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The BEGONIAN

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INSIDE/Begonias in the Landscape

The Cover: Semperflorens begonias in a wine barrel make an eye-catching garden display. Ronnie Nevins of the Orange County Branch

transplanted purchased seedlings from pony packs to enhance her lawn area all summer long. Thelma O'Reilly took the photograph.

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SEARCH FOR BEGONIAS IN THE RAINFORESTS OF PANAMA

Roberto Brin

The Republic of Panama, located at the southern extreme of Central America, is the isthmus that links the Americas and has the path between the Atlantic and Pacific Oceans, the famous Panama Canal.

Forty-five per cent of Panama's territory is still covered with tropical rainforest where lush begonias grow wild without fertilizers, watering problems, soil formulas, and gardeners on top of them. The climate is tropical and is divided into two seasons: rainy and dry. The rainy season is from April to December, and it rains frequently. The average rainfall is 65 inches per year along the Pacific coast and 120 inches per year on the Atlantic coast. The dry season, which we call summer, is from January to mid-April. The best months to look for begonias are January and the first half of February.

Our search for wild begonias started in Panama City, a city of contrast—colonial and modern, founded by the Spanish in 1673 on the Pacific side of the isthmus where we took the Pan American Highway driving west for 99 kilometers. We then turned left and, after driving by a narrow road that goes through

the hills, we arrived at the green mountains of El Valle at dusk.

El Valle is a small resort town located in the crater of an extinguished volcano at 2640 feet above sea level where temperatures range from the 60s to the 80s. The town is surrounded by mountains, some totally covered by tropical rain forest where hundreds of animals and plants live in the wild in harmony at only a few kilometers from 'civilization'.

Early in the morning my friend, Carlitos Fajardo, and I jumped into his Jeep to start our trip to La Mesa. Through a trail that passes by an almost untouched jungle full of beautiful trees, ferns, and flowers, we arrived at La Mesa, a place where clouds descend to touch the top of the trees. There, in the middle of the rainforest at 3300 feet, a sensation of isolation from the day-to-day problems invades you—no cars, no city noises, no pollution—just you and pure nature. We penetrated the jungle carefully cutting through trees with our machetes and searching for begonias. After a few minutes of walking among ferns and other plants, there appeared like a jungle queen with a crown full of beautiful pink flowers, *B. tonduzii*. There were about twenty plants in full bloom, a spectacle that I will never forget. This begonia, a shrublike species, is one of my favorites because it was the first wild begonia that I found in Panama.

This article covers the trip which Roberto Brin described at the Miami Convention banquet. It is the first one he ever wrote in English. His address is Apartado 7470, Panama 5, Republic of Panama.



Waterfall in a forest reserve 20 miles from Panama City, an ideal site for collecting begonias. Altitude 150 ft. Photographs by the author.

As we continued our search, we found a beautiful trailing-scandent begonia with white flowers and elliptical, emerald green leaves. This begonia, that I could not identify, was growing all over a small tree. Near this one, we found another trailing-scandent begonia, *B. glabra*.

On our way back to the Jeep, I saw a beautiful begonia clambering over a fallen fern tree; it was very similar to *glabra* but it had red flowers and red stems. I collected some seeds for my friend, Joy Porter, to be offered by the Clayton M. Kelly Seed Fund.

Near the Jeep we met an American fellow who was sitting almost immobile in front of a bush. We asked him what he was doing, and he explained to us that he was a "spider watcher". He had been observing spiders for 5 hours and taking notes of all their movements. He asked us what we were doing around there, and we told him that I was a "begonia watcher." By the expression on his face, I knew what he had on his mind.

At noon, we decided to go back to El Valle. While we were driving through the forest, I observed the many birds that were flying and jumping in the trees. Birds of all colors and sizes. It was a marvelous sight. (Panama has 850 different species of birds; this is more than Canada and United States have together.)

Halfway back to El Valle, we decided to stop near a river. We followed the river course to a splendid waterfall, an ideal environment for begonias, where we discovered many rhizomatous and shrublike begonias in all tones of green, some with leaves that had one or two "drip points" at the end. Most flowers were white, and a few were pale pink. I identified one as *udisilvestris*, a shrublike species. At first sight, most of the begonias in this area look alike, but when you see them closely, you find differences, sometimes very little ones. I sent some seeds of these begonias to the American Begonia Society Seed Fund; I hope one of our members will soon identify them.

A few weeks ago, Millie Thompson sent me



Begonia growing on tree trunk in forest reserve.

photocopies of the *Annals of the Missouri Botanical Gardens, Flora of Panama (Begoniaceae)*, and there I found names of begonias that have been identified that grow in the El Valle area: *B. conchifolia*, *plebeja*, *villipetiola*, *vestita*, *glabra*, *fischeri*, *udisilvestris*, *heydei*, *tonduzii*, *estrellensis*, and *convallariodora*.

As we were returning, we were happy because we didn't see any snakes and we were loaded down with plastic bags full of seed pods, samples of begonia leaves, and some plants. When we arrived at El Valle, my wife and I spent a wonderful weekend at "Villa Fajardo."

In the Linares Gardens, I collected a good quantity of *B. multinervia* seed. *B. multinervia* is a large (6-10 feet tall) thick-stemmed species with glossy green leaves and large inflorescence of small white flowers. This species is very popular among gardeners. Sunday afternoon, we drove back to Panama City feeling like new after the wonderful time we had at El Valle, my favorite resort place in the mountains of Panama.

A few days later, I invited my son, Juan Carlos, to drive me to the area of Madden



Roberto Brin

Dam to collect seeds for the Seed Fund. Madden is about 45 minutes from Panama City; it is one of the dams that holds the necessary water to operate the locks of the Panama Canal. The altitude is about 300 feet above sea level; it is very humid, and the temperatures range from the 70s to the 90s. Before I started my interest in begonias, I went to this place several times, but I never dreamed that we would have wild begonias in this location in Panama.

The road near the Madden Dam runs between banks of rocklike clay full of rhizomatous begonias with white or pink flowers that I am sure no botanical garden can duplicate. I walked by a trail, and on both sides there were "carpets" of begonias mixed with ferns, gesneriads, passifloras, and other assorted plants. These begonias are all very similar but there are slight differences in leaf shapes and texture. Since they grow right beside each other and bloom almost at the same time, maybe they are natural hybrids. At dusk, we returned home with plenty of seeds to send to Joy Porter. There are many other places in Panama where you can find begonias, and maybe next summer, I will visit the highlands of Chiriqui near the Costa Rica border. If I do so, I will tell you all about it.

Now that you have finished reading this article, close your eyes, transport yourself to La Mesa rainforest, and then imagine that before you appears, like a jungle queen....Have you enjoyed the trip?

Note: At the time Mr. Brin wrote this, Joy Porter was the director of the Clayton M. Kelly Seed Fund. This report also appeared in the Eastern Region Begonia News.

A SUPER TUBEROUS BEGONIA MARKET

Several years ago, ABS conventioners were thrilled at the sight of fields of tuberous begonias that reached the horizon at the Brown Bulb Ranch in northern California. Flower lovers who come to San Diego plan to visit a unique tuberous begonia super market to see an equally dazzling display. Shoppers are surely accustomed to the “supermarket approach” to buying almost anything, but few trips are more fun or more beautiful than a trip to Weidner’s Begonia Gardens in Leucadia.

The shadecloth-covered plot that encompasses Weidner’s Begonia Gardens covers about four acres. Early each year it is plowed and fertilized, and the earth is shaped into long foot-high beds. Individual seedlings are nestled into the mounds, about a foot apart, according to color and type. The plants grow more leaves and sturdy stems, and after a bit, the tiny nubbins that will form buds.

By the time income taxes are due, the Weidner Family is about ready to open the Gardens for the new season. There are plenty of flowers to enjoy, but April is too early for the giant tuberous begonia flower display. It is not too soon to consider transferring tuberous begonias to southern gardens—and the well initiated gardeners do this. This is the appropriate time to transplant the Non-Stop strain of tuberous hybrids, for they are already in bud.

Tuberous begonias adapt readily to the garden during the nice spring days. Being natives of the mountainous regions of South and Central America, the tubers flourish under cool damp conditions. The spring sunlight, plus timely feedings, will encourage bloom by early summer.

