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THE COVER: Chris Fergis of Miami, Fla., captured this closeup of a dewy flower of B. 'Bar- bara Ann'. The color transparency won the Greater Chicago Branch Trophy for best artistic photograph at the Begoniafest show last September in Santa Cruz, Calif.
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NOTES/From the editor

A few people have asked how last issue's cover plant, *Begonia syphillitica* (now correctly called *B. balmisiana*), got its name. I was too embarrassed to say before, but... Two hundred years ago it was thought to be a cure for um, er, uh... a certain disease ...

Ah, if only it were true. Then people wouldn't laugh when you say the word "begonia."

I appreciate the many compliments received about the January-February issue. With such a wealth of material, it represented one of the high points in the magazine's nearly 50 years of publishing.

Much hard work by many people is required to bring together such an issue, and the magazine is nothing without contributions by ABS members and others who spend untold hours writing and polishing manuscripts. We need more volunteers to write for *The Begonian*. *Please consider donating some time in this* way to serve the begonia world.

The unsung heroine of the magazine, by the way, is Elisabeth Sayers, who tirelessly maintains ABS members records, which double as *The Begonian* circulation list. With more care and attention to detail than you've ever seen before, she keeps records, deals with the computer service, and answers a plethora of letters.

Some of those letters ask why the magazine is always so late. That, I confess, is my fault entirely. I'm behind schedule—and trying to catch up. At least the printer can share the blame for delays with the January-February issue. A production error, generously and graciously corrected by the printer, accounted for about one week of tardiness.

In this issue, read about an upcoming dues increase in ABS News on page 52. Despite a lack of publicity and fanfare, 20 people already have started or renewed memberships at the "sustaining" level— \$10 above current rates. We hope this means people have recognized that \$10 dues are quite low considering the kind of magazine the society publishes. Despite the cutback from monthly to every other month, the magazine continues to account for the bulk of ABS operating expenses, leaving the society dependent on convention income for operating expenses.

We hope you will consider a dues increase of \$5—approximately equivalent to one nice restaurant luncheon in cost a worthwhile contribution to the society.

-K.B.

Mabel Corwin's secrets: how she grows her fabulous rexes

Mabel Corwin

I have always enjoyed growing plants. During the first nine years of our married life Ralph and I lived a few miles inland from the ocean where the climate was ideal for growing fuchsias.

I started collecting and really got carried away. Fuchsias were very popular at that time and many new hybrids were being introduced each year.

Then we moved farther inland to the San Gabriel Valley where the summers were hotter and the winters colder. Also, the air was much drier. I took my collection of 140 varieties with me, hoping to acclimate most of them to their new environment. I soon realized I was in trouble because of a lack of humidity. We moved in April and before the summer heat became a problem, I had already lost many of the more tender varieties.

I was invited to join the San Gabriel Valley Branch of ABS. I came home from my first meeting with two rex begonias. I knew nothing about begonias at the time. I put them in the lathhouse with my fuchsias and other shade plants. Each month I usually came home from the meeting with one or two more begonias.

The hot, dry summers were the biggest problem I had in trying to grow fuchsias. After a few months I realized begonias were tolerating my conditions better than the fuchsias.

The more I collected and grew begonias, the more interested I became. Today I grow all types, from *B. vitifolia* that grows through the top of a 10-foot-high lathhouse to tiny-leaved ones growing in bowls.

People often ask me which is my favorite. That is a little like asking me which of my children I love the most. However, I do have a special fondness



for rexes. The brilliant colors and interesting textures always attract attention.

Rexes require more humidity than other begonias. I think that is the main reason many growers find them difficult.

Lack of humidity causes the leaf edges to become crisp and dry and the plant simply does not flourish as it should. I have about 300 rexes growing in my shadehouse. This is the way I handle the problem: I place all of the rexes on low benches. The ground is covered with a thick layer of gravel. During warm weather I water the gravel. As the water evaporates it cools the air and adds humidity.

Most people grow on a smaller scale. Humidity can be added by placing pots on trays of wet gravel. Grouping plants together and placing a pan of water nearby also works. Indoors a humidifier would be helpful. Rexes also can be grown in terrariums if there is no other way to provide the necessary humidity.

The right amount of light is important to bring out beautiful colors. They should not have any direct sunlight. One of my reasons for growing on low benches is that the light is less intense. It seems to be just right for rexes.

I never grow rexes in hanging baskets. The light is too bright and the air too dry. They are sometimes grown under the

Mabel Corwin doesn't really keep secrets. This charming lady, who lovingly shares her knowledge and her plants, lives at 1119 Loma Vista Way, Vista, CA 92083.



B. 'Purple Petticoats' won Mabel a blue ribbon at the 1980 convention and show

benches in the greenhouse. This works well if good air circulation can be maintained.

Usually we are told the grow rexes warm. I grow mine in the coolest part of the shadehouse. During the winter our low temperatures are often around 40 degrees F. We usually have a few nights that are colder. Most of the plants have no leaves, or few leaves—they simply rest during the cold weather when the nights are long. In February new growth starts and during the spring months the growth is very fast.

While the plants are resting I check each one carefully. I usually pinch off the tip of the rhizome or cut it back to the edge of the pot if it has grown over the edge. This forces new growth along the rhizome and makes a full compact plant. If it has an upright rhizome I cut it back part way.

If the plant has been growing in the same pot for a year I usually pot up into the next size pot. Usually the plant needs to be set slightly lower and sometimes centered in the pot if it is growing off in one direction. I do this potting in March and April, when they are growing fast, and I start to fertilize.

Rexes respond to a regular feeding program during the spring and summer months. I start with an all-purpose formula such as 14-14-14 or 20-20-20, then alternate with 15-30-15 or something similar. I taper off the feeding in late summer when growth slows down.

In recent years mildew on rexes has become a real problem. Prevention is very important. Good air circulation is absolutely necessary. Some of us have found Funginex to be a good preventive spray. Once you have mildew on a plant it takes constant vigilance to keep in under control. It can spread very quickly when conditions are right.

Some varieties are much hardier than others. Usually those with soft, hairy leaves are a bit touchy. Spiral-leaved varieties may be difficult. However, many new hybrids are being introduced that are easier to grow. When I make a cross I always make sure that one parent is a strong grower. This usually results in a strong plant that is easy to grow.

If you have adverse conditions, or are a novice you should start with varieties that are easy to grow, such as *B*. 'Helen Teupel', *B*. 'Merry Christmas', or *B*. 'Vista'.

There are a few varieties that I always keep in the greenhouse. One is *B*. 'Purple Petticoats' that has won many prizes for me. I have tried it out in the shadehouse, but after a month or so it sulks and lets me know it is unhappy. Others that need greenhouse conditions are *B*. 'Glory of St. Albans', *B*. 'Helen Lewis', and *B*. 'American Beauty'.

If you really want to have fun with begonias, try growing rexes from seed. The first little leaves will be green, then for at least a year each new leaf will be different. One big advantage to growing begonias from seed is that they are acclimated to your conditions from the beginning.

So, if you have been afraid to try rexes because they are supposed to be difficult, why don't you give it a try? I think you will be glad you did.

Fertilizers: everything you ever wanted to know

Irving L. Phillips

All plants have certain basic requirements for nutrition. There are also several close parallels between animal nutrition and plant nutrition; for instance, all animals and all plants most have a continuing food supply to survive.

Also, both plants and animals require large quantities of other nutrients. For animals, nutrients required in large amounts are proteins, fats, and carbohydrates, and in small quantities numerous vitamins and minerals.

Although the amounts of the nutrients are represented by differing percentages, a deficiency in any one nutrient cannot be compensated by overfeeding of a different one. This is an important rule for any nutrition program—for the family, its pets, or its plants.

Plants need smaller basic nutrient blocks than animals can utilize. In fact, the plants combine energy from sunlight with the required basic chemical elements (their basic nutrient blocks) to make the basic nutrient blocks (foodstuffs) for animals.

Any plant—every plant—requires 16 elements to complete its growth cycle. Plants need large quantities of carbon, hydrogen, and oxygen. They get these from air and water. In a normal growing situation, it is not necessary to be concerned with these in planning a nutrition program.

Three elements are needed in fairly large quantities, sometimes referred to as macronutrients. These are the familiar nitrogen, phosphorus, and potassium. The formula (N-P-K) or three numbers on labels of plant foods and fertilizers refer to the concentrations or percentages of these three basic elements in the contents. You will find these present in the plants themselves from one-half to 3 or 4 percent by weight.

Three secondary elements, representing one-tenth to one-half of a percent of the plant structure, are calcium, magnesium, and sulfur. Although the percentages are smaller, the plants need these elements just as surely as they need nitrogen, potassium, and phosphorus.

Another group of elements represents only very tiny percentages of the weight of a plant. The quantities needed in the plant's diet are so small that they are usually represented as a number of parts per million (more convenient than saying one ten-thousandth of a percent). These are the micronutrients: boron, chlorine, iron, molybdenum, zinc, copper, and manganese.

A deficiency in the 3 percent nitrogen required will affect in an obvious way the growth, color, yield, etc., of the plant. A deficiency of one part per million of molybdenum makes the difference between a healthy plant and a sick one. These micronutrients are extremely important even if the quantities needed are extremely small.

