



December 1981

The BEGONIAN

The BEGONIAN

Publication of the American Begonia Society

Copyright ©1981 by the American Begonia Society

THE BEGONIAN is published monthly by the American Begonia Society. Views expressed are not necessarily those of the society, its officers, or the editors. Third-class postage paid at South San Francisco, Calif. ISSN 0096-8684.

Deadline for notices, advertising copy and manuscripts is six weeks before the first of the month of issue.

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

AMERICAN BEGONIA SOCIETY

Founded January 1932 by Herbert P. Dyckman

Aims and purposes

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

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

TO standardize the nomenclature of begonias.

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

TO issue a bulletin which will be mailed to all members of the society.

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

Services

See inside back cover

Elected officers

PresidentGilbert A. Estrada
7914 Springer St., Downey, CA 90242
Phone (213) 862-5976

Past PresidentNathan Randall
10079 West Lilac Road, Escondido, CA 92026

President-ElectChuck Anderson
826 Santa Rita Ave., Los Altos, CA 94022

First Vice PresidentMichael Kartuz
1408 Sunset Dr., Vista, CA 92083

Second Vice PresidentRobert B. Hamm
2951 Elliott, Wichita Falls, TX 76308

TreasurerJohn Ingles Jr.
8922 Conway Dr., Riverside, CA 92503

SecretaryArlene Davis
13390 Barker Lane, Corona, CA 91720

Appointed officers

Back Issue SalesKatharine Alberti
3322 Troy Drive, Hollywood, CA 90068

Bookstore ManagerBobbie Lovera
6073 De La Vista, Rubidoux, CA 92509

Branch Relations DirectorLynda Goldsmith
RFD 2, Fairfax, VT 05454

ADVERTISING MANAGER—Pam Mundell, 2324 Connie Dr., Sacramento, CA 95815. 916 925-3647.

Advertising rates: \$12 per column-inch; \$35 quarter page; \$60 half page; \$115 full page. Discount of 5% for four or more consecutive insertions.

MEMBERSHIP SECRETARY—Subscription, dues, circulation inquiries and address changes: Elisabeth Sayers, 369 Ridge Vista Ave., San Jose, CA 95127. 408 258-4670.

Subscription: \$10 per year. Foreign (includes Mexico and Canada) \$14. First class mail (includes Mexico and Canada) \$15. Overseas air mail \$30. U.S. currency only. Back issues (current volume) \$1.

Chairman, Ballot Counting Committee.....Pearl Benell
10331 S. Colima Rd., Whittier, CA 90604

Chairman, Awards Committee.....Kit Jeans
Rt. 1, Box 319, New Johnsonville, TN 37134

Classification Committee Chmn......Mildred Thompson
310 A Hill St., Southampton, NY 11968

Clayton M. Kelly Seed Fund Director.....Joy Porter
9 Bayberry Lane, Framingham, MA 01701

Corresponding Secretary.....Frances Estrada
7914 Springer St., Downey, CA 90242

Finance Committee Chairman.....Charles Richardson
696 Barsby St., Vista, CA 92083

HistorianFrances Estrada
7914 Springer St., Downey, CA 90242

Judging Chairman.....Margaret Lee
1852 31st Street, San Diego, CA 92102

Lending Library.....Dolores Fernandez
4369 Tujunga Ave., No. Hollywood, CA 91604

Members-at-Large Director.....Robert B. Hamm
2951 Elliott, Wichita Falls, TX 76308

Nomenclature Department
Co-directorCarrie Karegeannes
3916 Lake Blvd., Annandale, VA 22003

Co-directorThelma O'Reilly
10942 Sunray Place, La Mesa, CA 92041

ParliamentarianClair M. Christensen
11276 W. Washington Blvd., Culver City, CA 90230

Research DirectorAnthony P. Croce
24 Saxon Terrace, Newton, MA 02161

Round Robin DirectorMary Harbaugh
W2899 Homewood Ave., Shawano, WI 54166

Show Classification and Entry Chairman.....Frank Kerin
259 Churchill Rd., Turtle Creek, PA 15145

Show and Convention Adviser.....Barbara Schneider
3774 Vineyard Ave., Oxnard, CA 93030

Show & Convention Chmn......Mary Margaret Rafferty
18531 Ravenwood Dr., Saratoga, CA 95070

Slide LibrarianRalph Corwin
1119 Loma Vista Way, Vista, CA 92083

Speakers Bureau DirectorArlene Davis
13390 Barker Lane, Corona, CA 91720

THE COVER: *Begonia* 'Roulette', a cross of *B.* 'Bowtique' and *B.* 'Tiger Kitten' by Leslie Woodriff, and 582 others are listed by Rudolf Ziesenhenné in his history of *B. bowerae* hybrids that begins on page 248. Walter Haring of Flat Rock, N.C., photographed the plant in the collection of his wife, Elda.

Breakthrough book	Chuck Anderson reviews the Thompsons' <i>Begonias</i>	244
	A Thompson book excerpt on plant growing	245
B. bowerae hybrids	Rudolf Ziesenhenné lists as many as he knows	249
Round robins	253	ABS news 256
Seed fund	255	ABS services 259
	Question box 258	The board 259

NOTES/ *From the editors*

The Begonian is biting the bullet.

The issue you hold in your hands is the last one to be issued monthly. We are switching to bi-monthly publication effective with the January-February issue.

ABS directors authorized this change on Nov. 16 after discussions of the society's financial condition covering several board meetings.

The primary reason is to be able to keep annual dues at \$10.

Cost of printing and postage had increased so much over the past year that normal-sized *Begonians*—ranging from 24 to 36 pages—would have required spending \$34,840 on *The Begonian* alone in fiscal 1981-82.

The only way to finance such an expenditure was to raise dues to \$15 a year. A sizeable number of board members voiced opposition to an increase on grounds it would prompt members to quit the society.

An optional plan—smaller monthly *Begonians* of 20 pages each (such as those we have been publishing recently for financial reasons)—would have required a dues increase to \$12.50.

In the end, directors decided to hold the line on dues and publish six hefty issues of *The Begonian* each year.

After making this decision, the board adopted a revised 1981-82 ABS budget totaling \$30,475 in expenditures, of which \$21,890 is for *The Begonian*, and \$32,797 in estimated revenues.

Board members were aware of the importance of their decision. In past discussions, we pointed out that ABS had

published a monthly bulletin or journal for almost 50 years, and that a decision to cut back should not be made lightly.

It wasn't.

After strong soul-searching, we feel this decision is in the best interests of all ABS members. Today's economics require it.



There's a new publication in ABS. It's an occasional newsletter published by Branch Relations Director Lynda Goldsmith called *Branching Out*. Aimed at branch officers, it contains ideas and information to help run a branch more efficiently and effectively.

Lynda's first issue reports the responses to her May survey of branches on money-making activities, what keeps branches together, relations with local colleges, and more.

A copy of *Branching Out* was mailed to each branch in October. If you'd like more for your branch—or if you aren't in a branch but would like to see it—send a self-addressed stamped envelope to Lynda (see the facing page for her address).



There's an important lesson for all of us in Rudy Ziesenhenné's long list of *B. bowerae* hybrids that starts on page 248:

Suppose the Mexican habitat of *B. bowerae* had been destroyed by development—as many tropical habitats now are—before Thomas MacDougall discovered it in 1948. Look at all those *begonias* we wouldn't have today.

—C.A. & K.B.

Thompsons' new book comprehensive, useful

Chuck Anderson

It took perseverance and patience, worry and heartbreak, big chunks of faith and sacrifice. The result is a truly remarkable book on the family Begoniaceae, the long-awaited *Begonias: The Complete Reference Guide* by Mildred and Ed Thompson.

After disappointing experiences with two earlier publishers, the untiring Thompsons of Southampton, N.Y., persisted through the painful publishing process. Finally, in late October, begonia growers began to receive copies ordered earlier of this comprehensive, detailed, information-packed volume.

Begonias, published by Times Books at \$37.50 (or \$35 autographed when ordered from the authors) is well worth the price. It is thorough enough for the advanced grower, clear and basic enough for the beginner. In short, it's a milestone.

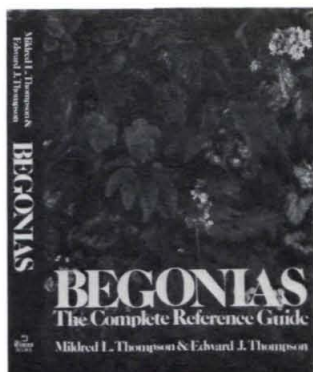
In its 396 oversize pages are full instructions on general culture of begonias, including light, potting mix, watering, humidity, fertilization, pest prevention, propagation, and growing. (See the excerpt on the facing page.)

These are followed by specific growing instructions group by group (cane-like, shrub-like, and the rest). The chapter on each group also contains a list of species and cultivars with date of discovery of introduction and the name of the country of origin or name of the hybridizer. Each chapter has clear black-and-white photographs of many of the begonias in that group.

Among the 850 photos and drawings are 165 color plates. All are labeled, making it possible to try to identify your mystery begonias. But the Thompsons offer a caution about that:

"There are so many look-alikes in the genus *Begonia* that it is easy even for the experienced grower to incorrectly name an unknown begonia. . . . It is far better to write "unknown" on the label of an unknown species or cultivar and enjoy it without knowing the name than to have it

Chuck Anderson is Begonian co-editor.



incorrectly named. This will avoid confusion and there will be no chance of distributing an incorrectly labeled plant to other begonia enthusiasts with whom cuttings and plants are shared."

Readers of *The Thompson Begonia Guide*, the authors' three-volume, loose-leaf, privately printed work from 1975, will recognize some familiar material, reworked and updated, in the new book. Most striking is "A Directory of Begonias," a valuable appendix listing more than 2,450 species and cultivars along with the horticultural classification for each and, where available, bloom information.

Many ABS members will soon find the directory—useful in spelling the names of and classifying new acquisitions—to be the most-used portion of the entire book. And members who waded into the sometimes difficult scientific articles in *The Begonian* will welcome the Thompsons' glossary of botanical and horticultural terms.

The huge number of begonias in the directory represents the diversity in the family, which the Thompsons explain eloquently as a primary reason for the plants' popularity:

"Begonias are a wonderfully diverse group of plants with various growth habits, many leaf shapes and sizes, seemingly endless leaf colors and color patterns, and many interesting types of flowers and flower clusters. This heterogeneity intrigues the grower and is undoubtedly the reason that there are over 2,475 different

Book excerpt: Looking their best

Mildred L. Thompson
and Edward J. Thompson

Without routine methods of regular grooming we cannot be successful growers, regardless of our soil mixes, fertilizers, watering, growing conditions, or years of growing experience. Good grooming is essential to both the health and appearance of the plant, and we know that the most beautiful as well as the most interesting begonias cannot be enjoyed or fully appreciated unless they are well groomed.

Grooming should be done regularly and systematically so that it never becomes an overwhelming task; groom once a week or each time the plants are watered. Grooming means keeping the entire plant,

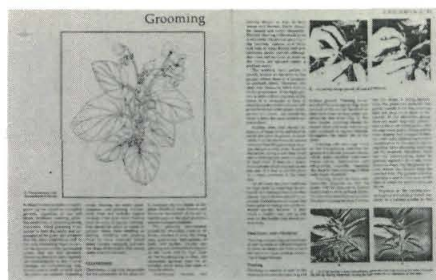
Mildred and Edward Thompson of P.O. Drawer PP, Southampton, NY 11968 are extraordinary begonia collectors and researchers. This article is excerpted from their new book, *Begonias: The Complete Reference Guide*. Copyright © 1981 by Mildred L. Thompson and Edward J. Thompson.

species and cultivars of the genus *Begonia* being grown today. The diversity of the group plus the general ease of culture result in an extraordinary group of plants to grow and enjoy in the home, fluorescent light garden, greenhouse, or outdoor garden."

When it comes to growing them, nothing can match careful, consistent application of common-sense gardening principles, the Thompsons emphasize:

"Very often successful growers are credited with secret ingredients in their mixes, special environmental conditions, or even pure luck; this is absurd. Successful growing is only a result of commitment to giving plants regular care, along with common sense."

