

July-August 1985

The BEGONIAN

The BEGONIAN

Publication of the American Begonia Society

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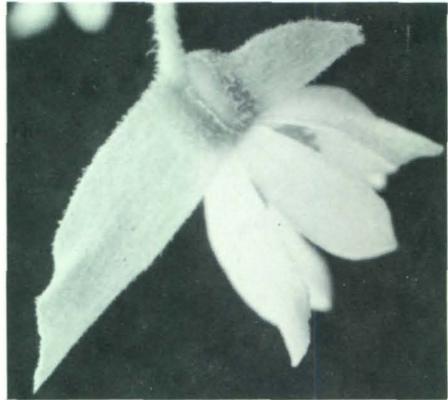
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A Scott Hoover Collection	76
A Simple Summerhouse	77
Cane Showcase	79
Colorful Leaves on Cane Begonias	81
Hostas, the Perfect Shade Plant	83
<i>Begonia lachaoensis</i>	85
Book Review: <i>Begonias—1984 Update</i>	89
Question Box	90
Round Robin	92
A Case of Mistaken Identity	94
More Question Box	96
Board Minutes	97



The Cover:

Presenting *Begonia novogranatae*, formerly known as *Begonia quetamensis* and listed as BUI87. The tuberous species was collected by Scott Hoover at Pittier National Park in Venezuela. The wing on the female blossom,

shown above, is one of its outstanding features. The photographs and story on page 76 were done by Thelma O'Reilly and the plant was grown by Patrick Worley.

NEWS/ Annual Meeting Call

ABS ELECTION

The following persons have been nominated for the term beginning in September 1985:

- President: Margaret Lee
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Ballots and candidate summaries were prepared by a committee headed by the secretary and sent to members as designated by the membership chairman. Ballots are to be marked and returned in time to reach the Ballot Counting Committee Chairman at least six days before the annual meeting. Ballots containing any marks other than in the box designated are not valid.

ANNUAL MEETING

Installation and Dinner

Saturday, September 7

to be held in conjunction with

The Sacramento Branch
Show and Sale
at the Red Lion Inn
2001 Point West Way
Sacramento, CA 95815
September 6-7-8

Reservations for the installation dinner are \$15.00 per person. Send payment to Chairman Betty Tillotson, 3912 Wildrose Way, Sacramento, CA 95826. Phone (419)363-9068.

Rooms at the Red Lion Inn will be \$52 per single, and \$60 double occupancy. Room reservations should be sent directly to the Inn.

Those driving to Sacramento will find the Red Lion Inn at the intersection of Route I-80 and Arden Way.

The call to the annual meeting was sent to members along with the election materials.

Continued on page 98

A SCOTT HOOVER COLLECTION – *BEGONIA* U187 Identified as *Begonia novogranatae*

Thelma O'Reilly

Venezuela was the country of origin on the bulging, soiled, crumpled envelope containing seed capsules collected by Scott Hoover and mailed to me in January 1980.

Seed in the packet labeled "Scott Hoover collection no. 187, Pittier National Park, Aragua, Venezuela," was sparse. Careful cleaning left about nine seeds each for the five recipients designated by Scott.

The following morning I planted my share. Within a month five seedlings were growing – slowly. Three survived to the time for the first transplanting. Mabel Corwin reported that she had a few seedlings of "SH 187." At this time I applied for a U number, and Phyllis Bates, the coordinator at that time, assigned *B. U187* to "SH187."

When my seedlings reached about seven inches they seemed reluctant to continue growing. As the leaves started to turn yellow, I decided the plants were approaching dormancy due to their tuberous habit. When foliage died back completely, I carefully examined the soil and discovered only one plant had formed a small tuber of hazelnut size. It was a disappointment when rot set in, destroying the tuber by November.

Mabel was more fortunate in the way she handled *B. U187*. When the growth cycle halted at about five inches, she gave a seedling to Patrick Worley. Under his "green thumb" and greenhouse conditions, *B. U187* continued to grow and flourish.

In March 1981, Patrick presented a program at the San Miguel branch meeting. Was I surprised and thrilled when he showed a blooming plant of *B. U187*? A few days later, laden with equipment, I visited Kartuz Greenhouses to photograph this beautiful, compact tuberous species.

With slides and research material on *Begonia* of Venezuela and Colombia, it was not difficult to tentatively identify this distinct species as *B. quetamensis* Smith and Schubert. Carrie Karegeannes supported this identification after studying my description and slides.

Thelma O'Reilly lives at 10942 Sunray Place, La Mesa, CA 92041. She is now Coordinator of the Unidentified Species Project for the ABS Nomenclature Committee.

The herbarium specimen labeled "Coll. number 12" was given to Lyman B. Smith on July 5, 1982. July 20, a letter from Dr. Smith advised that my herbarium specimen was *B. quetamensis* S&S.

I was captivated by the delicate beauty of *B. quetamensis*. It is a stemless, tuberous plant. New leaves, petioles, and peduncles are covered with pubescence having the appearance of white, wet fur that becomes minutely pubescent-pilose as the plant reaches maturity. Mature leaves are broadly ovate, acute, dentate, and clear green with a bright red dot at leaf blade-petiole joining. The inflorescence emerges from the base of the plant at the top of the tuber. Flowers are soft pink with deeper color on the largest wing. Male flowers have five (rarely four) tepals that are ciliate, serrate and finely pubescent. Five female tepals (rarely six) are unequal and broadly elliptic, ciliate, serrate and finely pubescent with three unequal wings. The largest wing, oblong and ascending, draws immediate attention.

Unfortunately, Kartuz's plant succumbed during the cold, wet winter of '84-'85. To my knowledge, there are no surviving plants from Scott's collection.

I understand Dr. Smith collected seed of this species in Venezuela, December, 1972. Jack Golding and Carrie Karegeannes raised plants from the seed, and Jack photographed and described *B. quetamensis*.

Begonia do not always stay "put." In *Phytologia* 54 (no. 7): 469 (Jan 1984), Lyman Smith and Dieter Wasshausen made *B. quetamensis* S&S *B. novogranatae* A. DC 1864.

Note: I would appreciate hearing from anyone growing this elusive species.

MEMBERS-AT-LARGE NEWSLETTER

The third number should be ready for mailing after the annual meeting. Thelma O'Reilly has been hampered in her activities by a problem with her right hand, so exact date is uncertain. A few copies of previous letters are still available.

Include a self-addressed, stamped envelope for each issue.

A SIMPLE SUMMERHOUSE FOR BEGONIAS

Lynda Goldsmith

Several years ago it became necessary for me to find a new solution to the problem of what to do with my begonias when I leave Vermont each summer. My collection had grown too large to ask anyone to take care of it; it seemed that putting the plants outside was the only answer. But what about watering and pest control? One year I had experimented with sinking several small pots into the soil in a moist, shady, shallow ravine not far from the house. When we returned a few weeks later for a brief visit, I found that every pot had been dug up and its contents emptied, perhaps by curious raccoons. Obviously the plants would have to be protected against mammals as well as insect pests.

The ravine seemed to offer the perfect location: a small stream that hides underground after the spring rains subside would supply moisture from below; the slight rise of land on either side would afford protection from strong wind; and the dense pine forest to the east and second-growth maple grove to the south and west would ensure ideal light conditions — no direct sunlight during the heat of the day, but some dappled light in the late afternoon (Fig. 1).

Sinking the pots into the ground still appeared to be the best solution to the watering problem, for the ravine was not within reach of the garden hose. Besides, I wanted a self-sufficient system. To avoid the hard work of digging a hole for each pot through the tough roots of native plants, a bed of four inches of

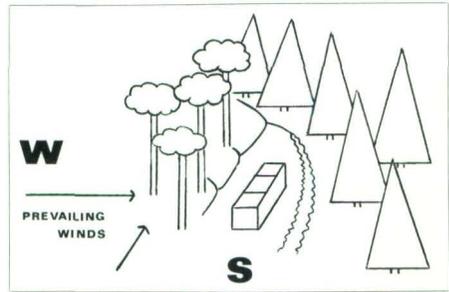
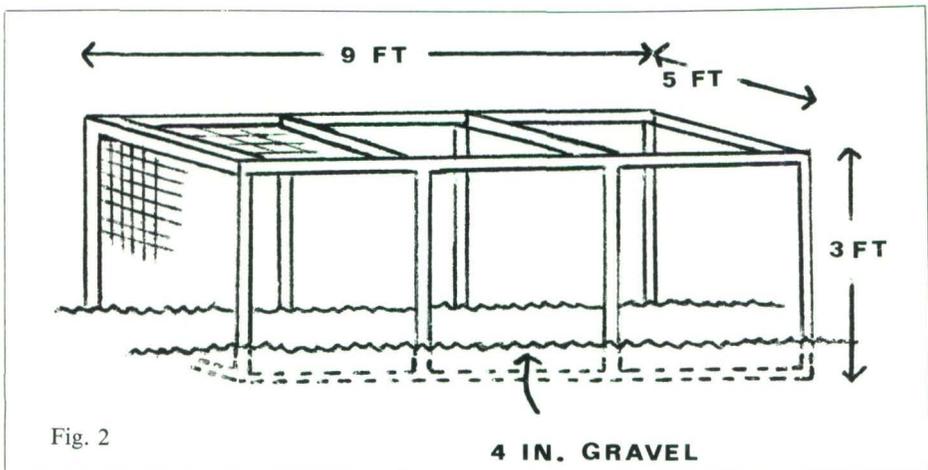


Fig. 1

gravel was prepared. I hoped that, with clay pots sunk to their rims in the gravel, enough water would be absorbed through the pots from the sandy but moist soil below them, but excess rainwater would drain quickly from them. In short, I was trying, without removing the plants from the pots, to simulate the natural conditions that keep the ferns and jewelweed in the ravine green and healthy through the extremes of summer weather.

