

September 1979

The BEGONIAN



The BEGONIAN

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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.

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THE COVER: *B.* 'Jack Golding' photographed by Thelma O'Reilly in the garden of Doug and Goldie Frost of Garden Grove, Calif. See story on the begonia, page 208, and on the ABS convention chaired by Jack Golding, page 209.

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NOTES/ *From the editors*

For some time, large numbers of ABS members have had serious trouble with *Begonian* delivery. Sometimes regular third-class copies arrive before those of members with first-class subscriptions. At other times the magazine doesn't arrive at all.

These circulation problems became apparent quickly upon our appointment as editors, and we are doing what we can to help the appropriate officers resolve them.

If you know someone who did not receive this issue (or any other), please tell the person to follow this procedure: send a note stating the problem to the membership secretary, with copies to us, the president, and the business manager (addresses on opposite page).

The membership secretary will send out a copy of the magazine and we will keep track of names of members who are having delivery problems. When we receive the computer-printed labels for the next issue, we will check the names to see if they're included. We will inform the other officers if we discover names are missing.



We'd like to publish the ABS branch directory in November—and after that it will appear quarterly. It had been scheduled for July, but financial problems forced us to publish fewer pages.

Since many branches elect officers in September, we need your help in getting updated information for the directory.

Branch secretaries are required to notify the ABS secretary of the election of new officers. But since a new ABS secretary is being elected, and her identity was not known at press time, we'd like you to do this: send a note as soon as possible to us (826 Santa Rita Ave., Los Altos, CA 94022) with the name of your president and his or her address, the name of your national director, and the location and time of branch meetings.

If branch elections will be held in the near future, wait and send us updated information. If we don't hear from all branches within about two weeks, we'll probably wait until December to publish the directory.

When we know who the new secretary is, we will pass on to her all

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Begonia profile: B. 'Jack Golding'

Thelma O'Reilly

I was touring the garden of Goldie and Doug Frost last spring looking for specimen begonias to photograph. My eyes were captured by a handsome, large leaved, shrub-like begonia that looked tantalizingly familiar.

When Doug told me it was *B.* 'Jack Golding' I was amazed because in my acquaintance with this begonia I had never seen a specimen with such large leaves that undulated in a flirtatious manner.

I fell in love on the spot, vowing to grow *B.* 'Jack Golding' to its full potential.

Thelma O'Reilly's love affair with B. 'Jack Golding' is well-known to those who've heard husband Tim comment on the situation at convention banquets. Thelma lives with begonias and bromeliads, and ever-patient Tim, at 10942 Sunray Place, La Mesa, CA 92041. This is one part in her series of occasional Begonia Profiles. Thelma is a co-director of the ABS nomenclature department.

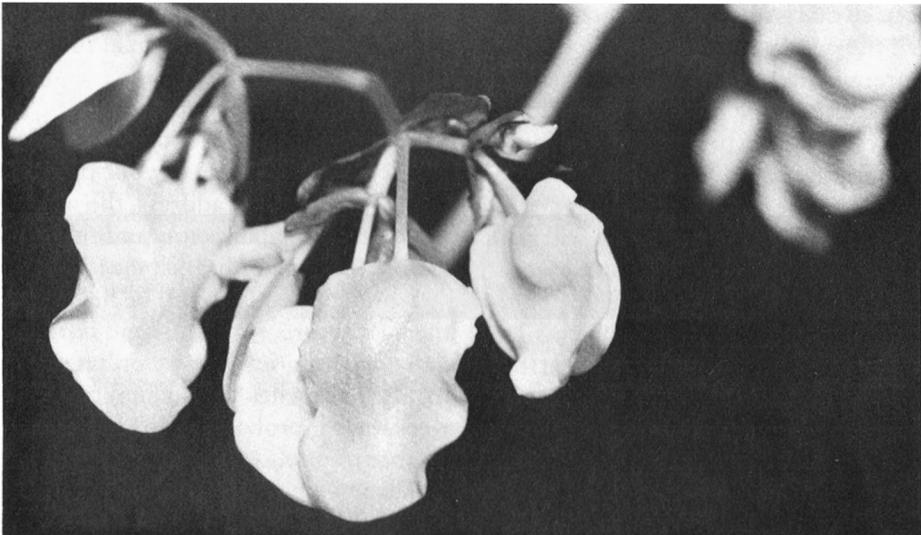
The Frost specimen, pictured on the cover, had sparsely hairy, 9½-by-6½-inch ivy green leaves with undulating margins and a satin sheen. Including the wooden tub, this elegant plant stood 2½ feet high.

A few weeks later, I visited Mabel Corwin and saw her beautiful begonia collection. She had a stunning specimen of *B.* 'Jack Golding', although the leaves were not quite as large as those on the Frost plant. When I exclaimed about it, she shared three large tip cuttings, which slowly developed into more vigorous plants than I had previously grown.

More than a year later *B.* 'Jack Golding' has not reached its full potential. Its leaves are 7 by 4½ inches and just beginning to undulate. It displays five bloom stalks. Each lime green peduncle supports a tall inflorescence of several pristine white buds covered with a lacquer-like sheen. Each bud

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Photo/Thelma O'Reilly



Pristine white flower buds on *B.* 'Jack Golding' resemble huge tear drops

Begonias in the Big Apple Sept. 14-16

The first-ever ABS convention and show outside California will take place Sept. 14-16 in New York with an extensive program of begonia seminars, a talk on tropical plants by author Charles Marden Fitch and a Sunday tour of world-famed Brooklyn Botanic Garden.

Jack Golding, famous New Jersey begonia grower and begonia nomenclature authority, is chairman of the convention, dubbed "Begonias in the Big Apple."

Jack will present one of five seminars Friday and Saturday. His 10:30 a.m. Saturday topic is "The Botanical Classification of *Begonia*." He lectures and writes regularly on begonias and plant growing under lights. He is co-author of *The Species of the Begoniaceae* and is revising it for publication by the Smithsonian Institution.

A related seminar will be given by ABS nomenclature co-directors Carrie Karegeannes and Thelma O'Reilly on "Species, Cultivars and Codirectors" Saturday at 3:30 p.m. following the ABS annual meeting. Carrie has researched and written about begonias for nearly 20 years. She and Thelma, an avid longtime begonia grower and writer, were named to head the nomenclature department in 1978.

Ed and Millie Thompson, enthusiastic growers and authors of the monumental *Thompson Begonia Guide*, will discuss "The Magnetism of Begonias" in a seminar Friday at 2:30 p.m. They have researched, written about, and photographed begonias for many years. Millie is ABS research director.

