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The BEGONIAN



The BEGONIAN

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EDITORS—Karen Bartholomew and Chuck Anderson, 826 Santa Rita Ave., Los Altos, CA 94022. 415 948-5345 (evenings).

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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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See inside back cover

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THE COVER: Photo of *B. 'Madame Queen'* by Duane Campbell, Owego, N.Y. See page 264 for a roundup by Elda Haring of crested rhizomatous begonias.

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NOTES/From the editors

Miscellaneous musings from "A Seaside Rendezvous," the Sept. 4-7 ABS convention in Long Beach, Calif. (more details next month):

There were doubts in some quarters about the likelihood of success this year because planning was late getting under way, the hotel was being less than fully cooperative, and, for the first time in recent memory, no branch was hosting.

The doubts evaporated like the last wisps of sunlight over the horizon as Jean Natter, an at-large member from Long Beach, proved that a good convention and show chairman need be neither experienced nor well known among ABS leaders.

The "hospitality room," a suite for participants to retreat to between main events, was hospitable indeed.

This was due in large part to the generosity of several local members, who provided home-baked goodies for nibbling, and Joan Coulat of Sacramento, who donated a large supply of first-class liquid refreshment.

Everybody attending the Saturday night banquet walked away with a special gift—begonia notepaper designed by grower-artist Kit Jeans of Tennessee. Kit attended the conven-

tion, presented a hybridizing seminar—and provided the notepaper, which she usually sells at her Gift Horse Greenhouse in New Johnsonville.

Figures for the main plant sale are not yet compiled, but we can report with gratification that more than \$500 was raised at the special sale of newly collected Philippine and South Pacific species held to benefit *The Begonian*.

These plants, provided by Martin Johnson of Redwood City, Calif., should make for interesting reports in coming years as they mature. Meanwhile, we're mulling what to do with the windfall, and will let you know as soon as we decide and get approval from ABS directors.

And in Sacramento, where the Sacramento Branch had its annual show and sale Aug. 23, the judges' luncheon, with multi-layered gelatin desserts and an apple sculptured into a bird, was as gorgeous as it was delicious.

The branch's cooks must be getting inspiration from Joan Coulat's husband Paul, a prominent French chef. Paul, incidentally, won a rosette in the show with a planting in a burl—his first-ever entry in a begonia show.

—C.A. & K.B.



B. 'Bunchii'

Photos/Karen Bartholomew

Begonias with frills—all those crested cultivars

Elda Haring

One of the first begonias I ever grew was *B. 'Bunchii'*, which I knew at the time as the "lettuce leaf begonia." The apple green leaves were heavily frilled on the edges. It grew in the east window of my living room and, although it never bloomed, I loved it for its foliage.

Looking back through the years, I am sure I had no idea it would flower. A number of years went by before we became members of ABS and began to learn that many begonias were winter bloomers and needed a short day to set buds.

In checking through the *Thompson Begonia Guide*, Logee's, Kartuz, and Lauray of Salisbury catalogs, and Kit

Jeans's list, I was surprised to be reminded that I have at one time or another grown many of the curled and crested rhizomatous cultivars.

In my opinion, *B. 'Madame Queen'* is the most charming of these crested begonias. (See the cover.) The very large coppery leaves have lighter green veins radiating from the center and are deeply frilled and ruffled on the edges. When well grown, it is simply magnificent. The pink flowers are merely icing on the cake.

Another of my favorites with very large frilled leaves was *B. 'Ricky Minter'* with light yellow-bronze leaves. This was once in my collection and so was the popular *B. 'Crestabruchii'* with light green leaves, rosy stems and pink flowers. Although it makes an excellent basket plant, I grew it in a large pot.

B. 'Beryl', given me by its originator,

Elda Haring is on the mend following a productive visit to a California clinic in August. She receives mail at P.O. Box 236, Flat Rock, NC 28731.

Ruth Stanley, grew in my fluorescent light garden for years. The bronzy green leaves with frilled edges had tiny pink hairs on the margin. It was always compact-growing and a great joy.

B. manicata aureo-maculata crispa was long a favorite, too. The leaves of this one are quite succulent with creamy yellow and white splotches and typical curled edges. It is a begonia that would immediately catch the eye of the casual visitor who would not know a begonia from a philodendron. I do not recall ever having grown *B. manicata crispa*, the non-variegated version.

When we moved from our Connecticut home to the mountains of North Carolina, an agonizing decision had to be made. Many of my plants had to be given away. Those crested ones in my collection that had grown

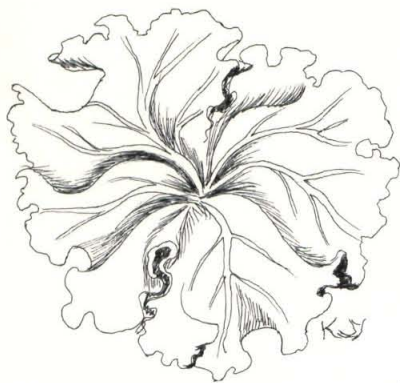


B. 'Ricky Minter'

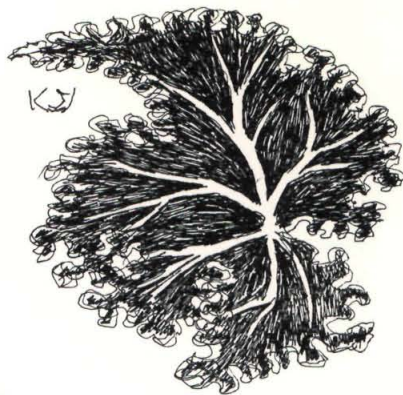


B. 'Crestabruhii'

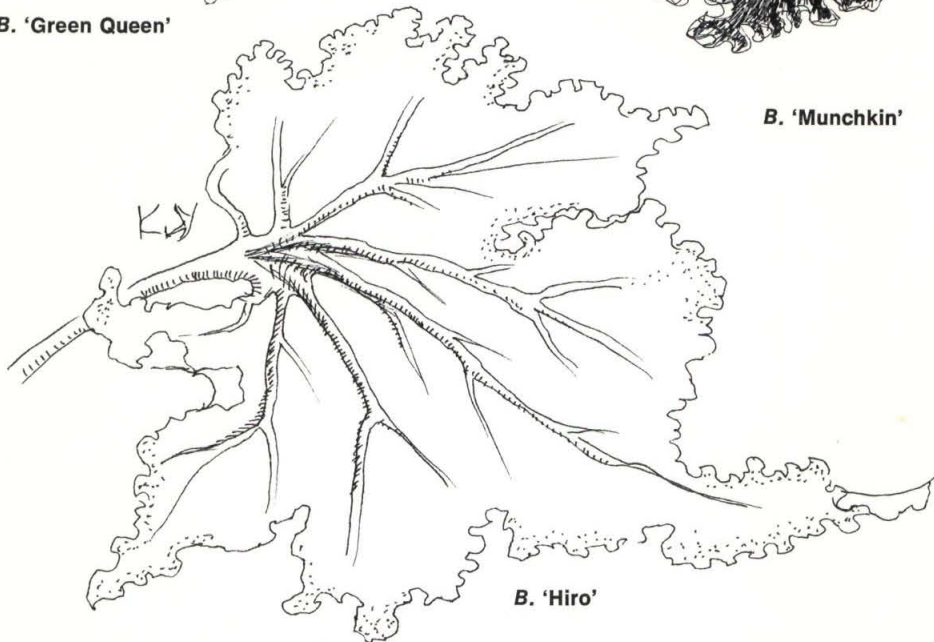
Photo/Bob Mattuket



B. 'Green Queen'



B. 'Munchkin'



B. 'Hiro'

to specimen size were sacrificed. Nevertheless, gradually over the past seven years, a few of the newer crested varieties have crept into my greenhouse and fluorescent light garden here.

Although I do not consider them truly "crested," I have both *B. 'Cathedral'* and *B. 'Fiji Islands'* with oddly curled leaves. The leaves of *B. 'Cathedral'* are much larger than those of *B. 'Fiji Islands'* and not so tightly twisted. They do not have the lettuce leaf edges on their margins. However, I like to keep these for comparison and to show visitors.

B. 'Essie Hunt' is a favorite of mine. It is outstanding with deep green leaves, red veins radiating from the center and is lightly crested on the edge. I find it difficult to keep a large one because visitors always want leaves and cuttings of this gorgeous cultivar. (See *The Begonian*, May 1980.)

Recently I received a leaf of *B. 'Hiro'* for propagation. The large silvery green leaves have a lightly frilled edge and a rosy streak on the back of the leaf. Even small plantlets grown from wedges have the typical wavy edges.



B. 'Oliver Twist'

Photo/Karen Bartholomew

This seems to be the only one with white flowers, all the others blooming pink.

Another very lovely new one is *B.* 'Munchkin' with leaves of reddish bronze and very heavily ruffled. Another, *B.* 'Oliver Twist', sounds difficult to resist—bronzy green leaves, spotted pink veins and white hairs on the margin.

B. 'Green Queen', which has green leaves with a pink ruffled and frilled edge, sounds delightful. A new one that might be worth having is *B.* 'Moonstone' with light brown leaves covered with white hairs and having the typical ruffled edges, as well as *B.* 'Muddy Waters' with green and brown marbled leaves.

Another, *B.* 'Nagre', is interesting with green leaves, reddish veins and crested margin. (It is virtually indistinguishable from *B.* 'Essie Hunt'.) Others I have seen listed but for which I can find no adequate descriptions are *B.* 'Don Jean', *B.* 'Pauli', *B.* 'Manacris', *B.* 'Madrid', *B.* 'Star Chest', and *B.* 'Whirly Curly'.

Most of these crested rhizomatous begonias are quite easy to grow. They

must be kept on the dry side during their resting period which in most sections of the country is during winter. They need proper pinching and pruning to keep them within bounds and may be grown as basket plants but are just as attractive in pots if properly cared for.

They will propagate from single leaf cuttings, wedges, and rhizomes. Some of them, particularly my own *B.* 'Bunchii', often will not show the frilled edges from cuttings until the plant approaches mature size.