The original plant nutritionists were farmers and nurserymen who recorded observations of the effects of applications of animal manures. In the late 1700s when the chemical elements were identified, nitrogen was determined as necessary to all plants. It was a long time before it was established that the nitrogen was used as a part of the amino acids and proteins that are utilized in all sorts of processes involved with plant growth. Plant nutrition studies have made great strides in the past 100 years.

Plant foods

A discussion of modern use of fertilizers—plant foods—would be incomplete without mentioning the question of or-

Former Begonian editor Phyllis Bates, a chemist, transcribed and edited Irving L. Phillips' presentation on fertilizers given at the 1982 Santa Cruz convention. Phillips, who works for the Monterey Chemical Co., is a member of the soil conservation committee of the California Fertilizer Association.

ganic vs. synthetic nutrients. In the popular view, organic fertilizers are derived from plant and animal sources not subjected to a manufacturing process, while synthetic nutrients are produced in a facility using natural gas or elements derived from animal and plant sources millions of years ago and stored in the earth in the form of nitrates, etc. Then too, a manufacturing facility may use "organic" materials to produce synthetic fertilizers, and that produces a further problem in definition.

The scientific definition of an organic compound merely means that it contains carbon. A plant cannot distinguish whether the nitrogen it uses came from an animal source or from a manufactured compound, such as urea. For the plant it is required only that there be an adequate supply of nitrogen and all the rest of those 16 elements.

But there are some differences between organic and synthetic nutrients. Most of the organic fertilizers are in some sort of fixed chemical form that must be broken down by the action of soil bacteria to forms usable by plants. Longer periods are required for organic nutrients than synthetic nutrients to become available to the plant. Organic foods include bone meal, blood meal, and various manures.

Synthetic plant foods are highly soluble in water, go into soil quickly, move through the soil readily, and are immediately available to the plant. Particularly in pot culture, they are not very long lasting. The synthetic foods often bear manufacturer's trade names.

By using both kinds of fertilizers, growers can tailor the feeding program to the plant's needs and take their own time and habits into consideration.

A recent development in plant fertilizers are the slow-release or controlled-release products that tend to overcome the disadvantages of the earlier mentioned synthetics. These include a group of 3M products and Osmocote. They vary in formula and in lasting properties. In these, the nutrients move through the pores of a plastic capsule slowly into the soil water. The other products, IBDU and Nitroform, are compounds that decompose chemically over a period of time in the soil to release the needed nutrients in a form the plant roots can absorb.

Food utilization

Having determined the nutritional needs of the plants and the choices available to meet those needs, the final consideration is making the food available to the plant.

The field-grown plant has practically unlimited foraging space. It can send roots in many directions for food and water. Roots are the "mouthpiece" of plants. In pot culture the availability of nutrients and water is restricted because root growth is restricted.

Restricting roots often adversely affects the growth of the plant even when sufficient food is present. There are other physical considerations not concerned with nutrition.

The relation of the amount of water in the root environment is different in a field-grown plant from that in pot culture. There is a phenomenon called the interface effect, where water tends to remain in the most dense medium because of the abrupt change in particle size.

If a pot were filled with a layer of sand topped by a layer of clay, water would tend to remain in the top dense layer and not drain through to the sand layer.

Even if a homogeneous mixture is used, the interface effect can be noticed. The air outside the pot is so much less dense that water tends to remain in the pot. In the field water would continue to drain away from the root area until only an even amount of water remains among the soil particles.

The amount of water held by the soil against the force of gravity is known as the field capacity. Any situation that permits exceeding this field capacity is a potential cause of root rot. Thus it is best to water potted plants until the mix is evenly wet and allow it to drain well from the bottom of the pot to minimize this effect.

For many plants the added water replaces oxygen, an essential nutrient in a

As rain forests come tumbling down, will species begonias come through?

W. Scott Hoover

Members of the American Begonia Society are aware of the devastation of tropical rain forests from my articles in *The Begonian* in September 1980 and June 1981. The removal of large trees by forest farmers, logging companies, and cattle ranchers is the primary cause of rain forest destruction. When the large trees are removed, many organisms become extinct due to the destruction of their habitat.

A scientific study of *Begonia* response to rain forest devastation would be a very involved undertaking, as it would for any group of organisms. Therefore, this article is simply an impression of how species of *Begonia* will survive the environmental crisis that is created by the destruction of their habitats.

My impressions have come from a number of field expeditions to the tropics in search of *Begonia*. Thus far I have made 438 collections of *Begonia*, of which approximately 40 percent have been multiple collections of the same species; the remaining 60 percent have been collections of a single species. The total number of species I have observed is approximately 250-275. The countries in which field expeditions were conducted include Mexico, Guatemala, Honduras, Costa Rica, Venezuela, Colombia, Ecuador, Jamaica, The Philippines, and Papua New Guinea.

From my observations, the greatest species diversity within a given area is found along elevational gradients in mountainous rain forest areas. For instance, in one day of collecting along the old road from La Palma to Quito, Ecuador, a representative section of rain forest along the western slope of the Andes, 13 different species of *Begonia* were collected. The

Scott Hoover, co-chairman of the ABS Conservation Committee, lives at 718 Henderson Rd., Williamstown, MA 01267. A botanist and tropical plant explorer, his latest begoniacollecting trip was to Mexico. distance traveled by car was not very great.

The habitats that *Begonia* seems to prefer in the mountains include stream margins, roadside embankments, north-facing cliffs, and waterfall areas. The great exception to my observations are the lowland rain forest areas such as the Amazon and Zaire River basins. In these lowland areas, many species of *Begonia* can be found also.

I have never done extensive field work in any lowland area, except three weeks in the Colombian Amazon and 10 days of general collecting in the Lacondon lowlands of Mexico. Short day trips out of one village and along trails through the Colombian Amazon resulted in observation of two species of *Begonia*. By comparison, one day of hiking along the trail from Vient de Julio to Huisto, Cauca, in Colombia resulted in observation of nine



Unidentified begonia growing in Papua New Guinea



The author collected begonias at the Kerowaigi habitat in Papua New Guinea in 1978. In this photo, begonias grow alongside ferns and other tropical flora

species (Hoover 1974). My impression is that in a given 10-mile radius, the mountain rain forest will have more species of *Begonia* than the same area of a lowland forest, but the lowlands are considerably more vast in total area than the mountains.

In terms of rain forest destruction, it is primarily, though not entirely, the lowland rain forests that are being removed so rapidly, according to the National Academy of Sciences (1980).

Access to mountain areas is much more difficult than in the lowlands and the mountains offer less immediate economic return than the lowlands.

In terms of *Begonia* survival in the lowlands, new species are likely disappearing every day somewhere in the world because of the removal of forest. It is these lowland *Begonia* species that are becoming extinct and as time continues more species will disappear. The Dipterocarpaceae rain forest areas comprising the lowlands of Southeastern Asia are the most severely threatened and likely to be completely removed within the next two decades (N.A.S. 1980a). The survival of *Begonia* in the mountain rain forest is more hopeful, but this will depend upon population pressure from the ecologically devastated lowland regions. In the mountain areas, begonias frequently become weedy along roadsides. Also, the natural tendency for them to hybridize in the wild, both in the lowlands and mountains, often results in new species. Many mountainous areas provide somewhat safe pockets of refuge for natural forest, such as gorges, steep cliffs, and waterfalls. In such areas begonias have some likelihood for survival.

My overall impression for the survival of the present great diversity of *Begonia* species is thus somewhat dim. Wherever *Begonia* habitats are being destroyed, the species populations are likely to become greatly reduced in size or extinct, particularly localized endemic species, of which there are many within the genus.

Presently the lowland species of Southeastern Asia are likely the most seriously threatened, though many species in other areas of lowland forest are threatened as

Searching for begonias in Mexico

W. Scott Hoover

On Jan. 23, 1982, two friends and I left Williamstown, Mass., in a 1963 International Stepvan and headed for Mexico. The temperature was 15 degrees below zero. The winter not only presented extreme cold, but considerable precipitation as well, for several delays occurred due to midwestern snow storms.

San Antonio, Texas, was our first destination. My original plans were altered because of funding. A car rental company in San Antonio was the only one in Texas that would allow cars to go into Mexico, so one car provided all the transportation through Mexico.

The itinerary of this expedition was to take me into areas of Mexico where I had never been before. Collecting and research work began earnestly in the state of Vera

1982 expedition to Mexico	
Approximate number of herbarium collections and duplicates	90
Number of species encountered and samples	26
Number of populations and patches sampled	99
Approximate number of epidermal peels obtained	1,200
Number of <i>Begonia</i> photographs (closeups, plants, habitats)	160
Number of general photographs (landscape and cultural)	119
Number of photographs of rain forest destruction	35
Approximate number of seed packages exported to A.B.S. members	35

More Native habitats continued from page 41

well. I do believe certain species of *Begonia* stand a much better chance of survival than other rain forest plants. The combination of begonias' ability to hybridize readily, become weedy, and frequently occupy disturbed, steep terrain would appear to give the group several advantages over some other tropical plant groups. I repeat that these comments are overall impressions and are not conclusions from a systematic study.