"Miniature, Dwarf and Bonsai Be-



gonias" will be described by Corliss Engle, prominent Eastern begonia grower, in a seminar at 3:30 p.m. Friday.

Joy Logee Martin of the family which operates Logee's Greenhouses in Danielson, Conn., will talk about "Rex Begonia" at 9:30 a.m. Saturday.

Friday evening dinner will be followed by "At Home With Tropicals," the talk by Fitch. He is a widely known lecturer and photographer who has written such books as *The Complete Book of Houseplants* and *The Complete Book of Houseplants Under Lights*, both of which include begonia chapters.

The convention and show will be presented at the Skyline Motor Inn, 10th Avenue at 49th Street. Directions on getting to the hotel were published on page 201 of the August *Begonian*.

The 50-acre Brooklyn Botanic Garden will be toured Sunday from 9:30 a.m. to 1 p.m. The famed garden includes a conservatory with a large collection of tropical plants.

On Saturday night, a dance will follow the banquet, which includes installation of 1979-80 officers and announcement of winners of major ABS annual awards.

The ABS annual meeting is scheduled for Saturday noon.

B. pavonina, the begonia with blue leaves

David Lee

The most strikingly colored of all begonias I have seen grows in the rain forests of the Malayan Peninsula in Southeast Asia. Observed directly, this begonia's leaves are a brilliant iridescent blue, this color turning to green and then a dull yellow as one changes the viewing angle.

English botanist H. N. Ridley described the plant scientifically from only two locations. This extreme rarity may be partly a function of the inadequate scientific collection of most tropical rain forest vegetation; I have seen it in a couple of other places on the peninsula (one population was since destroyed).

Although difficult to grow, this beautiful plant is bound to become popular, and there may soon be more plants in collections than in the wild.

Ridley named this plant *Begonia pavonina*, the specific name meaning "peacock-like." The blue leaf color is reminiscent of the brilliant blue feathers of that bird. Having recently worked in Malaysia for four years, I took the opportunity to become well-acquainted with this plant.

The natural history of the "peacock begonia" is a fascinating story which also helps explain why extra care is needed in growing it.

The plant grows only in the most shady and damp places of the ever-wet rain forests of the Malayan Peninsula. This environment poses a severe chal-

lenge for plant survival because of so little sunlight, which is needed for photosynthesis. Also, the many layers of overhead foliage absorb the most useful portions of the light spectrum, leaving little for the plants on the ground.

The amount of sunlight reaching the ground in these dense forests may

This beautiful plant is bound to become popular, and there may soon be more plants in collections than in the wild

be less than 1% of that above, and perhaps as little as 0.1% of the wavelengths of light used by the plants.

The peacock begonia has many adaptations, including the iridescent blue color, that enable it to survive in this dim environment.

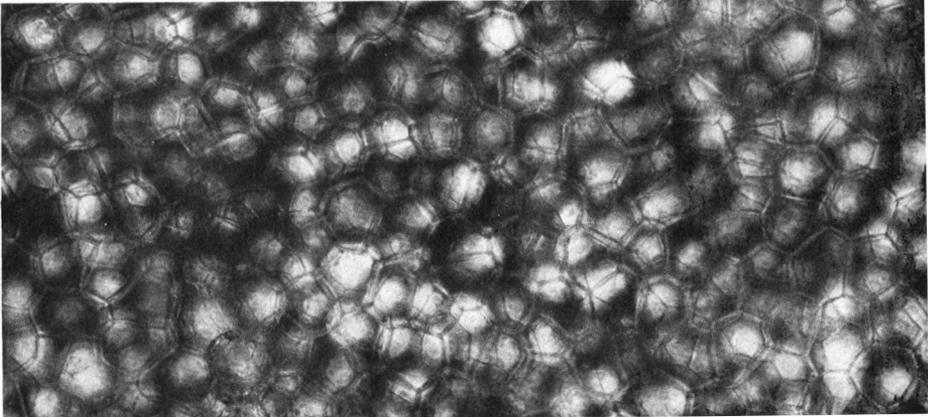
The blue color of these plants is not caused by a pigment. It is the physical result of interference, caused by thin membranes in structures of the upper layer of cells. This iridescent blue color is not uncommon in butterflies or birds, but it is exceedingly rare in plants.

Other examples of colors caused by interference include the rainbow colors caused by oil on a rain puddle and the anti-reflection coatings of camera lenses. All plants—including other flowering plants and several ferns—with metallic blue leaves live in the same tropical rain forest environment.

The coincidence between color and environment supports the contention that the color is no mere decoration but that it must serve a specific function.

In such shady places, plants have

David Lee learned about the "peacock begonia" while teaching at the University of Malaya, Kuala Lumpur, Malaysia. He earned his bachelor's degree at Pacific Lutheran University, and received his M.S. and Ph.D. degrees from Rutgers in botany. Presently self-employed, he can be contacted at Box 471, Warwick, NY 10990.



Microscopic view of *B. pavonia* leaf surface shows six-sided epidermal cells above palisade cells

many adaptations that enable them to operate as efficiently as possible, taking sunlight and carbon dioxide and converting them into sugars. The iridescent blue color may be the most spectacular of these adaptations because it helps determine what light is absorbed and reflected by the leaf.

A New Zealand friend, Brian Lowry, and I were able to demonstrate that when blue light is reflected much more red light—the most abundant for photosynthesis on the rain forest floor—is absorbed.

Peacock begonias are adapted to very shady environments in many ways. Cells of the uppermost layer, the epidermis, function as lenses in refracting the diffused sunlight toward the sites of photosynthesis, the chloroplasts. These are situated in an arc on the bottom of the second layer of leaf cells, the palisade parenchyma.