Although I always grow my begonias in a mix that contains some topsoil, I have seen many crested cultivars growing in packaged potting mixes or soilless mixes.

Feeding and watering during the growing season are important to keep them in good health.

If they grow too large for your space, they may be root pruned by cutting off one-third of the root ball, replacing in the same size pot with fresh potting mix in the bottom. The leaves likely will not grow as large as usual but will be spectacular and give you much pleasure.

The perianth of *Begonia* flowers

Denis Barabé

Subsequent to the article by A. I. Baranov (*The Begonian*, July 1979) on flower and fruit characters of *B. roxburghii*, I would like to make some remarks on the perianth of *Begonia* flowers in general and on that of *B. handelii* Irmscher flowers in particular. Baranov wrote about the flowers of *Begonia*:

Another thing which seems to need explanation is that at the time of de Candolle botanists considered *Begonia* flowers as dichlamydeous, i.e., having both calyx and corolla. Hence, de Candolle describes separately "sepals" and "petals," while modern botanists consider *Begonia* flowers as monochlamydeous, i.e., having only one whorl of perianth parts which are termed as "tepals" (page 166).

However, according to what Gauthier wrote in his 1950 study of the inferior ovary in the genus *Begonia*, the principal authors who worked on this genus differed in their interpretations of the nature of the perianth parts of the flower:

The perianth parts of the pistillate *Begonia* flower have been designated in various ways. Klotzsch (1855): "petals"; De Candolle, in *Prodomus* (1864): "Lobi (sepala, vel sepala et petala)"; Bentham & Hooker (1867): "perianthii segmenta" or "perianthii foliola"; Warburg (1894), in the first edition of *Pflanzenfamilien*: "Blütenhülleblätter"; Irmscher (1925), in the second edition of *Pflanzenfamilien*: "tepals"; Smith and Schubert (1946): "tepals"; Saunders (1925a, 1925b, etc.): "sepals"; Bugnon (1926): "sécales" (page 22).

Gauthier, for his part, considers the perianth parts of the pistillate flowers that he studied as sepals; they are extensively vascularized and are not ster-

ile stamens. However, he doesn't want to prejudge thereby the nature of the perianth parts of the pistillate flower in all species of *Begonia*, nor those of the staminate flowers. More recently, Kalmbacher (1971) wrote that *Begonia* flowers have both sepals and petals and Sporne (1977) mentioned a perianth differentiated as sepals and petals in the species *B. grandis* ssp. *evansiana*. To solve this problem, I think that it is not sufficient to consider only the external morphology to determine if a flower is monochlamydeous or dichlamydeous; it is also necessary to study the vascularization, as will be shown in the following example.

I studied the vascularization of the pistillate flower of *Begonia handelii* Irmscher. This species, like *B. roxburghii*, belongs to the section *Sphenanthera*. The pistillate flower of *B. handelii* possesses four stigmas, a four-celled ovary and a perianth formed by two decussate dimerous whorls (figure 1). There are no wings on the ovary. The parts of the external whorl are 3 cm. long and 2.5 cm. broad; those of the internal whorl are 1.5 cm. long and 0.5 cm. broad.

The analysis of serial sections from different levels in the flower shows

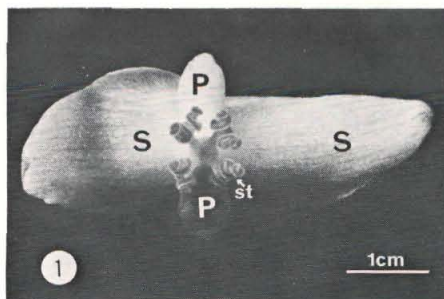
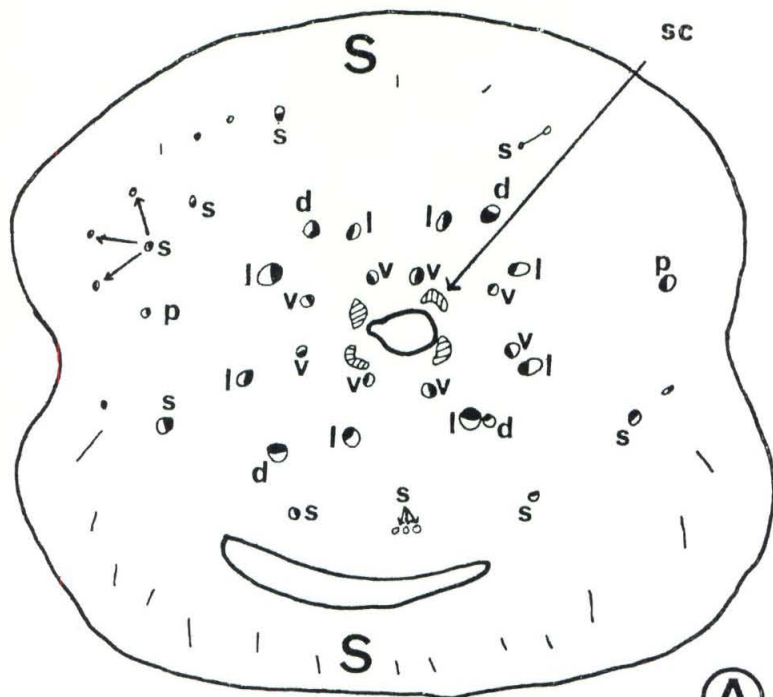


Figure 1: Pistillate flower of *B. handelii*. P, petal; s, sepal; st, stigma.

This is Denis Barabé's first contribution to The Begonian. He is a botanist at the Montreal Botanic Garden, 4101 est, rue Sherbrooke, Montreal, P.Q. Canada H1X 2B2.



2

2,5mm

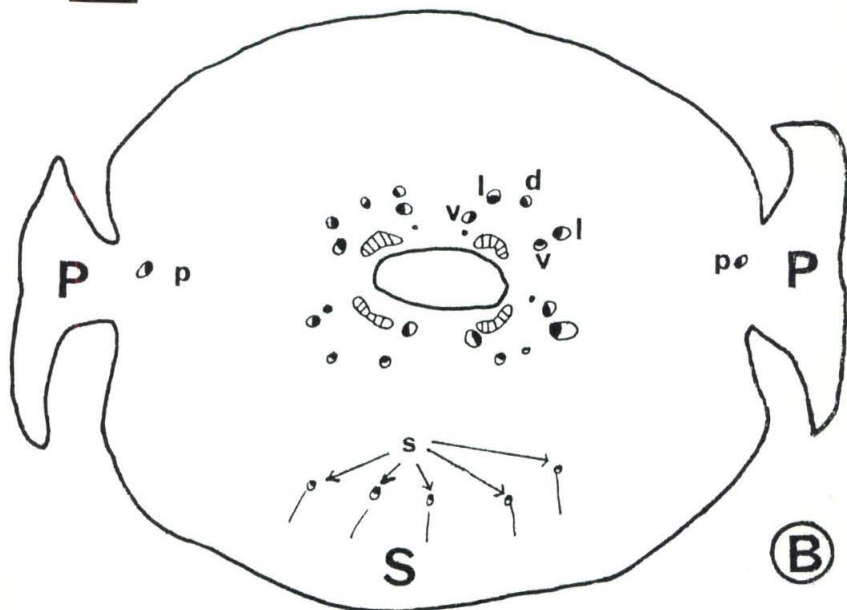


Figure 2 A-B: Transverse serial sections of the pistillate flower at the perianth level. *d*, dorsal bundle; *l*, lateral bundle; *p*, petal bundle; *s*, sepal bundle; *st*, stylar canal; *v*, ventral bundle.

that each part of the external whorl receives five to eight vascular bundles (*s*), depending on the specimen studied. Along the ovary wall, the perianth bundles are united with the carpellary bundles (*l* and *d*). The section depicted in figure 2A passes at the level of insertion into the sepals. One can distinguish the perianth bundles (*s* and *p*), the lateral (*l*), dorsal (*d*) and ventral (*v*) carpellary bundles, and the base of the styles. Higher, above the level of insertion of the sepals, the base of the perianth parts of the second whorl becomes visible (figure 2B). But, contrary to the parts of the first whorl, those of the second whorl receive just one vascular strand (*p*). This strand ramifies after it enters into the petal.

From these observations it appears that the flower of *B. handelii* is dichlamydeous in Malchior's sense (1964), i.e., having two whorls of perianth parts. But the flower is also heterochlamydeous, because it has a double perianth differentiated as both calyx and corolla.

In angiosperms with a perianth, the petals, which habitually are distinguished from the sepals by their color, possess generally a simple enough vascular system. They receive just one vascular trace, which goes through the blade without any ramification. In fact, "the vascular system may consist of one or several large veins and a system of small veinlets" (Esau, 1950; p. 537). But in the flowers of *B. handelii* the simplification of the vascular system is not very pronounced, and the petals receive one vascular bundle which divides early. The important fact is that each petal receives just one vascular strand from the central axis

while each sepal receives between five and eight.

This type of petal vascularization also occurs in the male flower of *Hillebrandia sandwicensis*, a primitive species of Begoniaceae (Gauthier and Arros, 1963). In *Hillebrandia*, each petal generally receives just one vascular strand, which may ramify in the distal part of the petal. The ramification occurs in the base of the petal when it has a very short proximal part. Elsewhere in *Hillebrandia* even the stamens show variations in their vascularization. In the long stamens, which approach the classical stamen, there is normally just one bundle. But in the dumpy stamens, it happens that the vascular system ramifies: the vascular bundle, in the filament, divides in two or three branches.

In conclusion, the study of the vascular system shows that the perianth of *B. handelii* possesses both sepals (petaloid sepals) and petals. Therefore, in the genus *Begonia* both monochlamydeous and heterochlamydeous flowers can be found.

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B. 'Bewitched', a Halloween mystery

Thelma O'Reilly

Ghosts, goblins, pumpkins, and witches greeted me at the Santa Barbara Branch meeting last October when I presented "Bewitching Begonias." Although it isn't of ghostly content, I shared the following "spooky" begonia story.