The book then provides comprehensive, detailed directions to do just that. And although the Thompsons represent several different climates and geographical areas as they write, they are careful to remind the reader to adapt the principles to his or her own garden conditions.



container, and growing environment clean and includes regular training of the plant itself. Staking must be done at regular intervals. Ties should be added to stakes to prevent stems from bending or curving. Pinching and pruning must be done routinely before stems become unsightly and ruin the shape of the plants. Old woody stems must be removed.

Cleanliness

Cleanliness is not only imperative for the appearance of the plant but is necessary for the health of the plant. Debris of dead flowers and leaves on the surface of the soil or healthy parts of the plant promotes disease and pest problems.

The growing environment should be absolutely clean at all times, whether it is

"... A grower should know the basic principles of good culture and apply them imaginatively to his particular situation."

In the book, you'll find a fascinating history of the discovery of begonias, beginning back before 1577, when a plant discovered in Mexico was given the name *Totoncaxoxo coyollin*. We know it today as *Begonia gracilis*.

Guest-written sections of the *Thompson Guide* that proved to be popular have been placed in the new book and illustrated nicely. These include window gardening by Marie Donnelly, fluorescent light gardening by Jack Golding, and hybridizing by Belva Nelson Kusler.

Contained in the book are nods to ABS and many member-growers, including a generous description of the society and an invitation to join.

If you like begonias, you'll love *Begonias*. Order from a bookstore, or you can order an autographed copy by sending your check for \$35 to The Thompsons, P.O. Drawer PP, Southampton, NY 11968.



in the living area, greenhouse, light garden, or patio and garden. Usually any growing area within the living area of the home will be kept clean as the house-keeping is done, but sometimes growers must be reminded about areas less open to view by others.

Greenhouse benches and shelves should be free of dead leaves and flowers. Floors should be cleaned and swept frequently. Periodic cleaning of the inside glass is advisable. Occasional spraying of the benches, shelves, and floors will help to keep disease and pest problems under control, although this need not be done as often as the plants are sprayed unless a problem exists.

The working light garden is usually located in the cellar or the garage, where there is a tendency to overlook debris. However, the same care should be taken here as in the greenhouse. If the light garden is within the living area of the home, it is necessary to keep it clean for its decorative value as well as for the health of the plants. In the garden and patio, care should be taken to keep the areas around our plants clean.

Another item that should be clean at all times is the container in which the plant is grown. In most cases, it is not necessary to remove the plant from the pot to clean it unless the pot is very dirty. It can be cleaned by using a wet clean cloth and a scouring pad (without soap) or steel wool. If there is a heavy accumulation of salt deposits on the clay pot, it is best to put the plant in a clean container of the same size.

At all times the plant itself can be kept clean by removing the yellowed and damaged leaves as they appear. Spent flowers

should be removed. Rotted leaves or leaves that have areas of rotting should be removed quickly because, if they touch a healthy leaf, rotting will start on the healthy leaf almost immediately.



Pinching and pruning are two ways of cutting stems to different degrees in order to shape and form a plant and produce more profuse blooming or larger flowers.

Pinching

Pinching is removal of part of the stem to produce side branching and bushier growth. Pinching is removal of the growing tip or removal of the end of the shoot or stem with three or four nodes just above the side shoot. For best results, pinching should be started when plants are very young and continued at regular intervals throughout the entire life of the plant.

Pinching will encourage many of the low-growing cane-like begonias to form low compact plants, which make excellent semi-erect basket plants. Intermediate and tall-growing cane-like begonias also benefit from pinching in their early stages of growth.

Pinching should be done with shrub-like begonias so that the plants will be induced to branch readily and to send up basal shoots. This must be done frequently when the plant is young because it is then that the shape is being formed. Once the plant has matured, the grower usually finds that pinching does not need to be done so frequently.

In the shrub-like group, there are many begonias, particularly in the small-leaved group, that are semi-erect plants. These will be more shapely and compact if they are continually pinched up to 2 to 3 months prior to the normal blooming time. After blooming, pinching can be resumed. However, those that are ever-blooming must be pinched regularly. As a rule, these bloom so freely that the grower seldom misses the flowers from the pinched tips. The grower will stop pinching a month or so prior to the time at which he wants maximum bloom.

Begonias in the trailing-scandent group should be pinched regularly in a fashion similar to that used for shrub-like semi-

erect types. Trailing begonias will produce much fuller baskets if they are pinched severely and regularly in their early stages.

Semperflorens begonias should be pinched, especially when they are young. As they mature, they usually branch readily and produce many basal shoots.

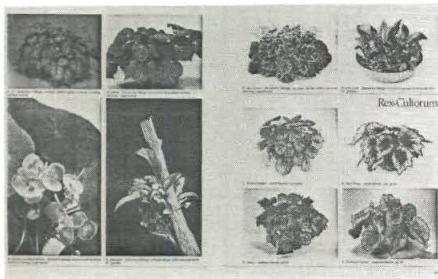
Pinching the tips of rhizomatous begonias induces more growth along the rhizome; the resulting fuller plant seldom will have naked rhizomes. The same is true in most cases for the Rex Cultorum group. Varieties of upright-stemmed rexes that are not rhizomatous will require pinching the stems.

Usually it is advantageous to pinch begonias in the tuberous group, especially in the early stages.

The preference of the grower can also play an important part in the amount of pinching that is done. Particularly in the small-leaved and medium-leaved shrub-like groups and the low-growing canes, there are some begonias that will grow beautifully both in an upright form with all main stems staked and will also grow in a semi-erect fashion. The grower must decide which form he prefers. An interesting and pleasant shape can be formed by allowing some of the center main stems to grow upright, staked if necessary, so that they will be taller than the outer stems and shoots. At the same time, the outer main stems and shoots are pinched more frequently, so that they will branch and hang slightly.

Pruning

Pruning is a more drastic cutting back of the stems. Generally when a cut is made further back than the fourth or fifth node, it is considered pruning. In normal



healthy plants, it is seldom necessary to do any extensive pruning. However, old woody stems should be removed to allow new growth to develop. Occasionally a stem will be removed because it destroys the symmetry of the plant. In extremely hot and humid climates where rotting is a problem, the grower may want to "thin out" a plant to provide better air circulation through a dense plant. Pruning is also done to control the size of the plant so that it will not become too large for the growing area. Pruning may be advisable to force lower growth on a plant that is becoming bare at the base. Cutting back a few stems to four or five nodes above the surface of the soil will induce new growth at a lower level.

Many growers believe that it is important to prune their older cane-like begonias severely each year in the late winter or very early spring. It is their opinion that this will produce fuller plants. Other growers do not approve of severe pruning if the stems are strong, healthy, and well formed. If severe pruning is done, it is best not to cut below four nodes from the surface of the soil.

Creeping rhizomatous begonias occasionally will have bare or nearly bare rhizomes hanging over the sides of the containers. These should be cut back to the place where there are leaves coming from the rhizomes. This will encourage branching as well as improve the appearance of the plant.

Pinching and pruning combined

For best results with most begonias, careful pinching and pruning must be combined throughout the entire training period of the plant, as well as when the plant is fully mature. Whether the grower is pinching or pruning, the symmetry of the plant must be considered. It is best to have in mind how the plant should look at maturity. The grower should be certain that the main stems of erect and semi-erect plants are not all the same height, but rather in graduated heights with the tallest stems in the center of the plant. Plants that are trailing should have longer stems on the inside and stems of

Please turn to page 257

B. bowerae and 583 of its many hybrids

Rudolf Ziesenhenne

Begonia bowerae was found on March 13, 1948, in Oaxaca, Mexico, by Thomas MacDougall, the late, renowned plant collector of New York, who sent the plant to me. In accordance with our understanding, the plant was described as a new *Begonia* species in *The Begonian* of April 1950 on pages 77-78.

On November 19, 1955, MacDougall collected another *Begonia* between Cerro Altravesado and Cerro Azul, Sierra Madre, at 4,000 feet elevation north of Niltpec, Oaxaca, Mexico. This plant MacDougall called the dark-leaved form, which I named *Begonia bowerae* variety *nigramarga* in *The Begonian* of December 1973 on pages 286-288.

These two plants—*Begonia bowerae* and its variety *nigramarga*—are the plants used extensively around the world in breeding the so-called *bowerae* hybrids. While studying these begonias, I made the first *bowerae* hybrid, crossing *B. bowerae* with *Begonia liebmannii* to produce 'Zee Bowman' and 'Green Zee Bowman' in 1950. Since that time I have tabulated *Begonia bowerae* hybrids which come to my attention and the list presented here contains 583 names.

In the last of *B. bowerae* hybrids the name Paul Eppele appears many times as the hybridizer without the plant parents listed. Eppele, of West Germany, obtained *Begonia bowerae* and made the following crosses: *Begonia bowerae* x *B. heracleifolia* variety; *B. bowerae* x *B. heracleifolia* variety different from above; *B. bowerae* x *B. 'Lindleyana'* as illustrated in *Exotica* on page 345—not the true *B. lindleyana* Walpers; *B. bowerae* x *B. mazae*; *B. bowerae* x *B. manicata*; *B. bowerae* x *B. 'Cleopatra'*.

Plants of these crosses were intercrossed by Eppele, resulting in the production of 50,000 plants. The plants in this list were among 32 named from these crosses and the series is called Mexicross Begonias; the name Goldenhybrid was given to another series within this group.

Another hybridizer's name appearing with the parents not given is E. C. Barclay-Griffiths of England. The seed parent of his plants was one of two unidentified begonias found in a purchased mixed-flower basket. Never seen before by Barclay-Griffiths, this plant had the dark shadow markings typical of *B. bowerae nigramarga* hybrids and was used to produce 55 plants (of which about 30 were named) by crossing it with *B. mazae*.

Unfortunately, complete facts for some listings are not available.

'Abbot of Tor,' Barclay-Griffiths.
'Abu-Dhabi' (*bowerae nigramarga* x *violifolia*) 1972, Patrick J. Worley.
'Afro-hair' (*manicata aureo-maculata* 'Crispa' x 'Bokitt') 1975, I. Misono.
'Aries' ('Norah Bedson' x 'Leslie Lynn') 1965, Thelma O'Reilly.
'Akane' ('Kifujin' x 'Black Magic') 1973, Y. Sakakibara.
'Akanegumo' ('Norah Bedson' x 'Silver Jewel') 1973, S. Henmi.
'Aladdin' ('Robert Shatzler' x unk.)
'Alberta' ('Dark Forest' x 'Dainty Lady') 1981, Bob Cole.
'Alice G' ('Persian Brocade' x 'Dr. Jim') 1973, Goldie Frost.
'Alisia', Paul Eppele.
'Amphion' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
'Amy Cole' ('Fabulous Tom' x 'Pattern') 1980, Bob Cole.

'Amy Hartman' ('Fabulous Tom' x 'Pattern') 1980, Bob Cole.
'Amy Rodo' ('Fabulous Tom' x 'Pattern') 1980, Bob Cole.
'Anchises' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
'Andante' (*bowerae* x *mazae*), J. J. Karper.
'Anita', Paul Eppele.
'Annie S' (*conchifolia* v. *rubri-macula* x 'Beatrice Haddrell') 1973, M. C. R. Sharrad.
'Annie Swain' ('Persian Brocade' x 'Dr. Jim') 1973, Goldie Frost.
'Antonia', Paul Eppele.
'Apache' (*bowerae* x 'Eppeley') 1972, Wallace W. Wagner.
'Apomo' ('Chumash' x 'Lospe') 1980, Bob Cole.
'Appaloosa' (*bowerae* x 'Eppeley') 1972, Wallace W. Wagner.
'Apple Pie' (*bowerae* x 'Eppeley') 1972, Wallace W. Wagner.
'Aquarius' ('Norah Bedson' x 'Leslie Lynn') 1965, Thelma O'Reilly.
'Arabesque' (*bowerae nigramarga* x *conchifolia*), J. J. Karper.
'Arachne' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.

