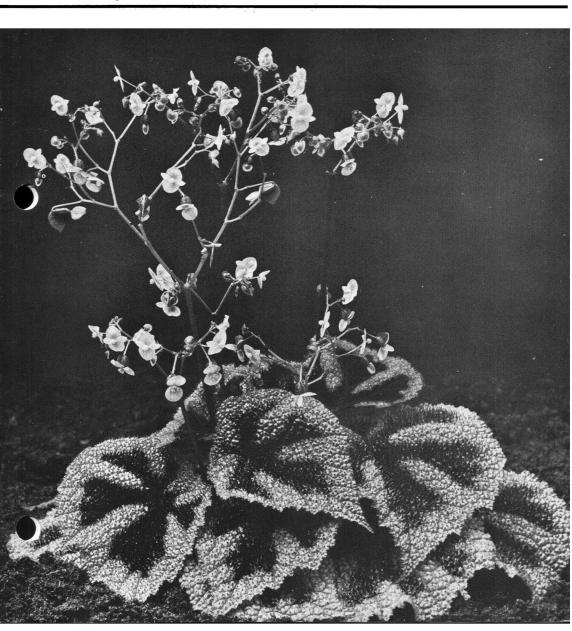
BEGINAN

SEPTEMBER, 1966

VOL. 33 ● NO. 9



Monthly Publication of the American Begonia Society, Inc.



Founded by Herbert P. Dyckman January, 1932

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General offices.

dues, address changes, or magazines:

Daisy Austin, Membership Secretary, 1510 Kimberly Avenue, Anaheim. Calif. 92802.

Subscription \$2.50 per year. Foreign, including Canada, \$3.00. U.S. air mail rate \$4.50.

Entered as Second-class Matter at the Post Office at Anaheim, California, under the act of March 3, 1879.

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The purpose of this Society shall be to 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; and to bring into friendly contact all who love and grow begonias.

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4900 Southern Avenue, South Gate, Calif.

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its officers.

BEGONIA REX WHY NOT REDISCOVER IT?

By Bernard C. Bowker

While going through some old issues of the *Curtis Botanical Magazine* in the library of Fairchild Tropical Garden, I came upon an illustration of an eye-catching and beautiful begonia. It was none other than the original *Begonia rex*, which is little known in cultivation, if it is in cultivation at all.

Begonia rex has no true stem and the petioles spring up in clusters from the underground creeping rhizome, which can be cut up to form new plants. The leaves are deep green with a metallic luster, tinged with purple toward the leaf margins. According to the text, the leaves are eight to ten inches long, five to six inches wide, and heart-shaped at the base. The cymes have only a few flowers but the flowers are large and pale rose. The male flowers are about twice the size of the female flowers.

Begonia rex is native to Assam province of northern India. The Assam province is noted for its elephants, forests, tea, rice, and cotton. While the province is mainly out of the tropical zone of India, at the lower elevations it should be considered tropical with reference to its vegetation and fauna. The area is protected on the north by the high mountains of southern China. Some parts of Assam are considered the rainiest on earth. Assam has a broad plain area which contains numerous streams and some navigable rivers. Scattered throughout this region are small (in area) mountains, which are called Hills. These hills are marked clearly on the National Geographic Map of India.

Begonia rex is found in the Arbor Hills, Mishmi Hills, Khasia Hills, Manipur Hills, Shan Hills, and also in adjoining Burma. It grows in shady ravines at elevations of 700 to 3,000 feet, making it a tropical to sub-tropical plant.

The area is one of constantly high humidity, being over 90 per cent all year long. Temperatures at low elevations range from 70 to 75 degrees from January to April, after which the temperature remains above 85 degrees for the rest of the year. Rainfall is seasonal, with the months of May to September often having as much as twenty inches per month. In the Arbor Hills area, where Begonia rex is most common, the yearly rainfall averages about 120 inches per year.

In view of the fact that *Begonia rex* is probably no longer in cultivation in the United States and Europe, I believe that the Begonia Society or some interested person should attempt to obtain seeds or rhizome cuttings from its native habitat in Assam.

When ordering cuttings, usually it is best to mail plastic bags and sphagnum moss to India to insure the safe arrival of plant material. Also, complete instructions in the packing of the material should be given.

Assam has good air transportation with daily commercial flights to the outer areas. Boat and train transportation also is good. In Assam there are some small colleges which have biology departments whose students would be glad to collect plants for a small fee. The Assam Forest Department at Shillong, Assam, which is associated with the Indian Forest Service, has foresters who know the area very well and who would assist in obtaining seeds or rhizome cuttings of rex.

Because *Begonia rex* is a beautiful begonia, it should be cultivated once again on its own. However, it might be interesting to see what would happen when it is crossed with species other than those which were used to give the Rex-Cultorum line of plants.

REMEMBER THE SHOW SEPT. 3-4-5

COVER PICTURE

Begonia masoniana — See Clayton M. Kelly Seed Fund Flight for description.

A REINTERPRETATION OF THE CYME OF BEGONIA SEMPERFLORENS 'THIMBLEBERRY'

By Torbjorn Lothman The City College, The City University, New York City

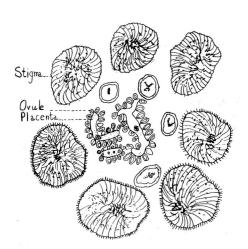
The family Begoniaceae has a three-loculed ovary containing a dichotomous placenta in each locule. The styles are three in number having twisted stigmata. The fruit is a capsule. There are numerous stamens and they are connate at their bases. In Begonia semperflorens 'Thimblebrry' the stigmata are two or three dozen in number. Malformed placentae are not dichotomous, and their ovules are not enclosed within a capsule. A complete re-interpretation of this "staminate" flower is given.