Most people prefer to wait a few weeks longer to make selections when the flower colors are blazened along the garden rows. The Begonia Garden takes on a new appearance. The rows of satiny green leaves are overwhelmed with bright red, yellow, rose, orange, white, burgundy, and pink blossoms. Now you can see the gorgeous colors and the precisely formed blossoms. Some plants have

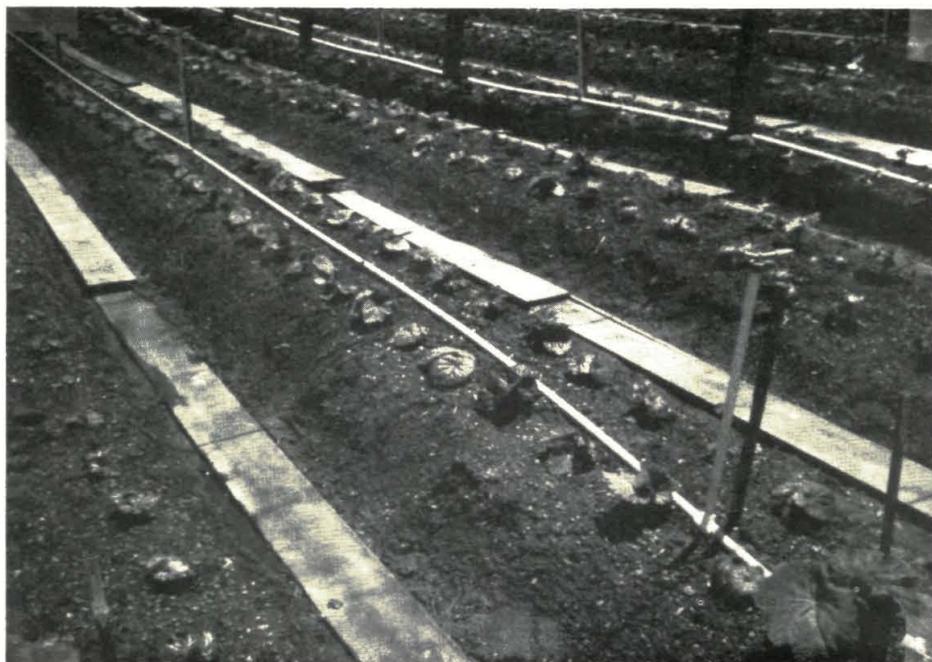
flowers that are shaped like tea roses, others like camellias, or carnations, ranunculas, or hollyhocks. Mid-July is top of the season and thus “show-off-to-sightseers” time.

ABS members are accustomed to the monoecious begonia flowers with their individual male and female flowers. For tuberous varieties, the showiest big blossoms are male and the shy ones clinging to the side are females. “Just as in high school,” explains Evelyn Weidner, “there are usually two girls to every boy.” The females grow the winged ovaries typical of *Begonia*. Because most people are accustomed to seeing and handling the tubers, occasionally some get the idea that there are no seeds on tuberous begonias. This is not true. However, because of the complex genetic makeup, the seeds can be sterile or of low productivity.

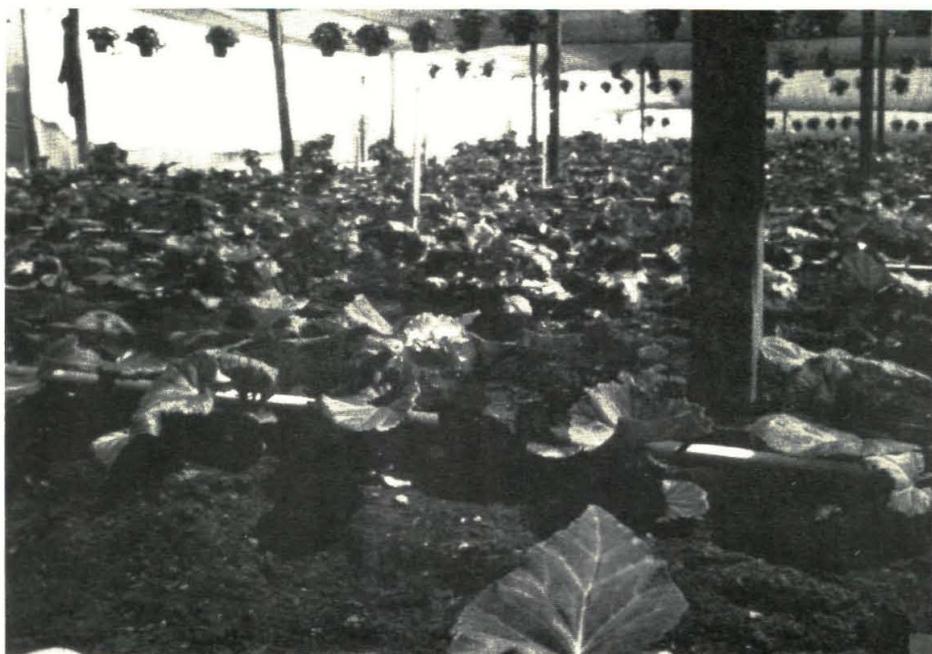
The procedure at the Begonia Gardens is to grab a trowel and a sturdy box in a wheelbarrow and to set off in search of the greatest flowers. There are plenty of sightseers and photographers, as well as true gardeners, and it doesn’t do to get in the way of the latter. Shoppers carefully encircle their choices with the trowel and lift the tuber with its moist soil cover into the box.

Making a selection is agonizing work. Each plant is so beautiful that you want to take it home with you. You simply must have that picotee flower: purest white with a splendid rose pink ruffle edging each petal. Against dark leaves a lovely clear yellow carnation shape glistens - but who ever saw a carnation the size of a salad plate? Into the box goes another that you can’t resist, a deep burgundy specimen. These proud beauties will be a joy well into the fall.

Bob and Evelyn Weidner own and operate the Begonia Gardens. Bob is horticulturist, planner, supervisor—often behind the scenes. Evelyn handles the sales and customer relations. Evelyn will present a seminar at the convention. The address of Weidner’s Begonia Gardens is 695 Normandy Ave, Leucadia, CA 92024.



Above: Weidner's Begonia Gardens shortly after seedlings were planted in beds. Planks between rows make rolling wheelbarrow "shopping carts" easier. Below: After several weeks growth transplanting means instant color.





Non-Stop series (sometimes called multi-floras) were developed in Europe for better performance in hot weather.

In addition to the classic tuberous varieties, Weidners also plant many of the new Non-Stop tubers. This strain develops a more compact plant form, ideal for planting in shady garden beds. These plants have been developed to withstand higher temperatures. The flowers may be somewhat smaller, but there are more of them and they keep coming all summer long. The colors are just as spectacular as those of the standard tuberous begonias. These start blooming early and go on and on; they are ready when the Begonia Gardens open in the spring.

Many visitors and shoppers wander about the Begonia Gardens absorbing the artful pleasures of the riot of color. It is also a great time to note the environment of the nursery. You may not have a huge screened area, nor the lines for sprinklers, nor even a shady garden bed, but you can provide a similar set of conditions that will be satisfactory in many locations, i.e., bright shade during most of the day, cooling breezes, a fair amount of humid-

ity, moist soil with means for good drainage. You might even get some ideas for improving conditions for growing other begonias.

The checkout lane is a great opportunity to ask any questions you might have. The entire staff will give you all the advice and encouragement you might need. They even have a little memo sheet for you to take home to remind you when and how to care for your tuberous begonias throughout the year.

From Evelyn Weidner, here's a suggestion for a refreshing party-pretty treat. Remove the petals from one or more tuberous begonia blossoms and wash gently; arrange in a nice pattern on a platter; nearby place small bowls of fruit-flavored yogurt. Guests top their petals with dabs of pastel yogurt for a sweet-tart tidbit. The combination is delightful and exotic.

Weidner's offers several other suggestions to begonia growers. In addition to the Non-Stops, there are several *Begonia* cousins that will give colorful satisfaction. *Begonia* 'Charm' will grow in the sunshine and will develop high color. In extremely hot locations it needs some afternoon shading, but the brighter the light the rosier the plant. The blooms are bright red and the leaves turn rose and golden and deep green. *B.* 'Cherry Blossom' has nice grassy green leaves and flowers that surely resemble their namesakes. A third great choice is *B.* 'Richmondensis' with white to pink flowers and bronzy green leaves. And consider *B.* 'Cleopatra', a happy houseplant with attractive, patterned green leaves and pale pink flowers that float on tall stems in late winter when there is little else blooming.

