



April 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

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

Past President Nathan Randall
10079 West Lilac Road, Escondido, CA 92026

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

First Vice President Michael Kartuz
1408 Sunset Dr., Vista, CA 92083

Second Vice President Joan Coulat
4111 DePaul Ct., Sacramento, CA 95821

Treasurer John Ingels
8922 Conway Dr., Riverside, CA 92503

Secretary Arlene Davis
13390 Barker Lane, Corona, CA 91720

Appointed officers

Back Issue Sales Katharine Alberti
3322 Troy Drive, Hollywood, CA 90068

Bookstore Librarian Gil Estrada
7914 Springer St., Downey, CA 90242

Branch Relations Director Lynda 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) \$14.50. Overseas air mail \$25. U.S. currency only. Back issues (current volume) \$1.

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

Business Manager..... Doug Frost
10622 Teal Dr., Garden Grove, CA 92640

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

Historian Frances Estrada
7914 Springer St., Downey, CA 90242

Judging Department

Co-chairman Margaret Lee
1852 31st Street, San Diego, CA 92102

Co-chairman Pat Maley
1471 E. Madison, El Cajon, CA 92021

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

Members-at-Large Director Duane Campbell
35 Valley Park, Owego, NY 13827

Nomenclature Department

Co-director..... Carrie Karegeannes
3916 Lake Blvd., Annandale, VA 22003

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

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

Public Relations Director Diane Fries
3531 Creeklewood St., Torrance, CA 90505

Research Director..... Corliss Engle
26 Edgehill Rd., Brookline, MA 02146

Round Robin Director..... Mary Harbaugh
W2899 Homewood Ave., Shawano, WI 54166

Show Classification and Entry Chairman..... Pat Maley
1471 E. Madison, El Cajon, CA 92021

Show and Convention Adviser..... Jean Natter, M.D.
260 Bennett Ave., Long Beach, CA 90803

Slide Librarian..... Ralph Corwin
1119 Loma Vista Way, Vista, CA 92083

Speakers Bureau Director Doug Frost
10622 Teal Dr., Garden Grove, CA 92640

THE COVER: This plant with leaves in amazingly varied levels of variegation is the new cultivar *B. 'Midnight Sun'*. A creation of Byron Martin of Logee's Greenhouses, Danielson, Conn., this specimen was grown and photographed by Thelma O'Reilly, author of the profile on page 84.

B. 'Midnight Sun' A variegated breakthrough, by Thelma O'Reilly 84
A detective story Carrie Karegeannes helps rediscover *B. partita* 86
Begonia salad Yes, you can eat some, by R. H. Terrell 91
New from Ecuador Eight species named and described 92
 Begonia gallery 90 Seed fund 96 Associated groups . . 101
 Round robins 94 New cultivars 98 ABS news 102
 Growing from seed . . 96 Question box 100 ABS services 103

NOTES / From the editors

There's lots of begonia news in the book world these days. In a field where begonias seldom have been taken seriously, all of a sudden our favorite plant genus is coming into its own.

Some of the best color photography of begonias ever published appears in *Begonias*, a Japanese soft-cover book containing 431 color plates with English captions—a few are misspelled—plus an index in English. This book is published by Seibundo Shinkosha Publishing Co. of Tokyo at \$15 plus \$3 for shipping.

(For ordering information, see page 234 of the August 1980 *Begonian*. Some who have purchased it warn that it may take several months for your book to arrive.)



The mammoth *New York Botanical Garden Encyclopedia of Horticulture*, an undertaking by horticulturist-author Thomas Everett, contains 29 pages devoted to the *Begonia* entry. Everett describes in detail many species and cultivars and gives generally reliable information on begonia culture.

But the begonia enthusiast sometimes wonders why he seems to go on and on about obscure species while ignoring many widely grown varieties. It's not that the obscure species are uninteresting, but do they belong in a work of horticulture, not botany?

One other objection: Everett pays lip service to the ABS system of horticultural classification (cane-type, shrub-like, *Semperflorens Cultorum*, etc.), but dismisses it as of use only to growers of show plants. Too bad many of his readers won't learn that the system also groups plants according to their cultural needs.

The *Encyclopedia* is a mostly thorough work consisting of 10 volumes at \$52.50 each. It's for serious gardeners; if you're one, write to Garland Publishing, Inc., 136 Madison Ave., New York, NY 10016. The publisher will ship one volume at a time and bill you as each is mailed.



Members in the 11 Western states will be interested in knowing that the new sixth printing of the *Sunset New Western Garden Book* has a revised

Please turn to page 89



Photos/Thelma O'Reilly

Variegation differs, sometimes greatly, from leaf to leaf



Large cluster of white flowers appears on long, erect stem

B. 'Midnight Sun'—the ultimate in variegation

Thelma O'Reilly

Beautiful leaves! Many plants have them. *B.* 'Midnight Sun' can lay claim to being the most strikingly beautiful, the choicest, and the most desirable of foliage plants.

Tovah Martin introduced me to *B.* 'Midnight Sun' during my visit to Logee's Greenhouses in Connecticut in September 1979. When I finished exclaiming over its beauty and distinctiveness, she asked if I would test a plant. They were anxious to learn how the leaves would color under California light and weather. A few weeks later a small test plant arrived.

After two weeks of deliberation I undertook the following course of action to insure it would receive the best TLC I could offer, plus a few prayers for good measure.

I repotted it into a small, shallow, redwood box, using my regular, fast-draining mix. I placed this container into an empty one of larger size. After attaching a wire hanger to the outside container (this positioned wires so they could not touch leaves), I hung it in the glasshouse at the highest level of south-west exposure. This location exposed it to the strongest winter light, kept water off the leaves, and prevented foliage damage from snails, slugs, and crawling insects.

B. 'Midnight Sun' responded quickly. Within a month the leaves had reached the edge of the outer container. When wires remain in contact with foliage, leaf burn always results; so I covered the wires with plastic straws.

Thelma O'Reilly, ABS co-director of nomenclature, lives at 10942 Sunray Pl., La Mesa, CA 92041.



Closeup of male flowers on *B.* 'Midnight Sun'

Leaves on *B.* 'Midnight Sun' vary in color. They burst forth from showy stipules that are 1¼", rippled, and cream colored with bright, pink-red borders. Unfolding and developing, each leaf takes on its own colorful beauty which can be cream, apple blossom pink, bright pink or shocking pink—alone or in combination with shades of green.

Green coloring appears on the upper surface of most leaves. It can color part or all of the veining; it can spread over the surface in small or large patches. Frequently, a leaf is entirely pink. When this occurs, the leaf starts to brown at the edges and soon dies from lack of chlorophyll. When I received my test plant, it had one completely dark green leaf with a narrow, shocking pink border. Under my growing conditions I have had no solid green leaves.

The upper leaf surface is sparsely dotted with pink hairs. The under surface, thickly covered with bright pink hairs, retains the vivid pink-red color of new leaves, creating a spectacular

Please turn to page 89

Tracking down and rediscovering *B. partita*

Carrie Karegeannes

What can beat a treasure hunt or a tangled detective story?

The story of almost any begonia! Only, with begonias, even after you find the pot of gold, it is still always “to be continued.”

In May 1979 I had a surprise—a fascinating letter with silhouettes and drawings of elegant, deeply bisected leaves of a plant Mildred Thompson had grown from seed received as *Begonia flanaganii* hort. A Netherlands seedsman had asked her help in finding its true name. Millie’s keen eye noted a relationship to *B. dregei* in the young leaves and perhaps to *B. suf-*

Carrie Karegeannes, ABS co-director of nomenclature, lives at 3916 Lake Blvd., Annandale, VA 22003.

fruticosa (syn. *richardsiana*) in the mature leaves, but also differences from both.