Introduction: This particular cultivar of Begonia semperflorens was orinated by E. K. Logee in 1946. Julius Roehrs Company (1963) described the inflorescence as "double golden stamens". I undertook the present study when a hand lens inspection of the inflorescence suggested that the description was incorrect.

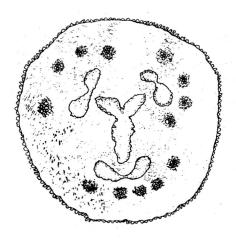
Materials and Methods: Plants of Begonia semperflorens cultivar 'Thimbleberry' were purchased from the greenhouse of Whitey's Nursery.

Flowers were fixed in FAA. They were left in FAA for two days and passed through an alcohol-xylel series before being embedded in paraffin. Blocks were sectioned at 10 mu. All slides were stained in safranin and fast green. All methods were taken from a sheet written by Copeland (1963).

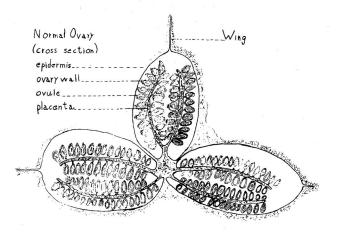
Results: The normal inflorescence. L. H. Bailey described the normal flowers of this plant family. He reported (and I found these correct) that flowers were in cymes. Parts are most regular in each series except that one wing of the ovary may be strongly developed. Flowers are disposed in clusters bearing staminate and pistillate blooms. The former usually open first. The perianth of the staminate flowers commonly consists of two petals and two petal-like sepals, the two series often unlike. The stamens are numerous with filaments distinct or connate. In Begonia species the anthers are usually 2 to 4 mm in length, oblong, flat, smooth, and, when open, have a powdery appearance and are



Cross Section Begonia Semperflorens 'Thimbleberry'



Cross Section of Normal Style



Cross Section of Normal Ovary

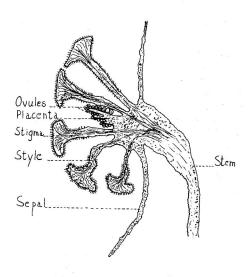
usually attached to filaments which are connate at the base. This is especially true in the semperflorens varieties.

Bailey says further that the perianth of the pistillate flower contains two to five or more parts with an inferior ovary which is two-three-celled, angled or winged, and with three styles which usually have three bent or twisted stigmata. They are like miniature twisted pipe cleaners or fine chenille threads. The ovules are numerous; fruit is a capsule with many fine seeds.

The cultivar produces on one cyme, staminate, pistillate, and the "thimble" type. Upon closer examination (even with the naked eye) it is very evident that the golden yellow center is not staminate. The entire center consists of two or three dozen tightly clusered chenille-like threads which, when gently parted, reveal innumerable ovules. No ovary wall surrounds them.

The ovules are at the base, which consists of a clumpy mass containing the attached stigmata and the malformed placentae.

Histological analysis confirmed this. In the normal pistillate flower cross-section the placenta is axial and dichotomous in each locule. In the cross-section of the 'Thimbleberry' the placentae are malformed, three in number, and definitely not dichotomous.



Sagittal Section

Sagittal sections show a mass of cells with ovules arising from the base and next to the attachmen of the stigmata.

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HOW LONG FOR SEED GERMINATION?

By Don Stephenson Paekakariki, New Zealand

Commercial seed packets have germination times printed on them, and most published information on seeds gives the time required for germination. Begonia growers, too, should be interested in the time they may expect to wait for seedlings to appear.

A check list of what the careful sower may expect — with some variations according to conditions — from a rapid germination for semps, perhaps even in five days, to much longer for some Indian species, may be built up by recording data on seed of dif-

ferent species and varieties.

Begonia seed may germinate over a period of a year or so, but, as far as I have found, there is one particular time that most of the seed germinates, and that should be taken as the "official" germination time. Most seed of other plants will germinate, in part, over a longer period than the stated time, so I do not feel that this is peculiar to begonias.

Age of seed, time of sowing, conditions, and temperature all have some bearing on the germination time. I have found that spring is best, maybe because I sowed the seed with substantial bottom heat, and then put them outside in a glassed-in porch, where I grow all my plants.

Of the few I sowed in July — still in our winter, here in New Zealand—most died, and the few surviving seedlings are so slow that seed sown later has passed them. After this experience, all my seed will be sown in spring — 'til I have a heated glass-

house.

The seed I have listed was purchased from the A.B.S. Seed Fund and grown in a commercial seed-raising mix, about 75 per cent sphagnum and 25 per cent vermiculite, with a fertilizer washed through. It is rather coarse, so for the second batch I covered the top with sifted sphagnum for a smoother sowing surface. I used a bottom temperature of about 70 degrees, reasonable light but not overbright, and sowed only a part of each seed packet.

RECORDED GERMINATION TIMES

(Editor's Note: A few germination times recorded by other members have been included.)