Each year Bob Weidner includes in his planning operations some unusual flowering plants to try in your garden. The royal purple *Brunfelsia* that flowers in deep shade is one of their much admired introductions. Also great for the camera and the garden are the fuchsia baskets with hundreds of earring-drop flowers; red, pink, and white star-flowered pentas; blue streptocarpus; orange marmalade bush; and the most gorgeous impatiens ever. But the best of all are the super begonias.

—P.P.B.

WICK WATERING SUCCESS WITH BEGONIAS

John Keller

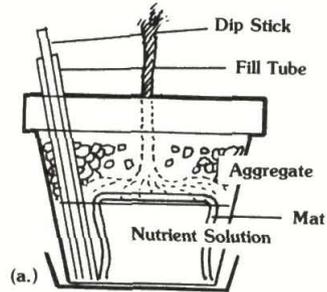
I have been very successful growing begonias by a wick watering method so I am eager to share my experience so that others may try it. I am away in upstate New York part of the summer every year and thus did not get involved too seriously with houseplants because of the problems of care while I would be away. There are limitations to requests for daily visits by friends!

Some years ago I saw an advertisement by Alpa Pots, Inc. for automatic watering of African Violets and other plants. I bought several of the complete kits and gave it a try. The violets did very well and the pot reservoir system provided the watering needs for the time I would be away. The complete system included the pot, internal shelf, glass fiber wick, watering tube and reservoir indicator stick, crushed tufa (as a growing medium), fertilizer (Chem-gro 10-8-22) and instructions.

About this time I became interested in miniature roses and begonias, which I found grew very well by this wick method. I continued to increase the number of pots and the size of the begonia collection.

A few years ago I started to make minor modification in the culture method. Instead of the tufa I found I could use soilless mix (commercial mix or my own blend) but eventually the most successful blend has turned out to be one of the proportion 50% commercial soilless potting mix and 50% perlite. This provides a very loose, well aerated mix that has good capillary action, does not get soggy, and retains water and minerals well. As a matter of fact this mix works well for all fibrous rooted plants. Miniature roses do well in this or the tufa.

I now use a dilute (1/4 strength) complete soluble fertilizer which can be applied to the surface or to the reservoir. However, since the fertilizer remains in the system rather than be-



Drawing courtesy Alpa Pot, Inc.

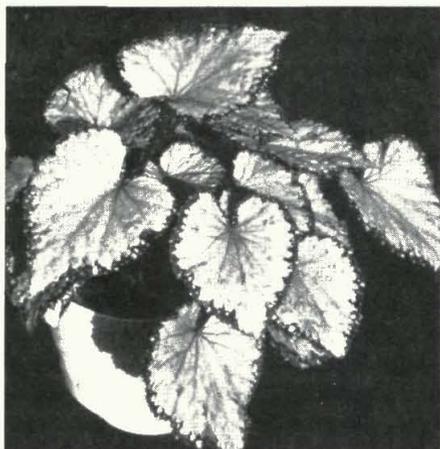
ing washed away, frequent applications are not necessary. Overfertilizing can be more damaging than underfertilizing. I fertilize about once every four weeks in summer and less in winter when plants are growing slower.

The pots can be cleaned out, washed, sterilized chemically, and recycled indefinitely. The glass fiber wicks can be cleaned and used over or new wicks purchased or cut from larger pieces of the fiber matting.

I have tried every type of begonia by this cultural method except tuberous because I grow these seasonally in the Adirondacks. The rexes particularly grow well because they thrive on the steady moisture and humidity. I replace these about every two years with new cuttings, but they could go on longer. Various rhizomatous have been growing very well in the same pot for several years — *B.* 'Texas Star', *B.* 'Cathedral', *B.* 'Madame Queen', *B.* 'Oliver Twist', and *B.* 'Patricia Ogden' among others. The canes and shrublike grow very well, for instance, *B.* 'Sophie Cecile', *B.* 'Robinson's Peach', *B.* 'Diclata', *B.* 'Esther Albertine' and *B.* 'Marguerite DeCola' among others.

I place many of the pots with plants outside in the garden for the summer, positioning for morning sun and afternoon partial shade. During good rainstorms the reservoir usually fills up and maintains a water supply for the dry periods. The drainage holes at the base of the culture medium allow drainage, provide aeration, and prevent the growing

John Keller carefully observes the growth of his begonias and other plants at 110 Summit Avenue, Montclair, NJ 07013



Top to bottom: The canelike *B.* 'Pink Parade', a rex, and a rhizomatous begonia grown by Keller in wicked containers.

medium from waterlogging.

I use the reservoir particularly when I am away and during warm growing weather when a steady capillary supply of water and minerals is beneficial. During winter I often water from the top since, in the north with rather dry conditions in the home and greenhouse, the constant capillary supply is also desirable.

The size and amount of foliage on the plant will determine how often the reservoir has to be filled. I have a large *B.* 'Texas Star' that uses a great deal of water so, therefore, the pot has to be filled much more often than for a smaller, slower growing begonia.

In my experience begonias can be grown successfully in any environment utilizing this culture system—garden, greenhouse, window-sill, and under lights depending on the cultivar requirements.

Our local reservoir water presents no problems but in areas with hard water it might be advisable to purchase spring water or collect rain water for any type of wick watering. Obviously the salt accumulation would be very detrimental, but since the pot reservoirs do not have to be refilled very often and this type of watering is very efficient I would suggest some dependable method of obtaining safe water. With this method there is much less overhead watering which reduces the danger from bacterial and fungal infections. So far I have had little problem with any form of rot, although algae and mosses will grow on the medium surface as they do ordinarily. Normally algae do not grow inside the pot.

All in all I have been very pleased by this method of plant culture. It saves a great deal on daily maintenance and permits me peace of mind when I am away for a few weeks. At this time a friend comes in once a week and checks the pot reservoir levels quickly and adds water where necessary but that is a far cry from tedious daily visits.

Photographs by John Keller

Shortly before publication time, John Keller wrote that he had heard that the Alpa Plantwell Systems are no longer being manufactured. If a suitable substitute is available we shall inform you.

BEGONIAS IN THE GARDEN

Earl McKinley

There may be as many ways to use begonias in the home landscape as there are varieties. In the northeast, the semperflorens varieties are great favorites for edging, in containers, and as an outstanding ground cover in shady spots. Many of the newer, F1 hybrid semps will actually grow and flower more spectacularly in full sun if given adequate moisture. The tuberhybrida varieties are traditionally grown as pot or basket plants. Here, too, the introduction of new hybrids, such as Non-Stop, has encouraged growers to use these in the open ground. Other types—canes and rex particularly—are occasionally used as accents or specimens in mixed plantings. These are often houseplants that are summered outdoors in their containers to later be returned indoors.

Despite these many and varied uses, it is still rare to encounter a planting devoted exclusively to these special plants. Perhaps misconceptions that they are all too tender, require excessive attention, are only houseplants, or won't otherwise succeed outdoors are to blame. Or maybe it just is not tried enough.

An all begonia bed can be a source of great pleasure and a focal point in the landscape. This article shares some ideas to encourage more gardeners to try such beds. The comments are based on experience in the Pittsburgh, Pennsylvania area. This is a USDA zone 6 climate with average summer temperature highs of 80 degrees, lows of 60 degrees, and rainfall of 11 inches. This is adequate to permit many begonias to develop into mature specimens during the four month growing season. Of course, very few will survive the -10 degree winters!

The key to success with a begonia bed is planning. The first step is to decide the type of plants to be included. Will it be devoted entirely to one or two types—say, semps and

tuberhybrida—or will other types be included? Another consideration is the source of plants. If they are grown at home, the varieties available are practically endless. If they must be purchased, varietal selection may be more limited. After deciding the type and quantity of plants to be used, the next step is to select a site.

As a rule of thumb, allow at least two square feet for each plant. Some will require more, others less, depending on their particular growth habit. Attention to the available light is important when selecting a site. While many begonias will tolerate or even thrive with some sun, few will take full, day long sun. Dappled shade for protection during the heat of the day is best. If the sun is excessive at the chosen site, a permanent or temporary shade structure can be attractively incorporated into the plan. Another factor in site selection is the prevailing wind. Good air circulation is important, but a spot subject to strong winds may lead to excessive drying or damage to foliage.

With the types of plants to be used in mind and a diagram of the site in hand, prepare a detailed design for the bed. Most begonias are "informal" plants. They lend themselves best to soft curves, small groupings or clusters, and circular patterns rather than more formal straight lines or angular patterns. Taller plants are best toward the rear of a bed, along a wall, or against tall shrubs. In island or free standing beds, the taller plants are most effective toward the center. These are not rigid rules and varying heights can be effectively used throughout the planting to avoid a monotonous appearance. Clusters of odd numbers of plants—three, five, and so on—typically fit into the overall design easier than even numbers. This is not important if the plants are intended to grow together to form a single mass.