The small, slender, deeply cleft mature leaves were different from any I had seen on a live begonia—but surely somewhere I had seen that striking pattern of leaf blade divided almost into two, with long slender lobes. And maybe even a mention that lower leaves were different? Yes! A name that fitted the parted leaf began to surface in my mind, with a recollection of a long struggle to translate the German of the late Edgar Irmscher’s detailed 1961 study of what we call “maple-leaved, semituberous” South African begonias.¹

A quick look at the March 1974 *Begonian*,² where I had summarized Dr. Irmscher’s findings, turned up *B.*



Photo/Karen Bartholomew

***B. partita*, even when young, is a compact mass of small, deeply cleft leaves**

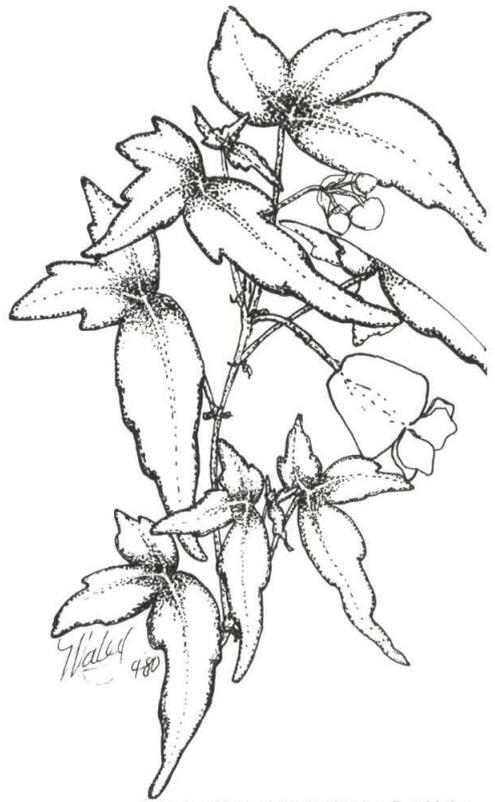
partita on page 67. His original article provided the remembered illustration and more details. Irmischer had named his new species in 1961, although it had been collected in the wild as early as 1897 and grown in the Berlin Botanical Garden in 1914. I wished I had included his photo of the specimen in *The Begonian*. Millie would have spotted the resemblance, I know, although neither of us had expected it to be in cultivation now.

Excitedly I wrote Millie what I thought, sending references—and even more excitedly opened the package received from her in June, a healthy little plant, full and bushy in its pot, not a leaf bent. It bloomed for me in late August and September, while still small. Under the eaves out on my deck, it was no doubt pleased with the filtered sunlight and the high humidity of Virginia summers (the heat was not 100 degrees and over like that of the past summer!). Since then the base has swollen into a tuber visible above the soil, 1¼ inches across now, although most of the leaves dropped over the winter in the house.

Millie also studied her plants in comparison to Irmischer's description and his photo of pressed leaves, as well as observing the flowers as they opened. White male flowers had two tepals (petals) and the white females five, and everything seemed to match. We agreed: this was *Begonia partita* Irmischer!

(Seed from another source offered in the March 1980 Seed Fund as *B. tripartita*, accidentally, was actually *B. partita* also, the sender informs us. More seed available—see page 96.)

Since Irmischer's 1961 article, O. M. Hilliard of the University of Natal has published a further study of this group, in *Flora of Southern Africa* in 1976—



Drawing/Copyright © 1981 by Pat Maley

B. partita

generously shared with me by Rudolf Ziesenhenne. Dr. Hilliard found so many variations in leaf lobing and cutting, on plants growing over a wide area (as Dr. Irmischer also had found), that he believed several named as related species should actually be placed together as local variant forms of *Begonia dregei* O&D.

Hilliard said the material might be classified into several groups—under the strict sense of the original names *B. dregei*, *B. natalensis*, *B. suffruticosa*, and *B. partita*—but he was not ready to assign them variety or form names at this stage of his study, so he grouped them all under *B. dregei*.

He found the variation was wide but continuous, ranging through a series of gradations in different plants and complicated by younger and sec-

ondary leaves that often were less deeply cut than mature upper ones (again as Irmischer had noted). Where Irmischer had sometimes taken intermediate forms or the occurrence of differently shaped leaves on the same plant as indications of wild hybrids, Hilliard deduced a natural "continuous variation pattern" (illustrated by the many leaf outlines on his figure 46). He also noted that *B. dregei* is very closely related to *B. homonyma* (synonym *B. caffra*) and that the "whole complex demands a thorough field and laboratory study." We await his findings with interest.

Growers of these ornamental plants, however, who maintain some of the differences in cultivation, hope that Dr. Hilliard will allow us names at some level to distinguish the striking forms we know, although we too see great variability in the *B. dregei* and *B. suffruticosa* plants we grow and exhibit. (And confusion is added by the ease with which members of this group inter-hybridize.)

Meanwhile, we now have in cultivation the dainty plant Irmischer described as *B. partita*, a medium-sized herb with erect, 5- to 28-inch, much-branched stems—and closely related to *B. suffruticosa*, as Millie surmised. Many leaves are divided almost into two, with the lanceolate lobes spread wide apart and often again divided in the middle. The inner margins of the clefts are convex, rather than concave as in *B. suffruticosa*. On upper leaves the cleft may reach almost to the petiole or it may stop a little short of that, while lower leaves may be more bluntly two- or three-lobed, more like *B. dregei* 'Macbethii'. Margins may be entire or coarsely crenate-serrate (scalloped to saw-toothed).

B. partita also has usually quite

sparse white hairs (scarcely noticeable on my plant) or short white bristles on the upper surface. In isolated specimens, several white hairs are at the upper end of the petiole.

Although leaves varied rather widely, Irmischer described oblong-lanceolate terminal leaf segments as about $\frac{5}{8}$ to $1\frac{3}{8}$ inches long, narrowed at the base, and the outer basal segments as $\frac{3}{8}$ to $\frac{3}{4}$ inch long. Lower leaf blades were $\frac{5}{8}$ to $1\frac{1}{4}$ inches long, with two or three lobes. In cultivation we find leaves may grow a little larger, the longest lobe perhaps $1\frac{1}{2}$ inches long and the largest leaves totaling perhaps 3 inches from tip of the longest lobe across to the opposite tip.

Bristle-tipped, brown or rusty, membranous stipules, $\frac{1}{4}$ inch long or less, remain on the plant. Petioles, $\frac{3}{8}$ to 2 inches long, are often attached to the blade at the side.

Cymes are slender, Irmischer said (and mine were), two- to three-flowered, $1\frac{3}{8}$ to 2 inches long, each ending in a female flower. Tiny pale bracts, broadly ovate to oblong, fall off early.

The two white male tepals are almost round, $\frac{1}{4}$ to $\frac{3}{8}$ inch long and $\frac{3}{8}$ inch wide. The five white female tepals are only slightly shorter, but are oval, oblong, or ovate, the outer ones a little shorter than the inner ones. The three styles are each divided into two short branches girdled by spiraled papillose bands. The three wings on the seed capsules vary from triangular to almost rectangular.

1. E. Irmischer, "Monographische Revision der Begoniaceen Afrikas I," *Botanische Jahrbücher* 81: 130-46, especially 143-45 and plate 10, fig. 2. 1961.
2. Carrie Karegeannes, "The Maple-Leaved South African Begonias," *Begonian* 41: 62-71. March 1974.
3. O. M. Hilliard, *Begoniaceae*, in J. M. Ross, ed., *Flora of Southern Africa* 22: 136-44 and fig. 46. 1976.

More 'Midnight Sun'

From page 85

color contrast with the variegation on the upper side. Both surfaces appear to glisten with wee particles of glitter.

Measuring 4 inches by 6 inches, leaves are cordate, broadly ovate, crenulate (minutely scalloped), and finely edged in pink. Petioles measure 3-4 inches and are covered thickly with bright pink hairs.

The inflorescence is lovely. An erect, sturdy peduncle terminates in a large, compact cluster of flowers. Sparkling male blooms are snow white flushed with bright pink-red, fluted, and 4-teped. Fluted female blooms are the same color with 5 recurved tepals. Flowers are variable in size and shape. Large, pink-red bracts and bracteoles are distinct, adding to the charm of *B.* 'Midnight Sun'.

Byron Martin of Logee's Greenhouses created this unusual cultivar in 1977 by crossing *B.* U003 to *B.* 'Jill Adair'. Only a few of the seedlings showed variegation. The best plant was selected for testing and propagation.

Tovah recommends that this low-growing, compact, shrub-like begonia be propagated from stem cuttings because leaf propagation is slow and uncertain. I have had little success with leaves because the pink coloring predominates, causing quick rot. I never water the leaves—just give a moist sponge bath occasionally.

Logee's Greenhouses entered my plant in the New Begonia Introduction by a Commercial Nursery division at the 1980 National Shade Plant Show. *B.* 'Midnight Sun', so named because of the light and dark color contrast of the foliage, scored 99 points from each of the five judges on the team. It won the Divisional Trophy and was awarded a certificate as the Begonia Hybrid of Distinction.