In order to protect the plants from damage from above, a $9 \times 5 \times 3$ ft "summerhouse" was constructed of $\frac{1}{2}$ -inch wire hardware cloth with wooden two-by-fours for support (Fig. 2). The structure has no hardware cloth on the bottom. Instead, the lower part of it extends into the gravel. For ease in opening, the top is divided into three sections; the three lids fit closely together so that there are no gaps.

How have my plants fared? In the four years I have used the summerhouse I've lost probably fewer plants than when they were cared for by well-meaning but inexperienced





View of one section of the begonia summerhouse

friends. One particularly dry season resulted in the loss of about a fourth of the plants, but I've discovered it is the smaller, recently repotted plants that adjust less readily. Established plants in large pots thrive, some of them reaching the very top of the housing. In fact, they usually look so healthy that it is with regret that I bring them indoors in September. I keep them outdoors as long as possible, covering the structure with a tarpaulin when an early frost threatens.

Because they are not pinched and pruned during their period of maximum growth, my plants certainly would not win prizes at a begonia show. Moreover, they would lose points because of holes in leaves, for the application of systemic insecticide granules in late May is not enough to protect them for three to four months. But most are alive, and many thrive—and bloom—as they never have indoors. Even if I were at home all year, I would still summer my plants in this way. If I were to give them even a minimum of attention, such as a second application of systemic insecticide at midsummer and watering when a drought lasts more than two or three weeks, the plants would be beautiful indeed.

The summerhouse is still in excellent condition, after five hard winters, but I must take care to keep the covers on even when it is not in use, for if falling leaves were allowed to build up a layer of humus, a multitude of maple seedlings would soon take hold. Even so, after several years many small tree roots began to creep into the gravel, and if I do not chop the roots along the edge of the housing and disturb the gravel a bit each spring, they make their way right through the holes in the pots and rob the begonias of their time-release fertilizer. More protection from flying insects could be gained by adding a layer of window screening inside the hardware cloth, but at a sacrifice of some light.

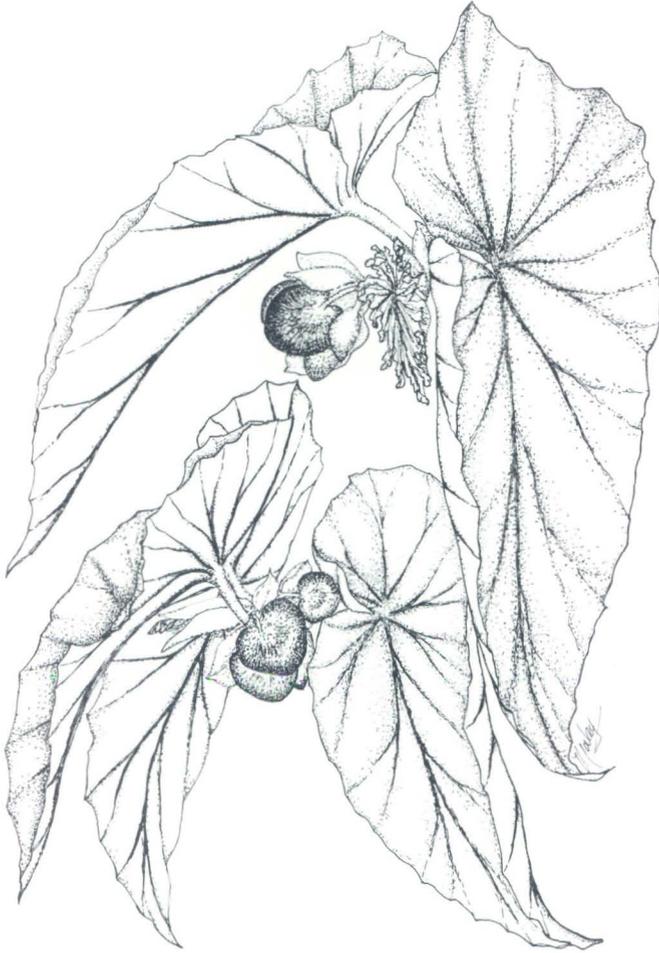
Not everyone has a ravine, or my particular needs, but other growers might find ways to adapt my begonia summerhouse to their own conditions and treat their plants to a season outdoors.

Illustrations by the author

Lynda Goldsmith grows begonias year round in Vermont, but she always spends the summer months in Maine. Her address is R. D. 2, Box 3850, Fairfax, VT 05454.

THE YEAR OF THE CANE/Cane Showcase

Pat Maley



Begonia 'Carolyn Collman'

Drawings by Pat Maley

Writing about my favorite canes could easily fill the *Begonian* from cover to cover, so I will try to spotlight just a few that I find very exciting. For now let's concentrate on low and intermediate canes.

One of my favorite low growing canes is *B.* 'FloBelle Moseley', a hybrid of *B. dregei* × *B.* 'Laura Englebert', developed by Mae Blanton

Pat Maley continues the series about cane begonias with suggestions of distinctive sturdy plants to grow. Pat lives at 7384 White Oak Drive, Placerville, CA 95667.

of Texas. Its dark mahogany leaves are finely notched and flared and beautifully set off the deep pink blossoms. This plant readily branches to form a low, spreading, compact plant. It is a real eye catcher.

Another Mae Blanton hybrid which is most satisfying is *B.* 'Evie Naomi', a hybrid of *B.* 'Helen Nicholson' and *B.* 'Laura Englebert'. The smooth grass-green leaves are slightly waved, and rose red blossoms light it up nearly year round. This begonia is classified as low growing (under two feet), but generally, I have found it to be in the two to three foot range,



though it could easily be kept smaller. *B.* 'Evie Naomi' really stands out bright and clear among other darker-leaved canes.

An all-time favorite among cane growers is *B.* 'Lenore Olivier'. This hybrid by Belva Kusler is no newcomer as it was registered #173 in 1961. It continues to be in high demand and somewhat hard to come by since it blooms so prolifically nearly year round that good cuttings are seldom to be had. The black-green leaves undulate, showing off their deep red reverse. The fragrant blooms, generally salmon pink, can vary greatly depending upon the light where the plant is grown. When Tovah Martin first listed it in a supplement to the Logee Greenhouse catalog, she mentioned that it had white blossoms. I wrote to her in confusion. She had been growing the plant in extremely low light and the blossoms were white. When she moved it to a brighter location it suddenly began to produce deep pink blossoms. Elda Regimbal of Fullerton, Ca.

grew a wall pocket of *B.* 'Lenore Olivier' in a location with a great deal of direct sun, and the dense, compact plant was covered with bright red flowers! This has been much used as a parent in later hybrids.

A midwestern hybrid is *B.* 'Carolyn Collman' from Hazel Harmon of Kansas. The leaves are dark green with red veins. The light green new leaves, with red veins showing brightly, are particularly distinctive. This plant blooms continuously and profusely with clusters of coral pink blossoms. While it can grow to 3 ft as an upright, I prefer it in a wall pocket, kept low and spreading.

Mr. Usemura of Japan gave us another beauty in *Begonia* 'Lubbergei', a hybrid of *B. dregei* with *B. lubbersii*. This is an easy grower with plenty of hybrid vigor. Its bronzy olive green leaves have deep red veins on the reverse, which glow through the leaf. *B.* 'Lubbergei' is a profuse bloomer, with very

Continued on page 94

COLORFUL LEAVES ON CANE BEGONIAS HYBRIDIZING WITH A PURPOSE



Begonia 'Harbour Lights'

Photo by Bill Cook

More than ten years ago, Sylvia Leatherman received a *Begonia* (later named 'Hawaiian Freakout') from Los Angeles State and County Arboretum staff member Charles Hewitt. Bob Cole got a plant from her and started to work on it. It was the inspiration for a whole series of hybridizing efforts with a very definite purpose in mind.

To produce this strange plant, Charles Hewitt of California Institute of Technology crossed a rex cultorum specimen with *Begonia* 'Hawaiian Sunset'. This upright rex had monstrous leaves, blackish green with light green markings and a center with some white and red spots. Most people who saw it frowned at it because it was not a typical *Begonia*.

At this time, one parent, *B.* 'Hawaiian Sunset' was at the height of its popularity. Everyone was eager to grow this graceful plant with its lax stems and medium-sized green leaves. The big attraction of the plant was not only

its nice appearance as a basket grown specimen but also its huge clusters of orange blossoms which everyone exclaimed about—definitely orange, not coral, not pink.

The other parent was a rex that Hewitt owned, an unnamed variety. The hybridization resulted in two plants being selected and grown by Hewitt and ultimately being registered by Cole with the ABS Nomenclature Department: Number 729 is *B.* 'Hawaiian Freakout' and Number 730 is sister seedling *B.* 'Hawaii Fifty'. Both of these were classed as rex cultorum with upright stems and non-spiral leaves.

While others were rhapsodizing over the orange colored blossoms, Bob Cole was considering the strange parentage of the hybrid—a rex cultorum combined with a canestemmed type! What if there were cane begonias with colorful zoned leaves like the rexes! This started Bob on a series of hybridizing trials using various canes and rexes. Many of the attempts to pollinate were unsuccessful, but finally *B.* 'Dolphin' came along. It never progressed beyond a six-inch high plant for Bob. Millie Thompson's test plant did better

Bob Cole hybridizes orchids and begonias at 18007 Topham St., Reseda, CA 91335. He has recently been on several plant explorations for his business, the Plant Shop.



Begonia 'Kathy Cook'

Photo by Ed Bates

though it did not produce flowers for her. Here was another dead end, but at least there was evidence of the cross having been made.

B. 'Maria Tall Chief' was the next step in the rex-cane progression. This mated the unregistered cane hybridized by Irene Nuss, *Begonia* 'Madame Butterfly'. (not to be confused with the registered rhizomatous begonia) by the rex cultorum *Begonia* 'Her Majesty Sylvia Leatherman' in an attempt to produce a more upright plant, more like the canestemmed varieties. Seedlings of this cross tended to be of the jointed rhizomatous sort with flowers larger than typical rex blossoms. Recrossing the members of this group resulted in losing whatever canelike characters that the original cross had produced.