After the design is complete, the next step is the actual preparation of the bed. It is best to prepare the bed well in advance of planting to allow the soil to settle and amendments to take effect. The top soil should be amended to create a humus-rich, well-drained bed.

Planting begonias in the garden is easy if you follow the sage advice of Earl McKinley who gardens at 117 Kinvara Court, Pittsburgh, PA 15237.

Materials such as peat moss, various manures and composts, sand, bark, and so on can be added to achieve this. A slightly acidic pH of 6.5 is fine for the majority of begonias. If lime is needed, remember it takes several months to be effective. Fertility levels should be fairly high as strong, robust growth is important in short season areas. Excessive nitrogen, however, should be avoided as it will stimulate succulent, disease prone growth. The use of a slow release fertilizer will feed the plants evenly over the growing season. If drainage is a problem, a very attractive raised bed can be created using timbers, bricks, or stone to retain a specially prepared, well drained soil mix.

The plants should be acclimated to outdoor conditions prior to setting them in the open ground. This is called hardening off and is necessary to prevent shock due to sudden changes in light, temperature, humidity, and air circulation. Gradually expose the plants to outdoor conditions over a period of a week to ten days. On planting day, set out the plants according to the design. If the plants are in individual containers, they can be placed where they will be planted and the overall design checked for the desired effect. If the plants are in flats or bedding containers, various aids can be used to set the plants in the desired position. For long lines, a garden hose or piece of rope can be placed as a guide. Lime or gypsum can be used to outline the planting areas too. In general, the plants should be placed at the same level as they were growing in the container. Frequent exceptions to this are the taller-growing canes which can be set deeper to encourage basal branching and full plants. As the plants are placed, they should be pruned, pinched, or staked as necessary. The plants should be given a good watering. A soluble fertilizer added to the water at the manufacturer's recommended rate will give them an extra boost and set them off to a good start.

A mulch spread an inch or two deep will greatly improve the appearance of the bed, help retain moisture in dry periods, reduce soil temperature fluctuations, and minimize weeds. The mulch should be kept an inch or

two from the base of the plants to eliminate the possibility of burying the growing point or encouraging basal rot.

Maintenance of a begonia bed is not significantly different from the care required by any other outdoor planting. In some respects it is easier. Most begonias are not bothered by many of the insect pests indigenous to the northeast, and insecticide spraying is minimal. The plants should be checked periodically for disease. Rainy, humid weather can lead to the development of fungus. Good air circulation and, if required, periodic spraying with a fungicide will minimize such problems. As in any planting, weeds should be removed when small. This not only keeps the bed looking attractive, but promotes better development of the desired plants. In dry weather, watering may be needed. This is best done with a soaker hose to avoid wetting the foliage, disturbing the mulch, and minimizing water waste. Additional fertilizer is generally not required because of the relatively short growing season.

Fall cleanup is important. If some of the plants are to be taken indoors, the acclimitization process must begin before cold weather. It can be difficult to lift and pot large plants without loss or damage. The damage to root systems which have spread extensively over the summer is usually too great. Even if the plant survives, it may not look good for some time. The easiest solution is to take cuttings to root and grow over the winter.

All plant debris should be cleaned out of the bed and either composted or disposed of to prevent insects or disease organisms from overwintering. Fall is also an excellent time to begin soil preparation and planning for next year. This is particularly true if major changes are anticipated or a pH modification is needed.

A well planned and planted bed will bring many hours of enjoyment. Begonias are versatile plants, and many varieties are adaptable to a wide range of cultural and climatic conditions. It is only through the use of good judgment and some trial and error that the best varieties for a locale will be identified. The all-begonia bed deserves more opportunities as a valuable landscape feature.

A BEGONIA DEMONSTRATION GARDEN



Earl McKinley

The Edna Stewart (Pittsburgh) Branch's Begonia Demonstration Garden is located on the property of the Pittsburgh Civic Garden Center, a facility which attracts many thousands of visitors. The garden is a highly visible, attractive, and elegant way to draw attention to begonias as a landscape feature and to the Society as a worthwhile organization.

The available plot, 8 feet wide by 32 feet long, was in practically full sun, so it was covered by a structure 8 feet high which provides 60% shade.

The garden is planted exclusively with begonias, over 200 of them. Obviously many of the plants are semperflorens, but there are a number of representatives of each major type — canes, trailing, tuberous, rhizomatous, and rex. All the plants were donated either by members or a local nursery.

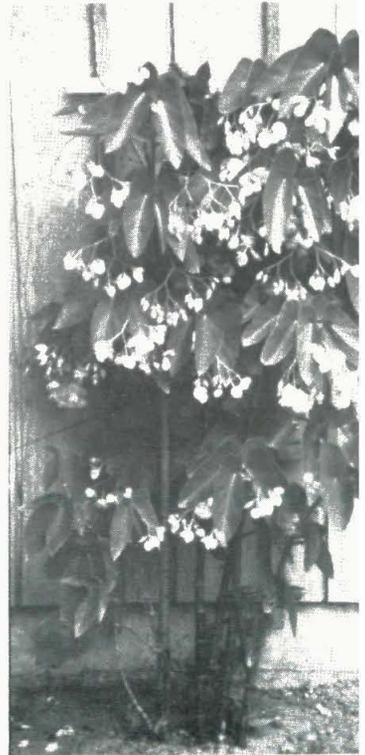
Early in the season, mildew attacked the Rieger begonias and most of the thirty in the garden were lost. Weekly spraying with captan or benomyl brought that problem under control. The lost Riegers were replaced with other tuberous hybrids which did well.

No insect damage was noted. There was some minimal damage from dogs illegally allowed to run loose on the grounds, but this was not a major problem. Interestingly, and this was a concern when we first considered the project, people respected the beauty and integrity of the garden — no plants were lifted or cuttings taken. The management at the Center was very pleased with the Garden and repeatedly told the Branch of the numerous compliments it elicited from visitors.

The total cost was less than \$150.00, most of which was for the structure which will last several years. The Branch is considering continuing the project next year.



*GLORIOUS DISP.
INCLUDE ALL*



E GARDEN EGONIAS

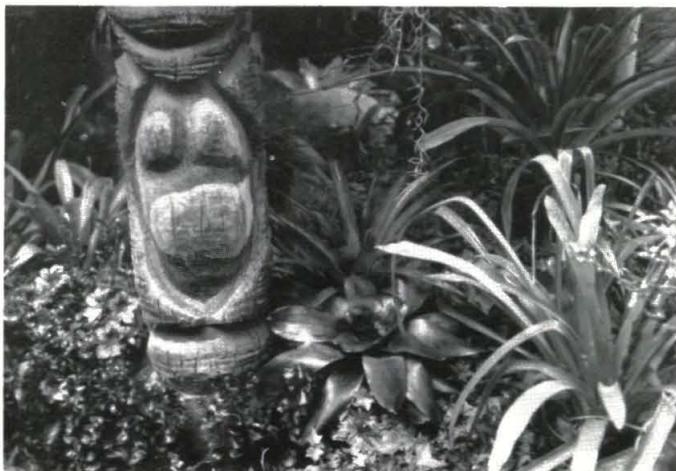
Far left top:
Patio of
Jackie Davis,
Aptos, Calif.
Ed Bates, photo.



Bottom:
St. Mary's Hospital
Kankakee, Ill.
Photo by
Ruby Tetrault

Top left:
Garden display
By San Miguel Branch
San Diego, Calif.
Photo by Marge Lee

Bottom left:
Cane begonia
near wall of house.
Photo by P. Bates



*At right,
top to bottom:*

Garden of
Isadore and Alice
Gold, San Francisco
Martin Johnson, photo.

Garden of
Thelma O'Reilly
La Mesa, Calif.
Photo by
Thelma O'Reilly

Patio and pool,
Jackie Davis,
Aptos, Calif.
Ed Bates, photo.



St. Mary's Hospital in Kankakee, Ill., has a horseshoe-shaped driveway from the main street to the entry. In the center near the street is a raised area planted with red flowered semperflorens with dark red leaves in the shape of a cross. White marble chips have been used around it for contrast. The cross is raised at the top so it is very easy to see as you drive by. The groundskeeper said it is about 12' by 8'.