About three years ago Barbara Philip accompanied Rudolf and Margaret Ziesenhenné to San Diego when Rudy presented a program on new cultivars to the San Miguel Branch.

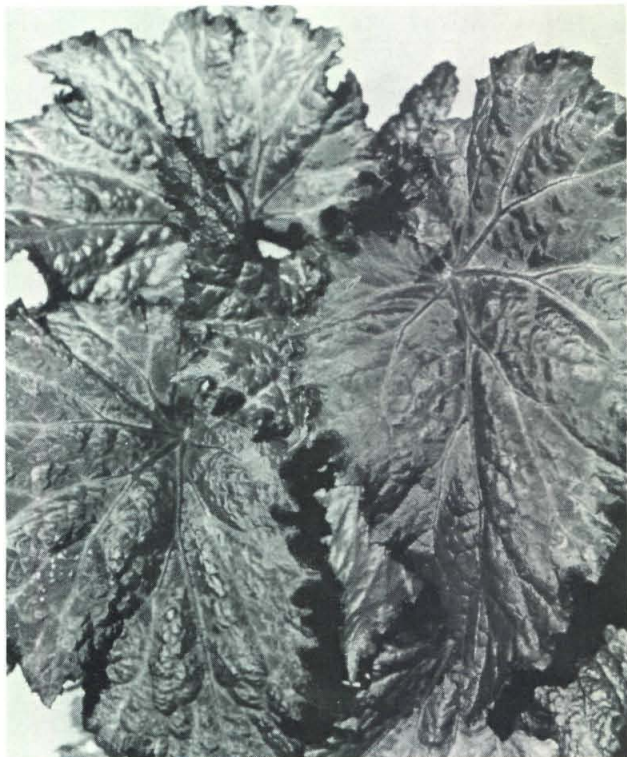
The prolific Thelma O'Reilly, whose articles appear frequently in The Begonian, was speechless for the first time in history when she was announced as the winner of the Eva Kenworthy Gray award at the ABS convention Sept. 6. She lives at 10942 Sunray Place, La Mesa, CA 92041.

One of the begonias Rudy displayed and discussed was a new *B. rex* cultivar created by Barbara Philip, *B. 'Corazon Rojo'*. Imagine my delight when Barbara presented me a small plant of this beautiful begonia—Branch President Dennis Torzeski received one, too.

It was easy to watch the progress of my new begonia because it was the only plant in my collection growing in a clay pot. I was tempted to repot it but we were in the middle of the rainy season and I feared losing it.

By the time this begonia was a year old, I was puzzled because it had not developed the outstanding red heart of *B. 'Corazon Rojo'*. A visit to Dennis Torzeski's garden confirmed my grow-

Photo/Thelma O'Reilly



B. 'Bewitched'

ing fears that my plant was not *B. 'Corazon Rojo'*. Bewildered, I returned home, rechecked the label (it still read *B. 'Corazon Rojo'*). and called Barbara. She had no logical answer without seeing the plant.

I decided to propagate and watch the results. Two leaves rooted quickly and developed into plants exactly like the mother plant. By now, the original plant from Barbara had matured into a distinct begonia of subtle beauty.

A visit to Santa Barbara last October was my first opportunity to show Barbara mature leaves of the begonia "without a name." I am still not sure who was most shocked when Barbara looked at the leaves and said "I never saw them before!" Although she had never seen these leaves before, she had potted a small begonia, labeled it, and given it to me in a clay pot. After much discussion Barbara and I concluded

my plant was one of her numerous unnamed *B. rex* seedlings.

After sharing this "mystery" with the Santa Barbara Branch on Halloween, I asked the members to name the begonia. Rudy suggested *B. 'Bewitched'* and the name was approved unanimously.

Begonia 'Bewitched' is a jewel of unknown parentage. Young leaves are metallic silver flushed rose-pink with a blackish-burgundy center and border. As leaves mature, the rose-pink color deepens into rose-red with a metallic sheen and gradually covers the leaf surface except for a few scattered patches of silver and the dark center and border.

Measuring 12 inches by 7½ inches, the shallowly lobed, assymetrical leaves are non-spiralled and ovate, gradually narrowing into such slender, long apices that caution must be used when handling them. Some leaves are slightly rippled, while others are nearly folded. Texture is crisp and surface is puckered. Sturdy petioles are 8-9 inches and brownish-red with scattered silver hairs.

It is a full, compact plant with a creeping rhizome. Because of the abundance of crisp, large leaves, I have to help the young leaves free themselves or they are caught underneath the foliage and become distorted. It has not bloomed to date.

Mildew and pests (including snails and slugs) are not attracted to this begonia. It is easy to grow and propagates quickly from leaf cuttings. I recommend it highly for beginners.

I am delighted with this bewitching begonia but will not be a bit surprised to enter the greenhouse one day and find my plants of *B. 'Bewitched'* have turned back into *B. 'Corazon Rojo'*.

Begonia Portraits

by Alice M. Clark

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How to cut your greenhouse fuel bill

David Atkinson

The easiest way to chop dollars off your fuel bill is to tighten up your greenhouse. You can start by caulking around the foundation. Put weather stripping around the door and all vents. These two things cost very little but can save you several dollars.

Lower the thermostat to 55 or 60 degrees F. Put sensitive plants by your heater or enclose them in a plastic tent with heating cable. Heat at 60 degrees until 10 p.m. or midnight then at 40 degrees until morning. Research has shown that plants don't suffer at this low temperature for part of the night.

Utilizing double layer plastic you can achieve a 40% reduction in heating cost. Or line your greenhouse with 4 mil plastic sheeting. To attach, use duct tape in metal houses and cardboard strips stapled to the wood in wood greenhouses.

Double doors stop drafts and leaks when you enter a greenhouse. Two-by-fours and plastic make a simple double door entry.

Place barrels of water in the greenhouse. The water will store heat during the day and radiate it back out during the night. Barrels with benches built over them will still work as solar collectors without decreasing usable space in the greenhouse. We use gallon milk jugs around the inside edge of the greenhouse, under the benches.

The north wall, usually the coldest part of the greenhouse, can be insulated with styrofoam sheets covered

with aluminum foil without decreasing light.

Bales of hay placed around the outside, especially the north and west sides, prevent heat loss.

Close your greenhouse early in the afternoon. If closed when the temperature drops to 80 degrees, the floor, pots, and walls will store heat to be released at night.

If you are planning to build a new greenhouse consider the following:

Trench greenhouses have less wall space to lose heat. Also earth around the outside will radiate some heat back into the greenhouse.

Greenhouses should be as square as possible. A 20 by 20 foot greenhouse has the same area as one 10 by 40 feet, but the square house has 20% less wall space to radiate out expensive heat.

Consider wood heaters if wood is available cheaply. Infrared units are also good because just the soil and plants are heated, not the air. A lean-to greenhouse attached to the south wall, especially if it is brick or rock, will store heat during the day and slowly release it at night.

"Solar greenhouses" have well-insulated north, west, and east walls. Only the south wall and roof are covered with fiberglass. Even the floor can be insulated. The north wall is usually covered with aluminum foil to reflect light.

With less wall space, good insulation, and tight construction, a "solar greenhouse" will hold a temperature 40 to 45 degrees above that outside.

And besides saving money, you'll be a patriotic energy conservationist.

David Atkinson, owner of Atkinson's Greenhouse at Rt. 2, Box 28, Morrilton, AR 72110, sells begonias, ferns, and cacti.

ROUND ROBINS/ *How members deal with cold weather*

Jan Clark

The cool nights of fall bring on new concerns for begonia growers. We all worry about losing a collection to winter's cold.

Kingsley Langenberg, Illinois, suffered just such a disaster one winter night when the temperature outside was near zero—and his greenhouse heater failed. Most of his plants were frozen solid. With the kind of optimism that only a dedicated hobbyist can muster, he comments:

"I've recovered from the shock now and look back on the experience as a very educational one." Here are some of the things he learned.

□ A temperature alarm is an essential part of a greenhouse in the mid-west.

□ A fan helps prevent frost damage in a greenhouse. Many of the begonias in the airstream from the fan survived; among them were *B. rex*, *B. hemsleyana*, and a *B. lubbersii* cutting.

□ Hairy-leaved begonias survived better than all others—probably due to their "fur coats" which trapped a layer of insulating air next to their leaves.

□ Some survived because they happened to be dry at the time. Their cells probably had a higher salt content than their water-swelled neighbors—sort of like antifreeze in their cells.

□

Fluorescent light growers share some tips for winter growing:

Jan Clark is round robin reporter. Information about joining a robin—a packet of letters circulated among begonia lovers—is available from Mary Harbaugh, round robin director. Write to her at Rt. 4, Box 343, Shawano, WI 54166.

Eugenia Lyon, Ohio, found that her flora-cart was getting too cold at night, so she wrapped the whole thing in 4-mil plastic sheeting and ran the lights at night instead of during the day. Heat from the ballasts kept the cart warm.

Linda Kirik, Ontario, used the same lighting schedule to reduce the need for supplemental heat. Regardless of when you burn your lights, it is important to lengthen the dark period to bring on flowering.

Mary Harbaugh, Wisconsin, reduced daylength to 10-12 hours in winter and was rewarded with profuse bloom on her rhizomatous begonias. Douglas Hahn, Ohio, offers the following explanation: "Reducing winter light time under fluorescents and curtailment of fertilizer keeps the begonias from being stressed into trying to grow when their biological timeclocks want them to rest."

□

Windowsill growers also have wintertime worries. Simply bringing in a collection that has summered outdoors can be a mind-boggling job! Agnes Hodgson, Pennsylvania, finds the chore made easier by tiered benches which can be taken down and reassembled indoors.

Mary Harbaugh cautions indoor growers against overwatering when rooms get cold at night. And Betty Davenport, Washington, reminds us to move begonias away from heat registers when winter comes.

□

Winter brings changes in growing schedules. Jo Jordan, Mississippi, received some cuttings in the fall. She rooted them by various methods, but

found that, regardless of method, they all "put themselves on hold" until spring.