'Arapahoe' (*bowerae* x 'Eppeley') 1972, Wallace W. Wagner.
'Archie Barclay-Griffiths', Barclay-Griffiths.
'Aruba' (unk. x unk.) 1979, Vaughan's.
'Aztec' ('Crestabuchil' x 'Bowtique') 1981, Bob Cole.
'Baby Down' (*bowerae* x unk.) 1972, Paul P. Lowe.
'Baby Fingers' ('Carolyn Ann' x 'Edith M') 1969, Susie Zug.
'Baby Perfection' (*bowerae* x 'Cleopatra').
'Baby's Breath' (*mazae nigricans* x *bowerae nigramarga*) 1973, Goldie Frost.
'Bahama' (unk. x unk.) 1979, Vaughan's.
'Barbados' (unk. x unk.) 1979, Vaughan's.
'Beatrice Haddrell' (*bowerae* x 'Sunderbruchil') 1953, Percy I. Merry.
'Bebe' (*aridicaulis* x 'Persian Brocade') 1974, P. Beck.
'Ben Aigan' ('Irene Barclay-Griffiths' x *manicata*) 1981, Barclay-Griffiths.
'Ben Buile' ('Irene Barclay-Griffiths' x *manicata*) 1981, Barclay-Griffiths.

Rudolf Ziesenhenne of 1130 N. Milpas St., Santa Barbara, CA 93103 is former ABS nomenclature director and has been collecting names of *B. bowerae* hybrids for 31 years.

'Ben Clibrech' ('Irene Barclay-Griffiths' x *manicata*) 1981, Barclay-Griffiths.
 'Ben Cruachan' ('Irene Barclay-Griffiths' x *manicata*) 1981, Barclay-Griffiths.
 'Ben Lomond' ('Irene Barclay-Griffiths' x *manicata*) 1981, Barclay-Griffiths.
 'Ben Macdhu' (unnamed seedling x unnamed seedling) 1981, Barclay-Griffiths.
 'Ben Venue' ('Irene Barclay-Griffiths' x *manicata*) 1981, Barclay-Griffiths.
 'Bernice Decker' ('Spaulding' x 'Joe Hayden') 1969, Barbara Decker.
 'Bert Finch', Barclay-Griffiths.
 'Bethlehem Star' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
 'Black Knight', Barclay-Griffiths.
 'Black Lace' ('Edith M' x unk. hybrid).
 'Black Prince', Barclay-Griffiths.
 'Black Swan' (*bowerae nigramarga* x *heracleifolia*) 1966, A. Ashizawa.
 'Black Tea' ('Kifujin' x 'Norah Bedson') 1973, A. Ashizawa.
 'Black Watch' ('Jodrell Bank' x 'Scottish Star') 1970, M. L. MacIntyre.
 'Black Zip' ('Tracery' x 'Zip') 1970, R. Ziesenhenne.
 'Blinkum' ('Maphil' x 'Maphil'). 1966, Sylvia Leatherman.
 'Blue Chip' ('Chumash' x 'China Doll') 1971, N. Umemura.
 'Bob Cat' ('Persian Brocade' x 'Dainty Lady') 1981, Bob Cole.
 'Bob Jessop', Barclay-Griffiths.
 'Boe' ('Bowtique' x 'Cachuma') 1980, Bob Cole.
 'Bokit' ('Tiger Kitten' x 'Bowtique') 1977, Leslie Woodriff.
 'Bonaire' (unk. x unk.) Vaughan's.
 'Bow-Arriola' (*bowerae* x 'Rogue') 1951, Della MacLanahan.
 'Bow-Chancee' (*bowerae* x 'Rogue') 1951, Della MacLanahan.
 'Bowerae Azul' (mutation) 1980, Bob Cole.
 'Bow-Imp' (*bowerae* x unk.) 1979, Michael J. Kartuz.
 'Bow Joe' (*bowerae* x 'Joe Hayden') 1954, Della MacLanahan.
 'Bow Ling' ('Bow-Nigra' x 'Zip') 1973, Bob Cole.
 'Bow-Nigra' (*bowerae* x *heracleifolia nigricans*) 1951, Della MacLanahan.
 'Bow Regard' ('Bow-Nigra' x 'Zip') 1973, Bob Cole.
 'Bowtique' (*kenworthyae* x *bowerae*) sport leaf, 1967, Chester Nave.
 'Bow Zip' ('Zip' x 'Bow-Nigra') 1973, Bob Cole.
 'Bow Zoe' ('Bow-Nigra' x 'Zip') 1973, Bob Cole.
 'Boy Friend' ('Zip' x 'Dainty Lady') 1978, I. Misono.
 'Branding Iron' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
 'Bronc' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
 'Brown Eyes' ('Norah Bedson' x *imperialis*) 1973, Leslie Woodriff.
 'Brown Shadows', Barclay-Griffiths.
 'Brown Twist' ('Bowtique' x 'Tiger Kitten'), Leslie Woodriff.
 'Caina' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
 'Calca' (unk. x unk.) 1974, Mickey Meyer.
 'Cajon Valley' ('Tiger Kitten' x 'Rip Van Winkle') 1980, Pat Maley.
 'Camilo', Paul Epple.
 'Camowool' ('Tarlet' x *bowerae nigramarga*) 1974, Mickey Meyer.
 'Camouflage', Barclay-Griffiths.
 'Carlsbad' (*nigro-venia* hort x 'Norah Bedson'), Wally Watchorn.
 'Carmen', Paul Epple.



B. 'Bow-Nigra'

'Carousel' ('Immense' x *bowerae nigramarga*) 1962, Ruth Pease.
 'Casey' ('Dr. Jim' x 'Bokit') x 'Bunchil', 1978, Jim Heffner.
 'Chantilly Lace' (*bowerae* x 'Black Shadows') 1961, H. E. Dillard.
 'Char Cole' ('Lospe' x *hydrocotylifolia*) 1980, Bob Cole.
 'Charles Barclay-Griffiths', Barclay-Griffiths.
 'Charles Chesterman' ('Patricia Lee' x 'Black Prince') 1981, Barclay-Griffiths.
 'Charles Rick' (*conchifolia* x 'Bow-Nigra') 1973, Bob Cole.
 'Char-Cole' ('Dainty Lady' x *hydrocotylifolia*) blue form 1981, Bob Cole.
 'Charro' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
 'Chartreuse' (*bowerae nigramarga* x 'Virbob') 1968, K. Takeda.
 'Chatoyancy' (*bowerae* x *kenworthyae*) 1950, Marie Turner.
 'Chia Ah Lin' ('Lospe' x 'Dainty Lady') 1981, Bob Cole.
 'Chichee' (*bowerae* x *carrieeae*) 1973, R. Ziesenhenne.
 'China Doll' ('Bow-Arriola' x *bowerae*) 1961, H. C. Dillard.
 'Chipalee' ('Stash' x unk.) 1973, Mickey Meyer.
 'Chop Suey' ('Dainty Lady' x *hydrocotylifolia*) blue form, 1981, Bob Cole.
 'Christian', Paul Epple.
 'Chumash' (*bowerae nigramarga* x unk.) 1961, R. Ziesenhenne.
 'Chumbow' ('Chumash' x 'Bow Joe') 1971, Paul P. Lowe.
 'Cinco de Mayo' ('Norah Bedson' x 'Sunderbruchii') 1969, Paul Lee.
 'Claical' ('Cleopatra' x Mr. Stanford's miniature).
 'Cleop-Ken' (*kenworthyae* x 'Cleopatra') 1962, Susie Zug.
 'Cleopatra' ('Maphil' x 'Black Beauty').
 'Clifton' (*bowerae* x *mazae*), M. L. MacIntyre.
 'Cocoa Star' ('Black Knight' x 'Chumash') 1973, Goldie Frost.
 'Comanche' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
 'Compeer' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
 'Concord' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
 'Connie Sue' unknown.
 'Consolation' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
 'Consort' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
 'Constant Rays' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
 'Constellation' ('Orion's Belt' x 'Persian Brocade' x 'Dainty Lady') 1981, Bob Cole.
 'Constitution' ('Orion's Belt' x 'Persian Brocade') 1981, Bob Cole.
 'Cookole Eight' ('Evening Nymph' x *schmidtiana*) 1980, Bob Cole.
 'Cookole Eleven' ('Evening Nymph' x *schmidtiana*) 1980, Bob Cole.
 'Cookole Man' ('Evening Nymph' x *schmidtiana*) 1980, Bob Cole.
 'Cookole Mole' ('Evening Nymph' x *schmidtiana*) 1980, Bob Cole.
 'Cookole Ten' ('Evening Nymph' x *schmidtiana*) 1980, Bob Cole.
 'Cookole Toe' ('Evening Nymph' x *schmidtiana*) 1980, Bob Cole.
 'Cool Waters' (*heracleifolia pyramidalis* x *bowerae*) 1954, Mary L. Gillingwaters.
 'Craigdhu' (unnamed seedling x unnamed seedling) 1981, Barclay-Griffiths.
 'Crazy Quilt' ('Norah Bedson' x *heracleifolia*). 1970, Wally Watchorn.
 'Crown of Thorns' ('Roi' x *bowerae nigramarga*) 1976, Bernard Yorke.
 'Cuyamaca' ('Chumash' x *carrieeae*) 1980, Pat Maley.
 'Dado' (*nigro-venia* hort. x 'Baby Down') 1972, Paul P. Lowe.
 'Dainty Dan' ('Zip' x 'Dainty Lady') 1973, Glen Lewis.
 'Dainty Lady' (*bowerae* x unk.) 1960, unknown.
 'Dainty Lizz' ('Dainty Lady' x 'Zip') 1973, Glen Lewis.
 'Daisy' ('Chumash' x *bowerae nigramarga*) 1971, Paul P. Lowe.
 'Dan Stocks' ('Black Knight' x 'Chumash') 1973, Goldie Frost.
 'Dapple Marge', Barclay-Griffiths.
 'Dark Beauty' (*bowerae* x 'Sunderbruchii') 1952, Percy I. Merry.
 'Dark Forest' (*kenworthyae* x *bowerae*) 1965, Chester F. Nave.
 'Dark Sheen' ('Joe Hayden' x *bowerae*) 1952, Don Horton.
 'David Cole' ('Fabulous Tom' x 'Pattern') 1980, Bob Cole.
 'David Haggat' ('Patricia Lee' x 'Black Prince') 1981, Barclay-Griffiths.
 'David Thomas' ('Patricia Lee' x 'Black Prince') 1981, Barclay-Griffiths.
 'Daydream' ('Scherzo' x *procumbens*) 1976, Hazel Burley.
 'Delia Marleau' ('Persian Brocade' x *nigro-venia* hort.) 1973, Goldie Frost.
 'Diamond Lil' ('Cleopatra' x 'Yanonali') 1980, Louise Bower.
 'Diana Haggat' ('Patricia Lee' x 'Black Prince') 1981, Barclay-Griffiths.
 'Dolores', Paul Epple.
 'Doreen Osborne', Barclay-Griffiths.
 'Dorothy Behrends' ('Kosmatka' x *carrieeae*) 1981, Goldie Frost.
 'Dorothy Jessop' ('Triplee Three' x 'Bert Finch') 1981, Barclay-Griffiths.
 'Double Vision' ('Bokit' x unk.), Leslie Woodriff.
 'Dr. Evers' ('Chumash' x 'Virbob') 1974, Paul P. Lowe.
 'Dr. Spelios' ('Chumash' x 'Virbob') 1971, Paul P. Lowe.
 'Dryad' (*dregei* x 'Bokit') 1976, Leslie Woodriff.
 'Dusky Knight' ('Patricia Lee' x 'Black Prince') 1981, Barclay-Griffiths.
 'Dusky Maid' ('Patricia Lee' x 'Black Prince') 1981, Barclay-Griffiths.
 'Dusky Scene' ('Patricia Lee' x 'Black Prince') 1981, Barclay-Griffiths.