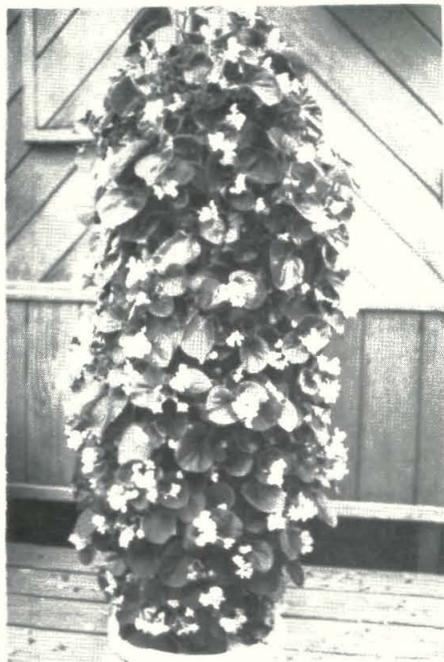
—Ruby Tetrault

Jackie Davis put almost every inch of her garden into begonias. She probably had crammed more different varieties into the garden than anyone else with the same space. On the centerfold is the entry to the Davis's home and a picture of the area near an ornamental pool.

The San Miguel Branch members are old hands at arranging display gardens of begonias as they have arranged many prize-winners for the County Fair. A trick they use that might be helpful to you: sink a pot one size larger than that of your potted begonia into the soil to its top edge and set the potted plant in it; make sure the ground cover obscures the edge of the pots. This is particularly good for plants that thrive with crowded roots or ones that need extra drainage.

Thelma O'Reilly has a tropical garden setting that includes a Hawaiian tiki, bromeliads, an azalea, and bronze leaved begonias, with some ivy trailing about.

Martin Johnson attended the garden viewing held by Isadore and Alice Gold. Meticulous attention to detail by the Golds keeps their tuberous begonias in A-one condition. You can hardly see any green color in this photograph!



Those who cannot have a full garden bed of begonias can try the suggestion of Bedding Plants, Inc., an educational group that distributes information on flower gardening. Their idea for a balcony or deck: a space-saving planter of semperflorens made with PVC pipe drilled with holes.

Ronnie Nevins tried several schemes to show off semperflorens begonias. The front cover illustrates one successful tactic, and a second is a wheel barrow, chock-full of pink blooming, bronze leaved "K-Mart specials." This looked so good that photographer Thelma O'Reilly suggested that she just start wheeling it south on the freeway to put in the San Diego Show (75 miles!).

Even if they are not in the garden, begonias brighten the scene. When she sent the photograph, Ruby Tetrault wrote, "I was in an auto parts store, and they had plants on all the shelves. Standing on the floor were four large plants of *B. 'Erythrophylla.'*"

The time to start a begonia garden for next year is now. Keep notes of designs and begonia varieties that are effective, and schedule your own activities to accomplish your goal.

BEGONIA EXTINCTION AND MAN

How Many Species of Begonias Have Disappeared? What Can We Do About It?

W. Scott Hoover

Extinction of species is a fundamental part of the evolutionary process. As new species originate, others die off. In recent years much attention has been given to mass extinctions, with particular emphasis on the extraterrestrial impact hypothesis at the Cretaceous-Tertiary boundary (see, for example, Silver and Silver 1982, Jablonski 1986, Nitecki 1984, and Boucot 1975). Extinction through geologic time is a natural occurrence, though a consequence of man's cultural evolution is the accelerated rate of species extinction. It is predicted that the destruction of tropical rainforests will be accompanied by a mass extinction of species that will equal, or exceed, that of the Cretaceous-Tertiary event 65 million years ago, or the Permian-Triassic event 250 million years ago (see Gates 1985 or Lewin 1983). A mere 100 years of recent human activity is all that will be required to rival the greatest mass extinctions in the history of life on earth. This extinction is happening now!

Species of *Begonia* are not exempt from extinction; they, too, are disappearing at the hand of man. To date, there is no way of knowing how many species have become extinct, but there is a way we can get some insight into the problem. Observing herbarium specimens from the turn of the century to the present day offers clues to our question. Certain areas of Mexico and Central America, for example, have received relatively intensive botanical study over the past century. When collections of a particular species have been gleaned from a regional area over a period of 100 years or so, and suddenly no more are brought back at a time when collections are still being made from the area, one may suspect that the species no longer exists in that region. Many *Begonia* species, and for that matter, many tropical organisms in general,

are narrow endemics, that is, are species restricted to small geographical area. Every day regions of the tropics are invaded by colonizers, farmers, or loggers, and the forest is cut down, leaving many species endemic to that area only a memory because extinction is left in the wake of so-called progress.

B. hydrocotylifolia Otto ex Hooker has been collected only a few times (specimens are not found in the Gray Herbarium, only a photograph of the type). This species is likely a narrow endemic, and to my knowledge no one has collected it recently. It may be suspected that *B. hydrocotylifolia* is extinct. The same situation may apply to *B. lindlyana* Walp., possibly some of those *Casparyas* placed in the old genus *Begoniella*, and many other species in the genus. Of course, this is speculative, but highly probable, at least with many species in the genus. In these instances we are not dealing with the natural process of biological extinction; we are observing the results of man's population explosion and his inability to live harmoniously with nature.

Some species of *Begonia* may be narrow endemics to the point of consisting of a few individuals in one population. In the West Sepik area of Papua New Guinea, I collected what appeared to be 23 species in a 24 km² area (Hoover 1980). I hiked these 24 km² quite thoroughly by a network process. Nearly 50% of the species I collected only once and these were restricted to population sizes averaging about 30 individuals. In population structure such as these, an entire species can be wiped out in one swoop. Consider all the species of organisms that are narrow endemics which have never been collected, and never will be.

Though the solution to the problem of this recent, of Holocene, mass extinction is beyond control because the human race is out of control, many strategies have been suggested which contribute to a conservation effort. Obviously, purchasing and protecting vast tracts

W. Scott Hoover is co-chairman of the conservation committee of the ABS, and lives at 718 Henderson Rd., Williamstown, MA 01267.

of existing unexplored rainforest would preserve it all intact, but this is impossible on a large scale. The world is fortunate if a few national parks can be established and protected. Hiring more biological collectors to at least obtain a record of what existed before species become extinct is another major conservation approach. Like everything else, such efforts are based on economic priorities and ultimately get placed on the back burner while such items as military spending, cosmetics, or jelly shoes gain rapid governmental or consumer appeal. A simple suggestion of mine, which may have been suggested previously by someone else, concerns a method for monitoring the relative survival status of species.

Without detailing a fully operative methodology, I suggest developing a code that identifies species' survival status according to estimated extinction probability. This would assist in conservation by distinguishing threatened species from weedy types, which is already suggested by the number of collections, but such a code would provide an actual survival classification.

Herbariums and museums are the repositories of biological specimens. Taxonomic specialists are responsible for identifying and describing species within a taxonomic group. Such specialization and expertise allows the taxonomist to make observations and estimates about the present survival status of different species provided the person does field work. All biological collections are identified by date of collection, geographical and regional area, and other pertinent information. Such a system of coding the collections in herbariums and museums would help conservation efforts because certain species can be targeted for recollection and possibly germplasm acquisition. Our herbariums and botanical gardens, museums, zoos, etc. are essential facilities for preserving species.

Another advantage of a survival coding system is that it would have biological implications. In essence, species population size is being estimated, thus implying reproductive, evolutionary, and survival success in a world dominated by man.

The destruction of forests causes the im-

mediate extinction of many species, while some have the ability to survive marginally, and a few others have become invasive colonizers. Many species of *Begonia* appear to have adapted to disturbed stream margin habitats, and often in premontane/montane life zones many species have become invasive along road cuts, and become weeds with specific elevational range distributions. Other species in tropical life zone habitats, or the few epiphytically occurring species, are not as successful, thus losing the ability to survive and simply become extinct with encroaching forest destruction.

Of the former weedy category, I recall a number of species from my own field work, some being narrow endemics, others widespread geographically: *Begonia alnifolia* A. DC., *B. colombiana* Smith & Schubert, *B. fagopyroides* Kunth. & Bouche, *B. fuchsiflora* Bar. & Bark., *B. heracleifolia* Schlech. & Chem., *B. minor* Jacq., *B. nelumbifolia* Schlech. & Chem., *B. oaxacana* A. DC., *B. parviflora* Poep. & End., and *B. stigmosa* Lind., to name several of the most invasive. Of the latter, threatened category, several species include: *B. buddleiifolia* A. DC., *B. crassicaulis* Lind., *B. croatii* Burt-Utley, *B. cymbalifera* Smith & Schubert, *B. hexandra* Irm., *B. manicata* var. *peltata* Smith & Schubert, *B. obliqua* L., *B. pinetorum* A. DC., *B. tiliifolia* C. DC., or *B. tropaeoliifolia* A. DC.