However, Texas is the exception that proves the rule, for Mae Blanton and Bob Hamm assert that cuttings and seedlings do best there in the cool parts of the year; propagation is nearly impossible in the stress of summer heat.

G. Art Sackenruther, California, who grows magnificent epiphyllums along with his begonias, reminds fellow robins that these plants need a rest in winter to set flower buds. He also recommends a high-phosphorus and potassium fertilizer during the growing season to promote bloom.



One of the great joys in begonia growing is getting seeds—either by swap or by ordering from the Clayton M. Kelly Seed Fund. But joy can turn into bitter disappointment if the seeds have been crushed. Postal cancelling machines are the usual culprit. In a recent robin, Mabel Corwin, California, shares this personal experience:

"I send seeds to Joy Porter (Seed Fund director). I take them to the post office and see that they hand cancel so it doesn't go through the machines. Joy sent one envelope back to me to show that it was machine cancelled in San Diego. My husband took it to the post office and asked them about it. They got their heads together and said it had gone through two other cancelling machines on the way. The small letters stamped on the back of the envelope told them this. It has to do with going from one zip code to another. They said they don't know of any way to prevent this. So I feel that some of our seeds are damaged in the mails."



In puzzling over begonia names, many growers wonder what to call rex and other seedlings. Pat Maley, California, gives a definitive answer:

"Only species come true from seed . . . all the rexes are hybrids (other than the original *B. rex*). The only way to propagate a named hybrid is vegetatively . . . from leaves or cuttings. Seedlings of a hybrid can never be called by the name of the parent, even if selfed, for the genes are mixed and they will not be alike. All too often someone has grown seedlings from a named plant, put the name of the parent plant on the seedlings, and shared with others, resulting in several plants out under the name of the parent . . . incorrectly . . . and adding to the confusion of begonia nomenclature."

Ruth Ihara, District of Columbia, cites the example of *B. 'Cleopatra'*: experts believe that the reason *B. 'Cleopatra'* from different sources varies so widely is that people have grown plants from *B. 'Cleopatra'* seed and

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GROWING FROM SEED/ A "light" method

Doug Frost

My wife Goldie and I have done a lot of hybridizing and, in the process, have developed a dependable way to grow from seed. Once tried, it becomes routine and proves quite simple.

First, take 2-inch square plastic pots, fill halfway with coarse perlite, and top with a mixture of finely ground peat moss and vermiculite. We use the product called Lite-Gro. Wet it thoroughly and pack it down tightly.

Scatter the seed thinly on top of the mix. Place the pots in a plastic shoebox or sweater box and fill the box to a depth of one-half inch with distilled water to which a few drops of vitamin B-1 has been added.

Put each box on a heating cable at 70 degrees F. and about 12 inches from fluorescent lights overhead. Turn on the lights and leave them on 24 hours a day.

We usually have complete germination in seven to 14 days, depending on the cultivar or species and viability of the seed. When germination is complete, drain off water and put the covered box back under the round-the-clock lights.

At this point, start foliar feeding every second day. Use an ordinary hand spray bottle, misting the plants with a half-strength solution of high-phosphorus fertilizer. We use Plant Marvel (12-31-14). The phosphorus encourages development of a good root system and a stocky, robust plant.

When a plant develops its fourth leaf, transplant to another covered box

containing an inch of the Lite-Gro mix. We usually take them up in small clumps of three to six plants.

As plants become large enough to separate, transplant singly to another box of Lite-Gro.

Two to three weeks later, they will be large enough to harden off. Now is the time to turn off the fluorescent lights—finally.

To harden off the plants, slide the lid back an inch on the first day. Increase the exposure to outside air each day until by the fifth or sixth day you can remove the lid. Now the plants can be potted up.

This procedure derives from the best points of numerous others we've tried and abandoned. We have no damping off, algae, or botrytis, and virtually zero mortality, even after transplanting.

We don't have a greenhouse, but use our enclosed patio which we heat in winter. In Garden Grove, Calif., it is hot and dry the rest of the year.

While some growers have reported difficulty in getting *B. ebolowensis* seedlings to live, we experienced 100 per cent survival with our system.

Seedlings of most tuberous species will produce flowers in six months from seed. We sowed *B. rhopalocarpa*, *B. manni*, and *B. sharpeana* in June and all had been transplanted once by late July. *B. patula*, sowed at the same time, was ready for potting.

PACIFIC HORTICULTURE

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Doug Frost, longtime begonia hybridizer and ABS member, 10622 Teal Dr., Garden Grove, CA 92640, guest wrote this month's column for Joy Porter.

SEED FUND/ *Palm-like B. luxurians*

Joy Porter, director, Clayton M. Kelly Seed Fund

- OT 1 — *B. luxurians*: An aristocratic shrub-like species found in Brazil in 1848 with palm-like, compound leaves, and a crown of smaller leaflets at the sinus. Not easy to grow, but an eye-catcher if you succeed. Chances of success better from seed than acclimating an established plant. per pkt. 1.00
- OT 2 — *B. olbia*: Supply limited. Contributed by Thelma O'Reilly, who was instrumental in discovering that a hybrid has been grown under the parent's name for more than 40 years (see *Begonian*, January 1978). If you think the hybrid is lovely (maple-shaped leaves, iridescent, with glowing red reverse), wait until you see the species. per pkt. 1.00
- OT 3 — *B. mazae*: A lovely trailing, scandent species found in Mexico in 1947 and described by Rudolf Ziesenhenné. Round leaves with a tiny, pointed tail, bronze-green, white sinus, and red-brown markings along veins. Deep red underneath. Grow fairly dry, with perfect drainage. Pink flowers per pkt. 1.00
- OT 4 — *B. gehrtii*: Small supply, but this beautiful rhizomatous with distinctive foliage has not been offered since February 1977. The bubbly leaf texture has caused it to be mistaken for *B. paulensis*. See picture labeled "un-identified species," November 1974 *Begonian*, page 280. . . per pkt. 1.00

The following seeds (OT 5 to 9) were collected by Scott Hoover in South America on his recent expedition. These seedlings seem to perish in high temperatures, so fall sowing is preferable.

- OT 5 — #235: Horned fruit species from cloud forest near Santander, Colombia. Damp, cool, shady location. per pkt. 1.00
- OT 6 — #257: Unknown shrub from road to Villavincencio, Colombia, elevation 4,600 feet. per pkt. 1.00
- OT 7 — #275: Unknown herbaceous type from area above Palman, Choco, Colombia. Spots on immature leaves. Very interesting. per pkt. 1.00
- OT 8 — #312: Unknown species from area above Tena, Ecuador. . . per pkt. 1.00
- OT 9 — #324: Unknown horned fruit species from area above La Palma, Ecuador. per pkt. 1.00
- OT 10 — *B. dietrichiana*: Shrub-like species with narrow, pointed leaves, 1/2" x 2", lightly serrate and attractively red-edged. The stems of the much-branched plant are a shining, succulent red, with white flower clusters at tips of new growth. per pkt. .50
- OT 11 — *B.* unknown species from Peru. Related to *B. bracteosa*. . . per pkt. .50
- OT 12 — *B.* unknown species. Source must remain secret. Try this and let me know what you think it is. per pkt. .50

Send orders to Joy Porter, 9 Bayberry Lane, Framingham, MA 01701. Include self-addressed stamped envelope. Massachusetts residents add 5% sales tax. Checks and money orders should be made payable to: Clayton M. Kelly Seed Fund. Foreign orders: U.S. funds only.

B. luxurians



QUESTION BOX/ *Greenhouse temperatures—how low?*

Elda Haring

Question: What is the minimum temperature in a greenhouse for most begonias in winter?

Answer: Many begonias will survive but not grow through the winter at a minimum temperature of 45 degrees. In my own greenhouse the minimum temperature is 56 degrees. For best growth the minimum temperature should be at least 60 degrees.

Question: What is the difference between *B. 'Roi de Roses'* and *B. 'Glory of St. Albans'*? They look alike to me.

Answer: *B. 'Roi de Roses'* is classified as rex, medium leaved, non-spiral while *'Glory of St. Albans'* is upright stemmed, non-spiral.

Many rexes have similar foliage and are difficult to identify.

Question: Both my *B. 'Essie Hunt'* and *B. conchifolia* var. *rubrimacula* have lost the red coloring at the sinus. *B. 'Essie Hunt'* grows in a northeast window where it blooms and *B. conchifolia* var. *rubrimacula* is on a light cart.

Answer: I do not know the answer to your problem. In my greenhouse, *B. 'Essie Hunt'* loses red coloring if grown in too-bright light, but *B. conchifolia* var. *rubrimacula* does not.

Under lights the red is more pronounced. I use one warm white and one cool white tube in my light garden setup. Possibly when new growth begins, fertilization will correct the situation.

Send questions about begonia growing to Elda Haring, P.O. Box 236, Flat Rock, NC 28731. She'll mail you her reply promptly.

Question: *B. 'Lenore Olivier'* is in a south window getting sun from 10:30 to 3. It has large clusters of flowers which do not open. The male flowers drop off like small rose-colored clam shells and the female flowers do not open. Are the unopened buds typical of this plant or should I change the location?

Answer: The sun shining through the south window may be too strong for the plant and the location too warm. Warm air from heating ducts would cause unopened buds.

I suggest you move your plant to an east window if possible and mist it often.

Question: I have good luck getting leaf cuttings to root but, when I transplant to an almost soilless mix, they rot. What do you suggest?

Answer: I let my leaf wedges remain in the propagation container until they have sent up plantlets and usually transplant when they are two to three inches high. I put them in individual pots using my regular potting mix. Water very sparingly especially during winter.

Question: The large older leaves of several of my rhizomatous varieties tend to curl under. I can see no pests. What causes this?

Answer: Usually curling of leaves would indicate that humidity in your

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Rudolf Ziesenhenné of Santa Barbara, Calif., and Thelma O'Reilly of La Mesa, Calif., were the surprised winners of ABS' most coveted awards announced at the convention banquet in Long Beach, Calif., on Sept. 6.