Cruz, which we covered from north to south, spending three weeks in the state.

Vera Cruz proved to have the most diverse vegetation we saw in Mexico. Begonias were very abundant in the mountain areas, typically reaching their greatest species diversity along elevational gradients in cloud forest areas. Stream margins, waterfalls, roadside embankments, and shady hill faces were the usual habitats for *Begonia*.

From Vera Cruz, we made a brief stop at the Misola waterfall in Chiapas to observe the population development of a possible new variety of *B. heracleifolia*. A rhizome of this plant is being grown successfully by Mabel Corwin of Vista, Calif. An irony of Misola was revealed when the Mexican government recently made this area into a national park, but nearly destroyed part of the developing *B. heracleifolia* variety population during park development.

From Chiapas we drove the back road to Tuxtla through Ocozingo and on to Oaxaca. The begonias in Oaxaca were among the most interesting in the entire trip. A possibly new species was collected in some evergreen montane rain forest above Valle National. This rhizomatous species had a fruit that was scarlet, flowers up to $1\frac{1}{2}$ inches across, and lovely long red hairs covering the leaf, petiole, peduncle, and back sides of the pinkishwhite tepals.

This species is one of the most beautiful I have ever seen, and though it probably please turn to page 43

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Go ahead. Take that vacation. Your begonias can get along without you

Diane Tuska

When my husband asked me if I would like to take a trip, I never thought I would hear myself say: "How long would I *have* to be gone?" But this was my first reponse, not where, when, or how!

I have not been growing plants indoors and under lights for very long and had just found the right spot for all of them. They were really doing beautifully. Plants that I had had for some time and which had refused to bloom were suddenly full of lovely blossoms.

I also had recently received plants and cuttings of some begonias from Millie Thompson, Kit Jeans, Michael Kartuz, and other sources. I was not too familiar with the growing of any of them and wanted to keep a watchful eye on them.

Obviously, I was going on the trip—so what to do with the plants? I wasn't too concerned about not watering them, for I know I tend to overwater and my absence probably would prove beneficial. My greatest worry was the heat. With the house closed up, I knew it would get very hot.

I spent the day before our departure bringing all the plants that were on the

Diane Tuska, who recently became a member of ABS, lives at 710 Plummer Drive, Greensboro, NC 27410, when she's not taking trips.

More Mexico continued from page 42

is not closely related, the scarlet fruit reminded me of the exquisite South African species in section Casparya. I have never seen this species in cultivation and it surely will be a winner at horticultural shows.

Table 1 summarizes the data collected from this expedition. By the time we arrived back in San Antonio, Texas, we had driven 5,000 miles through Mexico and upon return to Williamstown, the trip had totalled 9,000 miles. We did this driving in exactly two months, which is reminisI gave them all a good watering and set the lights to go on about three hours a day. I was afraid if I left the lights on the usual 12-14 hours it would be too hot and they would dry out too fast. I also set a small fan to go on and off with the lights so a little air would circulate.

I was almost afraid to go down to the basement upon our return. Finally I got up the courage, held my breath, and peeked into the plant room. They looked great! I did lose a few, but only a few out of the whole collection was pretty good for a beginner!

I know experienced growers might have cringed at my setup. But I didn't have a plant sitter to take care of them, so I did the best I could. What is most important is it worked for me.

As all the experts say when giving their formulas for growing, propagating, and soils, what works for them doesn't necessarily work for everyone. But for novices like me, I am passing along my experience.

Perhaps it will encourage others and keep them from panicking at the thought of leaving their plants for a spell. (I was away for 10 days.)

If your spouse says, "Let's take a trip" --go!

cent of my 1976 Baja California trip, where 8,200 miles were driven in one month. As great as begonia collecting is, it is not a vacation.

Without financial help from individuals and branches, this trip would not have been possible. My sincere appreciation is extended to the American Begonia Society, Mabel Corwin, Joan Coulat and other members of the Sacramento Branch, Martin Johnson, the Knickerbocker Branch, the Miami Branch, the Theodosia Burr Shepherd Branch, and Rudolf Ziesenhenne.

Awards committee seeks nominations for service, literature, and hybrid honors

Mabel Corwin

Now is the time to send in your nominations for the top American Begonia Society Awards for 1983: the Eva Kenworthy Gray Award, the Herbert P. Dyckman Service Award, and the Alfred D. Robinson Memorial Medal.

Nominations must be submitted in writing. Please state in your letter your reasons for believing the person or plant is deserving of an award.

Please read carefully the following rules governing the awards:

Eva Kenworthy Gray Award

This award is presented to a person who has contributed literary material which aided members in their study and knowledge of begonias, or who has been outstanding in his or her promotion of interest in the culture of begonias and understanding between the members in their pursuit for knowledge of begonias. He or she need not be a member of the American Begonia Society.

Past winners include:

1955, Bessie Buxton; '56, Charlotte Hoak; '57, Connie Bower; '58 Alice Clark; '59, Rudolf Ziesenhenne; '60, Louise Schwertfeger; '61, Helen Krauss; '62, Bert Slatter; '62, Bernice Brilmayer; '63, Dr. Clyde Drummond; '65, Mary Gillingwators; '66, May Taft Drew; '67, Sylvia Leatherman; '68, Drs. Lyman Smith & Bernice G. Schubert; '69, Harry Rutterfield; '70, Ruth Pease; '72, Elda Haring; '73, Dr. Fred Barkley; '74, Carrie Karegeannes; '75, Dr. Jan Doorenbos; '76, Alva Graham; '77, Mildred & Ed Thompson; '78, Jack Golding; '80, Thelma O'Reilly.

Herbert P. Dyckman Service Award

This award is to be presented to a member who has rendered long-time or very outstanding service above and be-

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Membership only \$10.00 per year Monthly LAIFS Journal, Fern lessons, Robins, Spore Store, Books, Educational programs. 14895C Gardenhill Dr., La Mirada, CA 90638 yond the normal duties of a member or officer of the ABS.

Former recipients are:

1968, Florence Gee & Herb Warrick; '69, Alva Graham & Edna Korts; '72, Everett Wright; '73, Walter Barnett; '74, Hazel Snodgrass; '75, Mae Blanton; '76, Gordon Lepisto; '77, Gene Daniels; '78, Margaret & Paul Lee; '79, Margaret Taylor; '80, Rudolf Ziesenhenne; '81, Mabel Corwin; '82, Clarence Hall.

Alfred D. Robinson Memorial Medal

This medal is awarded to an outstanding begonia hybrid. The following rules govern this award:

1. All begonia nominees must have been registered with the ABS Nomenclature Director.

2. The originator of the begonia nominee must be a member of the ABS.

3. The begonia nominee must have been released to the public for at least five years, but not more than 10 years prior to nomination.

Medal-winning begonias have included: 1949, B. 'Silver Star', B. 'Freddie', B. 'Golden West'; '50, B. 'Ricky Minter'; '51, B. 'Glendale', B. 'Virbob'; '54, B. 'Orange Rubra'; '57, B. 'Verde Grande'; '61, B. 'Kumwha'; '64, B. 'Madame Queen'; '66, B. 'Sophie Cecile'; '68, B. 'Purple Petticoats'; '69, B. 'Lady Frances Jean'; '72, B. 'Eunice Grey'; '73, B. 'Paul-bee'; '74, B. 'Universe'; '77, B. 'Wanda'; '78, B. 'Bowtique'; '80, B. 'Murray Morrison'; '81, B. 'Buttercup'.

As an ABS member you have a duty to nominate the person or plant you consider worthy of receiving one of these prestigious awards. I must receive your letters no later than June 9. So don't delay. Send your nominations to:

> Mabel Corwin, Awards Chairman 1119 Loma Vista Way Vista, CA 92083

The Indoor Light Gardening Society of America Inc., Dept. B, 128 West 58th St., New York, NY 10019 Dues \$8.00. LIGHT GARDEN published 6 times yearly, cultural guides, seed exchange, round robins, chapters, slide library.

The story of Eva Kenworthy Gray

Rudolf and Margaret Ziesenhenne

The first Eva Kenworthy Gray Award was given on June 24, 1955, by the ABS board of directors to Bessie Raymond Buxton. This award reads: "The American Begonia Society presents the 1955 Eva Kenworthy Gray Award to Bessie Raymond Buxton in recognition of her contributions of original material which aided members in their study and enjoyment of begonias." The original material referred to were Mrs. Buxton's book, *Begonias* and How to Grow Them, published in 1946 and The Buxton Checklist of Begonias, which was published by ABS in 1957.

The Eva Kenworthy Gray Award had been established at the April 25, 1955, meeting of ABS directors at the suggestion of then-Awards Chairman Dorothy Behrends, who had presented the idea of honoring Mrs. Gray, a veteran begonia grower and an early ABS member.

Born in Boonville, Mo., in 1863, Eva Kenworthy Gray lived in Iowa for a time but moved to Pacific Beach, Calif., at the turn of the century. Mrs. Gray's interest in begonias dated before 1920 when she was given two *Begonia* cuttings, *B.* 'Marguerite' and *B.* 'Odorata Alba' by Constance (Connie) Bower of San Diego. These led to the establishment of a large begonia collection.