FIRST BATCH

		,	
Begonia	Date Sowed	Germination Time	Comments
Brazil species (red stems)	July 25, 1965	2 in 6 days 3 in 8 days 12 in 12 days 18 in 14 days	Fair germination but most died from cold.
B. dregei	July 27, 1965	3 in 8 days 10 in 9 days 25 in 11 days 40 in 14 days	Very good. A few more up in September.
B. evansiana	July 22, 1965	3 in 12 days 5 in 16 days 7 in 18 days	Very poor. Only one plant left.
-Another member,			
Park's seed	Feb. 4, 1962	Good in 13 days	Good. Grew well.
B. lubbersi	July 27, 1965	1 in 12 days 5 in 13 days 14 in 16 days 19 in 18 days	Poor. Lost the lot in cold weather.

B. malabarica	July 22, 1965	3 in 6 days 10 in 12 days	Most seeds went mouldy.
B. pariles	July 22, 1965	1 in 13 days 4 in 18 days 7 in 21 days	Bad.
— Another member	Feb. 17, 1965	1 in 11 days Good germ. in a few days.	
B. rubro-venia (Hook)	July 22, 1965	2 in 10 days 12 in 11 days 40 in 15 days	Very tiny and slow- growing. Lost the lot.
 Another member, half-packet silver var. 	Feb. 2, 1966	Sprinkle in 11 days, more next few days.	Good.
B. boweri nigramarga	July 25, 1965	1 in 10 days 4 in 13 days	Bad.
 Another member, half-packet. 	Feb. 2, 1966	7 in 11 days 35 in few more	Good. Tiny.

I tried a second lot of B. boweri nigramarga in September, but still had bad germination. I gave the remaining seed from the first batch to a commercial grower, who sowed them in his glasshouse and had no germination. Maybe they prefer a hot box in the bathroom, after all.

SECOND BATCH

Begonia	Date Sowed	Germination Time	Comments
B. caragutatubensis	Oct. 30, 1965 (End of spring in New Zealand)	1 in 11 days 8 in 18 days	Very bad. B. kenworthyi in other half of pan.
— Another member	Sept. 25, 1965	Good sprinkle in 11 days. 37 in 15 days	
B. fusca (Leib)	Oct. 30, 1965	Lots in 11 days 100 in 17 days	Excellent.
B. fernando-costae	Oct. 30, 1965	60 in 18 days	About 50 percent
B. kenworthyi (Zies)	Oct. 30, 1965	1 in 9 days 3 in 16 days	Very bad. Could be too wet or too cold.
- Another member	April 4, 1965	1 in 12 days 12 in 14 days	
B. luxurians (Scheid)	Oct. 30, 1965	30 in 10 days 100s in 13 days	About 90 percent
B. pariles	Sept. 7, 1965	3 in 12 days 5 in 14 days 9 in 16 days	Just as bad as first batch.
B. richi	Oct. 30, 1965	25 in 9 days 100s in 17 days	
B. xanthina (Hook)	Oct. 30, 1965	2 in 11 days 16 in 16 days	Fair

OTHER SEED TIMES FROM OTHER MEMBERS

Begonia	Date Sowed	Germination Time	Comments
B. bradei	May, 1964	Few in 13 days	
B. bradei	Sept. 1965	2 in 12 days	Good. Difficult to
a "		13 in 13 days	grow on.
		33 in 15 days	
	The state of the s	40 in 16 days	

B. leptotricha	July, 1962	Many in 8 days	Good.
Another sowing, one seed pod from robin, few seeds.	Feb. 1966	3 in 8 days 5 total	Very few seeds sowed.
Another member	- 1962	Germ. in 8 days.	
B. limmingheiana	Sept. 1965	1 in 9 days 2 in 11 days	Poor.
		8 in 12 days 11 in 13 days	
B. 'Nomo' seed (calla semp F2 hybrid, from friend)	Feb. 1966	10 in 8 days	Very good.
B. screptrum (half packet)	Feb. 1966	3 in 11 days Many in 12 days 25 total	Good.
B. schmidtiana (Seed two-and-one-half months old, from robin)	Jan. 1966	3 in 15 days 4 in 17 days 5 in 18 days	Not good, but sowed few seeds.
B. socotrana			
1st member	Nov. 1965	Germination bega	
2nd member 3rd member 4th member	" " " " " "	6 weeks later. 1 in 11th week Nothing, 2 month Thin stand only	
B. 'Weltoniensis' (from robin)	April, 1966	Few in 11 days. Many more in 13 days. 60 total.	Good. Tiny. Grew well

ROUND ROBIN NEWS

Interest in new specialty flights and in regular robins continues high. And robins continue to tackle a wide variety of begonia problems and ideas.

Fertilizer: Robbie Totino of Mountlake Terrace, Washington, has had success with his use of household ammonia as fertilizer. He has "luscious leaves" on his canes, with very few dying at the bottom, but may have sacrificed bloom to leaves. He decided to try one-fourth cup ammonia (for nitrogen), one-fourth cup vinegar (for acidity), and one-fourth cup epsom salts (for bloom), in one gallon of water once a month. Time will tell if this is too strong.

Florence Bettis of Cottage Grove, Oregon, uses half old cow manure and half peat moss for rexes—"they love it." She sterilizes manure in the oven.

New Begonias: Elaine Wilkerson of Baton Rouge, Louisiana, has a variegated B. 'Erythrophylla' with lovely gold variegation in its leaves.

From growing and observing peonyflowered semps (seed from Australia in the Seed Fund), Barbara Walker of Bloomington, Indiana, thinks they must have a very strong, tall species in their parentage. They are large plants, not just large-flowered, and they are heat-resistant and sturdy. Good stock for hybridizing, she thinks.

Vernia Routh says she gave names of her granddaughters to her seedlings B. 'Roberta' and B. 'Angie'. 'Angie' is the most prolific bloomer, but seasonal. She can hardly keep enough plants of 'Roberta' in her greenhouse for propagation.