Two factors should be mentioned that are pertinent to developing a survival coding system: cost and expediency. Any conservation measure that can be implemented without great cost is one that deserves consideration. The seeming advantages of determining the survival status of species is apparent enough and would cost virtually nothing, except for initial development expenses and minor supply costs. From there outward, taxonomic experts would simply have to be willing to make survival status evaluations. The need for immediate conservation programs is evident, and the formalities of the usual scientific process may have to be waived. As Lewin (1983) points out, "There is strong consensus among conservationists that ... the looming catastrophe is so evident that scientific study

is irrelevant and all efforts should be directed to emergency preservation programs. Statistical confidence limits are luxuries that conservation biologists cannot now afford." A coding system for evaluation of species survival status depends on understanding that whatever system is developed must be based on estimates and the personal judgments of experts.

Though we don't know what species of *Begonia*, or how many, have become extinct as a direct result of man's activities, it is certain they are disappearing. Estimating species survival status is a simple means for evaluating species extinction probability, thus providing some perspective on rates of extinction. From here it is possible to employ conservation measures, or at least provide data for future generations of biologists, that is, if biologists are still here to study. We must remember that the destruction of planet earth, along with the diversity of life, is just a prelude to our own fate.

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Honor for Scott Hoover

On his last trip to collect begonias, Scott Hoover carried the red, blue, and beige flag of the prestigious Explorers Club. This is a symbolic gesture coveted by many adventurers and explorers that is granted to about two dozen expeditions each year. The expedition leader must justify his trip to the club. Flag Number 147 which Scott took with him has traveled with explorers to Sweden, Italy, Labrador, and India. Like the others before him, Scott will be required to file a trip report to be published in the *Explorers Journal*.

Hoover has made numerous trips to the tropics to study the disappearance of tropical rainforests and the impact on the environment. It is estimated that nearly 60% of the world's rainforests have been wiped out. Without plants to absorb carbon dioxide, the gas remains in the atmosphere and contributes to what is called the greenhouse effect. The greenhouse effect results in the warming of the surface temperature of the earth and melting the polar caps.

While on his trek, Scott collected data for several projects including plants for identification, plants for study for medicinal potential studies, and for leaf studies. Once plants have been identified for their high rates of absorption of carbon dioxide, these could be grown in large quantities to ease the greenhouse effect. As a research associate of the Missouri Botanical Garden, he carried out certain experiments and made plant collections.

Although conservation efforts have been launched, many begonia habitats have been destroyed. In this issue, Hoover describes how scientists can trace the disappearance of species based on records of previous collections, and the next issue will contain a report of his begonia-collecting activities in Panama and Costa Rica.



NEW CULTIVARS

Official International Registrations Numbers 896-900

Carrie Karegeannes, Nomenclature Director

Applications to register *Begonia* cultivars may be obtained from Carrie Karegeannes, 3916 Lake Boulevard, Annandale, VA 22003. Each form must be typed or printed in ink and accompanied by a \$2 check or money order payable to the American Begonia Society. Photos, drawings, and dried specimens of new cultivars are encouraged. ABS is the International Registration Authority for *Begonia* cultivar names.

In the citations of cultivar parents below, the female(seed) parent is listed first.

***Begonia* 'Copper Satin'**

No. 896—*Begonia* 'Bronze Medallion' × unknown 'Copper Satin'

Rhizomatous cultivar with crisp, glistening copper-colored, almost round, 4 1/2" × 3 1/2" leaves with slightly serrate margins and 5 main veins. Originated in 1980 by Mickey Meyer, 16 Guffara Street, Lathra, N.S.W., Australia; first distributed in 1981; no bloom reported. Tested by Leonore Corby of N.S.W., Australia. Registered May 9, 1986.

***Begonia* 'Lorn'**

No. 897—*Begonia pustulata* × *masoniana* 'Lorn'

Rhizomatous with green-marked silver, round-ovate, acuminate leaves. Measuring 4 1/2" × 3 1/3", the leaf blades have green edges streaking inward irregularly into the silver ground. The surface is rough and pustulate and the margin slightly serrate and ciliate. Two-tepaled white male and female flowers are few and small. Originated in 1976 by Mickey Meyer (address above); first bloomed in 1977; first distributed in 1977. Registered May 9, 1986.

***Begonia* 'Mam'**

No. 898—*Begonia* 'Universe' × unidentified 'Mam'

Rhizomatous with 4 1/2" × 3 1/2", crisp,

oval, acute leaves of dark olive green, patterned with red to purple semi-zigzag markings. The margin is red to purple and entire. Pink flowers in full clusters are carried on tall peduncles, the male flowers 2-tepaled, the females 3-tepaled. Originated in 1974 by Mickey Meyer (address above); first bloomed in 1975; first distributed in 1975. Registered May 9, 1986.

***Begonia* 'Red Kilt'**

No. 899—*Begonia* 'Sir Percy' × unknown 'Red Kilt'

Rhizomatous with erect rhizomes and showy wine-colored, smooth, semiglossy 5 1/2" × 4 1/2" leaves with sparsely serrate margin and 5 main veins. Pink flowers rise high above the plant on 7" peduncles from late winter to summer. The male flowers have 2 tepals and the females 4. Originated in 1974 by Mickey Meyer (address above); first bloomed in 1976; first distributed in 1977. Tested by Hazel Burley, Queensland, Australia. Registered May 9, 1986.

***Begonia* 'Josma'**

No. 900—*Begonia* 'Sir Percy' × unknown 'Josma'

Rhizomatous with silver-spotted reddish green leaves. The leaf blades are 4 1/2" × 3 1/2" and almost round with pointed tips, entire margins, and crisp texture, and are borne on long petioles. The originator reports that the seed parent was insect pollinated. Originated in 1979 by Mickey Meyer (address above); no bloom reported; no distribution reported. Registered May 9, 1986.



ROUND ROBIN NOTES

Mary Ellen Taback, director

The recently started Unidentified Species Flight filled to the maximum of 8 members at once, so we have located a chairman for another. If you would like to join it, put your request in as soon as possible; the unidentified species are the "in" thing right now. There are vacancies in some other popular topics: Odd and Rare, Growing Under Lights, Identification, and Photography. And for those of you who have a pioneering spirit and an interest in VHS video cameras and tape recorders, there is a proposal to start a robin using that equipment. There is a chairman and one member so far, and opportunities for new begonia fun for 6 more members. Remember that robins can carry 3 members, and are not continued with less than 5. At present 13 robins fly abroad to England, Australia, New Zealand, and Japan.

Mary Ann Clayton, NJ, was faced with a question from her audience: Are there any edible begonias? She had no answers, but from King Langenburg in another robin we have. He routinely samples a leaf of each new variety he acquires. His favorite for flavor is *B. franconis* Liebmann. It has a fresh tart flavor and he offers seed to his friends of #83 who wish to start a begonia salad garden.

"My canes were tangling horns with each other, so I cut them back today," says Clara Luoto, CA. For grooming canes, cut the weak sprawling growth out completely, suggests Mabel Corwin, CA. Big stiff canes that shoot straight up should be cut off at ground level. *B.* 'Honeysuckle' is one cane that cannot seem to decide how it wants to grow. It will have some graceful shoots, then start putting up those fat stiff ones. When she prunes, she starts by removing completely the weak growth, then the old woody canes. The healthy canes are cut to different lengths to make a well shaped plant, taking care to always cut to an outside bud. Canes can take more "potting up" than

some other types of begonias. When they dry out too fast it usually means they need a larger pot. They are heavy feeders and if they are hungry they will drop lower leaves. Potting up will prevent this.

Certain hard-to-grow begonias are being raised, more or less, by members in several robins, who compare results in different areas of the country. *B.* 'Orococo' is one that inspires comments. Arline Peck, RI, grows it upright on a fern fiber stick, rather than letting it hang, a more usual way. Mabel Corwin also grows it upright, on a totem pole. It is a fast grower, she reports. Arline finds *B. pearcei* very mildew prone, but the pretty yellow blossoms make extra trouble worth while.