Sun leaves of other plants contain large spaces between the two cell layers. As these spaces reflect much sunlight, there are no such spaces in *B. pavonina*. Immediately beneath the chloroplasts, in the next layer known as mesophyll, is a high concentration of anthocyanin pigments. Anthocya-

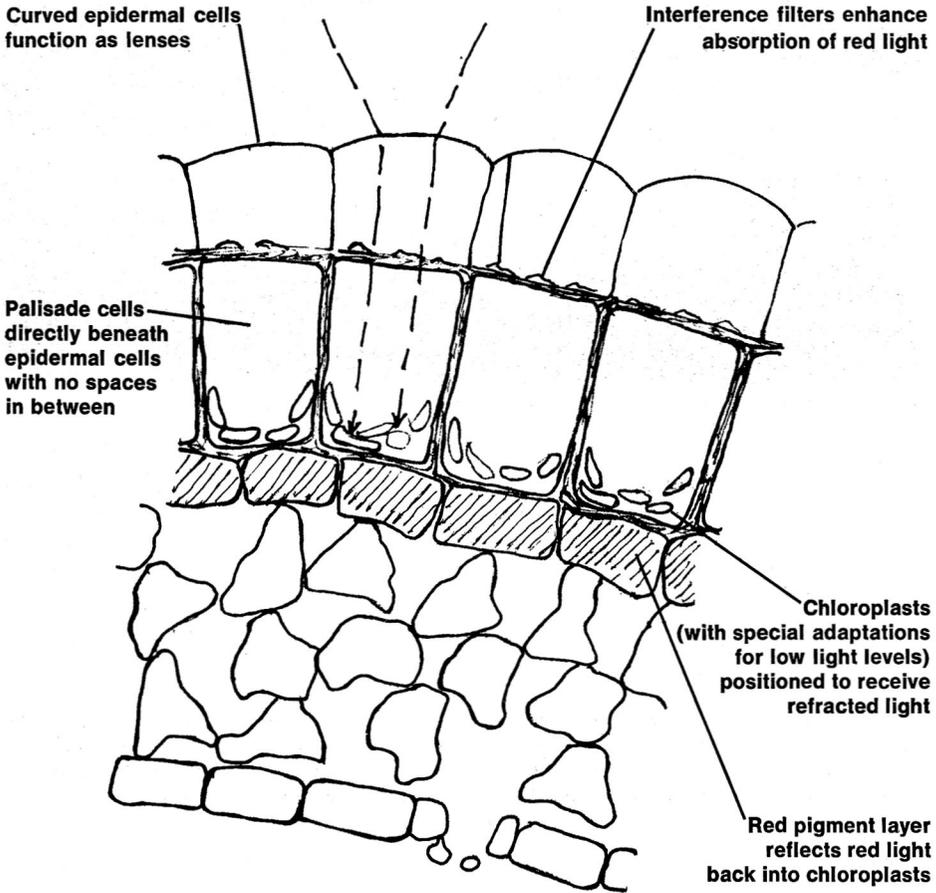
nins help reflect red light back into the chloroplasts.

The leaf shape, as in many begonias, is asymmetrical, allowing closer packing and less overlap. The plants are 97% water, held erect by simple fluid pressure in the cells. The total is much higher than those from more typical environments. Sun-tolerant leaves of other species are typically 65% water, with many synthesized compounds for support.

Peacock begonia plants naturally grow in the upper half-inch or so of soil. If the plants are subjected to drought—to which they are extremely sensitive—the leaves die and the small rhizomes may start producing new ones. Lack of evidence of absorption by root hairs indicates that symbiotic fungi (mycorrhizae) may be important for the survival of these plants.

From what we already know about these plants, it is possible to create conditions that should insure good growth and health.

Bright, open sunlight may damage the leaves of these plants; they prefer deep shade. In fact, the iridescent blue leaves develop only in plants growing in deep shade. They should also be



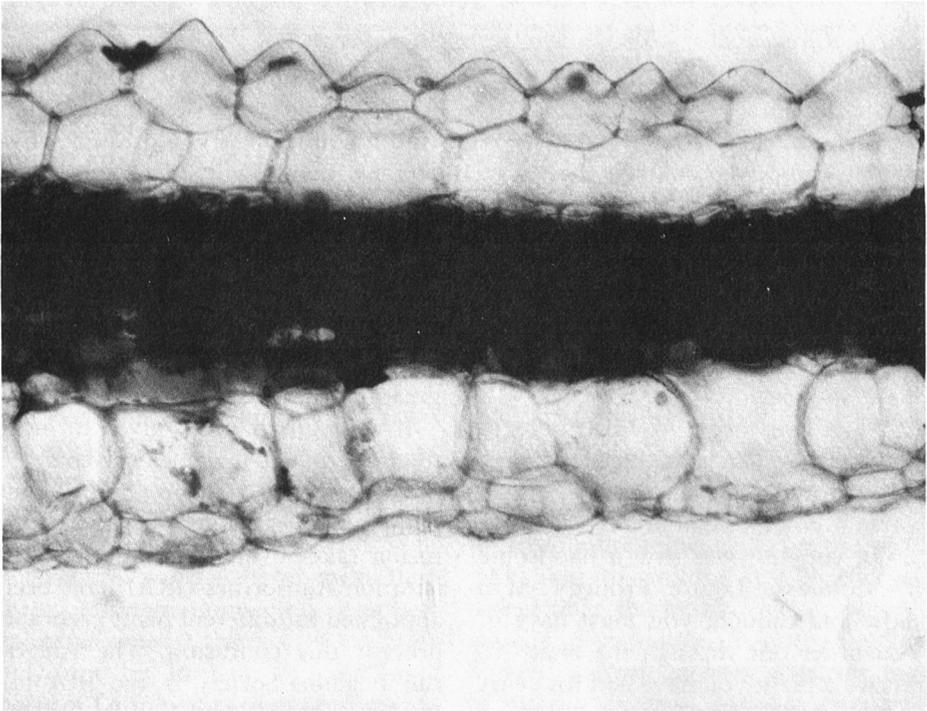
Cross-section of *Begonia pavonina* leaf showing its various adaptations to low light conditions

grown with plenty of moisture, the rhizomes placed shallowly in very humusy soil.

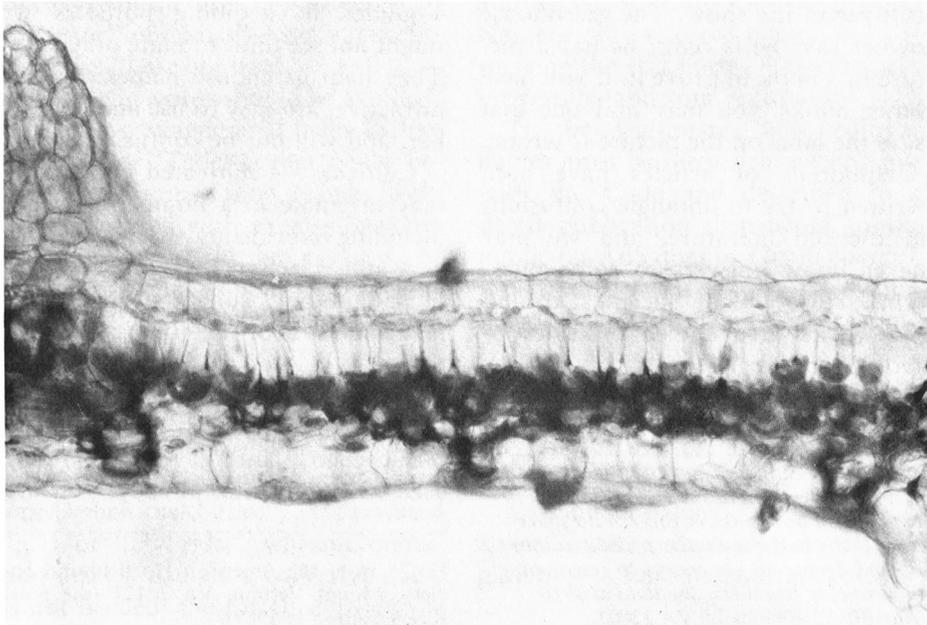
Frequent misting and avoidance of hot and dry conditions are also essential. Only in these optimal conditions will the plants thrive—and produce their spectacular blue leaves. Find a shady and cool—and therefore more humid—corner of your house in which to grow the peacock begonia. Move the plant around until you find the right conditions.