- 'Dusky Shadows' ('Red Planet' x *carolinifolia*) 1976, Leslie Woodriff.
- 'Dwarf Black Tea' ('Black Tea' x 'Bokit') 1980, A. Ashizawa.
- 'Dwarf Glory' ('Bokit' x *bowerae nigramarga*) 1979, A. Ashizawa.
- 'Dwarf King' ('Black Tea' x 'Bokit') 1980, A. Ashizawa.
- 'Dwarf Queen' ('Black Tea' x 'Bokit') 1980, A. Ashizawa.
- 'Easter Parade' (Edith M. x *mazae*), Susie Zug.
- 'Ecstasy', Barclay-Griffiths.
- 'Ed Bates' ('Persian Brocade' x 'Dr. Jim') 1973, Goldie Frost.
- 'Edith M' (*bowerae* x 'Reichenheim') 1952, Donald Horton.
- 'Edward Barclay-Griffiths', Barclay-Griffiths.
- 'Eggo', Paul Epple.
- 'Egyptian Princess' ('Cleopatra' x *socratana*) 1977, Leslie Woodriff.
- 'Elaine's Baby' (*bowerae nigramarga* x unk.), unknown.
- 'Elaine Wilkerson' (*bowerae nigramarga* x 'Cleopatra'), unknown.
- 'El Capitan' ('Bokit' x *nelumbifolia*) 1980, Pat Maley.
- 'Electra' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Elena', Paul Epple.
- 'Elise', Paul Epple.
- 'Elizabeth Newton' ('Tripple Three' x 'Bert Finch') 1981, Barclay-Griffiths.
- 'Ella Frost' ('Black Knight' x *bowerae nigramarga*) 1973, Goldie Frost.
- 'El MacWhorter' ('Zip' x 'Cleopatra'), unknown.
- 'Emelem' ('Norah Bedson' x *pustulata*) 1975, M. L. MacIntyre.
- 'Emerald Lacing' ('Chumash' x 'Aries') 1972, Paul P. Lowe.
- 'Emerald Sheen' (Joe Hayden x *bowerae*) 1952, Donald Horton.
- 'Emma Watson' (*bowerae* x *mazae*) 1951, Percy I. Merry.
- 'Enchantment' ('Missouri' x 'Maphil') 1981, H. F. Dillard.
- 'English Knight' ('Norah Bedson' x 'Clifton') 1964, M. L. MacIntyre.
- 'English Lace' ('Norah Bedson' x 'Clifton') 1966, M. L. MacIntyre.
- 'Epicurus' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Epithet' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Eppley' (unk. x unk.), Susie Zug.
- 'Escudera' ('Illisley' x *bowerae nigramarga*) 1976, Bernard Yorke.
- 'Esther Illions' ('Immense' x *bowerae nigramarga*) 1962, Ruth Pease.
- 'Eugenio', Paul Epple.
- 'Euma' (*bowerae* x unk.), J. J. Karper.
- 'Evening Nymph' (*bowerae* x 'Zip') 1973, Bob Cole.
- 'Evening Star' ('Chumash' x 'Joe Hayden') 1971, Paul P. Lowe.
- 'Fairylane' (*conchifolia* 'Zip' x 'Bokit') 1974, Leslie Woodriff.
- 'Fidus', Paul Epple.
- 'Fond Memories' ('Persian Brocade' x 'Dr. Jim') 1973, Goldie Frost.
- 'Frances Fickewirth' ('Norah Bedson' x Mexican species) 1968, Helen Shortt.
- 'Francisca', Paul Epple.
- 'Fred Bedson' ('Norah Bedson' x *pustulata*) 1974, M. L. MacIntyre.
- 'Fred Martin' ('Norah Bedson' x *pustulata*) 1974, M. L. MacIntyre.
- 'Frizzy Liz' (unknown), Ronnie Nevin.
- 'Frosty Fairylane' ('Bunchil' x 'Bokit') 1978, Leslie Woodriff.
- 'Fuzzy Wuzzy' ('Bokit' x 'Bokit') 1976, Leslie Woodriff.
- 'Gabriela', Paul Epple.
- 'Gaitana', Paul Epple.
- 'Garden Grove' ('Persian Brocade' x 'Dr. Jim') 1973, Goldie Frost.
- 'Gaystar' (unknown), Susie Zug.
- 'Gemin' ('Norah Bedson' x 'Leslie Lynn'), Thelma O'Reilly.
- 'General Landon' ('Helene Jaros' x 'Helene Jaros') 1977, Kit Jeans.
- 'Geometry' (*heracleifolia nigricans* x 'Chumash') 1972, H. Shigeml.
- 'George Zack' ('Beatrice Haddrell' x *heracleifolia nigricans*) 1979, Martin Johnson.
- 'Gie' (*malabarica* x 'Pattern') 1980, Bob Cole.
- 'Geisha Doll' ('Confederate Gray' x 'Bow Joe') 1961, H. E. Dillard.
- 'Ginger Ale' ('Persian Brocade' x 'Dainty Lady') 1981, Bob Cole.
- 'Gingi' ('Bow-Arriola' x unk.) 1977, Rainbow Begonia Garden.
- 'Giri Friend' ('Zip' x 'Dainty Lady') 1978, I. Misono.
- 'Glen Lewis' ('Zip' x 'Cleopatra') 1973, Glen Lewis.
- 'Glen's Zip' ('Cleopatra' x 'Zip') 1973, Glen Lewis.
- 'Golden Goddess' 1980, Leslie Woodriff.
- 'Golden Hind', Barclay-Griffiths.
- 'Golden Lady', Barclay-Griffiths.
- 'Golden Sheen' (Joe Hayden x *bowerae*) 1952, Donald Horton.
- 'Gorbat Monarch' (unnamed seedling x unnamed seedling) 1981, Barclay-Griffiths.
- 'Grand Canyon' (*bowerae* x unk.), Wallace W. Wagner.
- 'Granite Hills' ('Bokit' x *nelumbifolia*) 1980, Pat Maley.
- 'Green Eyes' ('Persian Brocade' x 'Dainty Lady') 1981, Bob Cole.
- 'Green Giant' ('Verde Grande' x unk.) 1972, Paul P. Lowe.
- 'Greengo' ('Persian Brocade' x 'Dainty Lady') 1981, Bob Cole.
- 'Green Leopard' ('Plute' x 'Dainty Lady') 1981, Bob Cole.
- 'Green Turnip' (*bowerae* x 'Zip') 1976, Bob Cole.
- 'Green Zeebowman' (*bowerae* x *liebmanni*) 1950, R. Ziesenhenn.
- 'Griselda', Paul Epple.
- 'Gualdrada' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Hanalee' ('Bokit' all green form x U017) 1981, Mabel Corwin.
- 'Happy Thoughts', Barclay-Griffiths.
- 'Harbison Canyon' ('Apache' x 'Yanonal') 1980, Pat Maley.
- 'Harry's Zip' ('Tracery' x 'Zip') 1970, R. Ziesenhenn.
- 'Hazel Gleams' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
- 'Hazel Irene' (*bowerae* x *manicata aureo-maculata*) unknown.
- 'Heather Ann' ('Black Knight' x *bowerae nigramarga*) 1973, Goldie Frost.
- 'Heilcha' ('Templinil' x 'Bow-Nigra') 1961, Mrs. Adam Sibiskie.
- 'Helene Jaros' ('Chumash' x 'Bow Joe') 1972, Paul P. Lowe.
- 'Helen of Troy' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Herah' ('Nimbo' x Palmaris hort.), M. C. R. Sharrad.
- 'High Hopes' (*masoniana* x 'Cleopatra') 1963, Howard Miller.
- 'Hikoboshi' ('Virbob' x 'Chumash') 1972, H. Shigeml.
- 'Hilario', Paul Epple.
- 'Himeningyo' ('Kifujin' x *mazae vridis*) 1974, A. Ashizawa.
- 'Hitomi' ('China Doll' x 'Raspberry Parfait') 1972, N. Uemura.
- 'Honey' ('Black Knight' x 'Chantilly Lace') 1973, Goldie Frost.
- 'Hopscotch' (*bowerae* x unk.), Susie Zug.
- 'Howzat' (*bowerae nigramarga* x 'Stash') 1976, Bernard Yorke.
- 'Huopo' ('Chumash' x 'Chumash') 1972, Paul Lee.
- 'Hutzpa' ('Zip' x 'Dainty Lady') 1973, Glen Lewis.
- 'Hyde Park' (*bowerae* x *mazae*) 1968, J. J. Karper.
- 'Iced Bluff' ('Dark Sheen' x *mazae*) 1953, Susie Zug.
- 'Illisley' (*bowerae* x *mazae*) 1952, Percy I. Merry.
- 'Imatonic' ('Illisley' x *bowerae nigramarga*) 1976, Bernard Yorke.
- 'Imp Kit' (*imperialis* x 'Bokit'), Leslie Woodriff.
- 'I'm Sunspot' (*bowerae nigramarga* x 'Zip') 1980, Bob Cole.
- 'Ines', Paul Epple.
- 'Ingar' ('Stash' x 'Stash') 1972, Mickey Meyer.
- 'Ink Spots' ('Crestabuchil' x 'Pattern') 1980, Bob Cole.
- 'Ino' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Irene Barclay-Griffiths', Barclay-Griffiths.
- 'Irish Coffee' ('Inglewood' x 'Helene Jaros') 1978, Kit Jeans.
- 'Irish Dream' ('Cleopatra' x unknown) 1978, Leslie Woodriff.
- 'Iron Weave' ('Cinco de Mayo' x 'Cachuma') 1978, Bob Cole.
- 'Jade' ('Wanita' x *conchifolia rubrimaculata*) 1973, M. C. R. Sharrad.
- 'Jade Pendent' (*chumborozo* hort. x *bowerae*), unknown.
- 'Jamaica' 1979, Vaughan's.
- 'Janet Kerr' ('Lospe Tu' x 'Dainty Lady') 1981, Bob Cole.
- 'Jodrell Bank' ('Norah Bedson' x 'Clifton') 1964, M. L. MacIntyre.
- 'John Sousa' ('Chumash' x 'Verde Grande') 1972, Paul P. Lowe.
- 'Josefine', Paul Epple.
- 'Juanita', Paul Epple.
- 'June Costan' (*bowerae* x *epipsila*) 1953, Beth Bath.
- 'Kanoko' ('Norah Bedson' x *imperialis*) 1971, H. Shigeml.
- 'Kegon' ('Norah Bedson' x 'Silver Jewel') 1973, S. Henmi.
- 'Kathy Diane' ('Bow-Joe' x 'Bow-Chances') 1960, H. E. Dillard.
- 'Kenann' (*bowerae* x unk.) 1951, Mable Walker.
- 'Kifujin' (*bowerae nigramarga* x 'Verde Grande' seedling) 1969, A. Ashizawa.
- 'Kingsbury' (*kenworthyae* x 'Beatrice Haddrell') 1952, Percy I. Merry.
- 'King Setaways' ('Tripple Three' x 'Bert Finch') 1981, Barclay-Griffiths.
- 'Kit Kat' (*bowerae nigramarga* x unk.) 1979, Leslie Woodriff.
- 'Knutsford' ('Norah Bedson' x *pustulata*) 1980, E. W. Curtis.
- 'Kogane' ('Virbob' x 'Chumash') 1971, H. Shigeml.
- 'Kokucho' (*bowerae nigramarga* x unk.), unknown.
- 'Kokuryu' (*bowerae nigramarga* x 'Virbob') 1973, S. Henmi.
- 'Konoko' (*imperialis* x 'Norah Bedson'), unknown.
- 'Kosmatka' ('Persian Brocade' x 'Dr. Jim') 1973, Goldie Frost.
- 'Kurochitode' ('Verde Grande' x unk.) 1978, K. Takeda.
- 'Kuroshio' (*manicata aureo-maculata* 'Crispa' x 'Bokit') 1978, I. Misono.
- 'Kurozuru' (*bowerae nigramarga* x *mazae* 'Stitched Leaf') 1972, K. Twazuru.
- 'Lacewing' ('Chumash' x 'Aires') 1971, Paul P. Lowe.
- 'Lady Circe' ('Lospe-tu' x *wollnyi*) 1978, Patrick J. Worley.
- 'Lady Grace' ('Maphil' x *conchifolia*) 1970, C. L'Hommiedue.
- 'Lady Lillian' ('Black Knight' x 'Chumash') 1973, Goldie Frost.
- 'Lakewood Gardens' ('Chumash' x 'Black Knight') 1973, Goldie Frost.
- 'Lallage Barclay-Griffiths', Barclay-