If it is possible to have a love affair with a plant, that's what has been happening since *B.* 'Midnight Sun' entered my life. Each day (unless circumstances prevent it) I visit my "love." Each time I lift it down to say "hello, beautiful," I marvel at the exquisite color combination—constantly changing—creating more joy.

More editors' notes

From page 83

Begonia entry written by none other than your male co-editor in consultation with more than a dozen prominent ABS growers.

It would be a conflict of interest to urge a copy on you, so all we'll say is that if you need a new copy (or a first copy) of this best-seller, look on the back of the title page to make sure you get the sixth printing. It's \$11.95.



Hot news from New York is that

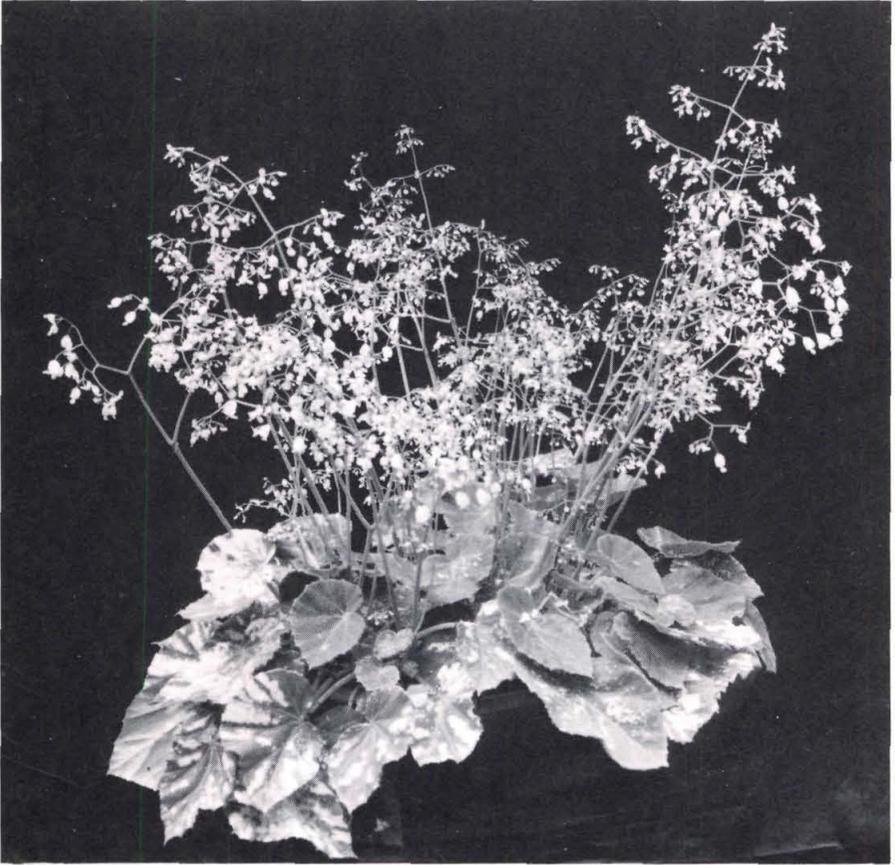
the long-awaited *Begonias: The Complete Reference* by Ed and Millie Thompson has been delayed for a few months. Times Books, the New York publishing house, assures us publication is expected in June. (There has been a staff reorganization at the publisher.)

And Millie says anyone who reserves a copy in advance with her and Ed will get it well before it arrives in bookstores. If you haven't reserved yours, see page 100 for details on how to do it.

—C.A. & K.B.

Begonia gallery:
B. manicata
'Aureo-maculata'

Photo/Alfred D. Robinson Collection



While most begonia enthusiasts grow *B. manicata* 'Aureo-maculata' for its green-and-yellow variegated leaves, pioneer nurseryman Alfred D. Robinson coaxed loads of soft pink blooms as well. The San Diego grower-hybridizer photographed this specimen in the 1920s or '30s. Until recently, it was referred to as *B. manicata aureo-maculata*. New nomenclature was determined by the ABS nomenclature department.

Some lettuce, a dash of *semperflorens* leaves

R. H. Terrell

In the January 1981 *Begonian*, J. Doorenbos write about a begonia which the people of Papua New Guinea grow as a vegetable. This species has not been identified, classified, or named. It was collected in 1977 by J. P. U. Zieck near the village of Kikori in the Gulf Province of Papua.

Zieck sent a plant of this begonia to Dr. Doorenbos who has grown it successfully; however, he has been unable to obtain any seed as this plant does not produce pollen under the climatic conditions of the Netherlands. Without seed, propagation is very slow; therefore, this begonia will be slow in being grown as a vegetable in other parts of the world.

However, even though this species is not available, we do not have to deprive ourselves of a salad bowl of begonias alone or combined with other salad greens in a mixed salad. I think I can say that all of the begonias can be eaten and relished, either raw or cooked.

They furnish many minerals and vitamins necessary for health. The dark purple or bronze foliage of some of the *semperflorens* kinds will supply the largest amount of these elements, more vitamin C than citrus or tomatoes. (It is a matter of common knowledge that the bronze lettuce, red chard, and beet leaves have a higher supply of vitamins than green food plants.)

Scott Hoover in the September 1980 *Begonian* wrote about begonias which have medicinal properties; however,

R. H. Terrell, 90, past ABS president and national director of Rubidoux Ranch, is associate gardener at Jurupa Mountains Cultural Center, 7621 Granite Hill Dr., Riverside, CA 92509.

their action is so mild they are safe as food.

For years, when I have pruned my begonias the cuttings were not consigned to the garbage can or compost pit, but went to the kitchen to be used as food. *Semperflorens* begonias are especially adaptable as vegetables; at one time I had a bed growing in the vegetable garden just for food.

Begonias are not the only ornamental plants from which we can use flower or foliage or both for food, not only saving on the cost of living but also enjoying delightful exotic flavors. A competitor to the begonia is the nasturtium with foliage, flowers, and tender seed pods edible.

The flowers of calendula add flavor and color to a mixed salad or they can be used alone. The flowers of *Hemerocallis* (daylilies) and all types of iris flowers are delicious, plus flowers of hibiscus and hibiscus relatives, the roselle, hollyhock and mallow. You can also eat roses, geraniums, gladiolus, and many more flowers.

But do not eat without knowledge, as some flowers are poisonous. Examples: *Digitalis* (foxglove), *Datura* (jimson weed), *Helleborus* (Christmas rose), oleander, *Poinsettia*, and others. Watch what animals eat—what rabbits and gophers like can be put on the table for the family.

ABS board to meet May 18

ABS directors will meet Monday, May 18, at Fullerton Savings & Loan Association, Anaheim, Calif.

The meeting begins at 7:30 p.m. ABS members are free to attend. The board consists of elected and appointed ABS officers plus each branch's national director.

Eight new species named from Ecuador

Carrie Karegeannes

Eight new *Begonia* species from Ecuador have been named and described by Lyman B. Smith and Dieter C. Wasshausen of the Smithsonian Institution. Their preliminary revision of the *Begonia* of Ecuador* lists 50 species found in that country, with the 8 new ones beautifully illustrated by A. R. Tangerini.

We do not yet know these new begonias in our plant rooms and greenhouses, nor whether they will grow well in our conditions, but they all appear to be of great interest. Some of the others from Ecuador—such as *B. foliosa*, *B. glabra*, and *B. guaduensis*—are well known to us and occur in other Latin American countries as well.

B. mariae L. B. Smith, discovered originally in Venezuela and pictured in color on the March 1974 *Begonian* cover, has been found in Ecuador also. Unfortunately, this unusually large-flowered species is not yet in growers' collections.