Mary Simon, OH, reports that the species *B. dayii* hort. and *B. boisiana* are very difficult to propagate. Alton Lee, FL, finds that pure sand is great for rooting difficult leaves, like *B. rajah* and *B. versicolor*. He finds *B. manicata* 'Aureo-maculata' impossible to propagate except by division. *B. rajah* will root using sand, perlite and charcoal in a shoebox, using complete leaves. This takes about a month under Florida's growing conditions. According to Art Sackenruther, CA, *B. paulensis*, which many growers rate "difficult," will root readily from leaf wedges. It likes shade, dense shade, adds Elaine Ayers, OH, to be at its best.

Another begonia rating interesting comments is the climbing *B. oxysperma* from the Philippines. Martin Johnson, CA, rates this one a challenge to all growers. It has never been selfed, he says, producing lots of pollen on unopened flowers. It needs a well-drained medium and should be watered only in the morning so that the leaves dry early in the day; it is very susceptible to mildew. Mabel Corwin grows this one on stakes, describing how it seems to grow into the stakes, producing very tough stems. She has a good picture of the young plant, which we hope she circulates. Many of the robins

carry great pictures, not only the Photography Robin, which is circulating some outstanding work now.

B. lubbersii frustrates Charlotte Kuhnle, OR. It must be watered very sparingly, it does not like cold, it needs good air circulation so she does not grow it in closed containers. It is very subject to mildew. Another robin reports that it never makes a beautiful plant. The grower takes cuttings continually, putting several into one pot so as to make a full plant. Then when it grows tall and is cut back, it is never good-looking again, and you have to start all over. It is also very difficult to self-pollinate or to cross. One wonders, "Why grow it?"—but not within hearing of a true begonia fan.

B. serratipetala is another difficult begonia, seldom achieving the beauty of form that its beautiful varicolored leaves deserve. Dan Haseltine, IL, recommends a shaded greenhouse with high humidity, and no high temperatures. It responds to either open bench or hanging basket if conditions are right, but needs rest periods at which times it seems to sulk. In its native habitat it will grow to a height of 6', Dan says.

The **species growers** of flight #55 have had some reports on two begonias which they are growing in very different areas of the country: *B. cummingii* and *B. chlorosticta*. Priscilla Beck, CT, acquired *B. cummingii* recently at the Eastern Regional seminar on Long Island, NY. Its orange flowers appeal to her, but she has believed that once it died down it would not come back. Dora Lee Dorsey, FL, reports that hers has started growth again after going dormant. Martin Johnson's *B. chlorosticta* is in bloom (end of the year), with two inflorescences, but as usual he knows that the males will not open until much later. He cannot self-pollinate it, and *B. dipetala* and *B. malabarica* he that likes to cross with it are not in flower. Tough luck for those robin members: no seed this time.

Mary Weinberg, IL, cut back *B. chlorosticta* when it grew too large. None of the cuttings grew, nor did the parent plant recover. This is the experience of other

growers in the midwest where it has to be a terrarium plant. She is very enthusiastic about a species new to her: *B. sericoneura*. She describes this as a Costa Rican species obtained in September '85, rhizomatous, with large, bright green leaves of a velvety texture with bright red veins. The flowers are unique, the female having one very large pink wing. She has selfed it, and maybe we will find seed available soon. It seems to enjoy temperatures in the low 50s.

The story of *B. 'Fiji Islands'* is told by Mabel Corwin, CA. In the early sixties, a begonia friend visited Fiji where she saw a large clump of this plant growing where the soil was quite wet. She put six leaves into her purse and brought them home. Mabel put them into a prop box and eventually raised three small plants which she shared with other growers. The plant was always called 'Fiji Islands.' The leaves were small and the plant compact. Some years later Steve Talnadge, a fern grower, got a plant of 'Cathedral' or 'Cathedral Windows' with some ferns he imported. It had larger leaves, but otherwise seemed to be the same. Mabel does not know if these two imports are the same plant.

Some begonia growers enjoy a challenge. The species growers are among these. Recently they compiled two **species lists**: challenges and easy to grow.

Among the challenges are *B. luxurians* (Arlene Peck and Albert Weatherhead), *B. incisa* (Betty Tillotson), and *B. 'Thurstonii'*

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(Lena Bussard). Lena raises *incisa* successfully in a 2-liter plastic bottle terrarium. Neglect is her secret, she claims. *B. incisa* does not like to be wet, Arline adds.

For their favorite easy-to-grow species they suggested several unusual-looking ones: *B. ludwigii* (Dan Hazeltine), *B. 'Cuyamaca'* (Betty), *B. rajah* (Lena describes the leaves as looking like taffeta), *B. stigmosa* (Lena and Arline), *B. leathermanii* (Arline) and *B. aconitifolia* (Joyce Smith). Several members agree that *B. rajah* grows best under bright light and high humidity and heat. A terrarium close to fluorescent tubes does well. *B. aconitifolia*, Joyce says, is classed as a superba-type cane but grows better using guides for thick-stemmed species: a shallow pot kept on the dry side.

B. ludwigii is easy to grow from seed and not difficult to grow to maturity. It is a good one for a grower's first thick-stemmed begonia. Dan describes its curious appearance in the fall: a trunk with a couple of yellowing leaves on the end. As these drop, the flower stalks appear. He has succeeded in growing new plants from seed of his own production, preserved in the refrigerator until spring.

Another robin has produced a list of **mildew prone begonias**. Mildred Swyka lists the canes *B. 'Elaine'* and *B. 'Pink Parade'*. Althea Thomas nominates *semperflorens* under lights in winter, and *B. 'Mme de Lesseps'*, *B. 'Interlaken'*, and *B. 'Lubbergei'*. Chris Giordano's selections are *B. 'Curly Cloud'*, *B. 'Honeysuckle'*, and *B. 'Preussen'*. *B. 'Honeysuckle'* was also nominated by Kathleen Herr, while *B. 'Picobeth'* was Elaine Ayers's choice.

There are several treatments for "mildew prone," both preventives and cures (see the *Begonian* indexes for references). A warning arose from a robin which growers should heed. Charlotte Kuhnle reports that she developed a skin infection when she used systemic granules, as well as swollen and itchy eyes. Mabel Corwin recommends using gloves when handling systemics. Another member suggests that a picnic spoon be kept with the container of poison so that the grains can be spooned out and stirred into the top inch of the pot with no hand contact at all.

Adventitious growth is an interesting characteristic of several begonias. *B. 'Templini'*, writes Mary Simon, will root if you put stems into water, but you should not get water on the leaves. It also applies to *B. hispida* var. *cucullifera*, another begonia with adventitious plantlets on the leaves. It is possible, but not easy, to root these "leaf babies" by pinning the leaf to the mix in the prop box.

This is such a good note to end on: "I am always filled with new enthusiasm after reading one of the Robins. . . my failures are forgotten, and I am ready to try again." Jane Hays, CO.

For information about robins write:

Mary Ellen Taback,
Round Robin Director
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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, P.O. Box 520, West Carrollton, OH 45449-0520.

ABS NEWS

MEMBERS AT-LARGE TO MEET AT PUA NANI

BEGONIAS CONVENTION

The third meeting of the members at-large is scheduled for Friday, September 5 at 4:00 in the Hawaii Room at the Hanalei Hotel, San Diego, CA. This promises to be a wonderful reunion, an excellent opportunity to meet others from many parts of the country, plus an added surprise. For information, write:

Thelma O'Reilly
10942 Sunray Place
La Mesa, CA 92041.

WELCOME TO GREATER ATLANTA NEWEST ABS BRANCH

The Greater Atlanta Branch meets the first Sunday of every other month at 3 p.m. at the Garden House of the Atlanta Botanical Society in Piedmont Park. The president is Betty Lockett. The organizing officer and now national director is Russ Richardson, 1854 Chancery Lane, Chamblee, GA 30341. At-large members in the area are urged to join with them. The next meeting will be October 5.

LIBRARY SUSPENDED

The committee to inventory the library completed a list of the books and reported

that the condition of the books was only fair. Most of the books about begonias have disappeared, except those which were placed in the Library at Los Angeles State and County Arboretum for safekeeping. The committee recommended suspension of the circulating library and either sale or discarding of the remaining books.