Liberty Hyde Bailey's *The Standard Cyclopedia of Horticulture* was her first reference book as it contained a good *Begonia* section with 199 mentioned. Several growers helped her with her collection and nomenclature.

By 1923 Eva had decided to grow begonias from seed and made a few crosses, producing new varieties which she named according to what they reminded her of, or for someone dear to her. B. 'Neely Gaddis' with pure white flowers and leaves, which reminded her of angel's



Eva Kenworthy Gray at Rosecroft Gardens. Photo reproduced from May 1949 Begonian

wings, was named for her little cousin who died at age 6. *B*. 'Nelly Bly' with its bright red flowers made her think of her sister Nelly's love for the color red.

She developed a mail-order business shipping begonias to the east coast.

A university graduate, Eva Gray first published in the 1920s a periodic *Flower Journal*, the main theme of which was *Begonia* and which included letters from plant lovers who wrote of their gardens and flowers.

Eva Gray and Bessie Buxton started in 1921 the Begonia Club of Round Robin Letters. Bessie was secretary of the club and the membership consisted of 12 people; it took three months for the letters to make the rounds from the Atlantic to the Pacific. Interest in *Begonia* increased and two more groups were formed in 1932 and 1936 with Eva as secretary.

Through these round robin contacts, Eva Gray enlarged her begonia collection

Rudolf and Margaret Ziesenhenne, long active in ABS, are keenly interested in preserving the society's history. They live at 1130 N. Milpas Street, Santa Barbara; CA 93103.

by exchanging seeds and cuttings until she had filled four large lathhouses and a glasshouse. Mrs. Gray, feeling there was a need for a book about *Begonia*, gave up the *Flower Journal* to devote her time to getting out a book. Her lathhouses not only furnished specimen begonias for her 17 illustrations but aided her in describing them from her own observation of the living plants. She included a historical sketch about *Begonia* as well as cultural and propagation instructions.

The Begonia Book by Eva Kenworthy Gray was finished in May 1931. Mrs. Gray had halftone engravings made of her photographs and she set the type by hand; she herself printed the pages on a hand press, collating them and stapling them together in a paper cover. This, believed to be the first Begonia book published in America, sold for 50 cents.

While living at Pacific Beach, Eva issued a catalog specifically for the east coast trade in which she listed begonias, ferns, seeds, and rare plants. Because of failing health in the late 1930s, Mrs. Gray left the damp climate of Pacific Beach and moved 12 miles inland to Encanto. At the new location she had at first only one lathhouse, 14 by 40 feet; two neighbor boys later surprised Eva by building her a lean-to lathhouse.

By 1941 Eva was finding it hard to



Rudy Ziesenhenne presented a plant of *B. kenworthyae*, a species he named in her honor, to Eva Kenworthy Gray in September 1950. Photo by Dorothy Behrends

carry on the business and care for the plants, but she continued. In October 1945 her large lathhouse was destroyed by fire, leaving her with the plants in the lean-to lathhouse. Moving to the home of her eldest daughter, Helen McCabe, also of Encanto, she again had a glasshouse for her collection and she continued to plant seed and exchange plants although she was ill. She also enjoyed a more quiet hobby of stamp collecting, corresponding with other stamp collectors around the world. She later moved to the La Iolla home of her daughter, Ethel Calloway; she passed away in La Jolla on July 11, 1951.

To perpetuate Eva Kenworthy Gray's name as a *Begonia* author, hybridizer, grower, and booster, *Begonia kenworthyae* Zies. had been named and presented to her at La Jolla's Eva Kenworthy Gray Branch of the American Begonia Society in September 1950.

As the name Gray had already been used for a *Begonia* species, Mrs. Gray's maiden name, Kenworthy, was used. Mrs. Gray's father had been a judge in California's Alameda and Mendocino counties, where he was affectionately called "Doc Kenworthy" because he had been a dentist.

Twenty-five Eva Kenworthy Gray awards have been given by the American Begonia Society since 1955.



B. kenworthyae, photographed by Carrie Karegeannes

ROUND ROBINS/ Economy hurting branch show plant sales?

Mary Harbaugh

Tight finances may be having their effect on branch plant sales. Dottie Lillestrand of Bloomington, Minn., reports that in the last year or two plants have not been selling as well as previously. At the plant sales she has worked, people are not buying plants as they did a couple of years ago. Plants are not moving well at the meetings, either. A small commercial grower told her that people are not as interested in plants as they were five years ago.

Dora Lee Dorsey, Tampa, Fla., gave begonias some good publicity a few months ago. She and the branch president carried some of Dora's best begonias to their local PBS television station where they taped a show about them.

There was no hesitation to buy at the sales tables at the Santa Cruz convention. As King Langenberg, Waukegan, Ill., observed, "Don't ever stand between ABS members and a sale table when it opens. I have never seen such a melee as the opening of the sales table. All I could see were hundreds of boxes held high over the thrashing mob as the rush was on."

Mary Ellen Taback, Newport News, Va., found a good way to transport all those plants home via airplane. "Dump the plant out of its pot carefully. Shake off some of the soil. Wrap the plant in a piece of newspaper. Then you can lay the plants, now quite light in weight, one on top of another until you fill a box or even a heavy bag. They travel beautifully this way."

Technical matter

Maxine Zinman, Boyce, Va., found a very interesting article by Dr. Bernice Schubert on begonias in the Encyclopædia Britannica. It may be a little technical for some, but it's worth a try if you have access to the encyclopedia.

Checking fluorescents

Light gardeners-have you checked your tubes lately? Light intensity gradually decreases and fluorescents should be replaced before they actually burn out. Douglas Hahn, Madisonville, Ky., tries to change his tubes every 12 to 18 months, depending upon the state of the family budget. He advises us to "check to see if they are beginning to darken at the ends. It's a good idea to write the date on the metal cap at the end of the tube to eliminate some of the guesswork. I also find it helpful to change only one tube per fixture at a time. For example, change one tube every nine months instead of both tubes every 18 months. It's a lot less shock to the plants and pocketbook."

Risa Young, Lyndhurst, Ohio, had this reply for a member who was having trouble getting her lights to come on after switching to a timer: "You might have a capacitor-start fixture. That type of fixture usually has a button that is pushed and held for a few seconds before it will light fully. They don't work with timers. You must use rapid-start fixtures with a timer as they don't need starters to charge up."

Kerosene cautions

Several growers are turning to kerosene heaters as a back-up heating source for their greenhouses. Ruth Wills, Oklahoma City, Okla., says to make sure they are clean-burning or you may find your plants covered with soot.

Beryl Orchard, Mansfield, Mass., warns us to be extremely careful when using these and provide for adequate ventilation. The gas buildup can be deadly to plants and humans. During last spring, she lost many of her double semps when her husband set the heater up too high. They were at work all day and by the time they got home it was too late. All had curled up for lack of oxygen.

Joan Campbell, Corvallis, Mont., has decided to empty her greenhouse during

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 W2899 Homewood Ave., Shawano, WI 54166. Please include a self-addressed stamped envelope.

those cold Montana winters. Rather than allowing it to remain completely idle, she has found a few other uses: drying clothes, drying fruit, drying hair, keeping the homemade wine fermenting, or housing the cat when he needs to be kept from underfoot. No doubt, with a little thought, you could come up with several more suggestions.

Tips on hybridizing

Charline Franklin, Longview, Tex., passes on some hybridizing tips from Jack Kramer. Beginners should mate plants from the same group—the chances for fertile seeds are better. The dominant characteristics of the parents are important factors for you to know. From past experience we know that *B. bouverae* hybrids pass on their stitched leaf. *B. kenworthyae* offspring usually have purplish foliage and semperflorens cultivars are strong parents. Semperflorens crossed with other types almost always produce semps.

Some begonias make better parent candidates because they are more fertile or set seed more easily. *B. bowerae, dichroa, fuchsioides, imperialis, manicata,* and *metallica* are well-known robust parents.

A difficult one for Dora Lee Dorsey has been *B. listada*. She doesn't know if it is an affirmed fact, but she has never found pollen that *B. listada* will accept. Its pollen is acceptable on many other varieties and it will self-pollinate.

If you have been having trouble getting your cane seed to germinate, here's a word from Mabel Corwin, Vista, Calif.:

Many cane begonias make pods that hang on and dry but they don't have any seed. This is often why a person may not get any germination on seed they have set. Empty the contents of the pod onto a sheet of white typing paper. Lift the paper and tilt it gently. Good seeds usually roll. They are round and plump. The chaff

Join the NATIONAL FUCHSIA SOCIETY MEMBERSHIP \$9.00 per year includes monthly FUCHSIA FAN "The New A to Z on Fuchsias," a softcover book, \$9.95 plus \$1.00 shipping (residents add 60¢ tax) Mail to: National Fuchsia Society, Dept. B 8137 Loyola Blvd., Los Angeles, CA 90045 sticks to the paper. I just roll the good seed onto another piece of paper and discard the trash. Sometimes the varieties are not compatible and the cross does not take, even though we dab the pollen on the female flower. Many hybrids are sterile.