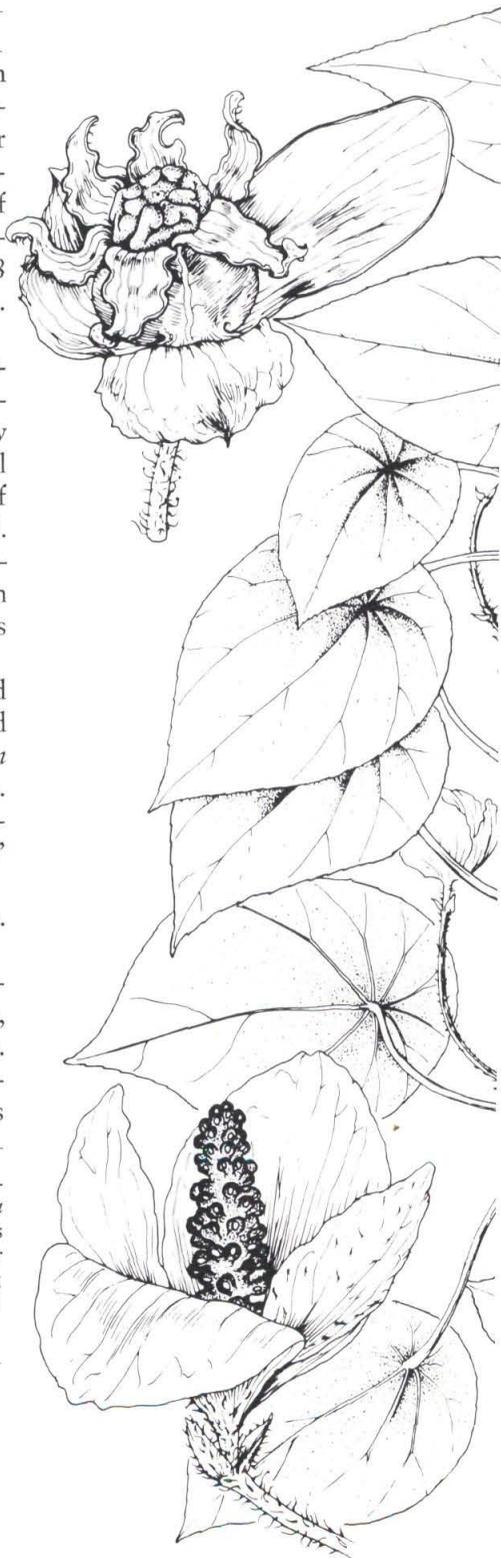
The new species named by Dr. Smith and Dr. Wasshausen are:

B. ynesiae, a climbing glabrous species with red flowers, large bracteoles, and variably cordate or peltate leaves.

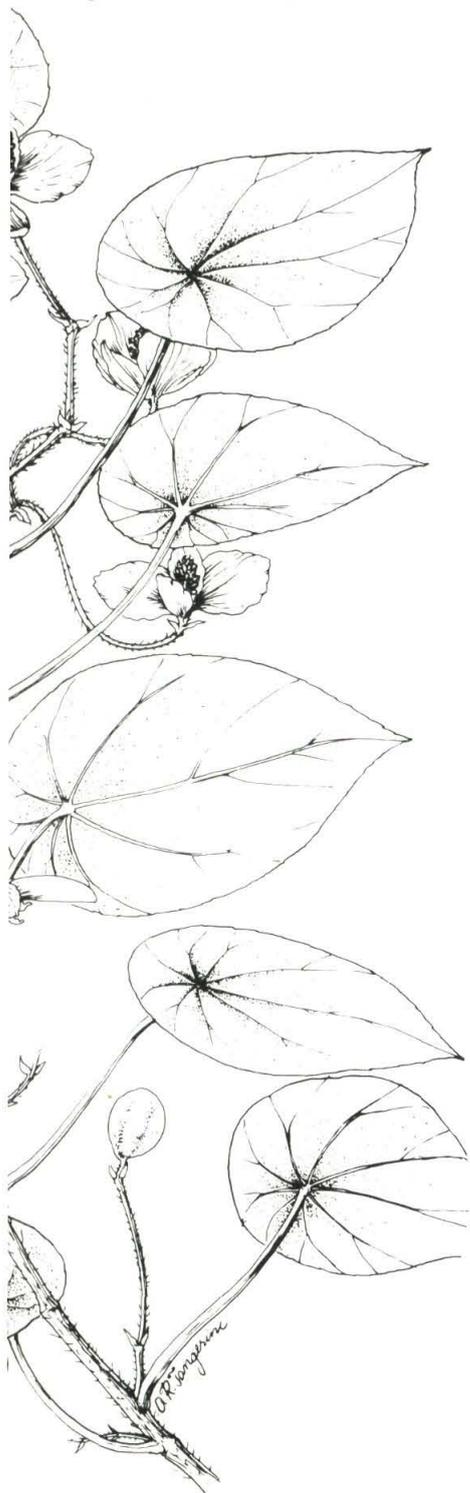
B. secunda, climbing, with red-and-white flowers on several peduncles

*Lyman B. Smith and Dieter C. Wasshausen, "Begonia of Ecuador," in *Phytologia* 44(4): 235-56. October 1979. The paper is preliminary to a more detailed study for *Flora of Ecuador*, edited by Gunnar Harling and Benkt Sparre—who collected the two species named for them.

Carrie Karegeannes, ABS co-director of nomenclature, lives at 3916 Lake Blvd., Annandale, VA 22003.



***B. geminiflora* Smith & Wasshausen.**
Begonia of Ecuador, plate 4



arising from one side of (second from) leafless branches, and with ample bracteoles and one capsule wing markedly larger than the others.

B. dodsonii, climbing, peltate-leaved, and orange-flowered with persistent bracteoles covering white capsules, which also have very unequal wings.

B. asympeltata, found as an epiphyte in the forest, erect and stout-stalked, with the peltate leaves strongly asymmetric and pleated at the base.

B. xerophyta, named for its adaptation to a dry habitat, stout-stalked, with asymmetric, shallowly lobed leaves that are downy above and minutely felted underneath: red-and-white flowered with male tepals sometimes more than 1 inch long.

B. sparreana, with erect stem; sparsely hairy, rounded-acuminate leaves; and pale pink to white flowers.

B. harlingii, with ascending stem, very asymmetrical leaves with a single cusp on one side, white flowers, and large deciduous bracteoles.

B. geminiflora, taken up more fully below and illustrated in the reproduced plate. We hope to share the others in more detail in later issues of *The Begonian*.

Named for its twin female flowers, *B. geminiflora* also bears unusual male flowers, red-tepaled with odd, elongated stamen columns. As described by Dr. Smith and Dr. Wasshausen, it is a climbing perennial with gray, zig-zag, minutely hairy, hard and brittle woody stem, marked by 4/5-inch internodes. The large stipules on the stem soon disintegrate, but the 1/12-inch stipules of the branches hang on—ovate with tapering tip, brown, and glabrous.

Peltate leaves—4 inches long by almost 2-1/2 wide, with petioles up to

Please turn to page 99

Mary Harbaugh

Days are getting longer, temperatures are warming and many robin members are looking forward to increasing their collections or replacing those favorites lost during winter. One popular way is through the sharing of cuttings among flight participants.

To ensure healthy arrivals, careful packing and shipping methods are important. Here are a few that have proven successful:

Thelma Adair, Minnesota, takes a small plant or cutting with a small amount of soil or moss which is slightly damp, not soggy. She puts this in a plastic bag which she then puts very carefully into a cardboard tube. A twist tie or tape is placed around the open end of the bag. The tubes are then placed together very tightly in a carton.

A recipient of one of her packages, Lorraine Simmons, Wisconsin, reports that they arrive like fresh plants just taken up. One could also use damp cotton or tissue on the end of the cuttings. This method works best with small plants; ferns can also be sent this way.

Mary Simon, Ohio, uses "zip-lock" bags for her method. She says to put the leaves into the bags with *no* water on the cut ends. Fasten the "zipper" but allow a bit of air to remain in the bag. This helps to prevent the plant from being crushed.

Do the same with several more bags. Don't crowd too much into one bag. Using as small a box as possible, place

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 Home-wood Ave., Shawano, WI 54166.

all the closed bags into the box. Make sure the box is full of "airy" bags.

"The air in the bags provides all the insulation and protection the plant material will need, if you make sure that the box is firmly full of bags so that they will not shift around. This method adds nothing to the postage for fillers and makes the package about as light as you can possibly make it. I've had excellent luck with this method."

Mabel Corwin, California, takes her cuttings for mailing on Sunday afternoon or Monday and lets them soak in water for several hours. She then takes them out of the water and puts a small piece of cotton around the stem and covers this with a piece of foil. This helps to keep it damp.