Fragrance: Don Salmon of Millicent, South Australia, has found fragrant flowers on his B. 'Pink Parade', also on a rex — in early mornings. Elaine Wilkerson finds her 'Pennywort' (B. hydrocotylifolia) most fragrant of all, and notes fragrance on thwaitesi, 'Rossi', and a large Honduras species (perhaps pilifera?).

(Continued on Page 181)

CLAYTON M. KELLY SEED FUND FLIGHT

No. 1 - B. species -

From a botanist in New Guinea. Described as a very beautiful terrestrial climber with pink flowers and cordate leaves. Collected near Tari Gap in the rain forest in Southern Highlands District in New Guinea. Seeds are long instead of round. New and different. Price \$1.00 per pkt.

No. 2 — B. eminii —

A very unusual species in many respects; looks more like a philodendron than a begonia. Also, the seeds look like philodendron seeds; you can actually separate and count them. Leaves are oval, with a dark band around the edge, and are rather ornamental. (See illustration.) Flowers are small and borne in the leaf axils. The plant was collected by Dr. de-Witt near Nimba, Liberia. Seeds were furnished by a botanist in Holland. Price \$1.00 per pkt. Please do not request more than one packet.

No. 3 — B. staudtii Gilg. var. dispersipilosa Irmscher —

One of the most beautiful rhisomatous species. During almost the whole year it is covered with large, deep yellow flowers. (See picture.) The plant was collected by Dr. de Wilde near Ebolowa in Southwest Camaroun. Seed was furnished by a botanist in Holland, who enclosed the following information with the seed and pictures:





"Although our breeding work is progressing rapidly, I have not been able to add much to our collection lately. I have located several interesting species in a collection in Germany, but so far my efforts to obtain them on an exchange basis have not been successful. So no *B. rajah* yet. However, we will continue our efforts."

Price of staudtii \$1.00 per pkt.

No. 4 — B. hispida cuculifera —

Lobed, downy-soft leaves with upstanding adventitious leaflets on the veins. White flowers. An interesting begonia 50 cents per pkt.

No. 5 — B. pearci —

Low. Stems succulent, leaves broadovate, pointed, irregularly toothed, velvet-like dark green, with glistening light green veins. Flowers are yellow. This species is largely responsible for the numerous yellow tones found in the tuberhybrida group, and later in Clibran and Baardse strains of *B. hie*malis. 50 cents per pkt.

No. 6 — B. boliviensis —

Medium. Stems succulent, smooth, green, tinged with red or brown. Leaves ovate-lanceolate, broad at the base and tapering to a slender point, glossy dark green, double toothed. Flowers orange-red, nodding, petals long. 50 cents per pkt.

No. 7 — B. cinnabarina —

Bolivian Andes.It has erect zig-zag stems, and both stems and leaves are slightly downy. The long, erect flower stems carry a compact panicle of three cinnabar-red, rounded flowers, two inches across. This begonia has played an important part in shaping some of today's plants. 50 cents per pkt.

No. 8 — B. masoniana syn. 'Iron Cross' —

Fresh seed from our friend in Holland. (See cover picture.) Introduced in 1952 in England, by Mason, it is said to be one of the most beautiful begonias in cultivation. Leaves are large and puckered, Nile-green, marked with a contrasting, bold, brownred pattern, resembling the German iron cross. Stems are white-hairy and reddish. Flowers are waxy, greenish white, with maroon bristles on the back. Seeds are sometimes slow to germinate. \$1.00 per pkt.

No. 9 - B. 'Persian Brocade' -

New introduction. Miniature rhizomatous; fresh green, star-shaped leaves edged in black, leaves laced and interlaced with black. Light green sinus and veins, upper leaf edge hairy, under leaf splashed with red, petiole hairy with red dots. Flowers pink. 35 cents per pkt.

No. 10 – B. Double semperflorens— Two shades of pink. We have collected seed from our second generation X-rayed semperflorens. Very double blooms in light and dark pink. We have no idea what these seeds may produce, but it will be interesting to try them. 35 cents per pkt.

Our good friend who collected so many begonia species for us in Brazil has returned to the United States. However, he has made a seed collecting trip to Colombia, South America, and brought back seed listed below:

No. 11 — B. Choice Columbia sp.— Upright, medium, with large, brilliant scarlet flowers and one inch finely serrated leaves. Collected along the road in a dense, wet forest east of Pasto at an elevation of six thousand feet. Because of its brilliant color and adaptability to pot culture, we think this will be among the better begonias. Hope you will try it. \$1.00 per pkt.

No. 12 — B. foliosa type —

Small leaf. Collected north of Pasto, along a creek in light shade at an elevation of six thousand feet. \$1.00 per pkt.

No. 13 — B. Climbing type —

Small, dark pink flowers. Leaves one and one-half inches, like those of an elm. From the moist forest west of Darien, at four thousand feet elevation. 50 cents per pkt.

No. 14 — B. Cane type —

Good-sized, pale pink flowers. Leaves ovate-acuminate about four inches long. Collected along the road-side from Pasto to Moca, Narina, Colombia, in nearly full sun but in the cool, wet forest at about six thousand feet elevation. 50 cents per pkt.

No. 15 — B. Cane type —

About eighteen inches tall. White flowers and round, shiny leaves. A good pot plant. Collected west of Darien at four thousand feet elevation. 50 cents per pkt.

No. 16 – B. Cane stem type –

Fairly large flowers. Collected near Cajamang, Colombia, at eight thousand feet elevation. 50 cents per pkt.