Is *Begonia pavonina* unique in the iridescent blue color of its leaves? Not quite. A year after I had left Malaysia, I received an air mail parcel sent by a friend and colleague, Ben Stone. It contained an even more beautiful blue iridescent begonia collected from some high mountain on the peninsula. It is a new species with a scientific description not yet published.

We have much to learn—about begonias and otherwise—in the rich rain forests of Southeast Asia.



Layers of cells with different functions show clearly in these microscopic cross-sections of *B. pavonina* leaf photographed by David Lee. Top photo illustrates the curved shape of epidermal cells in top layer. Photo below shows distinct layers of cells including those in red pigment layer (dark gray in photo). Compare with drawing on facing page.



Nomenclature rules and why they're there

Carrie Karegeannes, ABS Nomenclature Co-director

Rules, rules! Why can't I name my new begonia anything I want?

You can, of course.

But—suppose you have produced a batch of unusual seedlings, grown them on, chosen the best one, and let two or three friends (perhaps in another state) grow cuttings from it. They are excited about it, and so are you. You name it 'Black Beauty'; that fits it so nicely.

When you begin to distribute it, you hear: "That isn't 'Black Beauty'. I already have 'Black Beauty', and it doesn't look like that at all!"

Or, suppose you saw a handsome *B. 'Comtesse Louise Erdoedy'* at a show and thought you must have it. You order one through the mail—to receive a plant you have had for years as 'Spiraled Beefsteak Begonia'. Some of your friends call it 'Spiraled Feastii' and others *B. 'Erythrophylla Helix'*, but it looks nothing like that *B. rex* cultivar in the show. The greenhouse owner says he is right; he has a picture in a book to prove it. If you have other books, you may find one that says the label on the picture is wrong.

Hundreds of articles have been written to try to untangle confusions in the old literature, and we may never know answers to some questions. Hence plant societies around the world have agreed on rules to avoid more tangles.

You *can* name your exciting new cultivar *B. 'Black Beauty'* if you insist

—but ABS cannot register and publish it. It will not be a legitimate name. And if you want to enter it in a show, you no doubt will be told it is incorrectly identified.

Registering and publishing the names of new cultivated varieties (cultivars) is designed to help the grower, the show competitor, the researcher—all of us. Registration is of great importance to stability.

If the same name is given to more than one plant, if names are changed or forgotten, if we have no idea what plant a name belongs to, then confusion takes over. International Registration Authorities (IRA) have been appointed for different plant genera to prevent this confusion. The American Begonia Society is the IRA for *Begonia*.

The rules to help with new names are given in the *International Code of Nomenclature of Cultivated Plants**—guides to avoiding potholes we might not see until too late otherwise. They help us choose names that are attractive, are easy to use and remember, and will not be confusing.

Cultivars — cultivated varieties — may originate in a number of ways, including hybridizing species or cultivars and selecting the best seedlings, self-pollinating cultivars, inbreeding plants and selecting until a distinct form is developed, or propagating mutations (sports) that keep their new traits when reproduced.

If certain plants have been widely used in hybridizing already, you are

Carrie Karegeannes is an editor at the NASA History Office, where she recently has been working on books about the Apollo spacecraft. If she had her druthers, she'd quit her job and devote all her energy to researching and growing begonias. She lives at 3916 Lake Blvd., Annandale, VA 22003.

*\$1.75 from the American Horticultural Society, Mount Vernon, VA 22121 (the most recent edition is 1969).

more likely to produce a new and different plant by avoiding those. Try something new! You will want your own name attached to distinctive plants, ones that won't be lost among a number of look-alikes and soon forgotten. Friends in other areas (only a few if you want to compete for new introduction awards) could grow your plant cuttings to see if it is different from the ones they know.

New cultivars are given "fancy" names, in modern language, markedly different from Latin botanical names. We keep the old names dating from before 1959, with only a change of style, but all the new ones follow the Code.

Names should preferably consist of one or two words—never more than three (abbreviations and numbers count as words). Names of cultivars may not be formed by combining parts of Latin names of parent species. An initial article (such as "The") should not be used. Names should not begin with abbreviations ("Mrs." is an exception). Forms of address (such as "senor" or "Miss"—again, excepting "Mrs.") are not used.

Very long words should be avoided, as well as exaggerated names (like 'Reddest' or 'Tallest') that could become inaccurate in time. Names likely to be confused with existing begonia names also should be avoided, of course, as well as ones already in use.

If you feel it useful in special instances to give a collective name for all seedlings of a cross, that should be made clear. A collective name may be a phrase in modern language, in not more than three words, including a word such as "grex" (abbreviated "g.") or "Hybrids," without quotation marks. Usually a collective name is not needed; the formula giving the

parents is sufficient. The individual cultivars—the distinctive plants that are selected to be introduced—need individual cultivar names whether a collective name has been given to the cross or not.

Cultivar names are written with initial capitals and enclosed in single quotation marks. When they follow a collective name, the collective name is usually in parentheses: *Begonia* (Something grex) 'Something Else'.

If a collective, or grex, name is given, it stands for all crosses of the same parents, no matter when made or by whom, even if the parents are reversed.

Seedlings of a cross of two species, or from inbred lines, may be all much alike, but it is still the best practice to select only the best to name, propagate, and introduce. A self-pollinated hybrid, a cross between a species and a hybrid, or cross between two hybrids will nearly always produce varied seedlings. Those selected for introduction should be clearly distinct and given separate cultivar names. Naming only selected plants and destroying the rest hurts—but enhances the results (and your reputation).

To be legitimate, new cultivar names must be formed in accordance with the Code and described in a dated publication distributed to the public (as ABS does in *The Begonian*). Illustrations when possible are recommended, and the description should tell how the cultivar is different from others and how it may be recognized. The Code encourages sending a dried specimen to a public herbarium when this can be arranged.