Rudy, former ABS nomenclature director and a long-time begonia researcher and grower, won the Herbert P. Dyckman award for service to the society. It is named for ABS' founding president.

Thelma received the Eva Kenworthy Gray award for literary contributions to the study of begonias. She is a co-director of the nomenclature department and a frequent *Begonian* contributor.

B. 'Murray Morrison', a 1969 hybrid by Belva Kusler, was awarded the Alfred D. Robinson Medal of Honor for an outstanding cultivar.

(Detailed coverage of the "Seaside Rendezvous" convention will appear in the November issue.)

Election results

Chuck Anderson is ABS' new president-elect and Michael Kartuz new first vice president following the election of 1980-81 officers.

Chuck and Michael won contested offices. Joan Coulat was re-elected second vice president in the other contest.

Elected without opposition were Gil Estrada, president; John Ingels, treasurer; and Arlene Davis, secretary. John and Arlene are new faces on the board of directors; Gil has been president-elect and succeeded to the presidency upon the resignation of Nate Randall in May.

New officers, including Nate as past president, were installed at the Long Beach, Calif., convention Sept. 6. Election results:

President—Gil Estrada, 228.

President-elect—Chuck Anderson, 179; Howard Berg, 68.

First Vice President—Michael Kartuz, 168; Margaret Taylor, 91.

Second Vice President—Joan Coulat, 176; Norma Taylor, 82.

Treasurer—John Ingels, 218.

Secretary—Arlene Davis, 218.

In memoriam:

Orpha Colburn Fox

One of ABS' oldest and most knowledgeable members, Orpha Colburn Fox, died Aug. 29 after 32 years as a member of the Buxton Branch. Her death was announced at the ABS convention in Long Beach, Calif., which Orpha earlier had planned to attend.

Orpha, 81, of Dracut, Mass., had been Buxton's president, vice president, recording secretary for 11 years, historian, and chairman of shows and study groups. "Her reports were so interesting and informative that people enjoyed the business meeting," according to Buxton's Nancy Alvord.

A Round Robin participant, Orpha had other interests as well. She was an amateur historian, and wrote a history of Dracut and a history of New England carousels.

She is survived by three daughters and 10 grandchildren.



**Orpha
Colburn
Fox**

Cecilia Russell

Long-time member of the Monterey Branch Cecilia Russell died in early September following a lengthy illness. "She was always lots of fun to be with," said branch member Don Englund. "The branch will miss her enthusiasm."

Cecilia often attended ABS conventions with friend Leslie Hatfield, a past president of the branch.

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Carrie Karegeannes and Thelma O'Reilly, nomenclature co-directors

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

Begonia 'Grandpa'

No. 779—*Begonia* 'Bearded' x 'Rosetta' 'Grandpa'

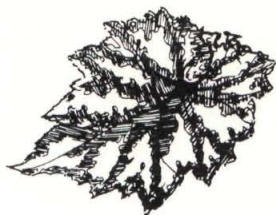
Rex Cultorum group; rhizomatous. Leaves are bright Kelly green with silver spots and dots, roundish and spiraled, 7" x 7½", with ciliate margin and warty, hairy surface. They are 9-veined and have 8" petioles with fine reddish hairs and ½" x ¾" stipules. The hybridizer says 'Grandpa' has a wonderful personality. Originated in 1976 by Bob Cole, 18007 Topham Street, Reseda, CA 91335; first distributed in 1979; first published and illustrated (leaf drawings) in the Plant Shop's Botanical Garden catalog, 1980. No bloom to date. Registered Nov. 7, 1979.

Begonia 'Hot Diggity'

No. 780—*Begonia* 'This 'N That' x 'Big Boy' 'Hot Diggity'

Rex Cultorum group; rhizomatous. Leaves are silver-white and deep green with a brownish-maroon edging, lobed with an overlap at the base, 7" x 8", with puckered surface and 8 veins. Petioles are 7"; stipules ¾" x ¾". The originator says this compact begonia has good color and leaf shape with an interesting leaf edging. Originated in 1976 by Bob Cole (address above); first distributed in 1979; first published and illustrated (leaf drawing) in Plant Shop's Botanical Garden catalog, 1980. No blooms to date. Registered Nov. 7, 1979.

Applications to register Begonia cultivars may be obtained from Thelma O'Reilly, 10942 Sunray Place, La Mesa, CA 92041. Each must be typed or printed in ink. A \$2 check or money order payable to the American Begonia Society must accompany each completed application. Photos, drawings, and/or dried specimens to accompany applications are encouraged. ABS is the International Registration Authority for Begonia cultivar names.



B. 'Hot Diggity'

Registration of cultivar No. 781 was postponed at press time.

Begonia (Maqux grex) 'Xox'

No. 782—*Begonia* 'Madame Queen' x 'Susie's Curl' (Maqux g.) 'Xox'

Rhizomatous. Young leaves of blackish-grape color with a red under surface fade to bronze-green with age. Mature leaves are 6" x 8" and lobed, with a partial spiral, ciliate-crenate margin, glabrous surface, and 9 veins. Petioles are 8" long, stipules ¼" x ½". Light- and dark-green marbled leaves distinguish this cultivar. Originated in 1978 by Bob Cole (address above); first distributed in 1979; first published in Plant Shop's Botanical Garden catalog, 1980. No blooms to date. Registered Nov. 7, 1979.

Begonia 'Mephistopheles'

No. 783—*Begonia* 'Witch's Lore' x 'Pam Sue' 'Mephistopheles'

Rex Cultorum group; rhizomatous with erect stem. Lobed, nonspiraled, dark-green leaves with red hairs are 4" x 4", with 7 veins, 8"-10" petioles, and ¼" stipules. Flowers are white. Small, hairy leaves of unusual coloring and upright rhizomes distinguish this cultivar. Originated in 1975 by Bob Cole (address above); first distributed and bloomed in 1979; first published in Plant Shop's Botanical Garden catalog, 1980. Registered Nov. 7, 1979.

Begonia 'Nice Guy'

No. 784—*Begonia* 'Ho Hum' x 'Silver Giant' 'Nice Guy'

Rex Cultorum group; rhizomatous. Spi-

raled 6" x 8" leaves have a dark-green center zone, a silver middle zone flushed with metallic pink, and a spotted outer zone, with a crenate margin, puckered surface, and 9 veins. Petioles are 10"-15"; stipules $\frac{1}{2}$ " x $\frac{3}{4}$ ". Originated in 1975 by Bob Cole (address above); first distributed in 1979; first published in Plant Shop's Botanical Garden catalog, 1980. No blooms to date. Registered Nov. 7, 1979.

***Begonia* (Ron Cat grex) 'Kitten'**

No. 785—*Begonia* 'Ronnie Nevins' x 'Cachuma' (Ron Cat g.) 'Kitten'

Rhizomatous. Green leaves with lighter green veins are cleft and "floppy," 8" x 13", with puckered surface. Petioles are 14" with white hairs and a red base; stipules $\frac{3}{4}$ " x 1". The giant, puckered, floppy leaves give this cultivar a distinct appearance. Originated in 1978 by Bob Cole (address above); first distributed in 1980; first published in Plant Shop's Botanical Garden catalog, 1980. No blooms to date. Registered Nov. 7, 1979.

***Begonia* (Yukapuk grex) 'Yippy'**

No. 786—*Begonia* Panama species x *conchifolia* var. *rubrimacula* (Yukapuk g.) 'Yippy'

Rhizomatous. Dusty green 6" x 8" leaves have red veins that fade with age, an entire to subentire margin, hairy surface, and 10 veins. Petioles are 12" long, stipules $\frac{3}{4}$ " x $\frac{3}{4}$ ". Minute pinkish hairs turn white as red veins fade, giving the foliage a dusty appearance. Originated in 1977 by Bob Cole (address above); first distributed in 1980; first published in Plant Shop's Botanical Garden catalog, 1980. No blooms to date. Registered Nov. 7, 1979.

***Begonia* 'Alice Ganns'**

No. 787—*Begonia* unnamed *rex* cultivar x unnamed *rex* cultivar 'Alice Ganns'

Rex Cultorum group; rhizomatous. Nonspiraled 6" x 9" leaves with a deep-green center shading into a silver area are bordered in brown and are red-veined, with serrate margin, glabrous and slightly puckered surface, and 9 veins. Petioles are 4"-6"; stipules 1". Flowers are pink. Short petioles, slight puckering, and irregular pebbled pattern on the leaves distinguish this cultivar. Originated in 1975 by

Bob Cole (address above); first bloomed and distributed in 1979; first published in Plant Shop's Botanical Garden catalog, 1980. Registered Nov. 7, 1979.

***Begonia* 'China Town'**

No. 788—*Begonia* 'Sir Roy Yewell' x 'Stanley Wilson' 'China Town'

Rex Cultorum group; rhizomatous. Lobed dark-green leaves with a starlike center, silver and green zones, and maroon border are nonspiraled, 5" x 5", with a glabrous surface and 8 veins. Petioles are $7\frac{1}{2}$ "; stipules 1". This cultivar is distinguished by silver markings shaped like teardrops, which reminded the originator of Madame Chiang Kai-shek. Flowers are pink. Originated in 1975 by Bob Cole (address above); first bloomed and distributed in 1979; first published in Plant Shop's Botanical Garden catalog, 1980. Registered Nov. 7, 1979.

***Begonia* (Cookole grex) 'Toe'**

No. 789—*Begonia* 'Evening Nymph' x *schmidtiana* (Cookole g.) 'Toe'

Thick-stemmed with 6" stem. Glabrous 2" x 3" leaves are bronze-green with red under surface, serrate margin, 6-8 veins, 4"-6" petioles, and $\frac{1}{2}$ " x $\frac{3}{4}$ " stipules. Flowers are pink. Short stems, short internodes, heavy branching, and compact growth distinguish this cultivar. Originated in 1977 by Bob Cole (address above); first bloomed and distributed in 1980; first published in Plant Shop's Botanical Garden Catalog, 1980. Registered Nov. 7, 1979.