The cuttings are then put inside "zip-lock" bags. She blows a little air into the bag as she seals it so the cutting isn't crushed. These are placed inside a strong cardboard box with some of the foam packing material that she saves. Crushed newspaper can also be used. She takes it to the post office on Monday or Tuesday and sends it by "Priority Mail" so it won't lay around over a weekend.

Marge Doremus, New Jersey, was delivering her cuttings to a friend in person. Since she was traveling by plane they were packed in a suitcase. The plants were wrapped in newspaper and the pots wrapped in plastic bags with plastic milk cartons to protect the tops. All arrived in excellent shape.

How to root cuttings

After all these cuttings have arrived in excellent shape, we find ourselves

faced with the challenge of rooting them successfully. There has been considerable discussion on this topic with the "Texas method" and the use of plastic shoe boxes topping the list of favorites.

Paul Lowe, Florida, when propagating terrarium begonias, uses plastic shoe boxes. With a hot nail he makes holes around the bottom for drainage and a few holes around the top for ventilation.

"You can put several small leaves and leaf sections in these and they will root quite rapidly in a mixture of peat moss and perlite. If you need to re-water you do not have to open the box but you can just set it in a pan of water and it will absorb the water through the holes. Be sure you soak the potting mix well before you place it in the box and wring it out before spreading it on the bottom. Do not pack it down. Just level it lightly. Cuttings must have oxygen to root so you don't want to have a soggy mixture."

Dora Hale, California, also likes to start her leaves and cuttings in plastic shoe boxes in a north window. "They seem to do better there than under the lights."

Betty Davenport, Washington, takes a plastic shoe box and glues a pill bottle at each corner. She then sets another box on the bottles and wicks the upper box. The bottom box is kept full of fertilizer water and the top box has the planting medium with the leaves.

The Texas-style method of propagation is described by Arlene Waynick, South Carolina. Take styrofoam cups with holes a half-inch from the bottom and a second row above these about a half-inch. Fill the cup to the

first row with chicken grit. Wrap the cutting in long-grain sphagnum moss and put in the center of the cup. Fill the cup in with sphagnum. Moisten the grit and moss.

Thelma Adair, Minnesota, reports that she has better luck rooting canes by the Texas method, although wedges and rhizomes are more successful in a prop box. Also, cuttings rooted this way don't have to be hardened off. Species which formerly had been grown in a terrarium could be grown out in a basket when the cuttings were propagated Texas-style.

In California, Betty Tillotson starts rex leaves by cutting the main veins and laying them flat, securing the leaves to the mix with hair pins. When the leaf is very large she often trims the leaf to two inches in diameter, cutting the rest away. Wedges, if desired, may be cut from the discarded material.

When Elda Haring of North Carolina puts down rex and rhizomatous leaves and a new plant grows at the sinus, she cuts off the new plant and reroots it by placing it in mix up to but not touching the leaf and leaving the old stem which usually sends up plantlets later.

Dorothy Coleman, Mississippi, roots leaves and cuttings in a fish tank, using moist vermiculite. She places the tank on top of her refrigerator where it stays warm. She feels that some shrub-like varieties root better in perlite.

Here's your chance

We can start a Midwest robin with only three more requests, and the All-California flight has a few openings. Here is a special invitation to our international friends to join a special robin just for you! Write today.

GROWING FROM SEED/What to do with tiny amounts?

Joy B. Porter

With this issue, I begin my second year as ABS Seed Fund director. Some mistakes; most caught by others. I promise not to make the same mistakes twice.

Perhaps you have questions about how I determine the number of seeds in a packet. Supply and demand are the criteria. In recent months I have offered several varieties containing

Write about your seed growing experiences to Joy B. Porter at 9 Bayberry Lane, Framingham, MA 01701.

only 10-25 seeds per packet. I have only done this in cases where I had tested twice and germination was 80 percent or better.

Would you rather they not be listed if I can't give a generous amount? Would you prefer to have a few versus none at all? It has been suggested that when supply is limited, I put 25-30 seeds in the packet and let the first 30-40 customers have them. Those first 30-40 orders will be from members who receive *The Begonian* by first-class mail. The majority of orders come 2-4 weeks later from third-class

SEED FUND/B. partita, among other species

Joy Porter, director, Clayton M. Kelly Seed Fund

- AP 1 — *B. macdougallii*: Rhizomatous with giant, compound leaves (nine leaflets, each having a prominent side lobe), white flowers on tall stems in spring. Spectacular in the ground; smaller in a pot. per pkt 1.00
- AP 2 — *B. rhopalocarpa*: Scandent species from Africa similar to *B. mannii*. Pictured in June 1980 *Begonian*, page 165. Large white flowers with club-shaped fruits. per pkt. 1.00
- AP 3 — U008. Shrub-like species with small to medium, light green kidney-shaped leaves. Whole plant is soft-white hairy and turns rosy-pink in full sun. Red hairs on backs of sepals make the buds look like bright pink fuzzy balls. per pkt. 1.00
- AP 4 — *B. olsoniae*: Compact, shrub-like with 6-inch, bronze-green leaves distinctly marked with light yellow-green veins. Short red hairs add a velvet touch. Large white flowers. per pkt 1.00
- AP 5 — *B. partita*: Semi-tuberous species with small finely dissected leaves and numerous white flowers in summer. Was listed in error as *B. tripartita* in March 1980 Seed Fund. I have had plants from this seed with green leaves, others with red-brown leaves. Recommended for beginners. (See page 86 in this issue.) per pkt 1.00
- AP 6 — *B. obscura*: Shrub-like species with small, bare leaves and large white flowers with hairs on backs of male sepals. Resembles *B. echinosepala* but larger flowers, stems, and leaves. per pkt 1.00

Send orders to Joy Porter, 9 Bayberry Lane, Framingham, MA 01701. Include self-addressed, stamped envelope or add 35 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.

mail customers.

It could be argued that those who pay extra for first class do so to get the seed before the supply is gone, and are entitled to that advantage. Enclose a note in your next order telling me which method you prefer. I cannot please the majority unless you let me know how you feel.

New members: It is possible to order from the previous 12 months' listings, but please list substitutes.

Please pollinate your plants; the Seed Fund needs seed. One-half inch of seeds in a seed envelope will give 25-50 seeds per customer, depending on size of seed and amount of chaff. Seed of some smaller-leaved types are more than 20 times larger than seed of some larger-leaved types. Thirty

seeds of *B. megaphylla* will fill an area no larger than a -.

These species have not been available in Seed Fund listings for years: *Begonia aconitifolia*, *lubbersii*, *maculata*, *undulata*, *goegoensis*, *bowerae*, *decora*, *rotundifolia*, *rajah*, *manicata*, species ex Kew, and *prismatocarpa*. If you are growing and blooming some of these, please try to make seed. The more they are grown, the less likely they will be lost to cultivation.

I appreciate the seed sent to the Seed Fund this past year, and hope there will be many new donors in the coming year. Everyone has his or her favorite daydream; mine is sitting in my little office literally buried up to my ears in envelopes marked "Hand Stamp—Seed Enclosed."

MAY 2ND AND 3RD. BEGONIA SHOW AT HAWTHORNE PLAZA



See our wide variety of begonias on Show and Sale for 2 days only.



HAWTHORNE PLAZA

Hawthorne Blvd. between El Segundo & 120th St.

© 1981 Hahn

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

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

Begonia 'Charles Jaros'

No. 812—*Begonia hatacoa* (typical spotted form) x *deliciosa* 'Charles Jaros' (syn. 'Lowe's rubro-venia')

Rhizomatous with rhizome jointed at soil level. Unevenly lobed, sharply pointed, moss-green leaves with silver spots are pink on the undersurface. Measuring 7" x 4½", the 6-veined leaves are serrate with a fine brown edge and silky surface. Petioles are green with white dashes; stipules, light green. Flowers—light pink, 1"-1½", with 2 male and 5 female tepals—are loosely clustered at the top of 4" peduncles in summer and fall. This cultivar differs from others of its type by its crisp leaf texture and its habit of branching freely from the rhizome at the soil surface to produce a full, well-branched plant. It does not go dormant like many others of its type. Originated in 1976 by Paul P. Lowe, 1544 West Road, Lake Park, FL 33403; first bloomed in 1977; first distributed in 1978; description first published (under synonym) in Logee's Greenhouses Supplement 1, 1979. Tested by Joy Logee Martin. Registered March 22, 1980.