No. 17 — B. Climbing type —

Climbing type on trees. Undulate rounded leaves to four inches in diameter. Flowers not seen. Collected from a creek bank south of Pueblo Rico, Caldas, Colombia, at five thousand feet elevation. 50 cents per pkt.

No. 18 — B. Giant type —

We have all heard of the giant begonia that grows in Colombia — this one grows from four to fifteen feet high, with leaves to fifteen inches, and flower heads more than two feet across. Seed was collected from a plant on a creek bank south of Cauca, Columbia. This would be an interesting begonia to grow in the shrub border. 50 cents per pkt.

No. 19 — B. Giant type —

Not as large as the one mentioned above. Very large heads of small white flowers. Seed was collected from a plant growing in a moist canyon along a creek. 50 cents per pkt.

No. 20 - B. involucrata -

Costa Rica. Oval green leaves of fine velvet are divided by depressed veins. Many branches and new shoots from the base keep the plant compact. Unusually tight clusters of white flowers. Keep the soil rather dry and keep the plant away from the hot sun. 50 cents per pkt.

It has taken much time and writing to collect the species offered in the September *Begonian*. We hope you grow and enjoy them.

GREENHOUSE PLANTS

Fern from Montevideo -

Large leaves on stems twenty-four inches high. 35 cents per pkt.

Gesneriad -

Green leaves, scarlet flowers. Seed was collected from Mocoa courtyard, Colombia. 35 cents.

Gesneriad -

Red, shrub type. 35 cents per pkt.

Cyrtopodium andersoni, Orchid-

Bold terrestrial and on rocks, with long pseudobulbs and four feet tall branching spikes of yellow flowers tinged with green, and with a rich yellow lip. 50 cents per pkt.

Stanhopea bucephalus, Orchidaceae Curious epiphyte, with ovoid, clustered pseudobulbs bearing a solitary stalked, plaited leaf. The pendulous inflorescence oddly appears through

BUXTON CHECK LIST OF BEGONIAS

A reference book for identification and origin of begonias.

An aid to hybridizers to check on previously registered names.

Price \$6.00 (In Calif. add 24¢ sales tax) Order from:

Mrs. Adeline Patterson, Librarian 8542 S. Acacia Street Cypress, Calif. 90630 the bottom of the orchid basket. The waxy flowers are large and spectacular and heavily scented, tawny-yellow, orange in the center, spotted crimson, and with two horns. Seed was collected on the road from Pasto to Barbacoas at thirty-five hundred feet elevation. 50 cents per pkt.

Schlumbergera makoyanum —

Form with joints matte bluish-green and purplish crenate margins, yellowish-brown bristles on tips. Star-like flowers somewhat lighter orange-red, flowering in spring. 25 cents per pkt.

Mrs. Florence Gee Seed Fund Administrator 234 Birch Street Roseville, California 95678

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THE ANNUAL BEGONIA SHOW

By Richard R. Hammond Northwestern Editor

To many of us who belong to the American Begonia Society, summer is the time of the annual Begonia Show. This is a time of hard work, but still a time of much excitement and inter-Others, however, who are not members of organized groups, have not had the rich experiences of planning, preparing for, and setting up a show. To many of us this is one of the most rewarding parts of our common hobby, raising begonias. It is to those who have not participated in a show that I am directing this article, in the hope that they, too, may know what it is like to put on a Begonia Show.

The Seattle Begonia Show is probably typical of many shows held throughout the country, with the exception that we specialize more in tuberous begonias and fuchsias, rather than in foliage begonias. We do, however, include a section for foliage begonias and also a section for other

shade plants.

Preparations for the show actually begin shortly after the closing of the previous year's show. It is necessary to choose the time and place for next year's show at least eight to ten months in advance. In a large city with many flower shows it is sometimes difficult to schedule a suitable place, for many clubs are competing for the same facilities. The Show Chairman must also be appointed at this time so that he may make necessary arrangements, and appoint subcommittee chairmen.

Another important item to be accomplished early is the choosing of the show theme. This theme must be used in all show publicity and in planning the set-up of the show. Any publicity for national magazines must be sent out at least six months prior to the show.

The Show Chairman appoints subcommittees such as staging, properties, awards, judges, publicity, education, and entries and classification.

An early duty of the staging committee is to make a floor plan. The Seattle show is based around a number of individual landscaped garden plots. These must be signed up in advance and plotted on the floor plan. Most of the plots are put in by individual members or groups of members. We also have some plots that are put in by other clubs or organizations. The Seattle Park Department, co-sponsor of the show, always puts in a beautiful display.

The publicity committee must contact all local newspapers and radio and television stations long in advance of the show. Experienced growers must then make appearances on television on the local garden shows. Posters are made to place in store windows. The last few years our own members have been silk-screening ap-

proximately 200 each year.

On Wednesday of the week prior to the show, we begin the actual show set-up. Early Wednesday morning our staging crew comes in and lays out the exhibit floor. All background construction is done, natural shrubs and trees are put in place, and plot boundaries are established. This is the day when much of the heavy work is done.

Thursday is the day when most of the garden plots are put in. Members bring shrubs, moss, and, of course, begonias, and weave them into a naturalized garden to fit in with the show theme.

Friday evening is the time for entering horticultural exhibits. Most entries come in Friday, although there is a short period Saturday morning for entries. Everyone is busy putting finishing touches on exhibits, displays, and education tables.