The next efforts tried various combinations of rex and cane. One such was *B.* 'Cole's Gemini' so called because the dark leaves split into two parts. It was a cross of *B.* 'Patapsco' and *B.* 'Lenore Olivier'. Another pairing, *B.* 'Phyllis Bates' with *B.* 'Patapsco' produced *B.* 'Ukulele', which has leaves with zones and spots, a rex. A chance seedling that was a derivative of *B.* 'Flamingo', a rank grower with 6 to 12 inches between nodes but otherwise not vigorous, was crossed with *B.* 'Ukulele'. Finally, *B.* 'Ukulele' and this chance seedling produced a group of seedlings that seemed to approach what Cole was hoping for. His ap-

propriate name for this grex was Break-through. The seedlings showed great variation in height, the stems had nodes like the canes, and the leaves were variously spotted and zoned. A patent application has been submitted for this group.

Among the named members of *B.* Break-through are *B.* 'Janetta Stanley' with large leaves uniformly spotted, *B.* 'Joshua Christopher' with dark, zoned leaves, *B.* 'Kathy Cook' a cane with medium sized leaves that resembles *Begonia* 'Thrush' (an old hybrid). *B.* 'Steven Cook' has typical cordate leaves with dark reddish center, a green zone bearing white spots, and a red zone at the margin on the underside. *B.* 'Natasha Bachurin' has lovely colors: dark green-maroon background with deep rose veins and a pale lavender zone near the edge. All of these are of short stature, making them ideal house plants. One or two of the grex resemble Mallet hybrids but by comparison these are of much easier culture. It is probable that these plants will be reproduced for the European foliage market.

Bob Cole, though pleased with the results shown by this group, says there is still plenty of hybridizing effort to be made to produce other variations on this theme of cane with colorful zoned leaves like the rexes.

HOSTAS, THE PERFECT SHADE PLANT

Wallace W. Wagner



Twila Wagner Memorial Garden at Oregon State Fairgrounds

Photo by Wallace Wagner

Most gardeners know what a rose, a daffodil, a daisy, and a marigold are, but mention a *Hosta* and you are likely to draw a blank stare. Old-time gardeners might recognize the names Funkia or plantain lily, out-dated names for hostas. By any name the under-appreciated hosta should be used more in our gardens. It is a great shade plant.

Hostas, with the "o" pronounced as "aw" in "saw," are a member of the lily family. They were named after Nicholaus Thomas Host, botanist and physician to the emperor of Austria in the eighteenth century.

Hostas are shade-loving perennials with attractive spring foliage and summer blooms, even in deep shade. Flowers are borne in profusion on tall stalks above the foliage in white and shades of lavender and purple. Some have

a delightful fragrance. In areas of frost, the foliage dies back in winter in a neat manner. The frozen leaves just melt away to nothing, leaving very little clean-up to do. Then in the spring the new leaves burst out of the ground just after the daffodils have faded.

Many of the species, originating in Japan, are still grown today, but the new hybrids with their colorful leaves bring versatility to the *Hosta* genus. Leaf colors range from the green of the species, to golds, blues, and variegated leaves of green, white, gold, cream, and char-treuse of the hybrids.

Hostas have much to offer the gardener, including the ability to thrive in the shade, super hardiness, ruggedness, easy maintenance, and a minimum of pests and diseases. Except for arid regions, hostas thrive in almost any climate. The clumps increase in diameter each year, quickly filling an area in a couple of years.

Large varieties grow over three feet tall with leaves sometimes over a foot across, making

Wally Wagner of Box 666, Prineville, OR 97754-0666, is an ABS past president, participant in the Round Robins, and fan of companion plants to begonias.

great background foils for other shade plants. Tiny-leaved varieties, some no more than three inches tall, can be used in borders, with medium sized ones filling in the areas between the two extremes.

The blue leaved hostas shimmer like the deep waters of a tropical lagoon, the golds shine like a beacon (particularly at dusk), and the variegated hostas break the monotony of the solid greens of most shade plantings. The golds can take considerable sun while the blues show their color best in the shade.

Hostas can be purchased in containers from some local nurseries, but the selection is usually very small. Mail order catalogs, on the other hand, offer several hundred varieties. By mail, hostas are sent as bare root plants. When the roots arrive they should be soaked for several hours in tepid water in the shade. Then the bare roots should be planted immediately in a rich, well drained soil. The soil in the bottom of the planting hole can be fortified with $\frac{1}{3}$ cup of superphosphate to help establish new root growth, but no other fertilizer is needed.

The bare roots should be planted by straddling the roots over a mound of soil in the middle of the planting hole. The hole is filled to within two inches of the soil line and soaked with a gentle spray for about an hour. The soil is added to match the surrounding soil line. If planted during a long rainless spell, the hostas will need to be watered each day, in the cool of the day, until new growth becomes active. Hostas establish quickly and 'jump out of the ground' at the first soil-warming day.

Hostas are easy care plants. During long hot spells they need deep waterings, especially if they are in locations where they get afternoon sun. They will show their appreciation if given a foliar feeding during periods of active growth. They should be watered and fed only in the mornings as water drops will burn holes in the leaves when the hot sun hits the leaves. When the flowers fade the stalks can be cut off for a neater appearance and for keeping the plants from setting seed, thus diverting energy toward producing a bigger root system. One of the joys is the minimum fall care previously mentioned.

Snails and slugs are about the only enemies hostas have. They love the leaves. Snail bait and careful attention to cleaning out their hiding places under garden trash will help control this problem.

Some of the outstanding *Hosta* hybrids include:

'Frances Williams'—wide irregular margins of beige-yellow or lime green

'Krossa Regal'—heavy textured, regal blue leaves; tall stalks of lavender blooms

'Piedmont Gold'—dense mound of golden foliage, hold color in high shade

'Gold Standard'—large pure gold leaves with green margin

'Cynthia'—very large, dark green leaves heavily splashed, spotted, and netted in sunshine yellow

'Lakeport Blue'—largest and showiest blue leaves, biscuit tufted, do not fade.

The last two are introductions by Chet Tompkins and are favorites of mine.

Cut hosta leaves are eagerly sought by flower arrangers. The leaves make attractive backgrounds and hold their rigidity and freshness longer than most flowers in the arrangements.

One of the largest collections of *Hosta* can be seen at the Official American Hosta Society Display Garden at the University of Minnesota Arboretum in Chanhassen, Minnesota. The Arboretum serves as the international registration authority for *Hosta*. More than forty varieties of hostas are displayed in a natural garden setting at the Oregon State Fair Grounds in Salem Oregon. The Garden was planted as a memorial to Twila Wagner, who succumbed to cancer in February 1983.

The American Hosta Society publishes a journal. Dues are \$12.50 for a calendar year. The address is AHS, 5605—11th Ave So., Birmingham, AL 35522.

For a list of mail-order sources for hostas, send a self-addressed stamped envelope to P. O. Box 502, Encinitas, CA 92024.

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BEGONIA LACHAOENSIS

Rudolf Ziesenhenné

In the fall of 1966 I received a mature leaf (fig. 1) and seeds of a *Begonia* Thomas MacDougall had found to which he had affixed his collection number C.279. He said it was a dwarf tuberous *Begonia* he had found in partial shade growing in humus on rocks. The location was at 5000 at Rio Sal, Lachoa, Jaquila, Oaxaca, Mexico, on August 24, 1966.

From the seeds I grew 180 plants which were all alike: very pretty little plants which grew to a height of five to six inches. All parts of the plant were covered with clear hairs mostly 3/16 of an inch long. The leaves of the cultured plants (fig. 2) are deeply lobed and not slashed like the ones from the wilds of Mexico. (I believe this is due to our lack of sufficient humidity; I have experimented by placing plants in a contained atmosphere and found that the lobes of the leaves are more elongated in the high humidity.)

The leaf margins are saw-toothed; the entire plant is green except the upper surface of the leaves which is covered with very small silver spots from which a single hair grows. The flowers are white, and there are only three on an inflorescence, two males and one female blossom. The male flowers have four tepals and the female flowers have six tepals (sepals and petals). The female flower is unusual in that it has three sepals and three petals. The sepals have hairs on the outside surface while the petals have none.

On June 26, 1972, Mr. MacDougall sent me plants from Mexico, and among them was a collection of six corms which bore his collection number C.327. The corms were collected from humus on or between rocks in part shade at Rio Sal at 4000', Lachao, Jaquil, Oaxaca, Mexico, on May 27, 1972. Of this plant Mr. MacDougall wrote in a note with herbarium material, "No flowers open (visi-

ble) on this plant and I still wonder if it is a *Begonia*."