Of course, names may not be registered against the wishes of the originator—or for a nonexistent cultivar.

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Carrie Karegeannes and Thelma O'Reilly, Nomenclature Co-directors

(In citations of cultivar parents, the female (seed) parent is listed first. The first three cultivar names were registered by Rudolf Ziesenhenné. All have been recommended by at least one grower besides the originator.)

No. 714—*Begonia* (*B.* 'Green Gold' × *B.* 'Crimson Glow') 'Kay Padavan'

Rex Cultorum group; rhizomatous. Leaves are pea green with red overcast and deep-red margins, spiraled, with smooth surface; 5"-6" × 3½"-4"; 7-veined; petioles red, 12"-14"; stipules ½"-¾". Flowers are deep pink, star-shaped, ¾" × ¼"-½", with 6 female tepals, 2 to 3 flowers on a stalk, and a 2"-2½" peduncle, blooming in winter and early spring. The pea-green leaves, overcast with a red sheen and marked with outlined dark-brown veins, distinguish this cultivar. Rhizomes grow close to the soil and petioles stand upright. Originated in 1976 by Louis T. Padavan, Box 127, Remsenburg, NY 11960; first bloomed in 1977, first distributed in 1978, and was described in the *Twiglette* in May 1979. Registered October 2, 1978, by Rudolf Ziesenhenné.

No. 715—*Begonia* (unnamed *B. rex* cultivar × unnamed *B. rex* cultivar) 'Manuel'

Rex Cultorum group. Leaves are deep maroon and olive green with maroon edging, broad, unlobed, with a pointed tip, 11" × 8"; surface bumpy and rough; 8-veined; petioles 10". Flowers are white shaded rose, 1½" × 1¼", with 4 male and 5 female tepals and 7" peduncle, blooming in early fall. Originated in 1976

by Barbara Rowe Philip, 600 Camino Campana, Santa Barbara, CA 93111; first bloomed in 1976, first distributed in 1979. Registered October 12, 1978, by Rudolf Ziesenhenné.

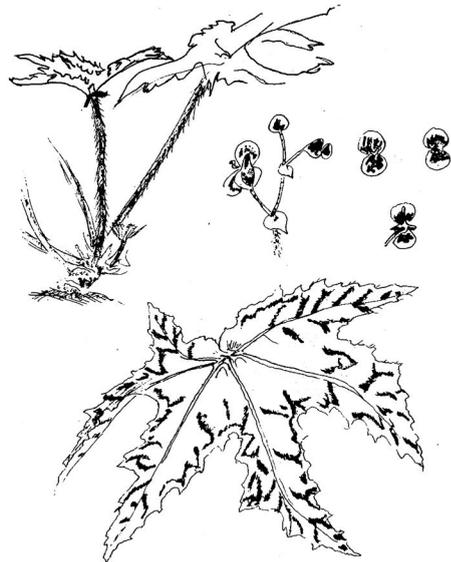
No. 716—*Begonia* (unnamed *B. rex* cultivar × unnamed *B. rex* cultivar) 'Sonya'

Rex Cultorum group. Leaves are maroon-purple with a very faint silver band, cordate with subentire margin, 9" × 6"; surface satiny, rough; 12-veined; petioles about 7". Flowers are white, 1¼" × 3¾", with 4 male and 4 female tepals and 9"-10" peduncle, blooming in early fall. Originated in 1977 by Barbara Rowe Philip (address above); first bloomed in 1977, first distributed in 1979. Registered October 17, 1978, by Rudolf Ziesenhenné.

No. 717—*Begonia* (*B.* 'Helene Jaros' × *B.* 'Helene Jaros') 'General Landon'

Rhizomatous. Leaves are yellow-green with chocolate-brown hash marks, cleft, with overlapping basal lobes, smooth and

Drawing/Kit Jeans



***B.* 'General Landon'**

Applications to register Begonia cultivars may be obtained from Thelma O'Reilly, 10942 Sunray Place, La Mesa, CA 92041. 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.

succulent, 4" × 4", with 6 pale-green veins and ciliate margin; petioles red, hairy; stipules yellow, chartaceous. Flowers are pink, 3/4", with 2 male and 2 female tepals, blooming in spring. *B.* 'General Landon', unlike its difficult parent, is a vigorous grower and is distinguished by deeply cleft, vividly patterned leaves. Originated in 1977 by Kit Jeans, Rt. 1, New Johnsonville, TN 37134; first bloomed and was distributed in 1979. Registered July 14, 1979.

No. 718—*Begonia* (*B.* 'Elda Haring' × *B. acetosa*) 'Carolina Moon'

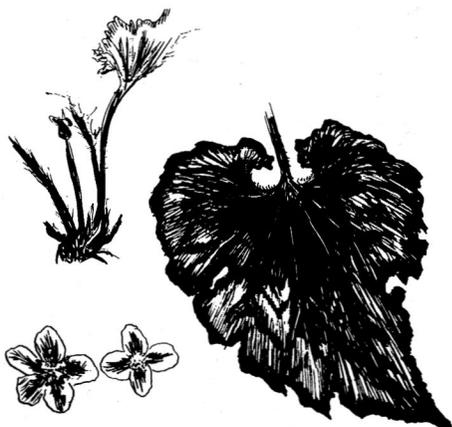
Rex Cultorum group; rhizomatous. Leaves are silvery pink, cordate, 4" × 6", with glabrous, slightly puckered surface and ciliate margin; 6- to 7-veined; petioles red, hairy, 6"-8"; stipules red, chartaceous. Flowers are two-toned pink, of typical *B. rex* shape, 1"-1½" with 4 male and 4 female tepals and 4"-8" peduncle, blooming in spring. Unusual parentage has produced a begonia distinguished by a more bullate leaf and silvery coloring than on the seed parent and with the more rounded shape of the pollen parent; growth is reminiscent of the pollen parent. Originated in 1977 by Kit Jeans (address above), first bloomed in 1979. Registered July 14, 1979.

Drawing/Kit Jeans



***B.* 'Carolina Moon'**

Drawing/Kit Jeans



***B.* 'Maxine Wilson'**

No. 719—*Begonia* (*B.* 'Venetian Red' seedling × *B. listida hort.*) 'Maxine Wilson'

Rex Cultorum group; rhizomatous. Leaves are shades of red overlaid with a smoky cast, ovate, 5" × 8", with a double sinus curl at the base, a ruffled and slightly ciliate margin, and a velvety surface; 7- to 8-veined, petioles red, hairy; stipules red, chartaceous. Flowers are two-toned pink, of typical *B. rex* form, 1"-1½", with 4 male and 5 female tepals, in winter and early spring. Shades of green on young leaves show the color influence of the male parent. As leaves mature, the pink to dark-red shades develop, margin ruffles deepen, sinus curls become more prominent, and leaves take on a smoky haze, creating a distinct begonia. Originated in 1977 by Kit Jeans (address above); first blossomed in 1979. Registered July 14, 1979.