Begonia 'Morning Star'

No. 813—*Begonia* 'Chumash' x 'Joe Hayden' 'Morning Star'

Rhizomatous with creeping rhizome. Star-shaped, 2¾" x 1½" leaves are black-brown with maroon undersurface, sharply pointed lobes, serrate and ciliate margin, silky surface, and 5 veins. Petioles are soft-hairy and red spotted; stipules, white.

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



Photo/
Hazel
Burley

**B. 'Christina
Grace'**

Flowers—pale pink, ¾" across, with 2 male and 2 female tepals—are clustered at the top of 6" peduncles in spring and early summer. *B.* 'Morning Star' is similar to *B.* 'Evening Star' from the same cross, but is much smaller and the leaf is uniformly dark instead of mottled with green. Originated in 1973 by Paul P. Lowe (address above); first bloomed and distributed in 1975. Tested by Charles J. Jaros, 2621 N. W. 23rd Court, Miami, FL 33142. Registered March 22, 1980.

Begonia 'Christina Grace'

No. 814—*Begonia aconitifolia* (syn. *faureana*) var. *metallica* x unknown 'Christina Grace'

Cane-like, Superba type, with numerous woody, 5' stems, swollen at the base. Palmately and triangularly lobed, cordate leaves up to 12" x 7" are dark glossy green, with a sprinkling of white dots when young, sparsely coarse-hairy above, glabrous and flushed red underneath. The faintly red margin is serrate; the 5 red veins, shading to green at the margin, are prominently raised underneath and indented above. Petioles are strong, thick, green; stipules, green. Large, two-toned trusses hanging on 2½" to 3" peduncles carry large, strong-clear-pink, 2-tepaled male and 5-tepaled female flowers measuring up to 2" across, paler pink toward centers, with deeper pink, triangular wings (one larger than the other two) on pale ovaries, blooming best in summer. Wider and shallower leaf lobes, larger flower clusters, and a slenderer and taller habit distinguish the cultivar from its seed parent. Originated in 1974 by Hazel Burley, 191 Simpson Road, Bardon, Brisbane

4065, Australia; first bloomed in 1975; first distributed in 1976. Tested by Bernard Yorke of Brisbane and Mickey Meyer of Lathra, New South Wales, Australia. Registered March 27, 1980.

***Begonia* 'Dapples'**

No. 815—*Begonia manicata* 'Aureo-maculata' x 'Mam' 'Dapples'

Rhizomatous. Obliquely ovate, cordate, 5-lobed "star"-shaped, 7½" x 6" leaves are mossy to deeper green with dark chocolate to almost black markings scattered over the leaf, including dark diamond shapes between the veins at the petiole attachment. The margin is cusped and serrate in addition to the lobes, and the smooth surface carries slightly stiff hairs and 6 whitish-green veins. Petioles are long, up to 11", pale green with red marking, and carry a small collar of red hairs at the top; stipules are pale green. Large flowers are pink at the base with red spots along the veins on the backs of 2-tepaled males. They are held in cymes high above the foliage on hairy, red-streaked, green peduncles up to 18" tall, blooming in summer in Australia. *B.* 'Dapples' is a larger, heavier plant than many similarly marked cultivars, with thick,

strong upright rhizome and leaves on very long, erect petioles. Originated in 1977 by Hazel Burley (address above); first bloomed and distributed in 1979. Tested by Mickey Meyer and Bernard Yorke (as above). Registered March 27, 1980.

***Begonia* 'Dreamtime'**

No. 816—*B.* 'Schertzo' x *B. procumbens* (syn. *limmingheana*) 'Dreamtime'

Trailing, with stems 2' long, reddish nodes 1" apart. New leaves are reddish brown shading to pale brown-green around the petiole, green at the margin above and reddish between the 6 raised veins below. Thicker than average, the leaves are almost ovate, 3" x 2", with entire margin and with satiny surface slightly puckered between indented veins above. Petioles are reddish shading into green, up to 1½" long; stipules are clear, fleshy, sheathing, then drying before falling off. Flowers, on 5" peduncles in summer, are pink, the males 2-tepaled, the females falling before opening. Originated in 1976 by Hazel Burley (address above); first bloomed in 1979; first distributed in 1978. Tested by Bernard Yorke and Mickey Meyer (as above). Registered March 27, 1980.

More Ecuador species

From page 93

2-4/5 inches long—are ovate with sharp to tapered tip and evenly rounded base, almost entire, and sparsely downy underneath around the petiole attachment.

The 1-3/5-inch peduncles are sparsely hairy, soon losing their hairs. Single male flowers and paired female flowers are borne separately on the same plant. Dr. Smith and Dr. Wasshausen said that evidently the one staminate flower is suppressed in one inflorescence and the two lateral pistillate flowers are suppressed in the other. Elliptic, ⅛-inch-long bracts—entire, thin, brown, and hairy—remain on the peduncle.

The male flower has a very short, hairy pedicel, ⅛ inch long, and 4 red, entire tepals. The outer 2 tepals are

broadly elliptic, 4/5 inch long, and sparsely hairy; the inner two are shorter. Many stamens cover the odd, ½-inch-long column in the center. The connective of the stout anthers envelops the pollen sacs.

The female flowers are on longer pedicels, 4/5 inch, with persistent, almost round bracteoles that cover the ovaries and capsules. The tiny female tepals, probably 5 to a flower, are elliptic, 1/12 inch long. The ovary is globular with very unequal wings, the largest wing on mature capsules measuring 3/5 inch wide, 1/4 inch high.

The type specimen was collected by Harling, Storm, and Ström (No. 9262), climbing in shrubs along a road from Santo Domingo to Quito, at about 600 feet altitude (holotype in the U.S. National Herbarium).

QUESTION BOX/ *What about new leaf drop?*

Elda Haring

Question: On both *B. 'Tingley Mallet'* and *B. 'Flo Belle Mosely'* I find the new leaf drops off when it is about three-fourths unfolded. Neither plant has any bugs or disease. I keep *B. 'Flo Belle Mosely'* on a south windowsill and *B. 'Tingley Mallet'* about four feet away from the window.

Answer: First be sure neither plant has too much nor too little water and none is in need of repotting. Sun in spring could be too hot shining through the glass.

It would be better if you can keep *B. 'Flo Belle Mosely'* in an east win-

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

dow. Many members find *B. 'Tingley Mallet'* difficult to grow in any case.

Question: I have a plant of *B. wallichiana*. It always looks leggy or sick. How can I grow it into an attractive plant?

Answer: *B. wallichiana* is a semperflorens species, schmidtiana type. These need to be grown quite on the dry side, being susceptible to root rot.

Cut off the tops of your leggy plant to within about 4 or 5 inches of the pot and reroot in a mix only lightly moist.

Pinch out the topmost leaves to force branching. Do not throw away the old plant but keep it quite dry. It likely will grow new leaves and shoots.

**AT LAST! AVAILABLE IN ONE VOLUME
HISTORY • CULTURE • CLASSIFICATION**

BEGONIAS

TIMES BOOKS will be publishing our book, *BEGONIAS: The Complete Reference*. It will be available through the Thompsons in June, 1981, and in bookstores.

*Information on 2,475 species and cultivars
Begonias in all growing environments
Extensive glossary and bibliography
All the latest information available*

• 384 PAGES • PRICE \$35

WOULD YOU LIKE US TO RESERVE
AN AUTOGRAPHED COPY OF THIS BOOK FOR YOU?

If so, send **NO MONEY** now; just send name and address to
Ed and Millie Thompson
P.O. Drawer PP, Southampton, N.Y. 11968

**OVER 850 ILLUSTRATIONS • 150 IN COLOR
700 IN BLACK AND WHITE**

ASSOCIATED GROUPS/Visitors always welcome

ALFRED D. ROBINSON BRANCH

2nd Tuesday, 10:30 a.m.
Homes of members
June Rakestraw, Pres.
5458 Avenida Fiesta, La Jolla
CA 92037
Margaret Lee, Natl. Dir.

ASTRO BRANCH

Gloria Quinn, Pres.
234 Tallant Dr., Houston
TX 77076

BUXTON BRANCH

3rd Saturday, Mass. Bay
Community College,
50 Oakland St., Wellesley, Mass.
Percy Ehrlich, Pres.
66 Fessenden St., Newtonville,
MA 02160
Anthony P. Croce, Natl. Dir.