In working with *B. rex* cultivar seeds, Mabel comments, it takes quite a while for the seeds to ripen. She picks them when the stem dries. There is no more nourishment from the plant after the stem has dried. If a pod hangs on until it is completely dry you must be very careful how you handle it. If you turn it upside down the seed will fall out. "I lay the pods on white paper until they are completely dry and then empty the seed onto the paper.

Also, if you are making a specific cross, the male flowers should be removed before they have a chance to drop pollen on the female blossom."

Tom Hixson, Matthews, N.C., found one of his crosses, *B. staudtii* var. *dispersipilosa* x *ficicola*, most challenging to germinate. He finally found a method that worked. Tom waited until the ovary and pedicel began to become limp and a little spongy. They wouldn't dry out in the closed, humid environment of their terrarium.

Just before they would have dropped, he sliced the ovary into sections as thin as possible (less than 1 mm)—sort of like slicing a banana. He laid these flat, spaced about a half-inch apart, on a tray of fairly wet milled sphagnum moss. After two weeks, the ovary decomposed and nearly every seed germinated. The islands of seedlings were separated with the point of a needle into individual two-leaved seedlings.

Computers and begonias? Some growers are finding ways to use their home computers to help in caring for and storing information about begonias. If you are interested in sharing ideas about this with others, why not join a new round robin entitled "Computers & Begonias."

Another suggestion is for a flight on tropical plants in general. As soon as I get six to eight requests, we can start a new flight—so let me hear from you today!

QUESTION BOX/ Why do cuttings die when potted?

Mabel Corwin

Question: I propagate leaves and cuttings in covered plastic boxes with good results. However, when I pot them up I have many losses. Can you tell me what I am doing wrong?

Answer: Be sure your cuttings are well rooted. In rooting leaves, I wait until nice little plantlets have developed before potting them up. Then I usually pot the whole clump together. Later, when the pot is full of roots, I gently pull it apart and pot two or three of the strongest in individual pots.

To check tip cuttings, I pull very gently. If there is no "give," it will be rooted. Sometimes instead of potting in individual 2- or 3-inch pots, I pot three cuttings together in a larger pot. This gives me a nice bushy plant very quickly.

When potting the first time, always be sure to use a pot just large enough to hold the root system. Overpotting is one of the most common causes of failure.

The new plants must be hardened off carefully. There are two ways to do this. You can open the lid of the prop box a little at a time until the plants have adjusted to the outside atmosphere. This is the way I do it: I pot up a few at a time as they are ready. I place them in another plastic box, so the environment is the same. I leave them there until they are actually growing, then I gradually remove the cover. I have very few losses this way.

Some growers like to mix some of their propagating mix with their planting mix for the first transplant. This makes a good "baby mix."

I water thoroughly to settle the mix, then water sparingly until new growth starts.

Question: My cane begonias have "bare bottoms." What causes this and how can I make my canes bushier? They have not bloomed very well.

Answer: Cane begonias are heavy feeders. Lack of fertilizer could cause this problem. Also, some growers like to use a heavier mix for their canes.

After one growing season, I suggest potting up in a larger pot, lowering the plant slightly. This usually results in more new growth from the base. Cut the canes back about two-thirds of the way. This helps to make a bushier plant. Always cut above the node that has a growth bud facing toward the outside of the plant.

In the spring I like to use a slowrelease fertilizer, such as Osmocote. This gives them the constant feeding they need and makes for sturdy growth.

Canes need good light to bloom. Some growers have reported that *B*. 'Sophie Cecile' had never bloomed for them until they moved it outside, where it had strong light. Sometimes a low-nitrogen fertilizer will help. Use a formula such as 2-10-10 or 15-30-15 when it is time for bloom. The extra phosphorus stimulates blooming.

Question: Some time ago I used a systemic insecticide on my plants. I no longer remember the brand name, but the active ingredient was di-syston. It was granular in form sprinkled on the soil and watered in. Within the next month I noticed that leaves on the plants it was used on began developing dried areas, sometimes on the edges and sometimes in the center.

Some varieties of begonias seemed to be affected more than others. Could this have been due to the systemic? I have since repotted most of these plants and notice that the new growth does not seem to be affected. I was very careful to follow directions as to the amounts to use, but wonder if it was not the right form for house plants or some other problem.

Answer: I contacted my friend who is a certified nurseryman. He said they are taught the active ingredient in the systemic granules will burn if used in an enclosed area. In checking my container I see there are no directions for house plant use. However, I know that many

please turn to page 57

Send questions about begonia growing to Mabel Corwin, 1119 Loma Vista Way, Vista, CA 92083. Include a stamped, self-addressed envelope; you'll get a prompt reply.

GROWING FROM SEED/ Seeds from hybrids variable?

Joy Porter

Do you sometimes feel frustrated because you cannot fit your unknown cane variety to any written description you have found?

Or—at a show or in another's collection you see a plant quite different from your own but with the same name?

In my "spare" time I often read Seed Fund listings from past issues of *The Begonian*. The following is quoted from the January 1959 issue:

"From San Diego, California, we have received seed of some of the best of the cane-type begonias. This is a rare opportunity to acquire the cane types that have disappeared from cultivation in some sections of the country." (We are now aware of and emphasize the fact that hybrids cannot breed true.)

This quote was followed by a list of eight cane-type hybrids including *B*. 'Mrs. Shinkle'. Let us suppose that 30 growers who have never seen the plant bought the seed and each one got six healthy seedlings, keeping three and giving three away, all with the label *B*. 'Mrs. Shinkle'.

The chances all are identical are infinitesimal because 'Mrs. Shinkle' is the product of the combination of genes from two different parents (*B. coccinea* x unknown). That is 180 potentially different plants, probably shared with other growers over the course of 24 years—and all with the same name!

Had I fully realized the ramifications of this concept in 1978 when we were trying to identify the many different cane begonias in the Barkley Collection at Northeastern University Botanical Research Station, my sleepless nights would have been fewer, and my agonizing over lost labels would have been minimal.

This situation applies to all other classes of *Begonia* hybrids—not just cane types.

As a beginner, I could not understand

why, in a description, the size and measurements of a stipule were important. The *complete* description is as important to *Begonia* identification as are fingerprints in human identification.

It is easy to see why begonia nomenclature is confused—any one of the thousands of people all over the world who grow *Begonia* can brush the stamens of a male flower of one plant on the pistils of a female flower on another plant and in four to 10 weeks harvest a ripe pod of fresh seeds. In two weeks so many seedlings will be produced that the surplus must be shared—with or without a name. When the problem is viewed from this perspective, it is amazing that the nomenclature is not more confused.

The growers of seedlings can help by realizing how this problem arose and how easily one mistake is compounded, and by clearly labeling their hybrid seedlings as such. In the future, all hybrid seed will be so described in Seed Fund listings, and if possible, parentage given so growers can label their plants as "seedling of *B*.

Many new growers have asked for seed of hybrids, so it is essential to understand that a plant with name capitalized and in quotation marks is a hybrid, and *must* come from a cutting of the original plant and not from seed from the plant. Only the hybridizer may name and register the plant.

Seedlings from hybrid crosses offered by the Seed Fund may not be registered without permission of the hybridizer. If this were not so, hybridizers would be reluctant to donate seed of a cross from which they had registered, or planned to register, named plants. Such seedlings may, however, be used as parents for crosses of your own.

This is not meant to discourage anyone from the fun of hybridizing—let the pollen fly! Understanding and following the rules makes it easier for everyone especially the people who will be growing and enjoying the hybrids 20 years from now.

Seed grower Joy Porter of 9 Bayberry Lane, Framingham, MA 01701, is director of Clayton M. Kelly Seed Fund. Write to her about your seed growing experiences.

SEED FUND/ B. acaulis—tuberous species from New Guinea

Joy Porter, director, Clayton M. Kelly Seed Fund

Since seed supply is limited on Nos. 1-7, "one packet per customer" applies.

- M-A 3 B. acaulis: Tuberous species from New Guinea with small bright green leaves and showy bright pink flowers. Terrarium care required. Supply limited. I can only give 15-20 seeds. I planted 36 seeds of which 17 germinated in 10 days, but only one of the 17 was green, the others albino. A small percentage may eventually produce green leaves

- M-A 8 Beautifully colored, new rex hybrids......per pkt 1.00 M-A 9 – *B. engleri*: Curious 2-foot shrub-like species from Africa with long hairs
- on stems, petioles, and leaves, and persistent stipules at each stem node. Pale green ovate leaves with red at sinus and main veins have red dentate margins. Sparsely produced large rose-pink flowers in late winter.
 M-A 10 B. coccinea-type cane with red flowers, green leaves, and typical basket-type growth.
 M-A 11 Seed from hybrid begonias, primarily rhizomatous.
- CORRECTION: In the January-February listing, J-F 2, *B. oxyspermum* should have

CORRECTION: In the January-February listing, J-F 2, *B. oxyspermum* should have read *B. oxysperma*. Seed packets were correctly labeled when sent to customers.