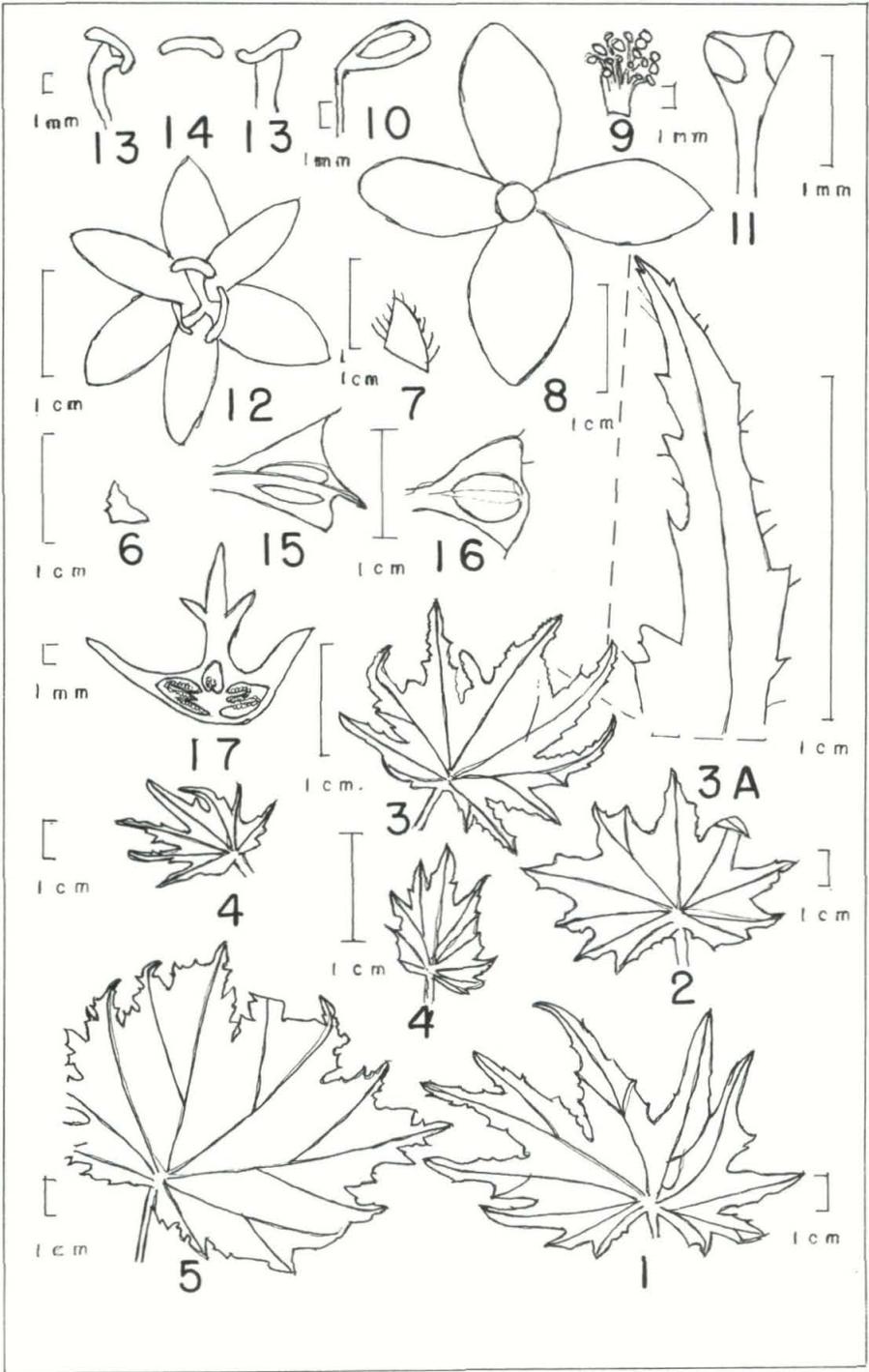
He also sent me dried plants and leaves. One of these leaves is pictured (fig. 3) with a leaf tip enlarged to show its details (fig. 3a). Among the specimens were many small, immature plants which have leaves as shown in the two illustrations marked (fig. 4). This type of leaf also occurs on the top of the mature plants. The plants grown from the corms of C.327 appear to be the same as those of C.279.

In an attempt to establish if this plant had been collected and already named, I found the most similar plant to be *Begonia portillana* Watson which was collected by Dr. Edward Palmer in June 1886 in a *barranca* near Guadalaajara, Jalisco, Mexico. Dr. Palmer affixed his collection number 143 to this plant. I have a photo of this specimen as well as the description in the original article. This plant has four tepals in the male flowers and five tepals in the female flowers, the leaves are shortly lobed (figure 5 is an outline tracing of the TYPE leaf) and the entire plant is purplish while the MacDougall plant has four tepals in the male and six tepals in the female flowers, the leaves are deeply slashed, and the plant is green.

In the fall of 1983, Dr. Dennis Breedlove, curator of the California Academy of Sciences, San Francisco, California, called on me with a bundle of herbarium specimens of *Begonia* collected in Mexico. Happily among the plants was a specimen of *Begonia portillana* Watson. We placed the herbarium specimen of MacDougall's C.279 next to the specimen of *Begonia portillana* Dr. Breedlove had collected, and it was very apparent that these were two distinct species.

I have named the plant *Begonia lachaoensis* after its native habitat.

Rudolf Ziesenhenné of 1130 N. Milpas Street, Santa Barbara, 93103 continues to study and publish descriptions of new species.



***Begonia lachaoensis* Zies.**

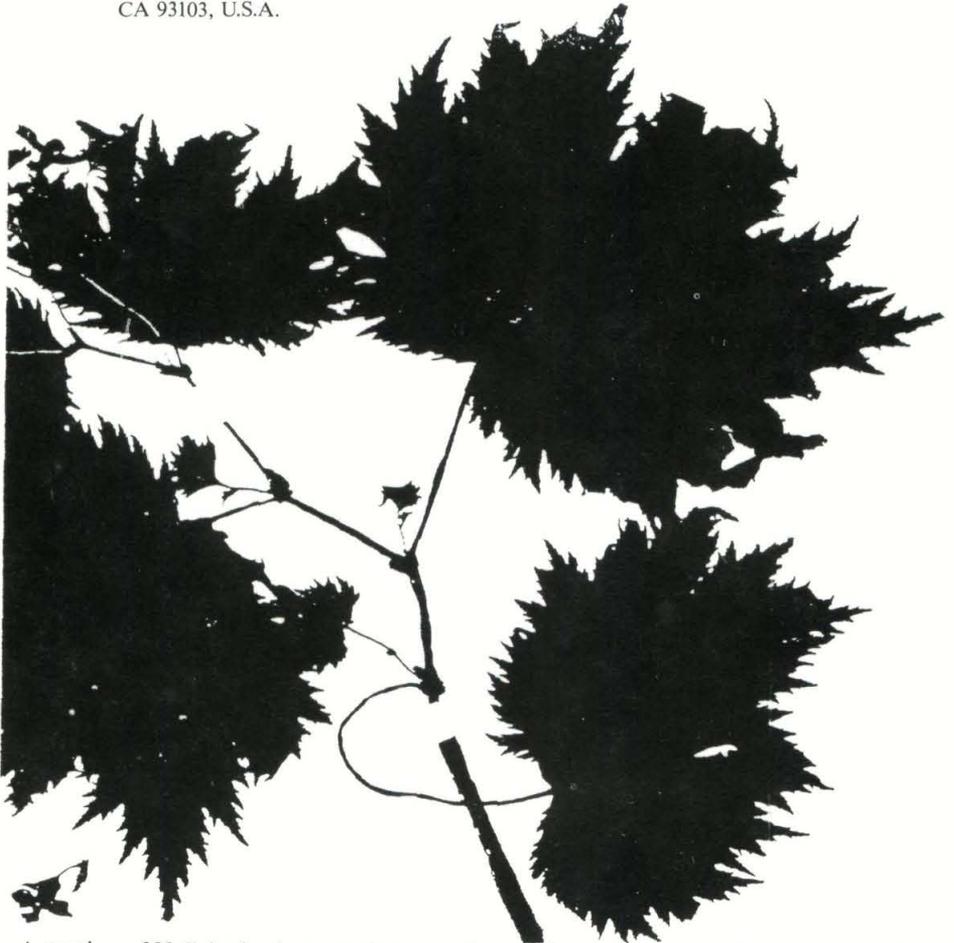
Begonia lachaoensis Ziesenhenne

Begonia (section HUZIA A. DC.) *lachaoensis* Ziesenhenne, new species, herbaceous, entirely hairy; stem annual, erect, round, base a perennial corm, 5-6 inches tall, diameter at base 3/16", 1-2 branching, well leaved, about 12-15 leaves inserted alternately at the nodes, internodes 1 3/16" long, 3/16" the shortest, 2" the longest, fleshy, light green, smooth, moderately hairy; stipules (fig. 6) remaining, thin, unevenly triangular, tip sharp, one margin toothed, the other gnawed, 1/4" long and wide, green, smooth, dull, hairy on the outside and margin, nerves not prominent; petioles cylindrical, smooth, 1" long, pale green, hairy with thin clear hairs to 3/16" long; leaf blade (fig. 1), a lower mature leaf, above spinach green (Royal Horticultural Society color chart 0960/2), silver spotted with a single hair protruding from each spot, smooth, shiny, below lighter green, smooth and dull, long clear hairs on nerves, transversely egg shaped, tip long tapering and two-lobed, with two equal basal lobes, margin lined with many saw teeth of various sizes with a single hair projecting from each tooth, slashed palmlike by 10 taper-pointed incisions, the divided segments long-tapering which gradually narrow in width beyond each large tooth, tip long-tapering, longest 2 1/2" long, 5/8" wide at base, blade 2 1/2" long, 4 1/2" wide, palmately 9-10 veins outside 2 basally, 3 laterally, median 1, inside 2 basally, 2 laterally, intervenia smooth, blade of upper leaves and small plants egg shaped (fig. 4), not transverse, deeply slashed with 6-14 segments, much smaller 1/2" long, 1" wide to 1 3/4" long and 2 1/2" wide, the nerves radiate from the base of the leaf like the fingers of the hand; inflorescence a three-flowered 2-parted cyme, 1 female flower between 2 male flowers, in summer; flower stem from the leaf axil, cylindrical, 1" long, medium green, dull, moderately covered with single clear hairs to 5/16" long, branches 3/8" long; bracts (fig. 7) quickly falling, primary ones outside green, dull, covered with long clear hairs, inside pale green, shiny, unevenly triangular, tip sharp pointed, base straight, margin straight - hairy, 7/32" long, 3/16" wide; male flower (fig. 8) pedicel 1" long, hairy, tepals 4, white, 2 outer thin, elliptical, tip sharply pointed, base straight, hairs up to 3/16" long on outside, 9/16" long, 11/32" wide, inner tepals 2, thin, elliptical, sharp-pointed tip, base straight, white, 15/32" long, 1/4" wide; stamens (fig. 9) 24, filaments united on a slightly raised base 1/32" long, then free, pom-pom shaped, filaments 1 mm long, anthers (figs. 10 and 11) inverted egg shaped slightly depressed at the top, 1/32" long, 1/32" wide, connective does not exceed the pores; female flower (fig. 12) tepals 6, white, exterior ones 3 sepals, thin, elliptical, tip sharp to blunt, margin straight, hairy on the outside, 19/32" long, 3/16" wide, interior ones 3 petals, white, thin, narrowly elliptical, point sharp to blunt, margin even, 19/32" long, 5/32" wide; styles 3 (fig. 13) not divided, base united 1 mm, falcate (fig. 14), stigma papilla cover top and edges, 1/8" long; capsule (Figs. 15 and 16) 11/32" long, 3/16" wide, narrowly elliptical, both ends blunt, green, 3 winged, largest thin, green, shallowly triangular gradually ascending toward the end of the capsule, tip long drawn out, margin straight, hairy, 7/32" long, 5/16" wide, hairs up to 1/8" long on the wings and margin, on each side of the wing there is a shallow auxiliary wing (fig. 17), the other two wings 1/8" long, ascending ovary (fig. 17) elliptical, ends rounded, hairy, 3-celled, placenta in the upper cell single, the other two cells have divided placentas each carrying seed on all surfaces.