No. 720—*Begonia* (unnamed *B. rex* cultivar × unnamed *B. rex* cultivar) 'Elegant Victoria'

Rex Cultorum group; upright rhizome. Leaves are silver with center mauve overlay and a green-speckled band edged with lavender at leaf border, 8" × 12", cordate with full sinus curl and semi-entire margin, the curl doubling over in the back; surface rugose; 9-veined; petioles 10". Flowers are light pink with 4 male and 4 female tepals and 10" peduncle, blooming in late winter. This cultivar is

distinguished by a longer leaf than is typical, a single full curl, and a clean, clear pattern. A "new look," says Keith J. Mautino, tester of this begonia. Originated in 1976 by Barbara Rowe Philip (address above); first bloomed in 1977, first distributed in 1979. Registered July 14, 1979.

No. 721—*Begonia* (B. 'Red Planet' × *B. carolineifolia*) 'Dusky Shadows' (Synonym 'Dusk')

Rhizomatous. Leaves have plum-red mazelike pattern on dusty-green background and are unequally cordate with shallowly lobed margin and medium-thick, crisp texture; 7" × 5"; 7-veined; petioles tan with red dashes and soft brown hairs; stipules green with red edge, persistent. Flowers are pale pink with green ovaries, round, 1¼", with 2 male and 2 female tepals, blooming winter to spring. Soft brown hairs on nearly all plant parts become sparse as plant matures, giving a dusty appearance to

the strikingly patterned leaves on this vigorous plant. Originated by Leslie Woodriff, 1100 Griffith Road, McKinleyville, CA 95521, in 1976; first bloomed in 1977, first distributed in 1976. Tested by Thelma O'Reilly and Ronnie Nevins. Registered July 14, 1979.

Drawing/Thelma O'Reilly



B. 'Dusky Shadows'

More nomenclature

Continued from page 215

Registration is acceptance of a name by a registration authority (ABS for begonias) and inclusion of the name in a register. Inclusion in a register doesn't automatically imply judgment of distinction or merit, but the Code urges testing before naming and asks that we indicate whether new cultivars have been tested when we publish their registration.

We are also to record the name and address of the originator and introducer, where and when the cultivar has been described if it has been published before, the parents (when known), and any awards received.

ABS registration forms provide space for this information, as well for details of appearance and size. Filling in all the blanks will permit publication of a good description. Illustrations that are clear enough for publication would be useful.

The nomenclature co-directors will check your names to see that they have not been used before, will help you meet the Code requirements—and publish your brand new names!

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Easy to grow: unfussy B. 'Apple Pie'

Elda Haring

A year or so ago I received a most welcome gift of fairly small-growing begonias all of which are known as the "Wally Wagner Windowsill Hybrids." As I understand it, these were all grown from seed of a cross of the miniature *B. bowerae* and *B. 'Eppley'*.

Wally Wagner is a past president of ABS and has a large commercial greenhouse business in Oregon. (He does no mail order business except for rare seeds which he collects from all over the world.)

Of these begonias sent to me two were especially appealing as I found they would grow delightfully in 3-to-4-inch pots so desirable for small spaces.

These two are *B. 'Apple Pie'* with green leaves black stitched on the edge with a fringe of hairs as has its parent, *B. bowerae*, and *B. 'Bethlehem Star'* which has small leaves about 1½ inches long, rounded, almost black with a white spot where the leaf meets the stem.

Both hold their flowers on rather short stalks quite close over the crown of leaves. The others I have been growing, *B. 'Comanche'*, *B. 'Mountain Man'*, *B. 'Stallion'*, *B. 'Mustang'*, and *B. 'Longhorn'*, I find are most attractive plants but for specimens eventually need to be grown in 5-inch pots. In my opinion, though, this size is not too large for the window grower.

These hybrids are not fussy about soil mixes whether the packaged kind, those I mix myself containing some

This is the third in a series about easy-to-grow begonias by Elda Haring, who devotes a great deal of energy to helping novice growers. Elda's Question Box column appears on page 222 this month.



B. 'Apple Pie'

Photo/Walter Haring

topsoil, or the so-called soilless mixes containing no nutrients.

They respond readily to feedings of well-balanced water soluble fertilizers such as Miracle Grow, Rapid-Gro, Plant Marvel or a constant feeding of Schultz Instant Liquid. They propagate readily by leaf and rhizome cuttings.

Although this group of begonias can take quite a bit of neglect, they must not be overwatered for they will suffer root rot and die. Let the top of the mix get quite dry before re-watering.

It has been my experience that it is better to put the pots in a container of water and let the water be drawn up to the top rather than practicing top watering, which sometimes rots rhizomes and leaf stems.

They must be observed carefully for water requirements where you live. Here in the mountains of western North Carolina, we have an average of 45 to 50 inches of rain each year and normal outdoor humidity fluctuates from 30% on sunny days to 70% on cloudy and rainy days.

I find the Wally Wagner Windowsill Hybrids are very happy in my greenhouse in winter with a minimum temperature of 55 degrees. They must be in filtered sunlight for the sun in win-

Please turn to page 220

More notes

Continued from page 207

the notices we receive from branches, and in the future she will compile the directory changes.



In December *The Begonian* will publish Christmas greetings from branches in advertisements. Deadline for the issue is Oct. 15, so now's the time to write some copy and send it along with a check to Advertising Manager Pam Mundell (see inside cover for address and rates).



New dues rates—and therefore new *Begonian* subscription rates—will go into effect Oct. 1 in keeping with action by ABS directors (see page 223).

Annual dues, including a third-class mail subscription, will be \$10.

More B. 'Apple Pie'

Continued from page 219

ter here is unusually strong and will bleach the leaves.

In the east window of my sunporch they are beautiful and most happy. Under lights, the leaves tend to become much darker with deeper blotches.

All in all, I think members of this group of cultivars are well worth adding to one's collection. They are interesting, some of them having curled leaves, easy to grow, and take up little space.