Saturday morning the horticultural exhibits are judged. At two o'clock, provided all goes well, the show opens and we all stand back and see how beautiful it is. It is a lot of work, but few can argue that it is not worth it

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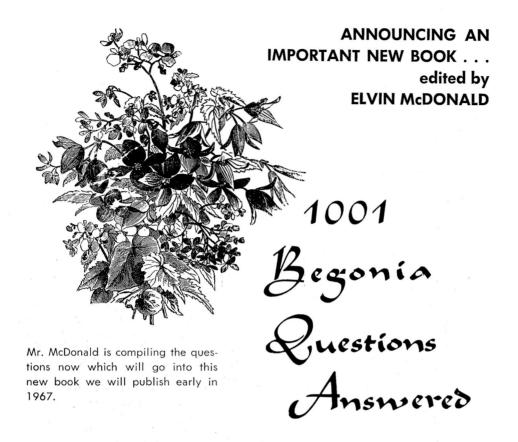
1—BEGONIAS	Rex, assorted 4-inch pot size. Rhizomatous, Bow Chancee, Boweri. Angel Wing, assorted 4-inch pot size.
2—BROMELIADS	Neoregelia hybrids, Billbergia hybrids, Aechmea assorted.
3—FERNS	Diaplazium esculenta (tree fern from Burma). Platycerium bifercatum (staghorn fern). Selaginella kraussiana (dwarf peacock).
4—ORCHIDS	Cattleya divisions assorted (no back bulbs). Species orchids of assorted kinds.
5-PALMS	Arikuryroba schizophylla (cathedral palm). Dictyosperma album (hurricane palm).
6—GRASSES	Arundo donax (varigated giant reed grass). Curculigo capitulata (palm grass). Pampas grass.
7—CACTI & SUCCULENTS	Night blooming cereus, Rhipsalis, Aloe vera (med- icine plant). Eryptocereus, Kalancoes, Euphorbias.
8—ROOTED CUTTINGS	Monstera deliciosa (Mexican hurricane plant). Crotons assorted, Philodendrons.
9—TROPICAL VINES	Passifloras (red or white passion flower vine). Aristolochia elegans (calico flower). Hiptage begalensis (Bengal orange blossom vine).
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BEGONIAS IN SEPTEMBER

By ELDA HARING

Here in the Northeast it is most important to return no later than September tenth those begonias which have summered out of doors to greenhouse, windows, sunporch or fluorescent light stands. Daytimes during the first week or so of September are inclined to be somewhat warm but nights are starting to become a little chilly. Bringing plants indoors before heat is needed lessens the shock of the change. Semperflorens, especially, seem to become watery and limp if left out-of-doors too long in the fall. Delaying until the end of the month when the first tinge of frost is in the air, rexes are likely to spot and other more fussy types to mildew. Some authorities think the spread of temperature from warm daytimes to cold nights is especially responsible for mildew on certain varieties of begonias.

By the end of the month the heating system in the house will be activated but is usually needed only early in the morning or late evening. Thus begonias brought in by the 10th will have adjusted to their new environment before more heat is needed. Prior to bringing the plants inside, wash off all the pots and repot those whose roots show the need for more growing room.

All plants should be sprayed to insure that no insects will be brought into the house to multiply in the warmth of the heat. I prefer to use Isotox according to directions, adding Phaltan, which is compatible with Isotox. also prefer to mix the insecticide with lukewarm water for spraying all my house plants. For many years I lost fine plants due to white grubs boring into the stem at the soil line while outdoors. Therefore, I have also gotten into the habit of giving my plants a quick dip into a half-strength solution of Isotox before bringing them into the house. Be sure to wear rubber gloves for this chore. It is very important not to let any of these poisonous spray materials come into contact with the skin. It is not necessary to soak the pots but submerge them so that the soil is covered by the insecticide solution, and then lift them and permit them to drain before placing them indoors.

This is also a good time to shape any plants which need this attention. Remove long branches and unsightly leaves. Nip out the tips of those which need it to make a more bushy plant. Although I prefer to take cuttings of all my begonias in earlyy summer, this may also be done in early September, which will give you nice little plants by late winter for window sill enjoyment.

ICE CREAM SOCIAL FOR A.B.S.

An ice cream social for all members of the American Begonia Society and their friends will be held Sunday, September 25, from 2 to 7 p.m. at the home of Mrs. Mabel Corwin, 4925 Willard Avenue, Rosemead, California.

This event will be a national-sponsored effort to raise money for the society, and all Branches of the A.B.S. are invited to help. A letter of details will be sent to each Branch.

SANTA BARBARA EXHIBIT

The Santa Barbara Branch of the American Begonia Society will stage an exhibit of tuberous, fibrous, rhizomatous, and rex begonias, on Saturday, September 10, from 9 a.m. to 5 p.m., and on Sunday, September 11, from 1 to 5 p.m., in the Santa Barbara Museum of Natural History, 2559 Puesta del Sol, Santa Barbara (near the Old Mission Santa Barbara). There will be no charge for admission.



4401 - 6th Street S.W., Cedar Rapids, Iowa

QUESTIONS AND ANSWERS

Several letters arrived after the June issue was received by the members. What did we do right?

Letters continue to arrive asking about growing rexes, and the plaint of browned edges seems never-ending.

Conversations and references force me once more to urge that those having this difficulty do everything possible to increase the humidity about their plants. Of course, all other factors must be correct — light, watering, feeding. But if they are, look to your humidity if the leaves continue to dry around the edges. We would appreciate word from the Rex experts that might help others to success, particularly for growing them in apartments.