In humus on rocks in part shade, August 24, 1969, Rio Sal, 5000 at Lachao, Jaquila, Oaxaca, Mexico. Type: Thomas MacDougall C.279.

Begonia (sectione HUZIA [KLOTZSCH] A. DC.) *lachaoensis* Ziesenhenne, spec. nov. Herba villosa omnino: caule annua, erecto, tereti, basi corno perenni, 13-15 cm elato, 5 mm crasso ad bassim, 1-2 remificatio, foliato bene, insertio alterna, 12-15 foliis; internodiis 3.1 cm longis, 5 mm brevibus, 5 cm longioribus, carnosus, viridis pallidis, laevis, hirtis modice; stipulis persistentibus, tenuibus, triangularibus, inaequaliter acutis, margine una dentata, altera erosa, ciliata, 5 mm longis et latis, viridis, laevitibus, obscure externis hirtis; petiolis teretibus, laevibus, 2.5 cm longis, viridis pallidibus, hirtis 5 mm longis; foliis infernis, maturis, viridibus spinaciis, guttatis argenteis cum hirtis projectis, laevitibus, nitidibus, subtis viridibus pallidibus, laevitibus, obscure, nervis hirtis longis, transversis, ovatis, acumunatis-longis, lobis duabus, lobis basilaribus duabus aequalibus, margine serrata amplitudi varianti, hirtis,

laceratis palmatis 10-incisuris acuminatis-longis, 6.3 cm longis, 11.5 cm latis, laminis supernis et plantis juvenibus ovatis non transversalibus 6-14 segmentis 1.3 cm longis, 2.6 cm latis ad 4.5 cm longis, 6.4 cm latis, palmatinerviis 9-10, basilaribus 3, extus lateralibus 3, mediis 1, intus lateralibus 2, interjacentibus planis; *inflorescentia* 3-floribus, dichasis aestivalibus, pedunculis axillaribus, teretibus, 2.6 cm longis, viridis pallidibus, obscure, hirtis moderata, ramis 1 cm longis; *bracteis* deciduis, extus primariis viridis, obscure, hirtis modice, ovatis, acutis, integeris, ciliatis, 6 mm longis, 5 mm latis; *tepales masculinis* 4, albis, 2 extus hirtis, tenuibus, ellipticis, acutis, extus hirtis modice, 1.5 cm longis, 9 mm latis, intus 2, agustis ellipticis, acutis, 1.2 cm longis, 6 mm latis; staminibus 24, filamentis 1 mm connatis, tum liberis sphaericis, antheris 1 mm longis, obovatis, retusis, 0.75 mm longis, 0.75 mm longis; connectivo non excedenti poro; *tepales feminis* 6, albis, 3 exteris (sepalis) tenuiter, ellipticis, acutis, hirtis, 1.2 cm longis, 5-6 mm latis, interioris 3 (petalis) tenuiter, angustis ellipticis, acutis, nudis, 1.2 cm longis, 4-5 mm latis; *stylis* 3, non divis, per 1 mmf connatis, per .30 mm liberis, falcatis, papillosis facia circumcirca; *capsula* 9 mm longa, 5 mm lata, angusto-elliptico, extrema obtusa viridia; inaequaliter trilata, ala maxima, viridi, triangulari, triangulari demisa, ascendenti, acuta, apiculata, hirta, 5 mm longa, 8 mm lata, in uterque alatis cetera 2, 3 mm longa, verticata; *ovario* elliptico, obtuso, 3-loculari, placentis loculari summis indivisis, alis bilamellatis, undique ovuliferis. Thomas MacDougall C.279, Rio Sal, 5000' at Lachao, Jaquila, Oaxaca, Mexico. Typo No. C. 279 in herbario Rudolf Ziesenhenné, 1130 N. Milpas St., Santa Barbara, CA 93103, U.S.A.



A portion of U. S. herbarium specimen number 47707 of *Begonia portillana*, collected by Dr. Edward Palmer in 1886. Reproduced at full size. Rudolf Ziesenhenné notes that the leaf margin of *B. lachaoensis* is just as finely divided as this.

In Review

BEGONIAS: THE COMPLETE REFERENCE GUIDE AND 1984 UPDATE

Mildred L. and Edward Thompson. 1981/1984 384 pages, 850 illustrations, hardbound

Dael Jones, reviewer

There is merit in reviewing a book years after its first publication. The senses are not clouded by the newness, and a true evaluation can be made. For this book, four major areas become the evaluating criteria: style, aesthetics, function and accuracy.

Style. Information is given authoritatively and economically, but with as much amplification as space permits. Since it was expected that users of this book would come from many levels of interest and growing competence, the presentation is neither too technical for the beginner nor too simple for the advanced collector—a praiseworthy feat.

Aesthetics. The layout is open and pleasing with large and easy-to-read type. The text is interspersed with many black/white photographs and illustrations of generally good quality. Color photographs are grouped in a single section as a printing economy.

Function.) If we look to the authors' intent "to explain the culture of begonias in a simple and methodical fashion so that the grower can take pleasure in his work," the book is surely successful. The family Begoniaceae is described and further broken down into eight groups followed by general culture information.

Some begonias have very little information provided. Advanced collectors, particularly, always want to know *everything* about a species or cultivar they wish to acquire and grow. However, one must immediately realize it would be beyond the scope of any such general work to include detailed, specific information on every single begonia.

The book is divided into logical sections with repetitive formats in the begonia groups—a device which familiarity lends easy usage of the book.

Accuracy. Doubtless, there are those who have discovered any typographical errors or inadvertencies which always manage to creep in on a project of this magnitude, and while perfec-

tion is always to be striven for, it is foolish to carp about minutiae and miss the wealth that does exist.

The taint of regionalism is avoided since the authors obviously recognize that there is no single potting mix that should be used by every grower, there is no single growing environment that will work for every circumstance, and there is no set of growing methods workable for every person and situation.

The value of this book springs from the clean presentation of much information. The authors' rich experience, dedication and tenacity has resulted in a book which will be around as a standard for a long time. These comments reflect the book's usefulness:

"I have been a begonia hybridizer and grower for over 30 years. The Thompsons had obviously researched the subject thoroughly, and I found their material to be of great help to me in my work."

Paul P. Lowe, hybridizer and grower

"I use the Thompson book all the time; it's probably my most used reference. The book has all the good qualities of writing and photography, with information for novices to experts."

Martin Johnson, hybridizer and grower

"The title says it all *Begonias: The Complete Reference Guide*. No previous book on begonias has been this broad and all-encompassing. If I were to recommend one book to someone interested in learning about begonias, this would have to be it. It is an outstanding contribution to begonia literature."

Pat Maley, chairman, Show Classification and Entries

One supplement has already been issued. It is soft bound and has the same dimensions as the parent book. There are 21 black/white photographs, 610 new listings of species and cultivars and 301 revised listings. It is easy to use and provides much needed information about the newest begonias. Mrs. Thompson has vowed that she will continue to update begonia information, and supplements will be issued from time to time as new species and cultivars are discovered and hybridized.

Dael Jones is an advertising designer and marketing consultant in Dallas Texas, and is an avid begonia grower.

Mabel Corwin

Question: Raising tuberous begonias indoors under lights and outside is not something new to me. I have been very successful until recently when I've developed this problem with the flower buds dropping off just when they are about to open. (Pennsylvania)

This problem was directed to Howard Siebold, author of the series on tuberous begonias that appeared last year. He replies:

Bud dropping can be an annoying problem. It is a sure indication that they are not satisfied with the growing conditions. The common causes are:

- Low humidity (70% is ideal)
- High temperature 60°F is ideal
- Roots too wet
- Roots too dry or too hot
- Not enough light (800 foot-candles—*at least*)

More than one of these conditions could occur at any given time. See page 71, July-Aug. 1984.

As I summarized in the *Begonian* for last November, trying to bring tuberhybrida into bloom under lights can be an expensive and frustrating experience.

In his book, *The Tuberous Begonia*, Brian Langdon says: "...They are essentially greenhouse plants, and if taken into the house for more than very short periods at a time are apt to show their resentment of the inevitable dry atmosphere by dropping their flowers and buds" He also suggests standing them on trays filled with wet gravel to maintain the local humidity, as does Eric Catterall in *Growing Begonias*.

Your letter seems to indicate that you have had them bloom indoors in the past. If so, what are you doing differently now? Think back—you may have made some gradual changes over the years, that didn't seem critical at the time.

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

You say you have been very successful until recently. Does this mean that they bloomed all summer and then started dropping buds suddenly—like in November? Were conditions changed like moving them from daylight to inside fluorescent light?

Six inches from new fluorescent tubes would be about 500 foot-candles in a two lamp fixture or 800 foot-candles in a four lamp fixture. Are the tubes new?