Send orders to Joy Porter, 9 Bayberry Lane, Framingham, MA 01701. Include selfaddressed, stamped envelope or add 40 cents for padded, hand-cancelled package. 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 and add \$1.20 for postage.

$m ABS \ NEWS$ / 1983 Riverside convention plans take shape

Past ABS President John Provine, superintendent of the Los Angeles State and County Arboretum, will be banquet speaker and Patrick Worley of Kartuz Greenhouses will be banquet master of ceremonies at the 1983 ABS convention and show in Riverside, Calif.

Scheduled for Aug. 18 through 21 at the Holiday Inn, the convention will include a tour of the famous Huntington Library, Art Gallery, and Gardens in San Marino. A second tour option, nurseries in the Vista area, is under consideration.

The convention will be "Begonia Fantasy," the name suggested by Stella Sandoval and Florence Hess in a contest organizers staged to select a theme. As a prize, the two will have their ABS dues paid for one year.

In addition to seminars on begonias, talks will be given on ferns and staghorn ferns, bromeliads, and fuchsias, according to Convention and Show Chairman Arlene Davis.

Trophy and ribbon donations are being sought (see page 54), and branches soon will be asked to donate sale plants.

To secure a wider selection of show judges, all accredited judges from outside the Riverside area who plan to attend the convention are asked to contact Margaret Lee, judging director, by June 1. (See address on inside front cover.)

The Rubidoux Branch is hosting the convention.

Dues to rise on Aug. 1

Annual ABS dues will be increased by \$5, effective with the 1983-84 fiscal year next Aug. 1. The board of directors authorized the hike at its March 5 meeting in an effort to make *The Begonian* selfsustaining and to be able to finance new projects in the future.

Dues have not been raised since October 1979, when a financial crunch forced an increase. Membership Secretary Elisabeth Sayers reminded directors that members can renew their memberships early for several years if they wish—to take advantage of the current rate.

The new dues schedule: Regular membership \$15. Foreign \$19. First-class mail \$20. Overseas air mail \$35. Sustaining membership \$30. Life membership \$150. Benefactor membership \$500. Spouse membership \$2. (First-class and airmail subscription rates are adjusted periodically as postal rates go up.)

President Chuck Anderson proposed to directors a discussion of dues without mentioning a figure. Chuck was chairman of an ABS task force which two years ago recommended that the society review dues annually so ABS can make responsible long-range financial plans.

Chuck pointed out that many plant societies have dues much higher than \$10 a year. *Begonian* Editor Karen Bartholomew noted that 20 people so far have joined or renewed at the new sustaining member level, indicating they feel membership is worth more than \$10.

Other directors said that action should be taken now, before a financial crisis arises, because any increase is not reflected fully in the treasury until a year after it takes effect. One board member said ABS always relies on income from the annual convention, which is a risky way to budget because the income varies tremendously.

Secretary Debi Best said she did not favor an increase unless the need for it was apparent to members. A motion to raise dues by \$5 was passed on voice vote.

Revisions get ratified

Members ratified all proposed changes in the ABS constitution and bylaws published in the November-December *Begonian*. Twenty-five members—about 1 percent of the membership—participated in the mail ballot.

All changes but one in the constitution were approved unanimously. One member voted against Article V, Section 1, renaming chairpersons to chairmen.

Four bylaws revisions were passed unanimously. Two members voted against the changes in Article III, IV, and V, which eliminate the office of president-elect, rename the chairman of the school for judges as director of the judging department, and give the judging director a role in establishment of show classification rules.

1982 Santa Cruz receipts in

"Begoniafest," the golden anniversary ABS convention held last September in Santa Cruz, Calif., earned \$5,234.87 for transfer to the ABS general fund, Show Adviser Mary Margaret Rafferty told the ABS Board of Directors March 5.

Mary Margaret has compiled a packet of information on how the convention was planned and staged. This is in addition to a booklet of general convention planning guidelines Thelma O'Reilly is preparing for publication.

Handbook to be reprinted

The July 1980 "Begonia Handbook" issue of *The Begonian* will be reprinted in a modified format for use as a general cultural pamphlet by the society and interested branches. ABS directors March 5 allocated \$3,500, as requested by President Chuck Anderson, for the project.

Chuck told the board he hoped the society would sell copies at a modest price perhaps a dollar or two. Whatever the price, a lower bulk quantity rate will be available so branches may purchase copies to sell at branch shows as a fund-raising activity.

Until the supply ran out, copies of the July 1980 *Begonian* were included as a benefit of new membership. Chuck said he wanted to continue giving out the handbook free to new members, while selling it to the public.

Content of the revised handbook will be substantially the same as the July 1980 *Begonian*, except that the list of officers will be deleted, as well as ABS News and most other noncultural material. The cover design also will be different. The branch directory and the article on begonia books will be updated.

A target publication date has not been set, but Chuck said he hoped to complete the project before branch summer shows.

He asked that branches contact him if they want to be notified when the handbook is ready. Chuck said he hoped the \$3,500 would buy the society a press run of 5,000 copies.

Southwest reorganizes

The ABS Southwest Region has reorganized and reaffirmed its commitment to stage the 1984 ABS convention following the sudden resignation of the region's director, Bob Hamm of Wichita Falls, Tex.

Bob announced his resignation and the suspension of all regional activities for six months, effective Jan. 1, in a letter to members of the region. In the letter, Bob said he needed time to handle personal affairs and said he had not found a successor as director.

The immediate effect was to spur the Barkley, Blanton, and Dallas Area branches to meet jointly for a resolution of the situation. Members voted to restart the region, name interim officers and appoint a nominating committee, and reschedule the suspended Southwest Get-Together for April 15-17 in Oklahoma City, Okla., in conjunction with the Barkley Branch show and sale.

Tamsin Boardman of Roanoke, Tex., one of two interim co-directors, wrote to President Chuck Anderson in February notifying him of Bob's earlier action. Chuck offered the support of the ABS board in the reorganization, and reported to board members at their March 5 meeting.

Tamsin said the region is determined to host an outstanding ABS convention and show in 1984. Potential speakers are already being contacted, she said, and hotel arrangements are being firmed up. She and others in the region commended Bob for spending four years as regional director after founding the region.

Part of the April Get-Together was to be devoted to convention planning. New officers were to be elected at the Get-Together. Tamsin was sole candidate for director.

In memoriam

Twila Wagner

Twila Wagner, wife of former ABS president Wally Wagner, died Feb. 4 in Salem, Ore., from the effects of a brain tumor. A memorial service was held in Salem Feb. 12.

Wally was ABS president in 1973-74.

FORUM/Best bargain in town—donate a trophy!

Margaret Lee

Trophies and ribbons are needed for the annual show and convention of ABS to be held in Riverside, Calif., August 18-21.

Trophies, needed for each division in the show, cost from \$25 to \$50 each.

Each trophy will be engraved with the name of the donor—or as the donor designates—as well as with the usual show identification. A donor also may designate a preference for a specific division. Such requests will be accommodated in the order received.

Smaller donations to help defray ribbon costs will be gratefully received and will be acknowledged.

This is one way each of us has the opportunity to participate in and be part of the 1983 show and convention.

We are counting on you!

Please make checks payable to the 1983 ABS Show Fund, and mail to:

> Mrs. Peter P. Lee 1852 31st Street San Diego, CA 92102

More Fertilizers

continued from page 39

form that the plant can utilize. Oxygenless roots die, and plant growth is diminished.

It is much more difficult to grow plants in pots than in garden soil. When roots cannot forage to get nutrients, the grower is prompted to feed with every watering. But this watering tends to create an interface effect and diminish available oxygen in the root area. Other steps must be taken to prevent growth problems. One of these is to underfeed rather than overfeed potted plants, and the other is to tailor the soil mix to pot culture.

Potting mixes

Garden or field soil is seldom the best medium for pot culture. It is not homogeneous and does not have sufficient permeability. Additives are needed to increase water permeability and nutrient mobility.

Perlite is volcano-derived rock which is expanded by heat. It lightens soil and drains well, but has little nutrient-holding ability.

Vermiculite is also expanded mineral material with a lot of surface area. It is very porous and bulky, but tends to squash and get slimy after awhile. It has some natural fertility.

Sand is cheap and drains well, but is heavy and has no nutrient-holding capacity.

Fir bark sawdust is long-lasting, cheap, and drains well. The resin content may be toxic to some plants. Lots of nitrogen must be incorporated into the feeding program when fir bark sawdust is used.

Canadian sphagnum peat moss is light, holds nutrients and water well, and furnishes some nutrients. It dries and packs and is then very difficult to rewet.

Peat from reeds and rushes does not dry as readily as sphagnum, but has a high salt content that is detrimental.

Therefore various combinations of these materials have been used in order to produce one suitable for pot culture. Cornell mix is one of the frequently used ones. It contains equal parts of peat, vermiculite, and sand. U. C. mix (University of California mix) is also frequently used. It contains peat moss, vermiculite, perlite, and sand. Commercially packaged mixes may contain other additives.

The begonia grower should be sure the mix used has excellent drainage, retains sufficient water to keep roots moist, and retains enough nutrients to support growth without causing salt build-up as shown by tip and leaf edge burn.