It also appears, from the letters coming in, that many growers of rexes and other rhizamotous begonias are unable to ascertain whether their plants have died or just gone dormant. If the rhizome continues to have a healthy, fleshy look, it is probably just in dormancy. Cut down on the watering as the rhizome bears quite a bit of water within its cells and too much watering at this period induces rot. Be patient - and watch for new growth to appear. A three months' period should be more than ample for determining the life or death of your plant.

Question: Mrs. Ann White of Wilsonville, Oregon, wrote for a description or photograph of 'Bow-Chancee', stating that her references varied in their descriptions of this variety.

Answer: Of ten commercial lists referred to, I was able to find only three listing the plant. The descriptions given did NOT vary, and summed-up came to: "Yellow-green leaves stitched (edged) with chocolate." Of the three, one listed it as "Bow Chance". Two hyphenated it, one did not. Can our members set the records straight on the variety?

Question: Mr. Charles Ivey, of Eau Claire, Wisconsin, is seeking a begonia with a rather large, star-shaped leaf, "similar in shape and color to what I

know as 'Manicata' having hairy stems and under-leaves, the most interesting feature being its perforations in the leaves with hairs bordering the openings on the underside."

Answer: Leaves with perforations are nothing new to us, an we can think of a hundred undesirable ways of getting them in our plants! However, the fact that Mr. Ivey recalls hairs growing from the perforations seems to indicate that neither disease nor bad culture contributed to this condition. Does anyone know this plant? Where can it be obtained? What is the parentage? Such information would be of interest and value to many of us, I am sure.

Question: Mrs. Littleford, of Oklahoma City, asks our opinion on the use of vinegar in the soil to increase the acidity.

Answer: This is the first time I have heard of this, and unless some experienced (and good) grower tells me he uses it, I, for one, would not attempt it! Lime is the more popular method of increasing acidity, but be sure your soil has been well-tested and reveals an insufficent amount for your growing purposes before attempting to increase acidity. Mrs. Parshall writes that she has been advised to use strong tea, and I suspect for much the same purpose. The use of tea is not new to us, and I know of a superb African violet grower who swears by it. However, I regret I am not versed in the sciences and have no idea whether the tea is helping, hindering, or just being ignored by the plants. It would be interesting to hear from our scientifically-inclined members as to the pros and cons of both vinegar and tea.

In response to our mention of methods for mailing leaves, Mrs. Robert C. Jones, of Oakland, New Jersey, writes to say she received rex cuttings placed between two layers of damp sphagnum and then wrapped in waxed paper, and they arrived in fine fettle. Although not stated, we assume leaves were sent in a box rather than an envelope.

Several responses to our request for information on Cala Lily and Charm growing. Grace Shatto says that placing them in a cool place did not work for her, and she tried an east window, the Callas and Charm protected from direct sun by plants being placed in front of them. Adds the new Calla leaves are pink rather than white, but growing beautifully, and the Charm sprawls its silly head off and is constantly in bloom. Her mix consists of 2 parts humus, 1 part peat moss, and about ½ part sand.

Mrs. Edna Stewart, of Tarentum, Pennsylvania, placed a cutting into a hanging basket where it immediately began to "sulk". She let it get very dry, and then during the winter it started new growth. Occasional feeding. Now 15 inches high — constant bloom. She believes in pinching-back Callas continually.

Mrs. Hackman, of Silver Spring, Maryland, placed her Calla Lily Begonia in a window receiving bright filtered light as soon as she bought it as a very small plant, and it "took" — good growth and much bloom. Repotted into a 6" pot and during the winter placed in a south window, trimmed back a little. In the spring back to the east window and growth increased. Waters it when top of soil is dry to the touch, and very infrequent feedings.

Mrs. Dee Brooks, of Renton, Washington, grows her Charm Begonia in a mix of peat moss, leaf mold, sandy loam, humus mulch, charcoal, vermiculite, and cow manure, watering about once a week, depending on weather, with "tepid water with a small amount of Wonder-Lizer in the water". Grows in a greenhouse.

Perhaps you will recall the plight of Mrs. Hope Parshall, who said that it was a shame that "cliff-dwellers" were unable to grow beautiful plants, and that only those with gardens had this privilege. She was depressed, disgusted, and what-have you. Well, we are happy to report that the latest note received from her is written in a

major rather than a minor key! She has discovered, through encouragement, that plants CAN be grown well indoors, and she sounds as though she is having a ball trying new methods and asking advice of all who cross her path. We like to think that much of the newly-found enthusiasm comes from her membership in A.B.S. and the help of its members.

Murray D. Morrison (Knickerbocker Branch) 2109 Matthews Avenue The Bronx, N.Y. 10462

ROUND ROBIN . . .

(Continued from Page 172)

True from Seed? Alberta Ross of Vienna, Ohio, adds to the discussion of B. 'Fleecealba'. Some have reported that seed comes 100 per cent true and some that it does not come true. Alberta found that her seedlings of 'Fleecealba' were varied. At least three look like semps; but one has a fairly large, white-hairy leaf with quite a ruffle, and two have a small round leaf like 'Pennywort', though quite hairy. These were small at time of reporting, and could change.

B. 'Weltoniensis': Norma Darragh of Covington, Louisiana, grows 'Weltoniensis' in the greenhouse, in a three-inch plastic pot. Winter before last it did not go dormant, but it did this past winter, for three weeks. This spring the pot was full again, tubers piled one on another, needing transplanting. She has never had mildew, though she watched it closely through a rainy January, February, and March.