You mention that you are using ¼ tsp of fertilizer every other day or when the surface is dry to about ½ inch. If this is in a gallon of water, I suggest that you apply it no oftener than once a week. The fact that you need to cut away some of the stems and leaves is an indication that you are over-fertilizing.

I hope some of these comments will be helpful in your analyzing the problem. As you can see, finding the answers may not be easy. If this discussion doesn't help, give me more detail and I will try again.

QUESTION: I recently moved to Alaska from Ohio. In Ohio I had no problem maintaining adequate humidity in my basement light garden. However, here the long heating season makes for very dry air. I'm growing exclusively under lights, but plan to summer some begonias on my large balcony. I've been told tuberous varieties do quite well here.

I brought along about 50 leftover seed packets from ABS and many of the seedlings have reached transplant stage. I keep all seedlings in Ziploc plastic bags while they are very small.

I have three questions:

1. I'm particularly fond of cane-stemmed and shrublike begonias. I realize a lack of humidity is not desirable for any begonias, but do you think the cane and shrublike types are the best choice for the dry air? Would another type of begonia be better?

2. I am a confirmed seed grower. I've ordered from almost every ABS seed list. How much cold can begonia seeds tolerate? Having seed sent to Alaska in mid winter would almost certainly result in freezing. Minus 40 to 50°F is common here.

3. I've overcome the humidity problem to some extent with my African violets by wicking them. Plants are set on egg crate over trays containing a mild fertilizer solution. Would wick watering work with cane and shrublike, or would this provide too much moisture?

My seedlings are still probably 6 to 8 weeks from the size where they can be unbagged. With some species I'll have plenty of seedlings to experiment with. With others, only one or two have germinated and I don't want to risk losing these.

I feel like I'm starting at square one in terms of growing plants. Conditions are so different here. (Alaska)

Answer: You certainly do have a challenge! It really is learning all over how to grow begonias. Here are some suggestions that I hope will be helpful.

I do think the cane and shrublike begonias would be the groups tolerant of the dry conditions. You should be able to grow some of the rhizomatous also. The tuberous require high humidity, but if you grow those during the summer months, perhaps you have the conditions that they need.

You might be able to work out a method of wick watering. A member in Arizona has wicked some of her begonias. She said it was the only way she could keep them wet enough. She had high temperature as well as dry air. You would need to use a very light potting mix. I suggest you try wicking a few plants and see how it works.

One way of adding humidity is to use trays with pebbles or gravel. Keep water in the trays and set the plants on top of the pebbles. One grower uses aluminum foil pans filled with water. She places a pot upside down in the center of the pan and sets the plant on top of the upside down pot. As the water evaporates it makes humidity for the plant. Placing pans of water in the plant room among the plants also helps. I think one of these methods might work better, but I suggest you try wicking a few plants and compare results.

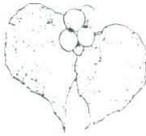
For your seedlings, I suggest you use plastic boxes, terrariums or fish tanks (whatever is available there) for your move from the plastic bags. Keep the seedlings in the enclosed containers until they are growing in individual pots, then gradually expose them to outside air. This is especially impor-

tant when you have dry air. This is the most critical stage for the seedlings. Many growers lose the seedlings because they change the conditions suddenly.

I'm not sure how much cold seeds will tolerate. I think Joy Porter will know. She has studied ways of sending seed and I'm sure if you write to her she will help you with this.

I hope some of these suggestions will be helpful. I would be interested in hearing later how you solve your problems. I'm sure trial and error will be your best teacher.

Continued on page 96



Begonia Buttercup

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Joan Campbell, director

When I send requested information about the robin flights, I must hear again from the person who made inquiry before I put him on a flight. This is true even though someone may have requested a place on a certain flight when they initially contacted me. I must know that the information was received and the rules understood and agreed to. Then the name goes on the list for a specified flight.

Flight chairmen follow up flights at their own expense, be it by postcard, phone call, or certified mail. Please, robin members, remember your courtesy postcards to your chairmen. It saves expense and aggravation.

I must correct a spelling error. *B. socotrana* produces bulbels, not bulbils, as reported in the March-April column. *B. socotrana* is unique. It is the only known bulbous *Begonia*, and there is a difference between bulbils and bulbels.

When is a **tuber** not a tuber? When it is a corm or an underground rhizome, perhaps, or even a tuberous stem. Classification of *begonias* is always under study, and some plants formerly called tuberous are now classified horticulturally as rhizomatous. It can be confusing. Joy Porter, Massachusetts, suggests the members of the Species Tuberous flight could make a valuable contribution to horticultural knowledge by observing closely the habits of the so-called tuberous.

Some of those large tubers produced by the South American species are actually several tubers which can easily be separated and grown. Some which produce multiple tubers are *B. boissieri*, *B. palmeri* (*californica*), *B. U103*, *B. biserrata*, *B. ignea* and *B. falcioba*. If exposed to air for too long a time, some of these multiple tubers may soften and start to rot.

If you would like to join a robin—a packet of letters circulated among *begonia* lovers—write for details and a list of flight topics to Round Robin Director Joan Campbell, 814 NE Honey House Lane, Corvallis, MT 59828.

Discussing **canes**, Carl Walker, Jr., North Carolina, reported *B. 'Esther Albertine'* had white blossoms instead of pink. When summer heat became intense. With cooler weather, the pink reappeared. Elaine Ayers, Ohio, said maple-shaped leaves appeared on some of the canes with *B. 'Lenore Olivier'* heritage, almost as though extreme heat caused them to revert to one parent. Elaine says she has learned that changes in bloom and leaf color are caused by cell changes when the temperature is too high, or from using fertilizer when the plant is under stress. Some of the Kusler hybrids may not be in general cultivation any more, Elaine comments, as *B. 'Clara Elizabeth'*, *B. 'Gigi Fleetham'*, and *B. 'Gertrude Nelson'* are hard to find.

Members of the Branch Administration flight would like to learn of successful **fund raising and recruiting activities** of other branches. The Barkley Branch reports a successful show which attracted eight new members. Their publicity chairman sent letters to newspapers before the show, notified the local television station, and sent show notices to all former members and known members of the society who don't belong to a branch. Signs were displayed around the show site and flyers were sent to all local nurserymen. Several newspapers did pre-show interviews with members and the local television station covered the show. A free plant was given to all children accompanied by their parents and a specimen plant was given to each new member. A small classified ad also drew some show viewers. Little work went into the planning stage, they thought up ideas as they went along. There were 225 plant entries.

Activities other branches enjoy include visiting special homes and botanical gardens; displaying at fairs and garden club shows; holding plant sales in shopping malls; giving demonstrations of potting, grooming, pollinating, seed planting, and identification studies.

Getting new members involved is important. A video tape on the ABS judging rules and regulations would be good to show to branch members before a show. One branch volunteers to handle the *begonia*

division at the local flower show where they may also rent a sales booth and sell plants, or present a display on begonias.

To attract new members, it is suggested that a local library be requested to get a good book on begonias. Some branches make sure they are listed with their local chambers of commerce, botanical councils or botanical gardens, and state fair commissions. Slide programs, such as are offered through our society, are very entertaining to prospective members.

Joan Hill, England, has been germinating seeds on damp kitchen paper towels. When a seedling sprouts, she gently lifts the paper and lays it on top of moist compost. As **seedlings** grow, she adds small amounts of fine compost over them.

Thelma Crawford, Kansas, prefers to feed seedlings with a fertilizer high in potassium such as Hyponex 7-6-19 which will not burn and builds a good root system. Thelma thinks crossing on begonias should be done with similar types; that is, a rhizomatous begonia crossed with another rhizomatous, and a cane crossed with a cane. She has found no matter what you try with a cane, the seedlings will usually resemble the cane parent.

Joy Porter, Massachusetts, is about to quit using milled sphagnum for seed pans as she thinks it is too acid, many seedlings yellow before they get large enough to transplant. She thinks begonia seedlings possibly vary in pH tolerance.

Discussing **plant propagation**, Mary Harbaugh, Wisconsin, uses milled sphagnum moss and vermiculite to root cuttings. Bob Ammerman, California, uses equal portions of perlite and vermiculite for propagation. He thinks he's had less loss over a period of time with this combination. Russ Hammer, Texas, prefers milled sphagnum for a rooting medium, both for begonias and for aroids. Cuttings which may rot in another medium can often be saved by switching to milled sphagnum.

Lena Bussard, Kansas, doesn't think strong light is all that necessary to root cuttings or to germinate seeds. She thinks, though, that correct bottom heat is an absolute must. If the light is good, that's fine, but if the room temperature is right, cuttings will do fine with less light.

Sue Haffner, California, reports a leaf of *B. incana* took six months to produce one plantlet. The leaf itself seemed to grow in the rooting medium for a long time, so she became impatient and cut through the midrib as one would an African violet. That may be what encouraged the plantlet to start.

Susan Johnston, Oklahoma, has rooted two shrublike begonias from leaves, *B. olsoniae* and *B. U002*. Mary Weinberg, Illinois, has rooted several types of begonias "horizontally," that is by laying the plant stem on the soil and pinning it there where roots will grow from the nodes. Later stems will start from the same nodes. Some which have rooted for Mary this way are *B. radicans*, a trailing-scandant type; *B. morelii*, a tuberous species; and *B. 'Pink Jade'*, a cane.

Albert Weatherhead, England, has found a good use for sedge peat which holds water better than sphagnum peat does. When propagating tuberhybrida, he cuts a side shoot *below* the fourth leaf on an axil of the main stem and leaf petiole. This cut, always made in a vee shape, is then placed into a 2" clay pot *at the side* of the pot, using 50% sphagnum peat and frit or perlite. Then the pot is put into a larger container and packed with the sedge peat which has been soaked with water. The pot is then placed out of the sun where it can be forgotten for about four weeks. Cuttings taken by mid-May will flower in September at the latest with a good half-inch tuber formed.