B. 'Apple Pie' originally was named B. 'Goldie Frost' and some growers still use the earlier designation. The name was changed by hybridizer Wally Wagner. The plant has not been registered under either name.—Editors

**SANTA BARBARA BRANCH OF THE
AMERICAN BEGONIA SOCIETY**
invites you to its meeting each month
except July at 7:30 p.m.,
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DO COME!

Foreign subscriptions including Mexico and Canada will be \$10.50. A first-class subscription, including one to Mexico or Canada, will be \$13.50. Foreign air mail subscriptions will be \$25.



Awright, let's be upfront about things like this: there was an . . . uh, well . . . *error* in the July issue. Our caption identified the leaf illustrated on page 168 as *B. 'Merry Christmas'*. It's *B. 'Happy New Year'*. (Close, though.)

—C.A. & K. B.

More B. 'Jack Golding'

Continued from page 208

dangles from its pedicel like a huge tear drop.

Southern California experienced record-breaking cold weather last winter and record-breaking heat on more than one occasion this spring and summer. *B. 'Jack Golding'* withstood these adversities like a trooper.

It roots easily from stem cuttings, prefers a fast-draining, porous potting mix and needs a heavy hand with fertilizer. If you give it these requirements, it responds by sending up several basal shoots. This plant is a must for every begonia collection.

B. 'Jack Golding' (B. paranaensis x B. 'Jill Adair' selfed seedling) was hybridized in 1969 by Belva Kusler who has created many choice begonias for us to grow and treasure. In 1970 Jack Golding assisted in the preparation and distribution of "The Kusler Hybrid (Begonias) Family Tree."

Jack, author, lecturer, judge and grower of begonias for many years, received the ABS' prestigious Eva Kenworthy Gray Award in 1978.

B. 'Jack Golding' bears Reg. No. 508.

ROUND ROBINS/ *Greenhouse cooling fans*

Mabel Corwin

There was a discussion of cooling and ventilating fans in one of the greenhouse flights. John Yochum, Indiana, reported:

One source that you may have overlooked is "muffin" fans offered for sale by various electronics dealers who frequently advertise in *Popular Electronics* and similar magazines. Most such fans operate off regular 110-volt AC current.

Although they are usually used (removed from surplus equipment), they are entirely satisfactory for greenhouse or home use. Generally the ones that I have purchased are six to eight inches square and really move the air.

Waiting to harden off

Diane Fries, California, used to transplant small babies into community pots and harden them off. Now she puts each small plant into an individual cup (the kind you get sauce or dressing in at a restaurant).

She doesn't harden them off until they are much larger. They seem to take the change much better when they are larger.

Indoor compost

Zelma Clark, New York, told about her composting method:

We shred leaves in the fall and, in addition to a couple of compost piles outdoors, I put some in large garbage containers and keep them in the base-

ment during the winter.

We mix the leaves with commercially bagged topsoil, sand, a little lime, and 5-10-5 fertilizer. Once or twice during the winter we empty the containers, stir up the mix, and put it back in the cans.

By spring it's beautiful. I use it as a basic mix, adjusting it for various plants.

A cupful of seeds

Bernard Yorke, Australia, reports success starting seeds in boiled peat moss in a plastic drinking cup. Instead of a hole in the bottom, he makes a hole in the side of the cup.

Pat Maley, California, writes: I start my seed in two-inch pots. Ten of them fit in a plastic shoe box (keep the lid on). When I transplant them, they go into five- by eight-inch foil baking pans with holes punched in the bottom.

I use a coarser mix than the fine seed mix. This is put into a plastic bag and put back on the light garden shelf where they were started. Over a week or two I gradually open the plastic bag to harden them off. Then they are moved out to the greenhouse.

When they are really young like that, give them plenty of light. As they get established and get larger, they can be moved to lower light situations.

Better pH

Arlene Waynick, South Carolina, found her potting mix had a very low pH. Her rex begonias were pale and anemic. She started watering once a month with one tablespoon of dolomite lime to a gallon of water. The new growth on her rexes is beautifully colored.

Mabel Corwin, round robin director, will send a newly revised flight list and other information about joining a round robin—a packet of letters circulated among begonia lovers—if you write to her at 1119 Loma Vista Way, Vista, CA 92083.

QUESTION BOX/ *How to make semps bushy*

Elda Haring

Question: Which begonias would you suggest that one should *not* buy because they are difficult to grow?

Answer: I could not make such a suggestion. A begonia that I find difficult to grow under my conditions might grow like a weed where you live.

Question: Do I need to pinch back semps to keep them bushy? Should I pinch out the top shoots or the top shoots with small new leaves near the stem?

Answer: If your begonias have been blooming all winter indoors, cut all old flowering stalks back to new growth. If, however, they are not yet in bloom, merely pinch out the top inch of each shoot to encourage branching.

Some semps are self-branching. If at present they are well branched, it should not be necessary to do any pinching unless you feel they are too leggy.

Question: What is a safe fumigant smoke bomb for a home greenhouse?

Answer: I do not recommend a fumigant smoke bomb for the home greenhouse. These should only be

used by commercial growers who can take proper precautions.

Two smoke generators (not bombs) are recommended by Claire Blake, author of *Greenhouse Gardening for Fun*. These are Plant Fume 103 for greenhouses 5,000 cubic feet or larger and Fulex Smoke Generator for smaller houses.

I have never used a fumigant in my greenhouse for I do not feel that any is truly safe for such use.

If you do use one, follow directions explicitly and put a large "No Admittance" sign on the door. Never use these in a lean-to greenhouse attached to house or garage because the smoke penetrates the most minute crack or opening.

The only spray I use in my greenhouse is a pyrethrin-rotenone spray. For those plants which have a habit of mildewing, I use a fungicide in a Windex bottle and treat only the plant in question. I never use a spray with a fine mist that might get in the eyes or on the skin or be breathed into the lungs.

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

Photo/George Ball Co.

A compact, floriferous semper-florens begonia is the result of proper pinching



Dues to go up Oct. 1

An increase in annual ABS dues to \$10 from the present \$6 will go into effect Oct. 1 following authorization by society directors.

Final vote was 41-12.

Directors present at the regular June board meeting voted 16-6 in favor of the hike. In a mail ballot, directors not present—including branch national directors—voted 25-6 in favor, according to ballot counting committee chairman Wanda Elin.

The increase was proposed as a way to ease society financial problems including a cash flow shortage.

ABS donations exceed \$2,500

An anonymous donation of \$1,000 topped the list of 29 branches and individuals who contributed \$2,514 to help ABS solve its financial woes.

President Nathan Randall and Treasurer Eleanor Calkins expressed appreciation for the widespread voluntary support of ABS by individual members and branches.

Board members appeared pleasantly surprised at the magnitude of donations when an accounting was presented at the July 29 meeting.