In feeding plants the grower should be sure to supply the macro- and micronutrients on a regular basis. We are fortunate to have a wide range of products available to supply the essential plant nutrients. ADVERTISEMENT

Baguley Greenhouses 4101 10th SE East Wenatchee, WA 98801 509-884-1368

Dear Begonia Enthusiast,

Within the past year or so, I have sent free sample boxes of begonias to most of the branches in ABS. I want to explain to all members of ABS the service I am offering. To those who have ordered from me or expressed interest, thank you. For those I have overlooked, please let me know so that I can get your free begonias and my list to your branch.

I have started a mail-order business with a new idea. I will send an order of plants which will arrive a few days before your meeting. One person can handle the plants, collect payment, and send the money to me. For doing this, there would be an extra plant in the order for the person handling the details. If for some reason the plants were not satisfactory-for example, the mail truck ran over the box before delivery-then no payment would be expected, but an explanation would be appreciated. There would be an order blank with the plants showing what plants were available on the shipping date and their cost. Any plants which you let me choose would cost \$2.50. There is a minimum order of eight plants. Using my computer, I would not duplicate a variety to your group for six orders unless you requested it. If there is a plant no one wants, I can set it up so that you are not sent the plant.

I will be setting up for individual orders in the near future. If you are interested in a price list or want any further information, please write.

Sincerely, Bruce H. Baguley

THE BOARD/ ABS board of directors, March 5, 1983

The meeting was called to order by President Chuck Anderson at 1:10 p.m. at the headquarters of Sunset Magazine, Menio Park, Calif. Chuck welcomed those attending the meeting and specially thanked those coming from a long distance. He reported that Sunset's publisher, Bill Lane, was pleased that Sunset could host a meeting of the American Begonia Society board.

President-Elect Bob Ammerman led the pledge of allegiance and read the aims and purposes of the society.

The minutes of the July 19 and November 13 board meetings were approved as printed in The Begonian.

Reports of officers

President Chuck Anderson received a letter from the Japan Begonia Society announcing their 20th anniversary. He wrote a message on behalf of the ABS on how we appreciate their contributions, such as new cultivars, techniques, and international friendships.

A summary of the treasurer's report was read by Karen Bartholomew for Bill Scarbrough. February receipts were \$1,619.90 and disbursements were \$4,388.40. There was a balance of \$9,003.44 in the checking accounts and \$19,926.42 in the savings accounts. It was noted that the society has spent \$900 less than budgeted for this time during the fiscal year and has \$4,000 more income. Income from membership dues is \$3,500 less than budgeted. Bill requested that all board members who handle money please send reports to him

Reports from the bookstore and back issues sales were read, showing February to be a very productive month.

Archivist Mary Vipond reported that she needs a file to organize the records of the society. Chuck said he will check the history books in the ABS storage locker and have them sent to her.

Mabel Corwin, Awards Committee chairman, has received material from Kit Jeans and is currently organizing it. She has written a notice for The Begonian urging members to send in nominations for the awards.

Ballot Counting Chairman Marvin Vipond has selected a committee and has rented a Post Office box in Sacramento. No count for the bylaws changes is available yet.

Charles Jaros, director of Consulting Begonians, has contacted the American Rose Society for information on the organization of their Rosarian program. Rosarians must prove that they are experienced and capable rose growers. They are available for answering questions, conducting workshops, etc. Charles is preparing a report to define a program for Consulting Begonians.

Darlene Fuentes reported that she received a letter from Dan Haseltine concerning the International Begonia Congress. He suggested including an international species bank in the congress so that begonia species do not disappear from existence. Darlene requested that branch directors go to their branches for their input and that members who correspond with international society members to contact her. She knows of five other begonia societies: England, Japan, British Columbia, and two in Australia. Thelma or Anly selected, elite begonia authorities. Darlene replied that her idea is to have everyone who is interested to attend; the term "congress" may be misleading. Martin Johnson suggested that publicity in botanical journals or with other societies. would be helpful in reaching begonia specialists in other countries.

Marge Lee read the report of the Judging Department for November through February. No new judges have been certified, but a steady flow of assignment lessons is being received. Chuck reported for Librarian George Ghiotto that

Chuck reported for Librarian George Ghiotto that he is making an inventory of the current holdings of the library. He is also checking on books loaned to the L.A. Arboretum.

Members-at-Large Director Thelma O'Reilly reported that she wrote an open letter to the membersat-large which was published in the November/December Begonian. She has received eight letters in response from five states. She read excerpts from them telling their feelings and suggestions. These included a regular newsletter in the Begonian, articles similar to that on Logee's Greenhouses, provide a basic information source, and provide a contact for other in-state members. Other ideas discussed included a newsletter which members could receive if they sent a stamped, self-addressed envelope, and basic sheets of information for each type of begonia. Personal contact with the members-at-large can make a difference in keeping members. It was mentioned that this could become a function of the Consulting Begonians.

Chuck read the Nomenclature Department report from Carrie Karegeannes. It included the activities of the department during November through February. Anyone wanting reprints of the Buxton Checklist should contact Carrie so that she can order the maximum number of copies, thus lowering the unit cost.

Show Adviser Mary Margaret Rafferty reported she has written a report on the 1982 Convention. She has assembled a packet of the materials they used for the show together with the report. Future convention chairmen can benefit from this information, add to it, and pass it along. The final financial report for the 1982 Convention showed a net profit of \$5,234.87. The board complimented Mary Margaret on the job she did on the convention.

Bob Ammerman reported on the progress of the 1983 Convention Committee. They held their last meeting at the Holiday Inn to look over the facilities; "Begonia Fantasy" is the convention name.

"Begonia Fantasy" is the convention name. Chuck reported for Slide Librarian Dan Haseltine that there seems to be new interest in the slide library and that he needs contributions of slides to update the library.

Chuck read a letter from Bob Hamm, chairman of the Task Force on Regions, reporting that he has started a proposal and is naming members to the task force.

Begonian Editor Karen Bartholomew reported that the January/February issue is late due to problems during the printing. The issue contains special color plates which were discovered in Spain by Dr. Iris Engstrand.

Membership Secretary Elisabeth Sayers received 93 new memberships between October 1982 and February 1983. She is trying to use the form approved by the board, but has found that it does not work. She called to the attention of the board that many branch and even national officers are not ABS members. There was a suggestion that the national board approve the election of branch officers, but the branches should be autonomous and this would alienate them.

Chuck announced that a roster of board members is available and will soon be updated to include telephone numbers.

Old business

There was a motion to grant a life membership to Past President Wallace Wagner, who held office for six months. The motion was passed by the board.

New business

The board approved a motion by Marge Lee to increase the cost of the judging course from \$8 to \$10, the point-scoring booklet from 1.25 to \$2, and the classification guide from 1.50 to \$2. There was a discussion on the appointments to be

There was a discussion on the appointments to be made to the Awards Committee. Each year, two members are appointed and they serve for three years. Chuck and Chairman Mabel Corwin will discuss the issue and appointments can be ratified by mail.

issue and appointments can be ratified by mail. Chuck proposed that the society allocate no more than \$3,500 to reprint the Begonia Handbook issue of the Begonian with some modifications to remove the introductory and routine material. It could be offered to new members, in the bookstore, and through branches to sell to the public. There was a discussion on the number of colors on the cover; having two colors cold add as much as \$200 to the total cost. It can replace the cultural tips bulletin from the bookstore. The motion was approved by the board.

A motion was made to increase the membership dues from \$10 to \$15 per year, starting the new fiscal

More Question box

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African violet growers use this product to protect their plants. I have used it on my violets in the house and had no problems.

The directions on the container do warn against using too much, but they don't say what will happen if you do. I think that is probably what caused your problem since it cleared up by itself. It could have been a combination of things such as temperature, light, watering, etc., along with the systemic.

Perhaps this product is not suitable for begonias. I would be interested in hearing from anyone who has had experience using systemic granules on begonias.

Question: I had a beautiful bowl of B. prismatocarpa. Recently it started to die back gradually. I don't understand why this should have occurred. The bowl was not moved or disturbed in any way.

year, August 1, 1983. Arguments in favor included that The Begonian is a good-quality magazine and its price should be increased. The cost of printing Its price should be increased, The cost of printing will not go down and it should be self-supporting. The society has been operating on the profits of conventions and eventually there will be an unprofit-able year. It takes a year for the treasury to reflect a dues increase and last time there was a financial crisis with bills not being paid. Many plant societies have dues which are higher than \$10. Deborah Best spoke against the increase because there is no ap-parent need at this time to raise the dues and that it will anger the membership unless it is justified. It was noted that the total dues can be very expensive with the additional branch dues. The board apsive with the additional branch dues. The board approved the motion to increase the membership dues from \$10 to \$15 per year. Chuck noted that this increase effectively raises the cost of a life membership from \$100 to \$150. The Long Beach Parent Chapter submitted its amended Constitution and Bylaws for approval. The

changes state if the chapter is disbanded, its assets be distributed according to IRS rules to another non-profit corporation. The amendments were approved

by the board. The Dallas Area Branch submitted its charter to join the#ABS. The board approved the charter and also the issuance of the standard \$30 check to them for starting the branch. A letter welcoming the branch to the order will be sent including a reminder that to the society will be sent including a reminder that all members must belong to the ABS. Special recognition was made of the Sacramento Branch which donates the proceeds of its December

Plant Table to the Research Fund. This year, \$41 was donated by the branch.