Griffiths.
 'La Mona', Paul Epple.
 'Lavinia' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
 'La Zoo' ('Chumash' x *hydrocotylifolia* form) 1980, Bob Cole.
 'Leonidas', Paul Epple.
 'Leopon' ('Virbob' x 'Chumash') 1972, H. Shigem.
 'Leprechaun' ('Bowtique' x 'Zip') 1979, Leslie Woodriff.
 'Leslie', Paul Epple.
 'Lewis's Zip' ('Zip' x 'Cleopatra') 1973, Glen Lewis.
 'Libby Lee' (*bowerae* x 'Bow-Nigra') 1954, Della MacLanahan.
 'Lillian Patburg' ('Black Knight' x 'Chumash') 1973, Goldie Frost.
 'Linore Barclay-Griffiths', Barclay-Griffiths.
 'Little Black Doll' ('Chumash' x 'Zip'), unknown.
 'Little Darling' ('Burgundy Queen' x *bowerae nigramarga*) 1964, U. U. Stanford.
 'Little Joe' ('Virbob' x 'Libby Lee') 1972, Paul P. Lowe.
 'Liz Herndon' ('Zip' x *bowerae nigramarga*) 1974, Mae Blanton.
 'Longhorn' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
 'Los Angeles' ('Bow-Chancee' x 'Bow-Chancee') 1954, Della MacLanahan.
 'Los Angeles California' ('Los Angeles' x unk.) 1980, Bob Cole.
 'Lospe' (*bowerae* x *carrieae*) 1973, R. Ziesenhenn.
 'Lospe-tu' (*bowerae* x *carrieae*) 1973, R. Ziesenhenn.
 'Love Letter', H. Shigem.
 'Lowe's Pet' ('Bow-Nigra' x 'Maphil') 1969, Paul P. Lowe.
 'Luis', Paul Epple.
 'Lynda Myatt' ('Tripple Three' x 'Bert Finch') 1981, Barclay-Griffiths.
 'Mac MacIntyre' (*bowerae nigramarga* x *pustulata*) 1974, M. L. MacIntyre.
 'Mac's Gold' ('Scottish Star' x *bowerae nigramarga*) 1970, M. L. MacIntyre.
 'Madame Butterfly' ('Fairlyland' x *carolineifolia*) 1975, Leslie Woodriff.
 'Magic Elf' ('Madame Queen' x 'Bokit') 1976, Leslie Woodriff.
 'Magic Valley' ('Persian Brocade' x *nigro-venia* hort.) 1973, Goldie Frost.
 'Maid Helene' ('Helene Jaros' x unk.) 1981, Kit Jeans.
 'Maikohan' ('Norah Bedson' x 'Black Swan') 1970, N. Uemura.
 'Manuela', Paul Epple.
 'Many Colours' ('Norah Bedson' x 'Clifton') 1964, M. L. MacIntyre.
 'Maphil' (*bowerae* x unk.) 1951, Mable Walker.
 'Mara' 1973, Mickey Meyer.
 'Marble Arch' (*bowerae* x *mazae*) 1968, J. J. Karper.
 'Marga' (MacDougall No. 318 x *bowerae nigramarga*) 1973, R. Ziesenhenn.
 'Marguerite Horn' ('Cleopatra' x 'Zip') 1973, Bob Cole.
 'Marleigh's Choice' ('Templinil' x 'Bow-Nigra') 1961, Mrs. Adam Sibskie.
 'Mascara' (*conchifolia* x 'Red Planet') 1979, Leslie Woodriff.
 'May Taft' (*heracleifolia nigricans* x 'Chantilly Lace'), Ruth Stanley.
 'Menuett' (*bowerae* x *mazae*) 1968, J. J. Karper.
 'Mercury' ('Norah Bedson' x 'Leslie Lynn') 1965, Thelma O'Reilly.
 'Merry Go Round' (*bowerae* hybrid x 'Zip') 1972, H. Shigem.
 'Meta', Paul Epple.
 'Midge' ('Norah Bedson' x *herbacea*) unknown.



Photo/Karen Bartholomew

B. 'Tiger Kitten'

'Midget' ('Joe Hayden' x 'Virbob') 1961, H. F. Dillard.
 'Midnight Twister' (*conchifolia rubrimacula* x 'Bokit') 1978, Leslie Woodriff.
 'Minima' (*bowerae nigramarga* sport) Kartuz.
 'Ministar' ('Scottish Star' x *bowerae nigramarga*) 1970, M. L. MacIntyre.
 'Mintie Bryant' ('Persian Brocade' x 'Dr. Jim') 1973, Goldie Frost.
 'Misty Meadows' ('Lospe-tu' x *carrieae*) 1978, Logee's Greenhouses.
 'Mityl' ('Tiger Star' x 'Bokit') 1978, I. Misono.
 'Moc' ('Norah Bedson' x MacDougall No. C.241) 1973, R. Ziesenhenn.
 'Mocking Bird' ('Palute' x *hydrocotylifolia*) 1981, Bob Cole.
 'Mohigan Summer' ('Palute' x *hydrocotylifolia*) 1981, Bob Cole.
 'Momozone' ('Norah Bedson' x 'Silver Jewel') 1973, S. Henmi.
 'Monalisa', Paul Epple.
 'Montage' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
 'Moon Bug' ('Beatrice Haddrell' x *masoniana*) 1967, Jane E. Neal.
 'Moon Eagle' ('Norah Bedson' x *heracleifolia*), Wally Watchorn.
 'Moon Rocks' syn. 'Carlsbad' ('Norah Bedson' x 'Sunderbruchii') Wally Watchorn.
 'Morning Star' ('Chumash' x 'Joe Hayden') 1973, Paul P. Lowe.
 'Moro', Paul Epple.
 'Motley' ('Norah Bedson' x *pustulata*) 1974, M. L. MacIntyre.
 'Mottled Sheen' ('Joe Hayden' x *bowerae*) 1952, Donald Horton.
 'Mountain Man' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
 'Mount Ida' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
 'Mr. Jess' ('Mustang' x Mustang') 1981, Bob Ammerman.
 'Mulgowie Pride' ('Stash' x *bowerae nigramarga*) 1976, Bernard Yorke.
 'Mustang' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
 'Naomiae' ('Chumash' x 'Black Swan') 1971, N. Uemura.
 'Needham' (*kenworthyae* x 'Beatrice Haddrell') 1953, Percy I. Merry.
 'Neptune' ('Norah Bedson' x 'Leslie Lynn') 1965, Thelma O'Reilly.
 'Neptune's Daughter' (Panama species x 'Neptune') 1980, Bob Cole.
 'Neptune's Folly' (Panama species x 'Neptune') 1980, Bob Cole.
 'Network' ('Palute' x 'Dainty Lady') 1981, Bob Cole.
 'Net-work' (unnamed seedling x unnamed seedling) 1981, Barclay-Griffiths.
 'Nibowcans' ('Bow-Nigra' x *heracleifolia nigricans*) 1953, Della MacLanahan.
 'Night Flight' (*carolineifolia* x 'Red Planet') 1979, Leslie Woodriff.
 'Nightmare' ('Red Planet' x *carolineifolia*) 1977, Leslie Woodriff.
 'Nigreen' ('Jodrell Bank' x 'Scottish Star') 1970, M. L. MacIntyre.
 'Nimbo' ('Sunderbruchii' x *bowerae nigramarga*) 1973, M. C. R. Sharrad.
 'Nocturne' (*bowerae* x *mazae*) 1968, J. J. Karper.
 'Nod' ('Maphil' x 'Maphil') 1966, Sylvia Leatherman.
 'Nona' ('Nimbo' x Palmaris hort.) 1973, M. C. R. Sharrad.
 'Norah Bedson' (*bowerae* x *daedalea* hort.) 1962, F. J. Bedson.
 'Notra Dame' ('Zippo' x *kellermanii*) 1981, Bob Cole.
 'Oh' ('Bowtique' x 'Cachuma') 1980, Bob Cole.
 'Oizumi' ('Verde Grande' x 'Black Swan') 1971, N. Uemura.
 'Olive Millman' (*bowerae nigramarga* x 'Baby Perfectiflora') 1971, Paul P. Lowe.
 'On Target' (*carolineifolia* x 'Red Planet') 1979, Leslie Woodriff.
 'Ops' ('Chumash' x 'Lospe') 1980, Bob Cole.
 'Orihime' ('Virbob' x 'Black Magic') 1973, S. Henmi.
 'Palute' ('Norah Bedson' x 'Sunderbruchii') 1969, Margaret M. Lee.
 'Pallas Athene' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
 'Pandora' ('Norah Bedson' x 'Zip') 1976, H. Shigem.
 'Parraweena' ('Koolena' x *bowerae*) 1974, Mickey Meyer.
 'Pasiphae' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
 'Pathos', Barclay-Griffiths.
 'Patricia Lee', Barclay-Griffiths.
 'Patricia Ogdon' ('Chantilly Lace' x 'Black Knight') 1973, Goldie Frost.
 'Pattern' ('Virbob' x 'Verde Grande' seedling) 1972, H. Shigem.
 'Paul Harley' ('Patricia Lee' x 'Black Prince') 1981, Barclay-Griffiths.
 'Paulo' ('Bow-Chancee' x unk.) 1969, Paul P. Lowe.
 'Paul's Donna' ('Templinil' x 'Bow-Nigra') 1961, Mrs. Adam Sibskie.
 'Paul's Shari' ('Templinil' x 'Bow-Nigra') 1961, Mrs. Adam Sibskie.
 'Pebble Beach' ('Lospe Tu' x 'Dainty Lady') 1981, Bob Cole.
 'Pedro', Paul Epple.
 'Peggie Frost' ('Persian Brocade' x 'Dr. Jim') 1973, Goldie Frost.
 'Pepper Steak' ('Persian Brocade' x 'Dainty Lady') 1981, Bob Cole.
 'Perko', Paul Epple.
 'Persian Brocade' (*bowerae* x 'Maphil') 1961, Mrs. H. E. Dillard.
 'Petey' ('Chumash' x 'Virbob') 1971, Paul P. Lee.
 'Petit Decor', Barclay-Griffiths.