CENTRAL SAN JOAQUIN BRANCH

Mary L. Lane, Pres.
19239 Road 232, Strathmore,
CA 93267
William Ireton, Natl. Dir.

CHEEKWOOD BRANCH

Homes of members
Pam Braun, Pres.
Rt. 6, Pinewood Rd.,
Franklin, TN 37064

CONNECTICUT BRANCH

4th Monday, Homes of members
Arline Peck, Pres.
Eagle Peak Rd., Pascoag, RI
02859
Priscilla Beck, Natl. Dir.

DESERT BEGONIA BRANCH

Mary Church, Pres.
1090 E. Grant Rd.,
Tucson, AZ 85719
Barbara Rogers, Natl. Dir.

EAST BAY BRANCH

3rd Thursday, 7:45 p.m.
Northbrea Community Church,
Berkeley, Calif.
Susan Patrick, Pres.
27406 Grand View Ave.,
Hayward, CA 94542
Glen Maynard, Natl. Dir.

EASTERN NEW YORK BRANCH

Betty Pullar, Pres.
411 New Karner Rd., Albany, NY
12205
Betty Pullar, Natl. Dir.

EASTSIDE BEGONIA BRANCH

4th Wednesday, 7:30 p.m.
590 116th Avenue N.E.,
Bellevue, Wash.
Dale Greer, Pres.
1704 212th Ave. S.E., Issaquah,
WA 98027
Shelton Fisher, Natl. Dir.

EDNA STEWART PITTSBURGH BRANCH

3rd Wednesday, 7:30 p.m.
Pittsburgh Civic
Garden Center
Suzanne Colaizzi, Pres.
115 Lillian Rd., Pittsburgh,
PA 15237
Frank Kerin, Natl. Dir.

ELSA FORT BRANCH

Helen Green, Pres.
2100 Hunter St., Cinnaminson,
NJ 08077
Gladys Cooper, Natl. Dir.

FRED A. BARKLEY BRANCH

1st Sunday, Homes of members
Merril Calvert, Pres.
11201 Draper, Choctaw,
OK 73020
Ruth Wills, Natl. Dir.

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

GARDEN GROVE BRANCH

3rd Thursday, 7:30 p.m., New
Community Meeting Center
11300 Stanford, Garden Grove,
CA 92643
Doug Frost, Pres.
10622 Teal, Garden
Grove, CA 92643
George Allison, Natl. Dir.

GLENDALE BRANCH

2nd Tuesday, 8:00 p.m.
Glendale Federal S & L,
401 N. Brand, Glendale, Calif.
Edward Yeckley, Pres.
634 Fischer St., Glendale,
CA 91205
Katharine Alberti, Natl. Dir.

GREATER CHICAGO AREA BRANCH

4th Sunday, except Dec., 2 p.m.
Oak Park Conservatory
561 Garfield, Oak Park, Ill.
Dan Haseltine, Pres.
6950 W. Nelson St., Chicago,
IL 60634
Virginia Beatty, Natl. Dir.

GREATER CINCINNATI BRANCH

Verda Stull, Pres.
5 Burnham St., Cincinnati, OH
45218
Erich Steiniger, Natl. Dir.

HAMPTON BRANCH

2nd Monday, 7:45 p.m., Parish
Memorial Hall, Southampton,
NY
Ed Thompson, Pres.
310-A Hill St., Southampton,
N.Y. 11968
Mury Burnaford, Natl. Dir.

HOUSTON TEXAS BRANCH

4th Monday, 1:00 p.m., Garden
Center, 1500 Herman Dr.,
Houston, Tex.
Mrs. B. A. Russell, Pres.
5926 Jackwood St., Houston
TX 77074
Gwen Brunka, Natl. Dir.

JACKSONVILLE BRANCH

3rd Monday, 7:30 p.m.
Agricultural Ctr.,
1010 North McDuff Ave.
Ann M. Helton, Pres.
334 Brunswick Rd.,
Jacksonville, FL 32216
Mary Harrell, Natl. Dir.

KNICKERBOCKER BRANCH

2nd Tuesday, 7:30 p.m.
Horticultural Society of New
York
128 West 58th St., New York,
N.Y.
Howard Berg, Pres.
16 Highview Terr.,
New Canaan, CT 06840
Marjorie Mack, Natl. Dir.

LONG BEACH PARENT CHAPTER

2nd Sunday, 1:30 p.m., Great
Western S & L
6330 E. Spring St., Long Beach
George Ghiotta, Pres.
702 Sunrise Blvd., Long
Beach, CA 90806
Muriel Perz, Natl. Dir.

LONG ISLAND BRANCH

2nd Wednesday, 8:00 p.m.
Planting Fields Arboretum
Oyster Bay, Long Island, N.Y.
Mrs. Martha Graham, Pres.
55 Duryea Rd., Melville,
NY 11746
Marie Donnelly, Natl. Dir.

MAE BLANTON BRANCH

4th Wednesday, 10 a.m.
Homes of members
Mae Blanton, Pres.
118 Wildoak Dr., Lake
Dallas, TX 75065
Glennis Crouch, Natl. Dir.

MIAMI BRANCH

4th Tuesday, 8:00 p.m.
Simpson Memorial Garden
Center
55 South West 17th Road,
Miami, Florida
Dr. James A. McArthur, Pres.
22175 Miami Ave., Goulds,
FL 33170
Charles J. Jaros, Natl. Dir.

MINNESOTA BRANCH

2nd Wednesday, 7:30 p.m.
Homes of members
Gladys Olmsted, Pres.
1840 Eighth St., Elk River,
MN 55330
Thelma Adair, Natl. Dir.

MONTEREY BAY AREA BRANCH

4th Wednesday, 8:00 p.m.
New Monterey Neighborhood
Center
Lighthouse and Dickman Sts.,
New Monterey, Calif.
Jackie Davis, Pres.
170 Wingfoot Way, Aptos, CA
95003
Leslie Hatfield, Natl. Dir.

NORTH LONG BEACH BRANCH

2nd Tuesday, 7:30 p.m.
Mercury S&L
4140 Long Beach Blvd., Long
Beach
Edith Van Landingham, Pres.
6925 Lime Ave., Long Beach,
CA 90807
D. G. Sullinger, Natl. Dir.

ORANGE COUNTY BRANCH

2nd Thursday, 7:30 p.m.
Fullerton S & L, 2310 E. Lincoln
Ave., Anaheim
Norma Taylor, Pres.
1500 Glenn Circle, Placentia,
CA 92670
Cruz Sandoval, Natl. Dir.

PALM BEACHES BRANCH

2nd Monday, Home S & L
Opp. Palm Coast Plaza, W. Palm
Beach, Fla.
April Foster, Pres.
564 Arlington Dr., W. Palm
Beach, FL 33406
Elverna Maley, Natl. Dir.

PALMETTO BRANCH

Lucille Peden, Pres.
4 Wildwood Dr., Greenville,
SC 29607
John McWhorter, Natl. Dir.

PALOMAR BRANCH

2nd Thursday, 7:30 p.m.
Vista Recreation Center
Charles Richardson, Pres.
696 Barsity St., Vista,
CA 92083
Patrick Worley, Natl. Dir.

POTOMAC BRANCH

4th Sunday, 2:00 p.m.,
National Arboretum
Blandensburg & R. Sts., N.E.,
Washington, D.C.
Maxine Zinman, Pres.
Rte 1, Box 73, Boyce, VA 22620
Carrie Karegeannes, Natl. Dir.

REDONDO AREA BRANCH

4th Friday, 7:30 p.m., R. H. Dana School Cafeterium
135th St. and Aviation Blvd.
Hawthorne, Calif.

Diane Fries, Pres.
3531 Creeklewood, St.,
Torrance, CA 90505

Diane Fries, Natl. Dir.

ROGER WILLIAMS BRANCH

3rd Monday night, Homes
of members.

Arlene Peck, Pres. & Natl. Dir.
Eagle Peak Rd., RFD #1,
Box 478, Pascoag, RI 02858

RUBIDOUX BRANCH

4th Thursday, 7:30 p.m.

West Riverside Memorial
Auditorium
4393 Riverview Dr., Rubidoux
Claire Husted, Pres.
13580 Indiana, Corona, CA
91720

R. H. Terrell, Natl. Dir.

SACRAMENTO BRANCH

3rd Tuesday, 7:45 p.m.,

Garden Center
3330 McKinley Blvd.,
Sacramento, Calif.
Patricia Jochim, Pres.
7664 Madeline Way,
Citrus Heights, CA 95610
Linda Luckett, Natl. Dir.