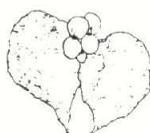
PLANT SALE AT ARNOLD ARBORETUM

Fourth annual auction of rare and unusual plants, public plant sale, members/friends plant giveaway at the Case Estates, Weston, Mass. Sunday, September 21, 9 a.m. to 4 p.m. Luncheon and beverages available. Write or call for information:

Arnold Arboretum,
The Arborway, Jamaica Plain, MA
02130
(617)524-1718

FESTIVAL OF GARDENING

The 82nd annual fall flower show & plant sale at Planting Fields Arboretum, Oyster Bay, NY 11771. October 18 to 26, 10 a.m. to 5 p.m. daily. \$3.00 per person (\$1.00 under 12). For information: (516)992-9200.



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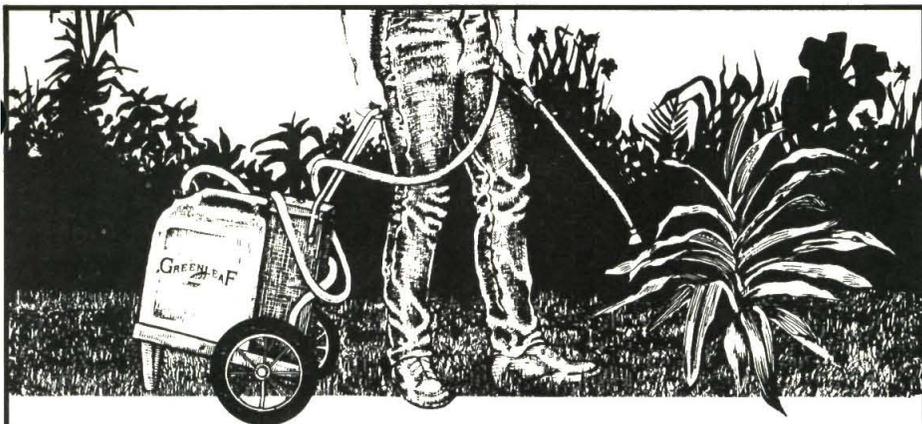
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MINUTES OF THE BOARD OF DIRECTORS' MEETING

MAY 4, 1986

The board meeting of the American Begonia Society was held at the Corona Steak House, Corona, Calif. President Margaret Lee called the meeting to order at 11:30 a.m. Aims and Purposes were read by First Vice President Arlene Davis. Minutes of the March 2 meeting were approved as mailed.

The treasurer's report was handed out in the absence of Eleanor Calkins. There is a balance on hand as of March 31 of \$14,194.40 in the checking account and \$29,493.07 in the savings accounts.

Correspondence was read. A letter from the National Council of State Garden Clubs invited us to affiliate with them. Details were incomplete, so no action was taken. A letter from Ed and Millie Thompson thanked ABS for the \$500.00 grant to their Begonia Museum.

Reports were given by chairmen of advertising, awards, business, judging, members-at-large, nomenclature, publicity, round robins, seed fund and slide library.

Back Issues Chairman Julie Panttaja reported she has received 70 cartons of back issues, about half the supply. A set of back issues will be assembled for use by the seed fund chairman. A value will be set for a complete set of back issues to be used by those who would like to donate one.

The convention chairman reported that preparations were continuing. Donations are still needed for trophies and plant sales.

The inventory of the lending library was completed. Chairman Lorra Almstedt was directed to have the remaining books appraised. Board moved that the begonia reference books be retained for use by the seed fund chairman, the bound issues of the *Begonian* become part of the Back Issues Chairman's permanent set for reference, and that the position of Lending Library be abolished with the creation of the position of Reference Librarian, Lorra Almstedt to fill that role. It was announced that the reference begonia books that were placed in the California Arboretum are available to be used by ABS members at their library. [Ed. note: Refers to books placed in the Los Angeles State and County Arboretum Library in the 1970s. They may be used on the site.]

Bookstore Manager Bob Bailey was introduced. He has ordered a shipment of books from Japan and will have a good supply of books at the convention. The *Buxton Checklist* needs to be reprinted. Phyllis Bates will check into it.

Membership stands at 1519 as of April 30. Compliments were extended to the Buxton Branch which signed up seven new members in April.

Board approved payment of shipping fees to have the L'Hommedieu research project papers sent to Margaret Lee and then to Nomenclature Chairman Carrie Karegeannes.

The nominating committee submitted the following proposed slate of officers for the year 1986-87: Presi-

dent, Margaret Lee; First Vice President, Arlene Davis and Jess Martinez; Second Vice President, Howard Berg and Charles Jaros; Third Vice President, Tamsin Boardman and Ingeborg Foo; Secretary, Jeannette Gilbertson; Treasurer, Eleanor Calkins. Board accepted the slate. Membership will handle the ballot procedure.

Editor Phyllis Bates pointed out the increased number of pages in the last *Begonians*. Policy for show coverage was reviewed. There is not room for detailed reports of local begonia shows, for instance, lists of winners; but a report on a particularly interesting seminar or report of general interest would be welcome. Any information for the *Begonian* must be in writing.

Under old business, the Miami Branch informed the board that they had not taken out their share of the 1985 profits. The treasurer will send it.

The board approved a membership (subscription) in the Nature Conservancy, at a cost of \$10.00, for the use of the Conservation Committee.

Margaret Lee reported on her trip to the Southwest Region Get-together. She said it was a very nice show, and she enjoyed the garden tours very much. Board approved \$200.00 for expenses of the trip.

The next meeting will be at the home of Ralph and Mabel Corwin, 1119 Loma Vista Way, Vista, CA on Sunday, July 13, at 11:00 a.m.

The meeting adjourned at 3:30 p.m.

Jeannette Gilbertson, secretary

MEETING CALL

The next board meeting will be the Annual Meeting at the Convention, Saturday, September 6 following luncheon.

BEGONIAN MINI-ADS

Minisads are \$1 per line per insertion with a minimum of \$4. A line is 36 characters including punctuation and spaces. Payment must accompany order. Make checks payable to ABS and send to Jess Martinez, 1770 Foothill Dr., Vista, CA 92084.

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AMERICAN BEGONIA SOCIETY

Founded January 1932 by Herbert P. Dyckman

ABS 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.

ABS Services

These services are available to all ABS members. For names and addresses of department heads, see inside front cover. Include a self-addressed envelope when you write.

AT-LARGE MEMBERS - Members who do not belong to branches are represented at board meetings by the members-at-large director. To find a branch in your area or to start a new one, contact the branch relations director for help.

BOOKSTORE - See information in this or next issue.

JUDGING DEPARTMENT - Mail order course for a member who wishes to become an accredited begonia show judge, \$10. Also available: a booklet on point scoring (\$2), the old (unofficial) classification booklet (\$2), information on fuchsia and fern judging, and other requirements to become a judge. Add \$1 for postage and handling on all orders and 6% tax for California residents.

NOMENCLATURE DEPARTMENT - Monitors newly published findings on *Begonia* names. Handles official international registrations of new *Begonia* cultivars and publishes these registrations. Gathers information about and assigns numbers to unidentified species.

QUESTION BOX - Prompt assistance with horticultural questions. Those of general interest will appear in the *Begonian* column.

ROUND ROBINS - Members exchange information about begonias and their culture through packets of letters which circulate among a small group of growers. There are dozens of these packets, called flights, on many specialized subjects. Contact the director for information.

SEED FUND - The Clayton M. Kelly Seed Fund offers seeds of begonia species and cultivars by mail. New offerings are listed in the *Begonian*. Donations of seeds are encouraged.

SLIDE LIBRARY - See information in this or next issue.

SPEAKERS BUREAU - The director maintains a list of speakers on begonias and related subjects.

ABS Slide Programs

Rhizomatous Begonias 200 slides with taped discussion by Mildred Thompson.

Japanese Cultivars grown in the United States. 127 slides, printed list. Taped program. By Mildred Thompson.

Begonias in their Natural Habitat by Scott Hoover. Slides from Mexico, Guatemala, Venezuela, Colombia, Ecuador, Papua New Guinea, and Jamaica. Taped program.

Begonias for Contained Atmospheres. 81 slides. Printed list, taped program. By Mildred Thompson.

The Tropical Rainforest by Scott Hoover. 45 minute tape narration. 78 slides.

The Making of a Begonia Show. 77 slides of the show being set up and the plants displayed by the Barkley Branch in 1982. Printed slide list.

A Trip to the Montreal Botanical Gardens. 92 slides by Jackie Davis and Joy Porter. Printed list.

Horticultural Grouping of Begonias. 140 slides by Mildred Thompson. Begonias divided into 8 groups. List.

This is a partial list of slide programs available for rental to ABS members and branches. The fee is usually \$10 plus First Class Insured return postage. Deposit required. Send SASE for complete list and detailed instructions.

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