- 'Phoebe Sessions' ('Persian Brocade' x *nigro-venia* hort.) 1973, Goldie Frost.
- 'Pia', Paul Epple.
- 'Pierrot' (Norah Bedson' x *heracleifolia nigricans*) 1968, K. Takeda.
- 'Pindah' ('Nimbo' x *manicata aureo-maculata*) 1973, M. C. R. Sharrad.
- 'Pinochio' (Norah Bedson' x 'Black Swan') 1970, N. Uemura.
- 'Plain Jane' ('Zippo' x *kellermanii*) 1981, Bob Cole.
- 'Platypuss' ('Lospe-tu' x 'Dainty Lady') 1981, Bob Cole.
- 'Pluto', Paul Epple.
- 'Plutus' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Poem' (Norah Bedson' x *aridicaulis*) 1976, H. Shigem.
- 'Porpoise' ('Persian Brocade' x 'Dainty Lady') 1981, Bob Cole.
- 'Priam' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Prince Charming' (Norah Bedson' x 'Maphil') 1980, A. Ashizawa.
- 'Princess of Wales' ('Patricia Lee' x 'Black Prince') 1981, Barclay-Griffiths.
- 'Prometheus' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Psyche' (*bowerae nigramarga* x 'Norah Bedson') 1968, K. Takeda.
- 'Purple Net' (unnamed seedling x unnamed seedling) 1981, Barclay-Griffiths.
- 'Quazimoto' ('Zippo' x *kellermanii*) 1981, Bob Cole.
- 'Queen Califea' ('Madame Queen' x *bowerae*) Unknown.
- 'Queen Guinevere' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Queen of Clubs' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
- 'Queen of Spades' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
- 'Raimundo', Paul Epple.
- 'Rambo' ('Ramola' x *bowerae*), Beth Bath.
- 'Ramona', Paul Epple.
- 'Randal Cole' ('Fabulous Tom' x 'Pattern') 1980, Bob Cole.
- 'Rondeveux' ('Persian Brocade' x 'Dainty Lady') 1981, Bob Cole.
- 'Randy' ('Verde Grande' x 'Missouri') 1961, H. E. Dillard.
- 'Ranun' (Norah Bedson' x 'Silver Jewel') 1973, S. Henmi.
- 'Raquel Wood' ('Bow-Nigra' x *manicata aureo-maculata*) 1961, B. N. Kusler.
- 'Ray Weakley' ('Chumash' x 'veroe Grande') 1972, Paul P. Lowe.
- 'Red Belly Button' ('Zip' x *bowerae*) 1973, Bob Cole.
- 'Red Bluff' ('Dark Sheen' x *manicata*) 1953, Susie Zug.
- 'Red Cleo' ('Cleopatra' x 'Tracery' x 'Zip') 1972, M. L. MacIntyre.
- 'Red Dragon' ('Zip' x 'Black Watch') 1973, M. L. MacIntyre.
- 'Red Ensign' (Norah Bedson' x 'Zip') 1979, A. Ashizawa.
- 'Red Eye' ('Tracery' x 'Zip') 1972, M. L. MacIntyre.
- 'Red Imp' ('Red Tracery' x 'Zip') 1973, M. L. MacIntyre.
- 'Red Mystery' ('Jaciniata' x 'Red Spot') 1973, M. L. MacIntyre.
- 'Red Planet' ('Scottish Star' x 'Zip') 1969, M. L. MacIntyre.
- 'Red Spider' ('Scottish Star' x 'Zip') 1969, M. L. MacIntyre.
- 'Red Spot' ('Scottish Star' x 'Zip') 1969, M. L. MacIntyre.
- 'Red Tracery' ('Cleopatra' x 'Tracery' x 'Zip') 1971, M. L. MacIntyre.
- 'Renaissance' ('Lakewood Gardens' x unk.) 1980, Bob Cole.
- 'Rikyu' (Norah Bedson' x *imperialis*) 1971, H. Shigem.
- 'Ripples' ('Broken Hill' x 'Universe') 1977, Hazel Burley.
- 'Robert Shatzer' ('Bow-Nigra' x *bowerae nigramarga*) 1967, Edna M. Stewart.
- 'Rosetta White' ('Zip' x 'Cleopatra'), unknown.
- 'Rosie Beck' (Norah Bedson' x Colombian species) 1968, Helen Shortt.
- 'Roulette' ('Bowtique' x 'Tiger Kitten') 1975, Leslie Woodriff.
- 'Rudi', Paul Epple.
- 'Rudy Illions' ('Immense' x *bowerae nigramarga*) 1962, Ruth Pease.
- 'Rusty Nail' ('Paiute' x *hydrocotylifolia*) 1981, Bob Cole.
- 'Ruthanne' (*bowerae major* x *liebmannii*) 1954, Louise Schwerdtfeger.
- 'Ruth Brankey' ('Persian Brocade' x 'Dr. Jim') 1973, Goldie Frost.
- 'Sahara' ('Dainty Lady' x *hydrocotylifolia* form) 1980, Bob Cole.
- 'Samba' (*bowerae* x *mazae*) 1968, J. J. Karper.
- 'Sarabande' (*bowerae* x *heracleifolia*) 1968, J. J. Karper.
- 'Sazanami No. 1' (*hydrocotylifolia* x 'Norah Bedson') 1966, A. Ashizawa.
- 'Sazanami No. 2' (*hydrocotylifolia* x 'Norah Bedson') 1966, A. Ashizawa.
- 'Sazanami No. 3' (*hydrocotylifolia* x 'Norah Bedson') 1966, A. Ashizawa.
- 'Scherzo' (*bowerae* x *mazae*) 1968, J. J. Karper.
- 'Scotch' ('Hopscotch' x *kenworthyae*) 1980, Bob Cole.
- 'Scottish Cup' ('Jodrell Bank' x 'Scottish Star') 1973, M. L. MacIntyre.
- 'Scottish Knight' ('Tracery' x 'Zip') 1971, M. L. MacIntyre.
- 'Scottish Star' ('Cleopatra' x 'Tracery') 1970, M. L. MacIntyre.
- 'Secundina', Paul Epple.
- 'Senica' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Serigala' ('Nimbo' x *manicata aureo-maculata*) 1973, M. C. R. Sharrad.
- 'Sernele' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'Sessoms' ('Cachuma' x 'Virbob') 1974, Paul P. Lowe.
- 'Shady Nook' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
- 'Shell' ('Bokit' x 'Squiggles') 1980, Bob Cole.
- 'Silbreen' (Norah Bedson' x *pustulata*) 1974, M. L. MacIntyre.
- 'Silhouette' (unk. x unk.) Leslie Woodriff.
- 'Silver Dots' (Norah Bedson' x *pustulata*) 1974, M. L. MacIntyre.
- 'Silver Wave' (Norah Bedson' x *pustulata*) 1974, M. L. MacIntyre.
- 'Sisquoc' (*carieae* x *bowerae nigramarga*) 1973, R. Ziesennehenne.
- 'Skipper' (*masoniana* x 'Bow-Nigra') 1965, Howard Miller.
- 'Sky Lab' ('Zip' x *bowerae nigramarga*) 1973, Goldie Frost.
- 'Smidgens', unknown, Paul Lee.
- 'Smiling Through', Barclay-Griffiths.
- 'Snow Peaks' (*ludwigii* x *bowerae*) 1975, R. Ziesennehenne.
- 'Soft Green' ('Sisquoc' x *nigro-venia* hort.) 1978, I. Misono.
- 'Sonate' (*kenworthyae* x *bowerae*), J. J. Karper.
- 'Spaulding' (*bowerae* x *hydrocotylifolia*) 1951, Louise Schwerdtfeger.
- 'Spindrift' ('Lospe-tu' x *wollnyi*) 1978, Patrick J. Worley.
- 'Stained Glass' (Norah Bedson' x 'Verde Grande' seedling) 1971, H. Shigem.
- 'Stallion' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
- 'Stampede' (*bowerae* x 'Eppley') 1972, Wallace W. Wagner.
- 'Starry Night' (Norah Bedson' x *pustulata*) 1974, M. L. MacIntyre.
- 'Stash' ('Templin' x 'Bow-Nigra') 1961, Mrs. Adam Sibiske.
- 'Steve Balcom' ('Lillian Steinhaus' x 'Little Joe') 1975, Paul P. Lowe.
- 'Sulcu' (*bowerae nigramarga* x MacDougal No. C. 241) 1973, R. Ziesennehenne.
- 'Summer' ('Cinco de Mayo' x 'Cachuma') 1978, Bob Cole.
- 'Sun God' (*bowerae nigramarga* x 'Zip') 1969, M. L. MacIntyre.
- 'Susan Bellinger' ('Tripple Three' x 'Bert Finch') 1981, Barclay-Griffiths.
- 'Sweet Deception' ('Lospe-tu' sport) 1980, Kit Jeans.
- 'Sweet Magic' ('Goli' x *megaphylla*) 1976, Leslie Woodriff.
- 'Tamabue' (Norah Bedson' x 'Silver Jewel') 1973, S. Henmi.
- 'Tanchyo' (*bowerae nigramarga* x *mazae* 'Stitched Leaf') 1967, K. Iwazuru.
- 'Taknoy', Paul Epple.
- 'Tariet' ('Stash' x unk.) 1973, Mickey Meyer.
- 'Terry-O' (*bowerae* x *mazae*) 1951, Mrs. Terry Olmsted.
- 'Tartan' ('Scottish Star' x *bowerae nigramarga*) 1970, M. L. MacIntyre.
- 'Tex' 1980, Bob Cole.
- 'Tell Star' ('Tripple Three' x 'Bert Finch') 1981, Barclay-Griffiths.
- 'Tempest' ('Tripple Three' x 'Bert Finch') 1981, Barclay-Griffiths.
- 'Thebes' ('Cleopatra' x *manicata* x 'Scottish Star') 1981, Barclay-Griffiths.
- 'The Gloaming' ('Tripple Three' x 'Bert Finch') 1981, Barclay-Griffiths.
- 'Thunder Cloud' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
- 'Tiger Belle' (Norah Bedson' x 'Tiger Star') 1979, A. Ashizawa.
- 'Tiger Kitten' (*bowerae nigramarga* x unk.) 1973, Leslie Woodriff.
- 'Tiger Star', unknown.
- 'Tigon' ('Virbob' x 'Chumash') 1975.
- 'Timbara' ('Koolena' x *bowerae*) 1974, Mickey Meyer.
- 'Timo', Paul Epple.
- 'Tincture New' (unnamed seedling x *mazae*) 1981, Barclay-Griffiths.
- 'Toke' ('Bokit' x 'Squiggles') 1980, Bob Cole.
- 'Toltec' ('Dainty Lady' x *hydrocotylifolia*) 1981, Bob Cole.
- 'Too Much' ('Chumash' x unk.) Paul Lee.
- 'Torbay Bronze', Barclay-Griffiths.
- 'Torbay Delight', Barclay-Griffiths.
- 'Torbay Enchanting', Barclay-Griffiths.
- 'Torbay Pride', Barclay-Griffiths.
- 'Tracery' (Norah Bedson' x 'Clifton') 1964, M. L. MacIntyre.
- 'Trinidad', Vaughan's.
- 'Tsurugi-no-mai' ('Chumash' x 'Bunchi') 1973, S. Henmi.
- 'Two Hairs' ('Paiute' x *hydrocotylifolia*) 1981, Bob Cole.
- 'Tyl Tyl' ('Tiger Star' x 'Bokit') 1978, I. Misono.
- 'Universe' (Norah Bedson' x 'Leslie Lynn') 1965, Thelma O'Reilly.
- 'Ursula Epple', Paul Epple.
- 'Vees' (Norah Bedson' x 'Clifton') 1970, M. L. MacIntyre.
- 'Veevers' ('Vees' x *versicolor*) 1974, M. L. MacIntyre.
- 'Verde Grande' (*manicata* x 'Dark Sheen') 1953, Susie Zug.
- 'Verde Grande Seedling', unknown.
- 'Vermash' ('Verde Grande' x

Please turn to page 255

ROUND ROBINS/ *Discovering begonia species*

Mary Harbaugh

Begonia species have an enthusiastic supporter in Dan Haseltine of Chicago, Ill. He would like to see everyone use yellow labels in the species pot so people will know that the plant is a species and not a hybrid. This could become a branch project and be carried out at branch shows. He also encourages everyone to self their species begonias and send the seed to the ABS Seed Fund.

In response to a request for identification, Elda Haring in Flat Rock, N.C., says it is difficult to tell a species unless you have seen photographs or good descriptions. Many of them have been used as parent plants for others and are similar. It almost takes an expert to recognize them.

Insect problems, solutions

Our eastern growers have had their difficulties with gypsy moths and Chris Giordano of Hauppauge, N.Y., relates her experience. She noticed that *B. luxurians* growing in her greenhouse was drooping. Gypsy moth caterpillars had begun devouring its leaves and she had to prune it back. Fortunately, "that was the only begonia they touched."

For those of you troubled with mealybug and scale problems, Betty Davenport of Pasco, Wash., recommends equal parts of water, ammonia, and alcohol with soap as a wetting agent. Sometimes the soap alone will do the trick.

Mike Ludwig in San Diego, Calif., also uses alcohol and water for mealybugs and suggests that denatured alcohol works as well as and often better than the rubbing type. You would need to ask for this at the counter in a drug store. It doesn't burn as rubbing alcohol sometimes does. He warns that you should keep it on the leaves and off the roots.

Charlotte Kuhnle, Hood River, Ore.,

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.

I want to pay tribute to a longtime Round Robin member. Elda Haring of Flat Rock, N.C., has found it necessary to drop her robin activities because of continuing health difficulties.

She has been an outstanding chairman of several flights, always providing interesting letters full of useful information. I frequently received requests from members wanting to be in a flight with Elda.