In addition to the \$1,000 anonymous donations, contributions were received from:

Alfred D. Robinson Br.—\$25; Buxton Br.—\$200; Eastern New York Br.—\$15; Eastside Begonia Br.—\$15; Edna Stewart Pittsburgh Br.—\$25; Garden Grove Br.—\$50; Glendale Br.—\$50; Greater Cincinnati Br.—\$25; Hampton Br.—\$25; Houston Br.—\$100; Jacksonville Br.—\$100; Long Beach Parent Br.—\$25; Miami Br.—\$100; Minnesota Br.—\$50; Monterey Bay Area Br.—\$25; Orange County Br.—\$50; Sacramento Br.—\$124; San Miguel Br.—\$100; Theodosia Burr Shepherd Br.—\$75; Westchester Br.—\$100; Southwest Begonia Growers Assn.—\$100;

Katharine Alberti—\$10; LaVerne Carpenter—\$25; Judy Hansen—\$5; Elda Haring — \$50; Marie Harrell — \$15;

Jeanne Vertefeville—\$15; Mr. & Mrs. Rudolf Ziesenhenn (in memory of Erika Weber, past president of the Santa Barbara Br.)—\$15.

Big plans for western show

A Saturday afternoon tour to Descanso Gardens in La Canada has been added to the schedule for "Begonia Galleria," the western regional show and sale in Glendale, Calif., Oct. 5-7.

Show coordinator Darlene Fuentes said the Saturday night banquet will benefit the ABS treasury. Tickets at a donation of \$10 per person and Descanso Gardens bus trip reservations are available until Sept. 30 from Darlene at 2313 Hollister Terrace, Glendale, CA 91206.

Although the event takes place at Glendale Galleria, Central and Colorado streets, Darlene has designated the Holiday Inn, 600 N. Pacific, Glendale, as an out-of-town members' gathering place. A bus will ferry members to the Galleria twice daily.

Darlene said "support from all of the West Coast branches" of ABS will help the organizers. The show, she said, is meant "to build the ABS treasury and to draw in new members."

Branches have been contacted with requests to supply sale plants and show schedules have been sent to branch presidents. Members needing show schedules may contact Darlene.

Board revises ABS constitution

ABS directors have revised provisions of the ABS constitution and bylaws dealing with membership categories, makeup of the board of directors, amendment of the constitution and bylaws, and dates of annual conventions.

The board voted unanimously at its July 29 meeting to make the changes after presentation of a report by the constitution and bylaws committee chaired by Ralph Corwin. The changes will go into effect after they are presented to the annual meeting in New York this month and published in *The Begonian*.

As revised, the constitution and bylaws

will provide for membership categories of annual, life, honorary, sustaining and benefactor; add the immediate past president as a society officer; give regional organizations the same representation as branches; and require annual conventions to be held between Aug. 20 and Oct. 1. Changes also were made to clarify mail balloting procedures.

Plant societies' N.Y. show

ABS branches will be among plant societies collaborating to present the New York City House Plant Societies Show Oct. 6-8 at New York Horticultural Society headquarters, 128 W. 58th St. in Manhattan.

Plants will be for sale and information on culture of various kinds of indoor plants will be available.

Long Beach convention set

The 1980 ABS convention will be held at the Holiday Inn in Long Beach, Calif. in September, ABS directors have decided.

The board selected Sept. 18-21 as its first choice for a date to avoid a conflict with the Jewish holy day Rosh Hashanah. If the hotel is unavailable, an alternate date of Sept. 11-14 was picked.

Doug Frost, one of the organizers, reported that a block of 50 rooms will be reserved, plus meeting space. He said the society has been quoted room rates of \$31 for a single, \$39 double, and \$5 for each extra person.

October show in Texas

The Houston Branch of ABS and the Astro Begonia Study Club will present their first-ever show and sale Oct. 27-28 at Houston Arboretum, 4501 Woodway, Houston.

Members will lecture at 11 a.m. and 2 p.m. each day. Show hours are 10 a.m.-5 p.m.

Entries must be registered on Friday, Oct. 26, between 10 a.m. and 2 p.m. The show schedule published in the June *Begonian* will be used minus divisions G and H.

Exhibit and sale in Connecticut

Five Connecticut plant societies including ABS will hold an exhibit and sale Sept. 29 at Silas Diane Shopping Center in Wethersfield, Conn.

Also involved are gloxinia and gesneriad, saintpaulia, fern, and indoor light gardening societies.

September board meeting

There will be a short meeting of the ABS Board of Directors at the New York convention. No other details were available at press time.

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Linda Miller, director, Clayton M. Kelly Seed Fund

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- SP 3 — *B. liebmannii*: Mexico. Rhizomatous. Leaves lobed, with light markings of silver on green. Underside red. Flowers are large, white in inflorescences.
Germination time: 11 days. per pkt 1.00
- SP 4 — *B. mollicaulis*: Tropical Africa. Shrub-like with soft green leaves covered with white hairs. Flowers white in pendulous clusters.
Germination time: 8 days. per pkt 1.00
- SP 5 — *B. multangula*: Java. A newly discovered species that is shrubby, 2-3 ft. high. Leaves 10 in. long, lightly lobed. Flowers are white, borne under the leaves, fruits succulent, remaining on the plant for 6 months or more.
Germination time: 15 days. per pkt. 1.00
- SP 6 — *B. multinervia*: Costa Rica. New species that is upright, about 2 ft. high. Leaves dark green, glossy. Flowers small but in large bunches, white.
Germination time: 7 days. per pkt 1.00

HYBRIDS

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- SP 9 — *B. 'Mont Blanc'*: Semperflorens-type with green foliage and white flowers. per pkt. .50
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- SP 15 — *Sinningia pusilla*: The smallest . . . has tiny lavender flowers, the plant itself not getting more than 2 inches across. per pkt .75

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The Plant Shop's Botanical Gardens, 18007 Topham, Reseda, CA 91335, (213) 881-4831—Welcome Wed thru Sun, 10 am-6 pm. Progressive catalog, \$2.00, refunded with first order. Poster of 18 species staghorns, \$4.00.

Woodriff's Fairyland Begonia Hybrids. List 25¢. Visitors welcome. Leslie & Winkey Woodriff, Fairyland Begonia and Lily Garden, 1100 Griffith Rd., McKinleyville, CA 95521. (707) 839-3034. SPECIAL—Collection of Curly Cloud—everblooming, Pink African Violet Begonia—everblooming, Burgundy Velvet bright colored rhizomatous begonia \$15 prepaid. Plus Calif. sales tax.

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