Members on the species growing flights often compare results from growing from seed. Arline Peck, Rhode Island, has suggested a round robin flight on those ubiquitous, unidentified, U-numbered species begonias, as not everyone is growing the Unidentified series, and it is difficult to decide what you may be doing wrong with them. Interested members drop me a line.

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A Case of Mistaken Identity: Plumier it is Not

The picture on page 228 of the *Begonian* for September 1978 was supplied to the editor by the Hunt Institute for Botanical Documentation as a picture of Charles Plumier to accompany a biography of this early plant botanist. The identification was questioned by Dr. Alicia Lourteig of the Museum d'Histoire Naturelle of Paris. The patient attention of Dr. Lourteig was rewarded when the Hunt Institute was finally able to re-search the matter and pronounced the photograph that of Francesco Cupani.

Dr. Lourteig writes, "We know well that there is no portrait of Plumier, excepting for the head (engraved) that has been several times reproduced and is very well known." [Ed. note: not presently available to us.]

Cupani was a contemporary of Plumier and a fellow member of his religious fraternity to whom he dedicated the genus *Cupania* that was later adopted by Linnaeus, in the same manner as the genus *Begonia* had been.

The Hunt Institute was delayed in its efforts

to determine the subject of the photograph because the staff was involved in putting the large collection of photographic documents in alphabetic order. In order to make the correction, the negative of the photograph was examined and the researcher discovered that a "subtitle could be discerned even though most of the letters had been excised by the photographic developer." Further communications were conducted to verify the identification with other institutions.

Since the photograph is incorrectly labeled, the reader should locate his copy of the September 1978 issue and make a correction with a note to look at this statement, lest anyone in the future be led to the wrong conclusion. Branch librarians and others who have access to library copies should make an effort to have the correction noted.

We thank Maurer Maurer, who wrote the biography of Plumier for the *Begonian*, and Dr. Lourteig for their efforts to set the error right.

CANE SHOWCASE

Continued from page 80

large white to pale pink blooms hanging like bells.

In 1975 Goldie Frost crossed *B.* 'Lenore Olivier' with *B. lubbersii*. This cross resulted in a number of beautiful new canes, each distinctive. I have three favorites from this group. *B.* 'Margaret Taylor' has gorgeous dark bronze-green leaves, to 10" long, with a thick, smooth texture. The flowers are brilliant red and occur all through summer and fall. *B.* 'Cosie' is a sister seedling with 3" × 12" peltate leaves, sharply pointed at both ends. The leathery dark green leaves are deeply cut, with notched and crinkled edges. The large (2") flowers are salmon pink, appearing from late summer right into winter. The third sister, *B.* 'Celia McClish' has dark bronze peltate leaves with a velvety texture. It blooms summer and fall with huge clusters of pure white, 2" flowers.

Michael Kartuz gave us the beautiful *B.* 'Orpha C. Fox' in 1974. This *B.* 'Hannah Serr' seedling has black-green leaves heavily splashed with silver and rose-pink blossoms to set it off. This is an excellent basket or wall pocket begonia.

Two other Kusler hybrids rank high on my list. *B.* 'Jeanne Fleetham' is another *B.* 'Lenore Olivier' hybrid with large undulating dark leaves. White blossoms, tinged with pink, are profuse and nearly always present. This is a slow grower, but well worth the waiting. *B.* 'Delphine Fosmo' is *B. dregei* × *B.* 'Laura Englebert'. The light bronze-green leaves are serrated and wavy, with rose backs. Against this background the large rose pink blooms with light apple green ovaries show up beautifully.

I could go on raving enthusiastically about other beauties as *B.* 'Anna Christine', *B.* 'West Newton', *B.* 'Pickobeth', *B.* 'Interlachen' and many more. Next time I want to write about the real superstars, the superba canes. Cane begonias never fail to excite me, and I hope I've succeeded in passing on some of my enthusiasm to you.

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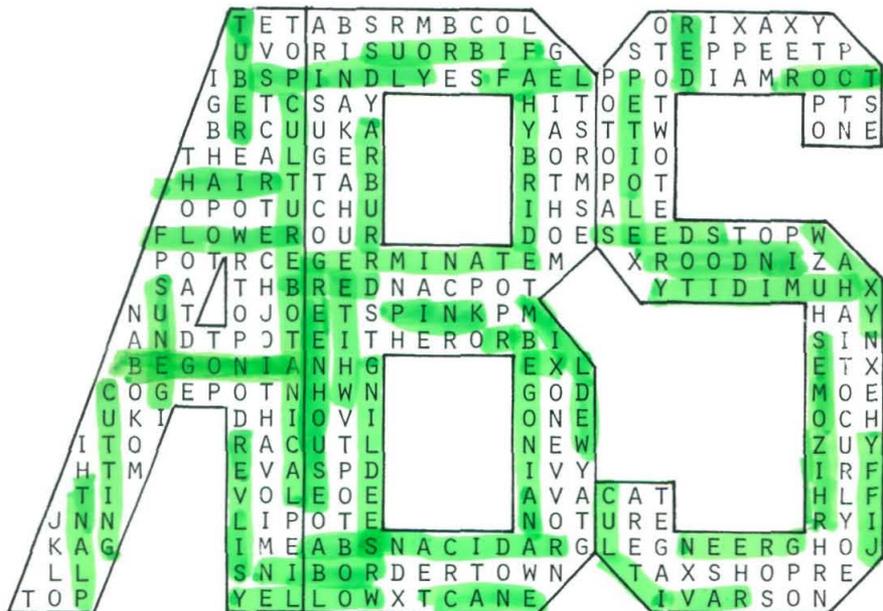
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A BEGONIA WORD SEARCH PUZZLE

Walt Maurus

Here's a word search puzzle for you to solve. The words were found in the Sept.-Oct. 1984 issue. They can be found forward, backward, horizontally, or vertically—maybe even around corners.

There is one word at least a dozen times that isn't listed because we use so many of them in our begonia hobby. Circle the words with a pencil as you locate them.



- | | | | |
|------------|----------|---------|----------|
| BEGONIA | PETIOLE | WAXY | YELLOW |
| GENUS | SEEDLING | JIFFY | GREEN |
| BOTANICAL | HUMIDITY | ROOT | RED |
| RUBRA | CULTIVAR | SEEDS | PINK |
| GERMINATE | MILDEW | VEINS | WHITE |
| RADICANS | CUTTING | HYBRID | BEGONIAN |
| GREENHOUSE | PLANT | REX | ROBIN |
| RHIZOMES | FLOWER | INDOOR | HAIR |
| SPINDLY | TUBER | CULTURE | SILVER |
| FIBROUS | LEAF | ABS | CANE |

Walt Maurus, a newcomer to ABS, suggests that other new members would welcome this opportunity to become familiar with words often used by begonia growers. He warns that future puzzles will be a little difficult.

QUESTION: I am rather new at growing begonias. Is there a difference between a dormant plant and a resting plant? How should they be handled? OHIO

ANSWER: Begonias usually rest during the winter when the nights are cold and the days are shorter. A plant that is resting is inactive and not making any new growth. It should be kept slightly damp until new growth buds appear.

Tuberous begonias go completely dormant. All of the stems and leaves die and fall off. The tuber should be taken from the soil and stored in a cool place until spring when it starts to sprout. This group includes the tuberhybrid and some species, such as *pearcei* and *sutherlandii*.

There are some small leaved begonias that are classed semi-tuberous. The tops usually die down completely on these. I leave them in their pots and they sprout from the base in the spring.

QUESTION: I have a question about rhizomatous begonias. Do you get a better plant when you start from a leaf or a piece of rhizome? TEXAS

ANSWER: I think you get a better plant from a leaf. However, it takes much longer. The rhizome usually roots rather quickly. If you pinch the growing tip of the rhizome that will force growth from the nodes and sometimes makes a full plant, especially on some varieties where the nodes are close together.

A rooted leaf cutting puts up several plantlets from one stem. If you do not divide them, but plant together in one pot this gives a nice full plant immediately. This is my reason for liking the leaf cutting better.

MIAMI REPORTS

The September-October issue will contain various reports from the Miami Convention. It should follow about a month after this one. The deadline for the issue after that is September 8.

We have discussed *B. ficicola* in this column several times. It seems to be very popular and does well in a variety of conditions. A grower in Dallas, Texas sent this interesting information: "My *B. ficicola* plants are grown in a 20" bubble with its top about 6" from a single Bright-Stik fluorescent light. About 30% of this light is cut by deliberate shading. An automatic timer gives this planting 12 hours light each day. There is very little natural light in this area.

All my plants are grown in equal parts of alkaline soil from my backyard, Canadian peat moss, coarse builders sand and sheep manure. For contained atmosphere plantings, I pour boiling water over the mixture and allow it to drain to a just-moist state before planting. About 1½" of builders sand is put in the container first, then the mixture and then the plants.

The tops of the containers are covered with glass with no opening left. My containers frequently "weep" down their sides and often leaves are constantly touching the wet interior sides. No leaves rot or deteriorate from this! Watering is generally not necessary more than once every 4-6 months, and then sparsely.

Currently thriving under these conditions, some for more than two years, are *Begonia ficicola*, *versicolor*, *xanthina*, *rajah*, *griffithii*, *exotica*, *chlorosticta*, *picta*, *U089*, *acaulis*, and 'Gold Coast'.

For me, most species requiring contained atmospheres grow best in excessively high humidity, fairly low light in 12 hour cycles, in the mixture described, with no fertilizer, so long as the mixture is kept moist but not heavily wet. The house temperature is close to 72 deg. year-round. This may not work for anyone else, but it works for me!

APOLOGY

I apologize for the lateness of this issue. Two family weddings, illness, and equipment failure converged to make any earlier delivery impossible.

Phyllis Bates

THE BOARD/

May 19, 1985

The board held its bimonthly meeting at 1 pm at the home of Elda Regimbal. The Aims and Purposes were read by Michael Ludwig, president of the San Miguel Branch. The minutes of the previous meeting were corrected to show the spelling of the Ecke Building at Quail Gardens.