It was reported that a new branch is forming in the Los Angeles area. It currently has 18 members and meets at the South Coast Botanic Garden. They have not submitted a charter at this time. Chuck read a letter from Millie Thompson offering

her resignation as chairman of the Horticultural Class sification Committee. She feels that her position no sification Committee. She feels that her position no longer has meaning in the society with the proposed amendments to the bylaws, but she will continue to work independently. Chuck wrote to Millie, urging her to reconsider; however, she declined. The board accepted her resignation with deep regret. Chuck received a letter from Tamsin Boardman describing changes in the Southwest Region. Bob Hamm anarently suspended regional operations ef.

Hamm apparently suspended regional operations ef-

Answer: I find B. prismatocarpa does this sometimes for no apparent reason. Perhaps it is just a short-lived plant. It is so easy to propagate. I always have a leaf or cutting in the prop box, just in case I need to replace it.

I suggest you lift the plant from the bowl and carefully break it apart. Plant the part that seems healthy in fresh mix in a clean bowl. Discard the old mix. As the peat moss breaks down it becomes more acid. (I try to lift all of my terrarium plants about once a year and plant in fresh mix.)

I keep young plants coming along of all of my begonias that I consider choice. Plants in the ground are pruned each year and continue to be beautiful for years. In containers it is often difficult to keep a plant looking good. I frequently discard old plants and replace with young ones. I'm sure some growers don't agree with me on this matter, but it works for me.

fective January 1, 1983, for six months because no new officers could be found to lead the group. He said that the members can decide whether to con-tinue or disband the region by June 1, 1983. There was a joint meeting of the Mae Blanton, Dallas Area, and Fred Barkley branches to address these prob-lems. They decided to keep the region going, ap-pointed interim officers, and rescheduled the Get-Together in Oklahoma City on April 15-17 in conjunc-tion with the Barkley Show and Sale. Chuck offered assistance to them in handling arrangements for the 1984 national convention to be held in the Dallas-Fort Worth area. Fort Worth area.

Chuck read a summary of recommendations from Scott Hoover for the Conservation Committee, regarding stands for the ABS to take on conservation issues. He will mail the report to the full board to read and vote by mail on each issue.

Vote by mail on each issue. Chuck presented a proposal by Bobbie Lovera that she rent a storage locker for \$11 to \$15 per month for storing the Begonian back issues. It can be paid for out of the profits from the Bookstore. The board approved the motion. There was a question on whether the price of the back issues chould be related since the mother the

back issues should be raised since the membership dues were increased. There was no decision, so

prices remain at \$2 per issue for the current year. Carol Spediacci, president of the San Francisco Branch, said that the 1983 Convention as rescheduled coincides with the San Francisco Flower Show. This affects the San Francisco members and the ability to obtain judges for the show.

Bob Ammerman stated that there are errors in the text of the changes to the Constitution and Bylaws printed in the Begonian. The changes remove the office of President-Elect and the text still contains references to this office. Chuck answered that the text is exactly as approved by the annual meet-ing and it cannot be corrected legally without an-other constitutional amendment, although the mis-takes are obvious. He is planning one more change to rewrite the constitution and streamline it. He would like to remove the specific details dealing would like to remove the specific details dealing with everyday issues and create a set of board poli-cies which can easily be amended by the board. The next meeting will be held at the South Coast Botanic Garden on July 10, 1983.

The meeting was adjourned at 4:30 p.m.

Respectfully submitted, Deborah Best, Secretary

BEGONIAN MINI-ADS

Begonia and lily catalog—35¢. Leslie & Winkey Woodriff, Fairyland Begonia and Lily Garden, 1100-B Griffith Rd., McKinleyville, CA 95521. Visitors welcome.

Violets - Begonias - Episcias Cuttings only. Send 50¢ for list. Wilson's Greenhouse, Route 1 Box 165-4 Ozark, MO 65721

- THE THOMPSON GREENHOUSE "A Living Museum of Begonias" owned and operated by Millie and Ed Thompson. Over 1400 different species and cultivars of begonias are displayed. While in New York plan to visit. HOURS: 9-12 noon Mon., Wed., Thurs., Sat.; 2-5 p.m. Fri. Other times by appointment. Call The Thompsons at 516-283-3237. LOCATION: Southampton College Campus, Southampton, N.Y. Open all year. No admssion fee. A number of small plants are available for sale. Branches and garden groups are welcomed. Seminars by The Thompsons are also available. For arrangements and scheduling call 516-283-3237 or 516-283-1633.
- BEGONIAS: ferns, violets, cactus, & more. ATKINSON'S GH, Rt. 2, Box 28, Morrilton, AR 72110. List 45¢. Rooted cuttings, reasonable prices. SPECIAL: 15 begonias \$15.95 p.p.

Mini-ads are \$1 per line per insertion with a minimum of \$4. A line is 38 characters including punctuation and spaces. Payment must accompany order. Send to Susan Muller, advertising manager, 124 St. Charles Ave., San Francisco, CA 94132.

- Begonias—violets—episcias. Cuttings only. List 50¢. Springtime Gardens, 2212 Hickory, Sulphur, LA 70663.
- Plant books, bulletins, and catalogs—Collection dates 1930 to 70: mainly begonia, gesnerial, fern, under lights. Send 40¢ stamps for 16-page list to Sausaman, 2058 Lombard, Phila., PA 19146.
- African violets, begonias, gesneriads, terrarium and dish garden minis, cuttings only. Windowsill Gardens, Box 943, Center Moriches, NY 11934. List 35¢.
- BEGONIAS: THE COMPLETE REFERENCE GUIDE, by Mildred L. and Edward J. Thompson, 384 pages, 850 illustrations (165 in color). Culture, classification, and history of begonias in one definitive volume. Price \$35 (shipping in U.S. included UPS or first class mail). For autographed copies write The Thompsons, P.O. Drawer PP, Southampton, NY 11968. Enclose \$35 check or use Master Card or Visa.

NEW BOOKS!

African Violets and Related Plants. 117 color photos plus 21 photos of gesneriads, \$4.50.

Begonia Portraits. Collector's item by the late Alice Clark. Only a few copies. \$11 hard cover.

Ferns. How to identify and grow 84 common ferns. Color photos, \$4.50. Mother Nature's Secrets for Thriving Indoor Plants. Fundamentals of indoor gardening. Color photos and information on 341 house plants. \$5.

Still available:

Begonia. Misono, 1974. Japanese text with 302 good color photos identified in English. \$30 hard cover. (English translation with no no photos. \$5.50 paperback. Order both for \$34.)

Begonias. Japanese text with 431 excellent color photos from 1980. \$23 paperback.

Begonias for Beginners. Elda Haring's popular primer published in 1976. Very useful, Now sold only by the ABS Bookstore. \$6 hard cover.

Les Begonia. Charles Chevalier's classic 1938 study of the begonia family translated by Alva Graham trom the French in 1975. Illustrated. \$5 paperback.

Pamphlet. Begonias from Seed. 25 cents each.

Begonian binders. Hold one year's worth. No repunching. Specify blue or black. \$5.25 each.

All prices include shipping. California residents add 6% sales tax. Send check or money order in U.S. currency payable to American Begonia Society.

ABS Bookstore

Bobbie Lovera, Manager 6073 De La Vista Rubidoux, CA 92509

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 bcgoniss.

ABS SERVICES

These services are available to all ABS members. For names and addresses of department heads and other officers, see inside front cover. Include a selfaddressed, stamped envelope when you write.

AT-LARGE MEMBERS—Services for members who don't belong to branches are handled by the members-at-large director. Contact her 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 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 editor.

BEGONIAN BACK ISSUES—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 1980. Back issues less than a year old are ordered from the membership secretary for \$2 each.

BOOKSTORE—Books on begonias and related subjects can be purchased mail-order from the bookstore manager. Contact her for a list of books available. The bookstore also sells reproductions of antique begonia prints and other items.

ABS directors meet July 10 at South Coast Botanic Garden

The ABS board of directors will meet on Sunday, July 10, at the South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes, Calif., at 1 p.m.

This will be the board's final meeting for fiscal 1982-83. All board members, including branch national directors, were urged to attend by President Chuck Anderson. Any ABS member may attend board meetings. JUDGING DEPARTMENT—The judging department offers a course by mail with which you can learn to become an accredited begonia show judge (\$8). Also available are a booklet on point scoring (\$1.25), information on fuchsia and fern judging, and other requirements to become a judge. Add \$1 postage and handling to all orders and 6% tax for California residents.

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.

QUESTION BOX—Send begonia-growing questions to Mabel Corwin, 1119 Loma Vista Way, Vista, CA 92083. You'll get a prompt answer and Mabel will use questions of general interest in her Begonian column.

RESEARCH—The research department conducts projects periodically. The department also has other activities, including the review of requests for ABS backing of outside projects. For details, contact the 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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