***Begonia* 'Finkelstein'**

No. 790—*Begonia* unnamed *rex* cultivar x hatacoa 'Silver' 'Finkelstein'

Rex Cultorum group; rhizomatous with erect stem. This begonia is distinguished by the color combination of mat silver on bright green and the unusual open spiral at leaf base. Measuring 3" x 5", the leaves are lobed, with glabrous surface, 6 veins, 5"-7" petioles, $\frac{1}{2}$ " x $\frac{1}{2}$ " stipules. Originated in 1976 by Bob Cole (address above); first distributed in 1979; first published and illustrated (leaf drawing) in Plant Shop's Botanical Garden catalog, 1980. No blooms to date. Registered Nov. 7, 1979.

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Begonia 'Lacadasycal'

No. 791—*Begonia* unnamed *rex* cultivar x 'Edie's Favorite' 'Lacadasycal'

Rex Cultorum group; rhizomatous with erect stem. A monstrous spiral distinguishes leaves with a brown-green center, mottled colors of green and silver, and a red border. Leaves measure 7" x 8" and have a crenate margin, bubbled and puckered surface, and 9 veins. Petioles are 8"; stipules ¼". Growth is compact. Originated in 1975 by Bob Cole (address above); first distributed in 1980; first published in Plant Shop's Botanical Garden catalog, 1980. No blooms to date. Registered Nov. 7, 1979.

Begonia 'Loco'

No. 792—*Begonia* Lee's #9 x hatacoa 'Silver' 'Loco'

Rex Cultorum group; rhizomatous with rhizome jointed at or below the soil. Nonspiraled leaves are silver with dark veins, 5" x 5", with serrate-ciliate margin, hairy surface, 7 veins, 4"-6" petioles, and ½" x ¾" stipules. Growth is upright and

compact. Flowers are pale pink. Originated in 1976 by Bob Cole (address above); first bloomed and distributed in 1979; first published in Plant Shop's Botanical Garden catalog, 1980. Registered Nov. 7, 1979.

Begonia 'Orb'

No. 793—*Begonia hidalgensis* (syn. *dayii* hort.) x *nelumbiifolia* (red-veined form) 'Orb'

Rhizomatous. Peltate, pale-green, 5" x 7" leaves with reddish veins turn dark green with blackish veins. The leaves have an entire margin, glabrous surface, 10 veins, 12" petioles, and ¾" x ¾" stipules. Leaf shape and red veins on fragile green coloring give distinction to this cultivar. Originated in 1978 by Bob Cole (address above); first distributed in 1979; first published in Plant Shop's Botanical Garden catalog, 1980. No blooms to date. Registered Nov. 7, 1979.

Begonia 'Southgate'

No. 794—*Begonia* Costa Rica species #4354 x *conchifolia* var. *rubrimacula* 'Southgate'

Rhizomatous. Slightly lobed leaves with felted veins and red dot at petiole attachment are bright medium green on upper surface and dull green underneath, occasionally peltate, 5" x 6", with entire to subentire margin, glabrous surface. They have 10 veins, 8"-10" brown-felted petioles, and ¾" x ¾" stipules. Pink flowers are profuse in spring. Originated in 1977 by Bob Cole (address above); first bloomed and distributed in 1980; first published in Plant Shop's Botanical Garden catalog, 1980. Registered Nov. 7, 1979.

Begonia (Collage grex) 'Summer'

No. 795—*Begonia* 'Cinco de Mayo' x 'Cachuma' 'Summer'

Rhizomatous. Star-shaped 4" x 6" leaves are green with cleft margin, glabrous surface, 9 veins, 12" petioles, and ⅓" x ½" stipules. The originator says this cultivar is a "fantastic, compact grower." Originated in 1978 by Bob Cole (address above); first distributed in 1979; first published in Plant Shop's Botanical Garden catalog, 1980. No blooms to date. Registered Nov. 7, 1979.

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Betty Pullar, Natl. Dir.

EASTSIDE BEGONIA BRANCH

4th Wednesday, 7:30 p.m.

590 116th Avenue N.E.,

Bellevue, Wash.

Dale Greer, Pres.

1704 212th Ave. S.E., Issaquah,

WA 98027

Shelton Fisher, Natl. Dir.

EDNA STEWART PITTSBURGH BRANCH

3rd Wednesday, 7:30 p.m.

Pittsburgh Civic

Garden Center

Suzanne Colaizzi, Pres.

115 Lillian Rd., Pittsburgh,

PA 15237

Frank Kerin, Natl. Dir.

ELSA FORT BRANCH

Helen Green, Pres.

2100 Hunter St., Cinnaminson,

NJ 08077

Gladys Cooper, Natl. Dir.

FRED A. BARKLEY BRANCH

1st Sunday, Homes of members

Dr. Fred A. Barkley, Pres.

104 E. Highland,

Tecumseh, OK 73475

This directory appears quarterly. If your branch listing is incomplete or inaccurate, please notify the secretary immediately and send a copy of your letter to the editors.

Dr. Jeffrey Black, Natl. Dir.

GARDEN GROVE BRANCH

3rd Thursday, 7:30 p.m., New
Community Meeting Center
11300 Stanford, Garden Grove,
CA 92643

Doug Frost, Pres.

10622 Teal, Garden

Grove, CA 92643

George Allison, Natl. Dir.

GLENDALE BRANCH

2nd Tuesday, 8:00 p.m.

Glendale Federal S & L,

401 N. Brand, Glendale, Calif.

Darlene Fuentes, Pres.

2313 Hollister Ter., Glendale,

CA 91206

Dolores Fernandez, Natl. Dir.

GREATER CHICAGO AREA BRANCH

4th Sunday, except Dec., 2 p.m.

Oak Park Conservatory

561 Garfield, Oak Park, Ill.

Dan Haseltine, Pres.

6950 W. Nelson St., Chicago,

IL 60634

Paul Thomas, Natl. Dir.

GREATER CINCINNATI BRANCH

Verda Stull, Pres.

5 Burnham St., Cincinnati, OH

45218

Erich Steiniger, Natl. Dir.

GREATER ROCHESTER BRANCH

3rd Sunday, Homes of members

Betty Fennell, Pres.

1054 Shoemaker Rd., Webster,

NY 14580

Eileen Franklin, Natl. Dir.

HAMPTON BRANCH

2nd Monday, 7:45 p.m., Parrish

Memorial Hall, Southampton,

NY

Ed Thompson, Pres.

310-A Hill St., Southampton,

N.Y. 11968

Mary Burnaford, Natl. Dir.

HOUSTON TEXAS BRANCH

4th Monday, 1:00 p.m., Garden

Center, 1500 Herman Dr.,

Houston, Tex.

Mrs. B. A. Russell, Pres.

5926 Jackwood St., Houston

TX 77074

Gwen Brunka, Natl. Dir.

JACKSONVILLE BRANCH

3rd Monday, 7:30 p.m.

Agricultural Ctr.,

1010 North McDuff Ave.

Ann M. Helton, Pres.

334 Brunswick Rd.,

Jacksonville, FL 32216

Mary Harrell, Natl. Dir.

KNICKERBOCKER BRANCH

2nd Tuesday, 7:30 p.m.

Horticultural Society of New

York

128 West 58th St., New York,

N.Y.

Howard Berg, Pres.

16 Highview Terr.,

New Canaan, CT 06840

Ed Grasheim, Natl. Dir.

LONG BEACH PARENT CHAPTER

2nd Sunday, 1:30 p.m., Great

Western S & L
6330 E. Spring St., Long Beach
Loretta Salzer, Pres.

4702 Ocala Ave., Lakewood,
CA 90713

Muriel Perz, Natl. Dir.

LONG ISLAND BRANCH

2nd Wednesday, 8:00 p.m.

Planting Fields Arboretum

Oyster Bay, Long Island, N.Y.

Mrs. Martha Graham, Pres.

55 Duryea Rd., Melville,

NY 11746

Marie Donnelly, Natl. Dir.

MIAMI BRANCH

4th Tuesday, 8:00 p.m.

Simpson Memorial Garden

Center

55 South West 17th Road,

Miami, Florida

Charles J. Jaros, Pres.

2621 N.W. 23rd Court, Miami,

FL 33142

Charles J. Jaros, Natl. Dir.

MINNESOTA BRANCH

2nd Wednesday, 7:30 p.m.

Homes of members

Dorothea Lillestrand, Pres.

2100 W. 108th, Bloomington,

MN 55431

Pat Burdick, Natl. Dir.

MONTEREY BAY AREA BRANCH

4th Wednesday, 8:00 p.m.

New Monterey Neighborhood

Center

Lighthouse and Dickman Sts.,

New Monterey, Calif.

Florence Peckman, Pres.

1249 Buena Vista Ave.,

Pacific Grove, CA 93950

Leslie Hatfield, Natl. Dir.

NORTH LONG BEACH BRANCH

2nd Tuesday, 7:30 p.m.

Mercury S&L

4140 Long Beach Blvd., Long

Beach

Edith Van Landingham, Pres.

6925 Lime Ave., Long Beach,

CA 90807

D. G. Sullinger, Natl. Dir.

ORANGE COUNTY BRANCH

2nd Thursday, 7:30 p.m.

Fullerton S & L, 2310 E. Lincoln

Ave., Anaheim

Cruz Sandoval, Pres.

2221 Evelyn Dr., Anaheim, CA

92805

Margaret Taylor, Natl. Dir.

PALM BEACHES BRANCH

2nd Monday, Home S & L

Opp. Palm Coast Plaza, W. Palm

Beach, Fla.

Mrs. Frances Hunter, Pres.

201 Potter Rd., W. Palm Beach,

FL 33405

Paul Lowe, Natl. Dir.

PALMETTO BRANCH

Lucille Peden, Pres.

4 Wildwood Dr., Greenville,

SC 29607

John McWhorter, Natl. Dir.

PALOMAR BRANCH

2nd Thursday, 7:30 p.m.

Vista Recreation Center

Ingebor Foo, Pres.