It was voted to enter memberships at Quail Botanical Garden and the Los Angeles Arboretum, the dues being \$10 and \$25 per year. These bring literature and allow use of meeting space.

The treasurer's report showed \$36,548.92 in all accounts. [General fund showed \$8569.97 after expenses of \$5009.94 were paid. The first amount includes dedicated amounts. E. Calkins] Received were a check for \$40.00 from Dan Haseltine for the slide library and \$669.86 from Joy Porter from the seed fund.

Other reports were received from Thelma O'Reilly, Joan Campbell, Marge Lee, Mabel Corwin, Pearl Benell, Bobbie West, Gil Estrada, John Ingles, Phyllis Bates, and Arlene Davis. There were branch announcements from Orange County of their Begonia Fiesta on June 15 and the Palomar show in late August.

The ballot counting committee reported that the dues raise passed with a count of 47 yes votes and 6 no votes. The dues will increase to \$15.00 on August 1, 1985.

A petition to add the name of Dan Haseltine was presented to the board to run for president. The petition was accepted. It was decided to mail the election ballots separately from the Begonian.

A letter of resignation was received from Joy Porter of the Seed Fund. The board moved to accept her resignation with regret as Joy has done such a good job.

The next board meeting is scheduled for Sunday, July 26, 1985 at noon at the home of the Corwins, 1119 Loma Vista Way, Vista, CA.

Arlene Davis, secretary

March 23, 1985

The board held its bimonthly meeting at 1 pm at the Ecke Building at Quail Botanical Gardens. The minutes of the previous meeting were accepted with the addition of the motion passed to accept the Alamo Branch into the ABS.

The treasurer's report was unavailable due to an automobile accident.

Betty and Norm Tillotson attended to assist with arrangements for the annual meeting.

Reports were heard from the following committees: public relations, membership, awards, branch relations, nomenclature, members-at-large, editor, judging.

Mabel Corwin reported 6 nominations for the Dykeman award, 6 for the Gray award, and 3 for the Robinson medal. The letters were sent to the awards committee members for consideration.

The nominating committee reported the slate of officers for the coming year: president, Margaret Lee, San Miguel branch; 1st vice pres., Arlene Davis, Rubidoux; 2nd vice pres., Howard Berg, Knickerbocker; 3rd Vice pres., Tamsin Boardman, Blanton; treasurer, Eleanor Calkins, Palomar; Secretary, Jeanette Gilbertson, Palomar. The slate was accepted and will be in the July August issue which will go out the first of July.

The annual meetings and installation will be held in Sacramento on September in conjunction with the branch show. Betty Tillotson will take reservations. A letter will be sent as the reservations are due on August 1.

The dues raise was discussed at length. It was moved and seconded that the dues be increased to \$15.00 per year. The board approved, with 1 no vote recorded, that the matter be submitted to the entire board for mail vote as required.

It was voted to allow 2 points for attendance at an all day judging seminar, making a total of five instead of three given for usual show and seminar (half day).

The next board meeting is scheduled for May 19 at the home of Elda Regimbal, 3117 San Juan Drive, Fullerton, CA at 1 pm.

Arlene Davis, secretary

BEGONIAN MINI-ADS

Miniads are \$1 per line per insertion with a minimum of \$4. A line is 36 characters including punctuation and spaces. Payment must accompany order. Make checks payable to ABS and send to Arlene Davis, 923 E. Francis Rd., Corona, CA 91719.

BEGONIAS and EPISCIAS

Plants and Cuttings. Send 50 cents for listing. Wilson's Greenhouse, Route 1, Box 165-4, Ozark, MO 65721

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BEGONIA AND LILY CATALOG 50¢

Woodriffs, Fairyland Begonia Garden, 1100B Griffith Rd, McKinleyville, CA 95521. Visitors welcome

IN MEMORIAM

The Sacramento Branch has lost another long-time ABS member with the death of Frances Flannigan this spring. Frances was a charter member of the branch, twice president of the branch, and designer of displays and exhibits on numerous occasions. She attended most national conventions until her health began to fail.

The Buxton Branch was saddened to learn of the sudden death of Rosemary Norton. She had edited the *Buxtonian* newsletter for several years, served as branch president, and had been the current membership chairman for the branch. She was closely associated with several of the spring flower shows and was particularly good at charming the public.

Both branches and the entire ABS will miss the efforts of these dedicated people.

BRANCH FEATURED IN SUNSET MAGAZINE

Several very pleasant members of the Santa Barbara Branch were pictured in the May issue of *Sunset Magazine* with an article encouraging gardeners to join specialty plant societies to increase enjoyment of their hobby. ABS was pleased to see friends' pictures and delighted by the publicity boost.

LANDSCAPING WITH BEGONIAS

I hope you have not forgotten to take photographs of begonias in landscaping. Perhaps it is not too late for you to snap a picture or two. Anything but polaroid shots are welcome, but 35mm slides are best.

With the print or slide, send a brief note explaining what begonias are present, what other plants are nearby, the place where the plants are growing. Include your name and address.

If you want the pictures back, be sure to include a self-addressed stamped envelope. Send to the Editor, Box 502, Encinitas, 92024 by the end of October 1985.

NEW MEMBERS

In the past several months quite a few new people have joined the ABS, according to Membership Secretary Pearl Benell. We extend greetings to these new members and encourage them to participate in the various activities of the Society and to take advantage of the services offered. We ask that those who have been members extend courtesy to these newcomers by assisting them in learning about the Society.

New Mail Order Source

Robert Hamm, owner of Plants Etcetera, 2951 Elliott, Wichita Falls, TX 76308, has announced that the company will expand into mail order delivery of plants and selected supplies for the devoted gardener beginning in the fall of 1985. A catalog and newsletter are planned (charge for mail order customers.)

Bob Hamm's business was severely hindered by the tornado of '79. He had been very active in the Southwestern Region previous to that event.

INVITATION

A SYMPOSIUM: The Biology of Tropical Epiphytes

In celebration of its tenth anniversary, the Marie Selby Botanical Gardens will hold a symposium entitled "The Biology of Tropical Epiphytes" on 19-21 September in Sarasota, Florida. The symposium is open to all biologists and horticulturists interested in epiphytes. Persons interested in attending the symposium should contact The Marie Selby Botanical Gardens, 811 South Palm Avenue, Sarasota, Florida 33577. (813)366-5730.

The notice for this was received too late to be included in the previous issue, so you will have to inquire about possible attendance at the sessions. The editor would be interested in communication with any ABS member who actually attends the symposium for a possible report for the *Begonian*.



THE AMERICAN IVY SOCIETY

is the international headquarters for nomenclature; offers new and unusual ivies; features *Ivy Journal* three times a year with reports on research, uses, history. Memberships: General \$15; Institutional \$22; Commercial \$50. Information: The American Ivy Society P.O. Box 520, West Carrollton, OH 45449.

AMERICAN BEGONIA SOCIETY

Founded January 1932 by Herbert P. Dyckman

ABS AIMS AND PURPOSES

- TO** stimulate and promote interest in begonias and other shade-loving plants.
- TO** encourage the introduction and development of new types of these plants.
- TO** standardize the nomenclature of begonias.
- TO** gather and publish information in regard to kinds, propagation and culture of begonias and companion plants.
- TO** issue a bulletin which will be mailed to all members of the society.
- TO** bring into friendly contact all who love and grow begonias.

ABS SERVICES

These services are available to all ABS members. For names and addresses of department heads, see inside front cover. Include a self-addressed envelope when you write.

AT-LARGE MEMBERS – Members who don't belong to branches are represented at board meetings by the members-at-large director. To find a branch in your area or to start a new one, contact the branch relations director for help.

BOOKSTORE – See information in this or next issue.

JUDGING DEPARTMENT – Mail order course for a member who wishes to become an accredited begonia show judge is \$10. Also available are a booklet on point scoring (\$2), the old (unofficial) classification booklet (\$2), information on fuchsia and fern judging, and other requirements to become a judge. Add \$1 for postage and handling on all orders and 6% tax for California residents.

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

NOMENCLATURE DEPARTMENT – Monitors newly published findings on Begonia names. Handles official international registrations of new begonia cultivars and publishes these registrations. Gathers information about and assigns numbers to unidentified species.

QUESTION BOX – Prompt assistance with horticultural questions. Those of general interest will appear in the Begonian column.

ROUND ROBINS – Members exchange information about begonias and their culture through packets of letters which circulate among a small group of growers. There are dozens of these packets, called flights, on many specialized subjects. Contact the director for information.

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 seeds are encouraged.

SLIDE LIBRARY – See information in this or next issue.

SPEAKERS BUREAU – The director maintains a list of speakers on begonias and related subjects.

ABS Slide Programs

Rhizomatous Begonias 200 slides with taped discussion by Mildred Thompson.

Japanese Cultivars grown in the United States. 127 slides, printed list. Taped program. By Mildred Thompson.

Begonias in their Natural Habitat by Scott Hoover. Slides from Mexico, Guatemala, Venezuela, Colombia, Ecuador, Papua New Guinea, and Jamaica. Taped program.

Begonias for Contained Atmospheres. 81 slides. Printed list, taped program. By Mildred Thompson.

The Tropical Rainforest by Scott Hoover. 45 minute tape narration. 78 slides.

The Making of a Begonia Show. 77 slides of the show being set up and the plants displayed by the Barkley Branch in 1982. Printed slide list.

A Trip to the Montreal Botanical Gardens. 92 slides by Jackie Davis and Joy Porter. Printed list.

Horticultural Grouping of Begonias. 140 slides by Mildred Thompson. Begonias divided into 8 groups. List.

This is a partial list of slide programs available for rental to ABS members and branches. The fee is usually \$10 plus First Class Insured return postage. Deposit required. Send SASE for complete list and detailed instructions.

Daniel Haseltine, Slide Librarian
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