SAN FRANCISCO BRANCH

1st Wednesday, 8:00 p.m.,

Garden Center
Golden Gate Park, 9th Avenue
and Lincoln Way
Omund Stromswold, Pres.
71 Ashton Ave., San Francisco,
CA 94112
Susan Muller, Natl. Dir.

SAN GABRIEL VALLEY BRANCH

2nd Tuesday, 7:30 p.m., Los

Angeles State and County
Arboretum
501 N. Baldwin Ave., Arcadia,
Calif.
Eugene T. Schriber, Pres.
136 N. Sunset Pl., Monrovia,
CA 91016
Ken Dahlquist, Natl. Dir.

SAN MIGUEL BRANCH

1st Wednesday, 7:30 p.m., Casa
del Prado, Rm. 104, Balboa
Park, San Diego

Pat Maley, Pres.
1471 E. Madison, El Cajon, CA
92021
Paul Lee, Natl. Dir.

SANTA BARBARA BRANCH

4th Saturday, 7:30 p.m.
Louise Lowry Davis Recreation
Center

1232 Da la Vina St.
Kathy Morehouse, Pres.
5410 P. eo Orlando,
Santa Barbara, CA 93111
Kay Willis, Natl. Dir.

SANTA CLARA VALLEY BRANCH

3rd Thursday, 7:45 p.m.

Allstate Savings, Payne
& Saratoga Aves., San Jose
Jackie Davis, Pres.
170 Wingfoot Way, Aptos,
CA 95003
Mary Margaret Rafferty,
Natl. Dir.

SEATTLE BRANCH

3rd Tuesday, 7:30 p.m., Bethany
Lutheran Church, 7400
Woodlawn Ave., N.E.

Dorothy Williams, Pres.
21519 92nd Ave. W., Edmonds,
WA 98020
Anton Soder, Natl. Dir.

SOUTH SEATTLE BRANCH

4th Tuesday, 7:30 p.m.,

Wm. Moshier Field House
430 S. 156th St., Seattle
Joanne Slosser, Co-Pres.
16419 3rd Ave., S.W., Seattle,
WA 98166
Bud Lueth, Co-Pres.
1302 Sixth Pl., N.E., Auburn,
WA 98002
Shel Fisher, Natl. Dir.

SOUTHWEST REGION

Robert Hamm, Dir.
2951 Elliott, Wichita,
Falls, TX 76306

TACONIC BRANCH

Mrs. John V. Steiner, Pres.

Bullet Hole Road, Mahopec,
NY 10541

Mrs. John V. Steiner, Natl. Dir.

TAMPA BAY AREA BRANCH

4th Thursday, 7:30 p.m.

Seminole Garden Center,
5800 Central Ave., Tampa
Dora Lee Dorsey, Pres.
8110 N. Edison Ave., Tampa,
FL 33604

Martin Grady, Natl. Dir.

THEODOSIA BURR SHEPHERD BRANCH

1st Tuesday, 7:30 p.m., Seior

Citizens Bldg., 420 Santa
Clara St., Ventura, Calif.
Mary Stine, Pres.
5548 Rainier St., Ventura, CA
93003

Hattie Lee Keller, Natl. Dir.

WESTCHESTER BRANCH

1st Thursday, 7:30 p.m.

Westchester Women's Club
8020 Alverstone St., Los Angeles
Clair Christensen, Pres.
11276 Washington Blvd.,
Culver City, CA 90230
Millie Simms, Natl. Dir.

WESTERN PENNSYLVANIA BRANCH

2nd Wednesday, 11 a.m.

Holiday Inn, Warrendale
Antonette Ponteri, Pres.
407 Canterbury Trail, Mars, PA
16046
Agnes Hodgson, Natl. Dir.

WHITTIER BRANCH

1st Thursday, 7:30 p.m., Palm

Park Community Center
5703 South Palm Avenue,
Whittier
Gertrude Blackstock, Pres.
15311 Embrook Drive, La
Mirada, CA 90628
Dorothy Kosowsky, Natl. Dir.

WILLIAM PENN BRANCH

4th Tuesday, noon, Homes of
members

Mrs. Herbert S. Webster, Pres.
"Millbridge" 13 Summit Dr.,
Bryn Mawr, PA 19010
Mrs. Lancelot Sims, Natl. Dir.

**"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 3 1/2 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

ABS NEWS/Showtime!

The 1981 season is starting for branch shows.

Redondo Area Branch will stage its show and sale on May 2-3 at Hawthorne Plaza shopping center in Hawthorne, Calif. (See advertisement on page 97.)

Jacksonville Branch will follow on May 15-16 with its "Begonia Portraits" show at Regency Square-West Mall, 9501 Arlington Expressway, Jacksonville, Fla.

Theodosia Burr Shepherd Branch will participate in a plant societies' show June 27-28 at Ventura County Fairgrounds, Ventura, Calif. Also on exhibit and for sale will be African violets, bonsai, fuchsias and other plants. (The branch also will host the ABS convention August 14-16.)

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 librarian. Contact him for a list of books available. Include a stamped, self-addressed envelope. The bookstore also sells reproductions of antique begonia prints.

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

BEGONIAN MINI-ADS

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

Begonias: Over 100 rhiz., rex, canes. List 45¢. 20 diff. \$15.95 pp. Semps 50¢. Ferns, cactus. Atkinson's Greenhouse, Rt. 2, Morrilton, AR 72110.

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

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

Rare & unusual Begonias, including new Lowe hybrids. Rooted & unrooted cuttings. No shipments to Calif. Price list 50¢ Paul Lowe, 1544 West Rd., Lake Park, FL 33403.

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. 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.

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.

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

Begonias. Blue ribbon winners. Odd. Rare. Unusual. Price list available. Tropical Greenery, formerly Begonia Paradise Gardens, 22140 S.W. 152 Ave., Goulds, FL 33170. (305) 248-5529.

Hundreds of begonias. Send for descriptive catalog. \$1. Millie Thompson, P.O. Drawer PP, Southampton, NY 11968.

Don't miss an issue . . .

Check address label.

If your membership expires within 3 months, renew today. Send to:

Elisabeth Sayers, membership secretary
369 Ridge Vista Ave.
San Jose, CA 95127

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



**Begonias/Episcias/
African violets**

Cuttings only—catalog \$1

Kit Jeans The Gift Horse Greenhouse
Rt. 1, New Johnsonville, TN 37134

**The Indoor Light Gardening Society
of America Inc., Dept. B,**

128 West 58th St., New York, NY 10019
Dues \$8.00. Magazine LIGHT GARDEN
published 5 times yearly,
cultural guides, seed exchange,
round robins, chapters, slide library.

Plant Shop's Botanical Gardens

New Begonia Catalog \$2.00 (incl. postage)—
over 100 drawings and 600 plants listed—re-
funded with first order. Staghorn Poster \$4.00
(incl. postage). Inquire about rare plant catalog.
18007 Topham, Reseda, CA 91335
(213) 881-4831 Open Wed-Mon, 9 am-5 pm

Seeds of new Streptocarpus and Be-
gonias plus seeds of rare and exotic
plants from collectors worldwide.
Yearly subscription to newsletters
and seed lists. USA \$5.00, Foreign
\$6.00 (US). RARE SEEDS, PO Box
616B, Silverton, OR 97381.

PORTER'S TROPICALS, INC.

*Begonias Ferns Rare Plants
Collector's Items*

Open Mon. thru Fri. 9-4 Shipping
or by appointment \$50 minimum
19102 Bond St., Orange, Ca. 92669 (714) 997-2581

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

Address correction requested

ANTONELLI BROTHERS

2545 Capitola Road
SANTA CRUZ, CALIFORNIA 95060

36-page color catalog 25 cents

*Join the NATIONAL
FUCHSIA SOCIETY*

MEMBERSHIP \$9.00 per year
includes monthly FUCHSIA FAN
"The New A to Z on Fuchsias", a hardcover book,
\$11.95 plus \$1.00 shipping (residents add 72c tax)
Mail to: National Fuchsia Society, Dept. B
340 Moss St., Laguna Beach, CA 92651

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

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

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



Non Profit Org.
U.S. POSTAGE

PAID

Permit No. 655
South San Francisco, CA