1050 Melrose Way,

Vista, CA 92083

Mabel Corwin, Natl. Dir.

POTOMAC BRANCH

4th Sunday, 2:00 p.m.,

National Arboretum

Blandensburg & R. Sts., N.E.,

Washington, D.C.

Maxine Zimman, Pres.

Rte 1, Box 73, Boyce, VA 22620

Carrie Karegeannes, Natl. Dir.

REDONDO AREA BRANCH

4th Friday, 7:30 p.m., R. H. Dana School Cafetorium
135th St. and Aviation Blvd.
Hawthorne, Calif.
Evelyn Isaac, Pres.
2022 Bataan Rd., Redondo
Beach, CA 90278
Diane Fries, Natl. Dir.

ROGER WILLIAMS BRANCH

3rd Monday night. Homes
of members.
Arlene Peck, Pres. & Natl. Dir.
Eagle Peak Rd., RFD #1,
Box 478, Pascoag, R.I. 02858

RUBIDOUX BRANCH

4th Thursday, 7:30 p.m.
West Riverside Memorial
Auditorium
4393 Riverview Dr., Rubidoux
Claire Husted, Pres.
13597 Indiana, Corona, CA
91720

R. H. Terrell, Natl. Dir.

SACRAMENTO BRANCH

3rd Tuesday, 7:45 p.m.,
Garden Center
3330 McKinley Blvd.,
Sacramento, Calif.
Patricia Jochim, Pres.
7664 Madeline Way,
Citrus Heights, CA 95610
Linda Luckett, Natl. Dir.

SALINE COUNTY BRANCH OF KANSAS

4th Monday, 1:30 p.m., Homes
of members
Mrs. Sam Gilmore, Pres.
536 Crestwood Rd., Salina,
KS 67401

SA FRANCISCO BRANCH

1st Wednesday, 8:00 p.m.,
Garden Center
Golden Gate Park, 9th Avenue
and Lincoln Way
Dolores Dupre, Pres.
417 Hazelwood Ave., San
Francisco, CA 94127
Susan Muller, Natl. Dir.

SAN GABRIEL VALLEY BRANCH

2nd Tuesday, 7:30 p.m., Los
Angeles State and County
Arboretum
501 N. Baldwin Ave., Arcadia,
Calif.

Cecelia Grivich, Pres.
2808 S. Baldwin Ave.,
Arcadia, CA 91006
Ellie Skinner, Natl. Dir.

SAN MIGUEL BRANCH

1st Wednesday, 7:30 p.m., Casa
del Prado, Rm. 104, Balboa
Park, San Diego
Pat Maley, Pres.
1471 E. Madison, El Cajon, CA
92021
Paul Lee, Natl. Dir.

SANTA BARBARA BRANCH

4th Saturday, 7:30 p.m.
Louise Lowry Davis Recreation
Center
1232 De la Vina St.
Phyllis Mautino, Pres.
420 Calle Palo Colorado, Santa
Barbara, CA 93105
Keith Mautino, Natl. Dir.

SANTA CLARA VALLEY BRANCH

3rd Thursday, 7:45 p.m.
Allstate Savings, Payne
& Saratoga Aves., San Jose
Jackie Davis, Pres.
170 Wingfoot Way, Aptos,
CA 95003
Mary Margaret Rafferty,
Natl. Dir.

SEATTLE BRANCH

3rd Tuesday, 7:30 p.m., Bethany
Lutheran Church, 7400
Woodlawn Ave., N.E.
Dorothy Williams, Pres.
21519 92nd Ave. W., Edmonds,
WA 98020

Anton Soder, Natl. Dir.

SOUTH SEATTLE BRANCH

4th Tuesday, 7:30 p.m.,
Wm. Mosier Field House
430 S. 156th St., Seattle
Joanne Slosser, Pres.
16419 3rd Ave., S.W., Seattle,
WA 98166
Herbert Briggs, Natl. Dir.

SOUTHWEST REGIONAL ASSOCIATION

Robert Hamm, Dir.
3817 Jo Ann 15-D, Wichita
Falls, TX 76306

TACONIC BRANCH

Mrs. John V. Steiner, Pres.

Bullet Hole Road, Mahopac,
NY 10541

Mrs. John V. Steiner, Natl. Dir.

TAMPA BAY AREA BRANCH

3rd Saturday, 1:00 p.m.
University of So. Florida,
Student Chapel Bldg.
Stefan K. Brown, Pres.
4011 N. Howard, Apt. 101,
Tampa, FL 33623

Dora Lee Dorsey, Natl. Dir.

THEODOSIA BURR SHEPHERD BRANCH

1st Tuesday, 7:30 p.m., Senior
Citizens Bldg., 420 Santa
Clara St., Ventura, Calif.
Barbara L. Schneider, Pres.
3774 Vineyard, Oxnard,
CA 93030

Velma Montgomery, Natl. Dir.

WESTCHESTER BRANCH

1st Thursday, 7:30 p.m.
Westchester Women's Club
8020 Alverstone St., Los Angeles
Arnold Krupnick, Pres.
11506 McDonald, Culver City,
CA 90230

Clair Christensen, Natl. Dir.

WESTERN PENNSYLVANIA BRANCH

2nd Wednesday, 11:00 a.m.
Northway Mall Community Room
North Hills, Pittsburgh, Penn.
Genevieve Allison, Pres.
221 Schaffoner Rd., Butler,
PA 16001
Agnes Hodgson, Natl. Dir.

WHITTIER BRANCH

1st Thursday, 7:30 p.m., Palm
Park Community Center
5703 South Palm Avenue,
Whittier
Gertrude Blackstock, Pres.
15311 Elmbrook Drive, La
Mirada, CA 90628
Dorothy Kosowsky, Natl. Dir.

WILLIAM PENN BRANCH

4th Tuesday, noon, Homes of
members
Mrs. Herbert S. Webster, Pres.
"Millbridge" 13 Summit Dr.,
Bryn Mawr, PA 19010
Mrs. Lancelot Sims, Natl. Dir.

BEGONIAN MINI-ADS

Begonias. Featuring Wally Wagner hybrids, gesneriads, miniatures for light gardens. List 50¢. Pat Morrison/Jim Heffner, 5305 S.W. Hamilton St., Portland, OR 97221.

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Box 165-4 Ozark, MO 65721

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Mini-ads are \$1 per line per insertion with a minimum of \$4. A line is about 36 characters. Payment must accompany order. Send to Pam Mundell, advertising manager, 2324 Connie Dr., Sacramento, CA 95815.

Begonias—violets—episcias. Cuttings only. List 50¢. Springtime Gardens, 2212 Hickory, Sulphur, LA 70663.

Rare and unusual begonias including Lowe hybrids. Rooted & unrooted cuttings. Price list 50¢. Paul Lowe, 1544 West Rd., Lake Park, FL 33403.

New Fairyland begonias. Echo—Fragrant, pink, everblooming; Bokit hybrid—Spiral green star, black or brown markings; China Curl—Versicolor x cathayana x rex, spiral purple black, silver zone; Gift plant, 4 plants \$12.00 prepaid. Begonia and Lily Catalog 35¢. Fairyland Begonia & Lily Garden, 1100-B Griffith Rd., McKinleyville, CA 95521.

THE BOARD / *Condensed minutes—ABS directors*

March 17, 1980

Pres. Nathan Randall introduced Jean Natter of Long Beach, proposed convention chairman. Wanda Elin moved her appointment, seconded by Margaret Lee. Motion carried. Following a suggestion by Pres. Randall, Thelma O'Reilly moved that Patrick Worley be appointed a member of the Awards Committee, seconded by Margaret Lee. Motion carried.

A letter from Mildred Thompson stated she could no longer continue as Co-director of Research, but will complete the Grow & Study project. Margaret Lee moved her resignation be accepted with regret, seconded by Pat Maley. Motion carried. Pres. Randall then proposed Mrs. Thompson as Director of Classification Committee. Karen Bartholomew so moved, Thelma O'Reilly seconded. Motion carried.

Pres. Randall announced the selection of the nominating committee: Phyllis Mautino, Santa Barbara, chairman; Phyllis Bates, Palomar; and Claire Husted, Rubidoux. Pat Maley moved approval, seconded by Katharine Alberti. Motion carried. Pres. Randall proposed Pat Maley as Chairman of the Show Classification and Entries Committee. Darlene Fuentes moved to accept, seconded by Katharine Alberti. Motion carried.

Treasurer Eleanor Calkins reported balance on hand Jan. 1, 1980, \$6,915.12; receipts \$3,019.96; disbursements \$1,753.81; leaving balance on hand Jan. 31, 1980, \$8,181.27. February receipts \$1,627.78; disbursements \$3,048.90; leaving a balance on February 29, 1980, \$6,760.15. Report was filed for audit.

Gil Estrada moved that \$400 be transferred from the Bookstore account to the Cultivar Fund, seconded by D. G. Sullinger. Motion carried.

Katharine Alberti, Back Issue Begonian Sales, reported balance of \$300. Sixty-six back issues were sent to Seattle, 5 years to Carlton L'Hommedieu, and three December 1979 not received by members. Katharine reported that sales are very slow.

Margaret Lee, Chairman of the School of Judges, reported Marie Thompson of Sacramento was made a sophomore judge. Pat Maley, Co-chairman, asked the board to approve the use of judges for classification of entries. The department feels a good judge should be able to classify show entries and later judge impartially. Gil Estrada moved to allow judges to work in classification, seconded by Darlene Fuentes. Motion carried with 11 members in favor and 6 opposed.

Ralph Corwin, Constitution and By-laws Committee Chairman, distributed copies of the new constitution and by-laws. Ralph also reported that the duties descriptions manual is down to a semi-final editing. It is as complete as the committee can make it. Ralph stated that the committee feels it has completed the work as well as it can and next year a new committee should take over with fresh enthusiasm and ideas.

Membership secretary reported 92 new members and 7 renewals.

Gil Estrada sought board opinion about purchase of Millie Thompson's new book for the Lending Library. Thelma O'Reilly moved two copies be ordered, seconded by Gil Estrada. Motion carried.