I never had to worry about the whereabouts of her flights because she always kept right on top of them. I know I speak for all of us when I say: "Thank you, Elda, for all of your hard work. We are going to miss you very much."

gives us her recipe for an insecticide against whiteflies, aphids and mealybugs. She uses 1 quart of warm water, 2 tablespoons Ivory soap powder, and 4 ounces of alcohol. Shake and spray the leaf undersides. Repeat twice at 5-day intervals. She found that this worked well for a terrible whitefly problem.

When it comes to diseases . . .

Barbara Grill of Sarasota, Fla., has found a solution to her difficulties with damping off. When she sows seed she uses a mix similar to Jiffy Mix and bottom waters either before or after she puts the seed in, depending on the fineness of the seed.

She puts about a tablespoon of captan to the gallon of water she uses for bottom irrigation. Since she has employed this method, damping off has ceased to be a problem.

During a discussion of mildew problems, Mabel Corwin of Vista, Calif., commented that years ago she never heard of mildew on begonias. It has only been the last few years that she has been bothered. Now it seems to be worse every year. Several other members have noted that it seems to be more resistant to fungicides than previously.

Elda Haring uses karathane in a spray bottle and spritzes it on any of her be-

gonias that have a tendency to mildew and no longer finds it a problem.

Eliminating algae

Jeanne Olson, Puyallup, Wash., uses a soilless mix as it comes from the supplier, and notices that her usual problem with algae growth disappears every summer. The only factor that changes is the weather.

Don't worry about crystals

The formation of salt-like crystals on the leaves of some plants such as *B. veloziana*, *herbacea*, and *attenuata* is not uncommon. Elda Haring points out that they are called exudations but they do not hurt anything. "You can wash them off if they worry you but it is part of the plant and not a disease or insect."

Scented begonias?

A few members have been wondering if there are scented begonias. Lynda Goldsmith of Fairfax, Vt., says that *B. handelii* has a fragrance, but it is a tricky begonia to grow. She also said some think *B. solan-anthera* has a fragrance.

Mabel Corwin says the scented begonias are usually fragrant only in the morning. Most of the time she can't smell

them—it is usually very faint. The most fragrant one she has is *B. 'Honeysuckle'*. She describes it as a cane with large clusters of pink flowers. It is a free bloomer and she can enjoy the fragrance when watering.

Postage increases have been putting a pinch on all of us in the robins so we need to do all that we can to hold down the cost of the flights.

Use the lightest weight paper you can and write (or better yet, type) on both sides of the sheet. Consider carefully any enclosures such as printed material and photographs. They can be valuable sources of information, but please be sure their value is worth the extra weight.

Please be sure you have the proper amount of postage on the envelope. Some robins have had lengthy delays or perhaps been lost because of improper postage and no return address. It is not fair to another member to have to pay your postage. If you are unsure of the correct amount, have it weighed at the post office.

These suggestions, if followed, can help to hold down expenses for both our flight members and the society.



The Complete Reference Guide:

BEGONIAS

by Mildred L. Thompson and Edward J. Thompson

*At last! In One Volume
for Beginner and Advanced Grower*

- 9" x 12"
- 396 Pages
- Over 850 Illustrations
165 in color
- Over 2,450 species and
cultivars

HISTORY • CLASSIFICATION • CULTURE
SPECIAL TECHNIQUES

\$35 ppd—books shipped UPS

To order an AUTOGRAPHED copy:

Mail to: The Thompsons
P.O. Drawer PP
Southampton,
NY 11968

Please send an autographed copy of BEGONIAS.

Name _____
Address _____
City _____
State _____ ZIP _____

Charge to ☐ Visa or ☐ Mastercard No. _____

☐ Check or money order enclosed in the amount of \$ _____

Signature _____

SEED FUND/ *Hybrid semps and lots of species*

Joy Porter, director, Clayton M. Kelly Seed Fund

- DC 1 — *B. venosa*: Choice shrub-like species with reniform, white-felted leaves. Large, brown paper-like stipules clasp stem. Fragrant white flowers in tight clusters spring into summer. per pkt 1.00
- DC 2 — *B. multinervia*: Thick-stemmed species from Costa Rica with rounded-oval, glossy green leaves with pronounced "tail." Leaf underside and petiole are red. Pink flowers. Bushy. per pkt 1.00
- DC 3 — *B. maculata*: Cane-like with dark green, silver-spotted leaves and pink flowers. Seed from plant pictured in Vol. III of *The Thompson Begonia Guide*. per pkt 1.00
- DC 4 — *B. cathayana*: Rhizomatous species from China with exotic velvet-textured leaves, dark olive-green, lobed and dentate and zoned with light green graduating to white; veins and leaf reverse covered with red-purple hairs. Orange flowers. Supply of this rare and lovely species is small; packets will contain 14-16 seeds. Germination is easy but prolonged (I got 11 seedlings from 12 seeds) but that is where the easy part stops. Needs warmth, humidity; do not water with cold water. per pkt .75
- DC 5 — *B. cinnabarina*: Low-growing tuberous species from Bolivia with orange flowers. Summer-flowering; winter dormant. per pkt .75
- DC 6 — *B. williamsii*: (syn. *wollnyi*) Semi-tuberous species from Brazil with attractive lobed green leaves splashed with silver. Although it has a short dormancy in early winter before it blooms with medium-size, light pink flowers, it is soon clothed with new leaves. Easy to grow from seed and is very rewarding. per pkt .75
- DC 7 — *B. malabarica* variety: This is a variety of the species from Ceylon which has white flowers. Thick-stemmed, bushy, to 2 feet with small to medium green leaves toothed and sparse hairy. per pkt 1.00
- DC 8 — Seed from hybrid semperflorens begonias including calla type, bronze leaf, ruffled or bi-colored flowers, and others chosen for their floriferous habit. per pkt .75

PAMPHLETS

- Begonias from Seed, Sowing and Growing* ea. .25
- Begonias in General—Basic Descriptions of Classes and Culture* ea. .50

Send orders to Joy Porter, 9 Bayberry Lane, Framingham, MA 01701. Include self-addressed, 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.

More *B. bowerae* hybrids

Continued from page 252

- 'Chumash' 1973, Paul P. Lowe.
- 'Virbob' (*bowerae* x unk.) 1951, Mable Walker.
- 'Virgil Barclay-Griffiths', Barclay-Griffiths.
- 'Virginia Owen' ('Norah Bedson' x Colombian species) 1968, Helen Shortt.
- 'Virgo' ('Norah Bedson' x 'Leslie Lynn') 1965, Thelma O'Reilly.
- 'Vivian Barclay-Griffiths', Barclay-Griffiths.
- 'Walter Haring' ('Cachuma' x 'Aires') 1971, Paul P. Lowe.
- 'Wanita' ((*hydrocotylifolia* seedling x 'Maphil') x unidentified rhizomatous begonia) 1965, M. G. R. Sharad.

- 'Whirlwind' ('Strigillosa' x 'Bokit') 1974, Leslie Woodriff.
- 'Whiskers' ('Black Knight' x 'Chumash') 1973, Goldie Frost.
- 'White Belly Button' ('Zip' x *bowerae*) 1973, Bob Cole.
- 'Wilmslow' ('Norah Bedson' x *pustulata*) R. Ziesenhenné (M. L. MacIntyre seed).
- 'Winkey's Bronze' ('Madame Queen' x 'Bokit') 1977, Leslie Woodriff.
- 'Winkum' ('Maphil' x 'Maphil') 1966, Sylvia Leatherman.
- 'Winsome' ('Tripple Three' x 'Bert Finch') 1981, Barclay-Griffiths.
- 'Wizard' ('Norah Bedson' x *carrieeae*) 1973, R. Ziesenhenné.
- 'Worlds Apart' ('Cleopatra' x *socotrana*) x *imperialis*, Leslie Woodriff.
- 'Yellow Bowtique' (*kenworthyae* x *bowerae*) 1967, Chester Nave.
- 'Yvonne Wells' (*bowerae* x 'Zip'), unknown.
- 'Zee Bowman' (*bowerae* x *liebmannii*) 1950, R. Ziesenhenné.
- 'Zibow' ('Zip' x *bowerae*) 1971, M. L. MacIntyre.
- 'Zip Code' (*bowerae nigramarga* x 'Zip') 1973, Bob Cole.
- 'Zipper' ('Zip' x 'Bow-Nigra') 1973, Bob Cole.
- 'Zippo' ('Zip' x 'Bow-Nigra') 1973, Bob Cole.
- 'Zippy' ('Zip' x 'Bow-Nigra') 1973, Bob Cole.
- 'Zulu' ('Tripple Three' x 'Bert Finch') 1981, Barclay-Griffiths.

*Which of the three ancestors is a parent and which are grandparents is unknown.

A proposal to create six regional vice presidencies was defeated by a close vote in the election to amend the ABS Constitution and Bylaws in October and November.

One hundred twenty members—about 5% of the membership—voted, Pearl Benell, chairman of the ABS ballot counting committee, reported to ABS directors Nov. 16.

Revisions to Constitution Article IV, Section 3, Article V, Section 2, which would have created the vice presidencies and put their incumbents on the Executive Board, lost by votes of 56-63 and 55-64 respectively. Fifty-three to fifty-four percent of those voting rejected the revisions.

All other proposed revisions passed by substantial margins, including removal of the requirement that the ABS convention be held between Aug. 20 and Oct. 1 each year.

Pearl noted that several members sent notes in opposition to being forced to cut ballots out of *The Begonian*. Ballots are now printed in *The Begonian* by order of the ABS annual meeting.

Conventions in Texas, Florida

ABS' Southwest Region has invited the society to hold its 1984 annual convention in Texas in the spring, and the Miami Branch wants to host the 1985 convention in Florida, also in the spring.

President Gil Estrada notified ABS directors of the invitations on Nov. 16, and appointed President-Elect Chuck Anderson and Vice Presidents Michael Kartuz and Robert Hamm to report to the board on proposed arrangements.

The 1982 convention will be in Santa Cruz, Calif., on Sept. 9-12. No site has been selected for the 1983 convention. The committee will seek a 1983 site.

The Texas and Florida invitations came after passage of an ABS Bylaws amendment making it possible to have the convention in spring. The earlier requirement for a fall convention made it impossible for branches in the southern U.S. to host the convention because fall is a bad time there for a begonia show.

Southwest sets Get-Together

The 1982 Southwest Regional Get-Together will be next April 28-May 1 in Dallas and will feature Mickey Meyer, begonia grower and hybridizer from Tuthra, Australia, as guest speaker.

Guests bringing plants for the show are asked to arrive before 3 p.m. on Thursday. To attend the members-only preview sale, plan on arriving before 7 p.m. Thursday. Local growers can bring plants Wednesday evening.

The Get-Together will include a full-day tour of greenhouses and gardens on



Photo/Chuck Anderson

Mary Church (right) of Desert Branch answers questions for visitor to branch's show at Tucson (Ariz.) Botanical Garden Oct. 24-25. Despite the extreme dry heat of Tucson area summers, the several hundred plants on exhibit demonstrated the ability of dedicated ABS members to grow their begonias no matter what the conditions. There were many rhizomatous, shrub-like, and cane-like plants, and a few tuberous, Rex-Cultorum, and semperflorens. It was a non-judged show. Member-propagated small plants sold quickly at the adjoining sale, as did craft items and baked goods.

Friday with lunch at a member's home. Friday evening and Saturday will be devoted to informative programs with the annual banquet scheduled for Saturday.

For details, write to Robert Hamm, director, ABS Southwest Region, 2951 Eliott, Wichita Falls, TX 76308.

Open house marks ABS founding

The Long Beach Parent Chapter will observe the 50th anniversary of the founding of ABS with an open house Sunday, Jan. 10. The meeting will be from 1 to 4 p.m. at Great Western Savings, 6300 E. Spring St., Long Beach, Calif.

Rudolf Ziesenhenné will speak on "The Early History of the Begonia Society." Rudy is the society's member of longest standing, having joined in April 1935.

