ziesenhenne, 1130 Milpas, Santa Barbara, California. There were 22 members present.

President Carol Notaras called the meeting to order at 1:45 p.m. and welcomed everyone.

Margaret Lee read the Aims and Purposes.

Secretary Ingeborg Foo read the Minutes of the Annual Business Meeting of September 14, 1991. Treasurer Eleanor Calkins reported \$4,451.38 in checking accounts and \$45, 536,67 in savings accounts, for a total of \$50,088.05 as of October 1, 1991. Treasurer reported that there was not enough money in checking to cover **Begonian** printing costs, and the Board voted to take the funds out of savings.

Correspondence:

Ingeborg Foo read the letter of resignation from Jeannette Gilbertson. The resignation was accepted with regret and an award of Life Membership.

Moving?

Please remember to notify the Membership Chairman of your change of address. The Post Office does not forward bulk rate mail: ABS is billed for notification of the new address (if one is available), but the issue is destroyed. You miss your **Begonian**; ABS must pay for the issue, the postage, and the notification that you have moved; and no one is happy. If you forget to let the Membership Chair know you've moved, you'll have to purchase your missed magazines from the Bookstore - that gets expensive! A letter from Scott Hoover stated that his expedition must be postponed, possibly for 6 months, because of his duties with the New England Tropical Conservatory.

Astro Branch requested that cuttings from the Barkley Collection be sent to the Fort Worth Botanic Garden.

Committee Reports:

Membership - John Ingles reported 40 new members from ads placed between Jan. 1 and July 31, 1991. The Board voted to continue the advertising.

Old Business:

Houston Knight reported on the move of the Barkley Collection, stating that the collection is fairly safe now and 3 places are willing to receive cuttings: Whittier Branch, Fort Worth Botanic Garden, and Salsbury, MA.

New Business - Gene Salisbury was invited to accept the position of First Vice-President.

Next Board Meeting: January 18, 1992 at 1 p.m. at home of Houston Knight, 13455 Hadley St., Whittier, California.

Meeting adjourned at 4:10 p.m.

Respectfully submitted, Ingeborg Foo, Secretary

Note: Minutes are condensed because of space limitations. Any member may request a copy of the complete Minutes from the Secretary. A self-addressed, stamped envelope would be appreciated.





THE AMERICAN IVY SOCIETY

is the International Registration Authority for *Hedera*; provides sources for new & unusual ivies; publishes *Ivy Journal* three times a year with reports on research, hardiness testing, life-sized photos of ivies. Memberships: General \$15; Institutional \$25; Commercial \$50. Information: The American Ivy Society, PO. Box 520, West Carrollton, OH 45449-0520.

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Elected Officers

President.....Carol Notaras 2567 Green St., San Francisco, CA 94123
Past President.....Jeannette Gilbertson 410 JoAnn Circle, Vista, CA 92084
First Vice-President....Gene Salisbury P.O. Box 504, Tonkawa, OK 74653
Second Vice-President...Millie Thompson P.O. Drawer PP, Southampton, NY 11968
Third Vice-President....Mary Bucholtz 2411 Hendricks Ave., Jacksonville, FL32207
Secretary.....Ingeborg Foo 1050 Melrose Way, Vista, CA 92083
Treasurer......Eleanor Calkins 910 Fern St., Escondido, CA 92027

Audit Committee

Audit Committee

Ed Bates

P.O. Box 230502, Encinitas, CA 92023-0502 Ralph Corwin

1119 Loma Vista Way, Vista CA 92084 wards.....Thelma O'Reilly

0942 Sunray Place, La Mesa CA 91941 Ballot Counting......Ronnie Nevins

1913 Aspen Circle, Fullerton, CA 92635

Begonian, Back Issues.....Betty Tillotson 3912 Wildrose Way, Sacramento, CA 05826

Book Store.....Anita Ruthenberg 1016 W. Arlington Ave., Fort Worth, TX 76110

Branch Relations......Douglas Hahn 7736 Stonehill Dr., Cincinnati, OH 45230

Business Manager......Dale Elmblade 3418 McKibbon, St. John, MO 63114-4324

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Clayton M. Kelly Seed Fund......Diana Gould 9278 Mapleview Way, Elk Grove, CA 95758 **Conservation Committee** Director.....Scott Hoover 718 Henderson Rd., Williamstown, MA 01267 Administrator.....Bruce C. Boardman Box 249, Roanoke, TX 76262 Convention Advisor......Barbara Nunes 6025 Greeley Blvd., Springfield, VA 22152 1992 Convention Chairmen Chairman.....Elda Regimbal 3117 San Juan Dr., Fullerton, CA 92635 Co-chairmen...Mary Sakamoto Brad Thompson Historian...Norma Pfrunder 3484 Jefferson St., Riverside, CA 92504 Horticultural Correspondent......Mae Blanton 118 Wildoak, Lake Dallas, TX 75065 Judging......Maxine Zinman Rt. 1, Box 73, Boyce, VA 22620 Long-Range Planning......Kay Tucker 207 W. Southcross, San Antonio, TX 78221 Nomenclature.....Carrie Karegeannes 3916 Lake Blvd., Annandale, VA 22003 Parliamentarian.....Margaret Lee 1852 31st St., San Diego, CA 92102 Public Relations/Special Advertising **Russ Richardson** 1854 Chancery Lane, Chamblee, GA 30341 Research.....Houston Knight 13455 Hadley St., Whittier, CA 90601 Round Robin.....Virginia Hamann Needmore Land & Cattle Co., Chester IA52134 Show Entries/Classification......Tim Last 437 Prospect Ave., #15, Brooklyn, NY 11215 Slide Library Co-Chairman.....Daniel Haseltine 6950 W. Nelson St., Chicago, IL 60634

Co-Chairman......Charles Jaros 2621 NW 23rd Court, Miami, FL 33142

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or subscription, dues, circulation inquiries contact John Ingles, Jr. 157 Monument, Hio Dell, CA 95562-1617



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Address correction requested

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