Millie Thompson wrote requesting all members of the Grow and Study project get their reports in by June 15, 1980, except those in newly launched surveys, so a collective report can be compiled. She cautioned that it is important to report all successes and failures as they indicate where special conditions should be employed to grow the particular species successfully. She also reported that 16 new members have been added to the Research & Grow Study Group since Aug. 15, 1979.

Branch Relations Director Evelyn Cronin reported she will soon forward a charter to the Astro Begonia Study Group.

Chuck Richardson proposed paying a fee to the Round Robin Director. Since the current Round Robin Director will be resigning, it may difficult to find someone willing to handle the time-consuming job without some remuneration. Chuck moved that the new director receive an allowance of \$75 per month, seconded by Karen Bartholomew. After lengthy dis-

cussion a motion was made by Margaret Lee to table action until the next meeting, seconded by Muriel Perz. Motion carried by a hand count of 8 yes votes to 7 no.

D. G. Sullinger moved to accept a new design for stationery proposed by the editors and have the appropriate amount printed. Seconded by Thelma O'Reilly. Motion carried.

Mabel Corwin announced her resignation as Round Robin Director, and recommended Mary Harbaugh of Wisconsin as new director. D. G. Sullinger moved to accept Mabel's resignation with regret, seconded by Katharine Alberti. Motion carried.

Walter Barnett has offered to buy the file cabinet formerly used by the secretary for \$40. The cabinet is much bigger than needed for ABS records. Gil Estrada moved to accept his offer, seconded by Doug Frost. Motion carried.

Karen Bartholomew moved that \$100 be allocated to add the expiration date to **The Begonian** labels, seconded by Darlene Fuentes. Motion carried. Karen also moved that advertising rates be increased to the following: \$115, full page; \$60, half page; \$35, quarter page; \$12 per column inch. Gil Estrada moved acceptance, seconded by Darlene Fuentes. Motion carried.

D. G. Sullinger moved that \$50 be allocated for printing an advertising brochure, seconded by Pat Maley. Motion carried.

Pres. Randall stated that he had oral approval of board members of the resignation of Kathy Brown, Membership Secretary, and now asked for formal board approval. D. G. Sullinger moved that we accept with regret, seconded by Pat Maley. Motion carried. Wanda Elin moved that we accept Elisabeth Sayers of San Jose as the new membership secretary, seconded by Margaret Lee. Motion carried.

—Norma Taylor
Secretary

May 19, 1980

Pres. Nathan Randall proposed naming Helene Jaros to the Awards Committee. Chuck Anderson so moved, seconded by Pearl Benell. Motion carried.

A letter was read from Dennis Maley asking to be relieved of his duties as slide librarian effective immediately. He cited pressures of two jobs. Karen Bartholomew moved acceptance of the resignation, seconded by Pearl Benell. Motion carried.

Pres. Randall reported a communication from Evelyn Cronin stating that the Buxton Branch would like to host a convention sometime in the next three years. He wrote asking for a definite date.

The minutes of the previous meeting were not available due to absence of secretary.

Gil Estrada reported for the bookstore from Jan. 1, 1980, to March 31, 1980, balance on hand \$1,788.08, receipts of \$550.02, disbursements of \$694.86 leaving a balance on March 31, 1980, of \$1,643.24. Gil moved to transfer \$500 to the Treasurer for deposit to the Catalog Fund. Seconded by Pearl Benell. Motion carried.

The Nominating Committee report was presented. Phyllis Bates announced the slate as follows: President, Gil Estrada; Pres. Elect, Chuck Anderson and Howard Berg; First Vice Pres., Margaret Taylor and Mike Kartuz; Second Vice Pres., Norma Taylor and Joan Coulat; Treasurer, John Ingles; Secretary, Arline Davis. The motion to accept the slate was made by D. G. Sullinger, seconded by Doug Frost. Motion carried. Pres. Randall asked for nominations from the floor. There were none.

Judging Chairman Margaret Lee reported accrediting Maxine Zinman of Virginia as a sophomore judge.

Constitution and By-Laws Chairman Ralph Corwin reported the work of his committee finished as far as it can go this year. He released to the President the master copy of the Constitution and By-Laws, the duties descriptions of each office in the society, new branch suggested Constitution and By-Laws, and organization charts. Ralph thanked his committee for diligent and conscientious work. He asked that the committee be dissolved and submitted his resignation. D. G. Sullinger moved to dissolve the committee

and accept Mr. Corwin's resignation. Seconded by Margaret Lee. Motion carried.

Slide Library—income \$6; programs reserved \$12; expenses 80c.

Gil Estrada moved that Dr. Barkley be paid \$100 from the Research Fund to help defray the expenses of his trip to Mexico. Seconded by Chuck Anderson. Motion carried.

Margaret Lee referred to the motion tabled at the last meeting regarding the allowance for the Round Robin Director. The motion remained tabled until the Finance Committee meets and submits a recommendation.

Chuck Anderson moved that **Begonians** sold by the membership secretary, up to one year back be sold for \$1 per copy, seconded by D. G. Sullinger. Motion carried. Chuck presented a new design for membership application. After discussion, Jean Natter moved to print the new application, seconded by Gil Estrada. Motion carried.

Chuck and Karen told of the errors and delays of the present computer service. A bid was presented by our current printer and mailer—the cost will be approximately \$160 per month and there will be a one-time set-up fee of \$100. Gil Estrada moved to accept the bid, seconded by Margaret Lee. Motion carried.

Gil Estrada moved to charter the Astro Branch of Houston, Texas, and the Roger Williams Branch of Rhode Island, duly seconded.

Pres. Randall resigned from the presidency, effectively immediately. Pres. Elect Estrada moved to accept the president's resignation with regret. Seconded and carried.

—Gil Estrada
Acting Secretary

The next board meeting will be held at 7:30 p.m. Monday, October 20, at Fullerton Savings and Loan, Anaheim.

More Round robins

Continued from page 275

sold them as *B. 'Cleopatra'*. Of course, since it's a hybrid, the seedlings would vary; a number of us have plants called *B. 'Cleopatra'* which are probably not the true one.



Ethel Arnold, California, has been repotting her begonias using coarse bark in the bottom of the pot, then steer manure, and then her regular mix. Her plants are responding beautifully. Alta Soule, California, grows her begonias organically. Her mix is sphagnum, sand, topsoil, and perlite. She feeds only manure tea. A cane begonia five feet tall and still growing testifies to her good culture. Incidentally, do you remember that in last month's column we reported on Alta's battle with a difficult begonia? She reports that the score is now "*Begonia-20, Alta-0.*" It's the challenges that keep life interesting!

More Question box

Continued from page 278

room is a little low. Try keeping them on a tray of aquarium gravel with water in the bottom of the tray.

In spring as new growth starts be sure the plants have adequate water while growing rapidly. If only the older leaves are curling, cut them off and use them for propagation.

Question: If a begonia is called a *B. 'Helene Jaros'* seedling, is it a hybrid of *B. 'Helene Jaros'* or a chance seedling?

Answer: If a hybrid begonia is self-pollinated by hand, resultant seedlings would be known as seedlings of that hybrid.

A chance seedling is usually one which has germinated from seed dropped from any given plant that may have been pollinated by bees or other insects flying from flowers of one variety to another.

A hybrid can be a cross of two species, a species and a hybrid, or a deliberate cross of two different hybrids.

Question: Could failure of seeds to germinate be caused by too-high temperatures in a greenhouse?

Answer: If seeds are enclosed in plastic boxes with lids or in closed plastic bags, the interior could heat up to a dangerous degree, inhibiting germination.

If your greenhouse is very hot, I suggest seed pans would be better kept in the house where they would have bright light but cooler conditions in summer.

Some seed, however, has low viability, or it may be too old or not have been allowed to mature properly, in which case viability would be poor or nonexistent.

ABS SERVICES

These services are available to all ABS members. For names and addresses of department heads and other officers, see inside front cover.

AT-LARGE MEMBERS—Services for members who don't belong to branches are handled by the members-at-large director. Contact him for details. If you are interested in finding a branch or starting one in your area, contact the branch relations director for help.

THE BEGONIAN—The monthly journal of the society publishes how-to articles, scientific information, and ABS news. Articles on a member's personal experiences with begonias are welcomed, as are black-and-white photos of begonias and color slides suitable for use on the cover. Contact the editors. Individual copies of *The Begonian* more than a year old are available from the back issue sales chairman (75 cents). A full year is \$6.50 for any year in the 1940s, \$5 for any year from 1950 through 1978. Back issues less than a year old are ordered from the membership secretary, for \$1 each.

BOOKSTORE—Books on begonias and related subjects can be purchased mail-order from the bookstore librarian. Contact him for a list of books available. Include a stamped, self-addressed envelope. The bookstore also sells reproductions of antique begonia prints.

JUDGING DEPARTMENT—The judging department offers a course by mail with which you can learn to become an accredited begonia show judge. Also available are a booklet on point scoring, information on fuchsia and fern judging, and other requirements to become a judge.

LIBRARY—Books about begonias and gardening may be borrowed by mail from the lending library. Contact the librarian for a list of books and the procedure.

NOMENCLATURE—The nomenclature department monitors newly published findings on begonia names as well as handling official international registration of new begonia cultivars. Registrations are published in *The Begonian*.

RESEARCH—The research department conducts a Grow and Study project in which members experiment with various begonias and compile their findings. The department also has other activities, including the review of requests for ABS backing of outside projects. For details, contact a co-director.

ROUND ROBINS—Members exchange information about begonias and their culture through a packet of letters which circulates among a small group of growers. There are dozens of these packets—called flights—on many specialized subjects. To join one or more, contact the round robin director.

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 seed are encouraged. Please contact the Seed Fund Director.

SLIDE LIBRARY—A series of slide shows on begonias and begonia growing can be borrowed by mail for showing at meetings and seminars. New shows are under preparation. Contact the slide librarian for fee information.

SPEAKERS BUREAU—The speakers bureau maintains a directory of speakers on begonias and related subjects. Contact the director.

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