Dec. 11 was the date in 1931 on which a meeting was held in Long Beach to explore formation of a begonia organization. The actual first meeting was Jan. 10, 1932. The organization was known as the California Begonia Society; in June 1934, members voted to change the name to American Begonia Society.

Begonia show in Washington, D.C.

One hundred fifty-eight entries plus a display of begonias from the U.S. National Botanical Gardens made for a grand second annual show of the Potomac Branch Oct. 24-25 in Washington, D.C.

In the show, held at the National Arboretum, James Cox of Baltimore, Md., won best of show with an unnamed *B. rex* cultivar and Joyce Smith of Alexandria, Va., won sweepstakes (most blue ribbons) and "showing is sharing" (most entries) awards.

Division winners were James for best rhizomatous, *B. 'Bunchii'*, and best Rex-Cultorum, *B. 'Merry Christmas'*; Joyce for best cane, *B. lubbersii*, best single plant in contained atmosphere, *B. versicolor*, and best mixed planting in contained atmosphere; and Maxine Zinman of Boyce, Va., for best shrub-like, *B. foliosa*, and best tuberous, an unnamed plant.

Two new slide shows

The ABS slide library now contains two new shows available to branches—one on tuberous begonias and one on the National Begonia Festival in Capitola, Calif.

Rudolf Ziesenhenné of Santa Barbara, Calif., former ABS nomenclature director and an ABS member since 1935, donated the slides for these shows. President Gil Estrada reported their availability to directors Nov. 16.

One is a 60-slide show of tuberous begonia cultivars created by the late Frank Reinelt. The other show consists of 34 slides of the begonia festival in 1963. All slides were taken by Reinelt, who worked in Capitola, and later given to Rudy.

For ordering information, write to Slide Librarian Ralph Corwin (see inside front cover for address).

In memoriam

Annie C. Tedford (Annie C. Robinson)

Annie C. Tedford, widow of Clarence P. Tedford and of pioneer begonia nurseryman Alfred D. Robinson, died Oct. 17 at age 89.

An accomplished begonia hybridizer in her own right, Annie carried on Rosecroft Begonia Gardens on Point Loma in San Diego, Calif., for several years after A. D. Robinson died in 1941. The nursery was then sold. It was closed about two years ago by owner Kathryn Hunter.

Many early begonia hybrids created by A. D. or Annie or both are still in cultivation. The Robinsons had five children. Annie's second husband died in 1977. She leaves 26 grandchildren and 11 great-grandchildren.

Annie's name has been added to a garden she helped create at DeLuz Ecology Center in Fallbrook, Calif., now known as the Native Garden in Memory of Clarence P. Tedford and Annie C. Tedford.

More grooming

Continued from page 247

gradually shorter lengths on the outside. Older hard growth should be removed as necessary from the inside layer to allow new growth to take over.

Cuttings

After the stems are pinched and/or pruned, the cuttings should not be thrown away. If the cuttings have two or more nodes, they can be propagated. This is a wonderful way to share plants with other begonia fanciers.

QUESTION BOX/ *Bad luck trying to grow canes*

Elda Haring

Question: Some leaves on my canes develop a dry black spot and drop off. I feed frequently and I have moved them back from the window now that the sun is stronger. I saw no insects but sprayed and also gave a soapy rinse. My B. 'Tom Ment' has very soft, droopy stems plus leaf loss. The soil mix I use is the same that you suggest.

Answer: Constant feeding is not good for begonias that contain topsoil and fertilizer in the mix as mine does. Constant feeding is best for use in soilless mixes.

I feel you are giving your plants too much fertilizer and there may be fertilizer salt buildup.

There is a possibility also that the droopy stems and leaf loss could be caused by insufficient water at the rootball. When you use constant feeding, pots must be flushed out with water every 6 weeks. In winter this could be too much water therefore and your plant could be suffering root rot. Remove from pot and, if mix is soggy, cut off at least $\frac{2}{3}$ of the rootball, replacing in dry mix. Do not water for a few days and then very spar-

ingly to encourage fresh roots to grow.

Should the rootball be extremely dry, soak the pot in water deep enough to flow over the rim of pot. If it bubbles, the soil is too dry. Let stand until bubbling stops, then water; do not water again until the top seems dry.

Your problem does not sound like insects or fungus but rather is physiological.

Question: What do you think about sending cuttings bare rooted? I got some with bare roots and they collapsed immediately. Isn't it too much of a shock to send them that way?

Answer: This is very bad practice. If I received such a cutting, I would submerge it immediately in a container of water until it becomes crisp and then pot in my own propagating mix until pot is full of new roots. If possible, remove a leaf after crisping and use to propagate a second plant.

In my opinion it is quite damaging to the plant to send it out bare rooted. Plants can easily be wrapped in damp cotton or tissue covered with aluminum foil to keep them moist. If you have received them from a commercial grower, complain immediately.

BEGONIAN MINI-ADS

BEGONIAS—all types. Illustrated, descriptive catalog featuring over 700 varieties, many rare and unusual. \$1.50. THE THOMPSONS, P.O. Drawer PP. Southampton, N.Y. 11968. 516-283-3237.

African violets, begonias, gesneriads, terrarium and dish garden minis, cuttings only. Windowsill Gardens, Box 943, Center Moriches, NY 11934. List 35¢.

Begonias. Episcias. African violets. Cuttings only. Catalog \$1. Kit Jeans, the Gift Horse Greenhouse, Rt. 1, New Johnsonville, TN 37134.

MARANTACEAE. Calatheas and other rare plants. Stamp for list.
Martin Beckerman
454 Fort Washington Avenue
New York, N.Y. 10033

Begonias. Episcias. Cuttings only. Catalog \$1. Kit Jeans, the Gift Horse Greenhouse, Rt. 1, New Johnsonville, TN 37134.

Mini-ads are \$1 per line per insertion with a minimum of \$4. A line is about 38 characters including punctuation and spaces. 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.

Violets - Begonias - Episcias
Cuttings only. Send 35¢ for list.
Wilson's Greenhouse, Route 1
Box 165-4 Ozark, MO 65721

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

Begonias—Ferns—Unusual plants
Send large stamped envelope for list to Ferns & Foliage Nursery, 1770 Foothill Drive, Vista, Ca 92083.

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.

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 1979. 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 manager. 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 (\$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. Con-

tact the librarian for a list of books and the procedure. Include a stamped self-addressed No. 10 envelope.

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 veteran collector Elda Haring, P.O. Box 236, Flat Rock, NC 28731. You'll get a prompt answer and Elda will use questions of general interest in her Begonian column.

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 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.

THE BOARD/ *ABS directors' meeting Oct. 20, 1981*

The fiscal 1981-82 budget presented at the annual meeting was discussed as well as the increase in dues proposed in the budget report. Muriel Perz, Parent Branch national director, moved to refer the proposed budget back to the Finance Committee with instructions to leave dues at \$10 annually and to provide for a monthly Begonian. It was seconded by George Ghiotto, representing North Long Beach Branch. Co-Editor Chuck Anderson urged defeat of the motion, saying the board should adopt a budget this evening. Judging Chairman Margaret Lee pointed out that the editors cannot regulate the cost of paper, printing, and postage. President Gil Estrada said Bay Area costs are higher than in Southern California because wages are higher, but added that printing costs probably would be the same in Southern California. The motion was carried.

Bill Scarbrough, Whittier Branch national director, moved to continue use of the 1980-81 budget until a new budget is adopted. It was seconded by Cruz Sandoval, Orange County Branch national director. The motion was carried.

1981 Convention Treasurer Velma Montgomery made her final report, which was accepted by the board. Convention proceeds were turned over to Treasurer John Ingles. Net income totaled \$322.

Legality of the 1979 Constitution and Bylaws was discussed. Muriel Perz voiced the opinion that nothing adopted since 1976 is effective because more recent amendments have not been published in The Begonian. Chuck Anderson moved to make photocopies of the Constitution and Bylaws as soon as current balloting is finished, send the copies to all

board members, and make copies available to all members sending stamped, self-addressed envelopes. It was seconded by John Ingles. The motion was defeated.

Bill Scarbrough moved to instruct the secretary to research the minutes to confirm the 1979 Constitution and Bylaws were adopted, then publish them in The Begonian. The motion was seconded and defeated.

Letters from several branches regarding The Begonian and the co-editors were read. Muriel Perz moved to request the resignation of Co-Editors Chuck Anderson and Karen Bartholomew. It was seconded by George Ghiotto. Chuck Anderson said he and Karen would abide by any decision of the board. After discussion, the motion was defeated on a 5-10 vote. Chuck Anderson abstained.

Gil Estrada adjourned the meeting with these words: "Let this be a new beginning, and everyone work for the betterment of our society."

Kartuz Greenhouses, Inc.

1408 Sunset Dr., Vista, CA 92083

(714) 941-3613

Open every day—9 a.m. to 5 p.m.

Begonias, gesneriads, orchids, tropicals, including our exclusive introductions.

Color catalog \$1.00.

PORTER'S TROPICALS, INC.

Begonias Ferns Rare Plants
Collector's Items

Open Mon. thru Fri. 9-4
or by appointment

19102 Bond St., Orange, Ca. 92669

Shipping
\$50 minimum
(714) 997-2581

SPOONIT[®]

"GETS THINGS GROWING!"

Gives
exceptionally
fast results when
used on flowers,
ferns, shrubs,
trees and lawns
May be used for
foliar feeding

get 1 lb. for
\$3.50 pp
from

PLANTSMITH
1924 Plymouth St.
Mountain View CA 94043



"Schultz-Instant" LIQUID PLANT FOOD

EASY TO USE

"Just add 7 drops per qt. in the water
Everytime you water.
Everything you grow."

Ultra Pure, Concentrated, 10-15-10,
Liquid, All Purpose, "Starts & Feeds
Formula". Convenient for all indoor
and outdoor uses. 3 Sizes.

Available at your store or send
\$1.50 for 5-oz. oz. \$2.75 for 12 oz.
\$4.00 for 28 oz. (includes mailing)



"Schultz-Instant" Fertilizer

EASY TO USE

"Just add 1/4 tsp. per gal. in the water
Everytime you water. Everything you grow."

Ultra Pure Concentrated, 20-30-20, Soluble,
All Purpose, "Starts & Feeds Formula".
Sizes for Gardens, Vegetables, Flowers,
Roses, Shrubs, Trees, Lawns, Greenhouses,
Nurseries. 3 Sizes.

Available at your store or send \$2.50 for
1 lb. Small Garden Size, \$9.95 for 5 lb.
Lawn & Garden Size, \$33.00 for 25 lb.
Estate Size (includes mailing).
By the makers of "Plant Shine".

SCHULTZ CO.—St. Louis, MO 63043

SEND FOR OUR FUND RAISING OFFER

American Begonia Society
369 Ridge Vista Ave.
San Jose, CA 95127

Address correction requested

JOIN THE FERN EXPERTS

Have fun in the

Los Angeles Int'l Fern Society

Membership only \$10.00 per year

Monthly LAIFS Journal, Fern lessons, Robins,
Spore Store, Books, Educational programs.

14895C Gardenhill Dr., La Mirada, CA 90638

New complete rare plant & begonia catalog
available July '81. Over 50 new begonias,
hybrids & sp. \$2.00. Refundable first order.

The Plant Shop's Botanical Gardens, 18007

Topham St., Reseda, CA 91335. (213) 881-4831.

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

BEGONIAS, GERANIUMS, EXOTICS FERNS, OXALIS, CACTI, HERBS

1980-81 Catalog with Color—\$2.00

LOGEE'S GREENHOUSES

(Est. 1892)

55 North Street, Danielson, Connecticut 06239

ANTONELLI BROTHERS

2545 Capitola Road

SANTA CRUZ, CALIFORNIA 95060

22-page color catalog \$1.00

BEGONIAS

REX BEGONIA SEED

RUDOLF ZIESENHENNE

\$1.00 per pkt plus 15¢ postage

Calif. residents add 6% Sales Tax

1130 NORTH MILPAS STREET

SANTA BARBARA, CALIFORNIA 93103

Non Profit Org.

U.S. POSTAGE

PAID

Permit No. 655

South San Francisco, CA