Iron Cross: Norma grows B. masoniana the way she does rexes, except for keeping pots on the dry side. She has trays of moist sand and gravel on a table in a closed-in porch, with one forty-watt Gro-Lux lamp to supplement window light (five hours of sun in winter). Rexes seem to love warm days and cold nights here. Barbara Walker uses a very light mix and waters infrequently.

Rex Dormancy: Geraldine Daly of Coventry, Rhode Island, grower of huge rex plants, notes that B. 'Green Gold' and B. 'Ranee' seldom go dormant for her.

Mrs. Carrie Karegeannes, Round Robin Director 3916 Lake Boulevard Annandale, Virginia, 22003



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COMING EVENTS

SEPT. 1 — WESTCHESTER BRANCH: Birthday pot-luck supper at 6:30 p. m. Rudolf Ziesenhenne will be guest speaker.

SEPT. 9 — SAN GABRIEL VALLEY BRANCH: A four-member panel will talk about growing begonias from A to Z, demonstrating with

seeds, leaves, and cuttings.

SEPT. 10-11 — SANTA BARBARA BRANCH: Exhibit of tuberous, fibrous, rhizomatous, and rex begonias in the Santa Barbara Museum of Natural History.

SEPT. 14—INGLEWOOD BRANCH: Pot-luck dinner at 6 p.m. — 50 cents. Bring service and one covered dish. Mrs. Mabel Corwin, Past president of the A.B.S., will speak and show slides on the Eastern convention and show held in New Kensington, Pennsylvania.

SEPT. 15 — FOOTHILL BRANCH: Pot-luck dinner at 7 p.m. Regular meeting at 8 p.m. This is the meeting for sharing. Bring your favorite plants so others may enjoy them. Meeting will be an open forum and your comments on your plants will be welcome.

SEPT. 17 — BESSIE RAYMOND BUXTON BRANCH: Begonia show, lecture, and sale, at University of Massachusetts, Waltham Field Station.

SEPT. 23 — REDONDO AREA BRANCH: John Bingenheimer, Jr., a nursery student at Orange Coast College, will talk on "Diseases and Pests of Begonias".

SEPT. 25 — Ice cream social at home of Mrs. Mabel Corwin, 2 to 7 p.m.
OCT. 6 — WESTCHESTER BRANCH: Joe Littlefield will speak on "Helpful Hints on Begonias".

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REPORT OF A. B. S. BOARD MEETING

The regular meeting of the Board of Directors of The American Begonia Society, was called to order by President Muriel Perz, at 7:30 PM in the South Gate Auditorium, South Gate, Calif., July 18, 1966.

President Elect, Everett Wright led in the pledge of allegiance to the American Flag. Mr. Wright also read the Aims and

Purposes of the Society.

Secretary, E. Keaster called the roll with 22 officers, chairmen and branch representatives present. Minutes of last meeting were approved as read.

Past Pres. M. Corwin reported on the cuttings of the new hybrid Jill Adair that she is preparing for the show.

Treas. H. Burkett reported a balance of \$722.87. The seed fund amounted to \$66.67.

Memb. Sec. Daisy Austin reported new members 99, and renewals 190, or a total of 289. This report was for a two month period.

Adv. Mgr. A. Rose, reported \$30.00 accounts received, and \$71.35 accounts receivable.

There will be two people appointed to assist the Round Robin Director. Also a contact made to determine her expense.

Vera Naumann has received a letter from a recessed branch wishing to be reactivated. This will be done at the convention.

Librarian A. Patterson reported on the new up-to-date books added to the library. She also displayed the interesting book she and Mrs. Perz have compiled for the library using pictures and other excerpts from the old Begonians. Since this book will probably be a much in demand item, especially by the newer members, it is hoped Mrs. Patterson will have time to create another copy.

Mr. Barnett has checked with many authorities trying to obtain as much knowledge as possible on the controversy on the Begonias San Miguel and Mr. Jacques. Mrs. Perz had obtained a very simular report. Motion was made by Mr. Cocke, seconded by H. Burkett that the A. D. Robinson retroactive award not be given to San Miguel since this is a controversial plant and was not given the award when the plant was presented in the past. According to the By-Laws the A. D. Robinson award is a cherished one and should not be given to a controversial plant. Motion carried.

Committee on changes of Constitution and By-Laws to be presented at the Convention were appointed by Mrs. Perz. Consisting of W. Barnett, Anne Rose and Gertrude Winsor. Motion by P. Benell seconded by Earl Hough, to accept these appointments. Carried.

All officers are reminded to send a report to President and Business Manager of all ABS property in their possession.

Motion by Mr. Cocke, seconded by Mr. Barnett that President send a letter to the printer of the Begonian informing him that her term of office will expire as of Sept. 4th, 1966, and that the October Begonian will terminate her authority. Consequently she cannot commit the new President to this publisher. Any further contracts will have to be made through the new President.

The passing of Mrs. Leona Cooper was announced. Mrs. Cooper was a past Treasurer of the ABS. She was on a visit to Chicago at the time of her passing. A letter to be sent to her family.

Mrs. Gillingswater appreciates hearing from her friends.

There being no further business, meeting adjourned at 9:00 PM.

Late report of Ed Com: Reminder of dead line date for material and notices to reach committee being the first of the month, 2 months prior to publication. All Calendar dates should be sent direct to Editor and a copy sent to the com.

Evelyn Keaster, Secretary.

In Memoriam

Ethel Calloway, of La Jolla, California, passed away the latter part of July. She was the founder of the La Jolla Branch of the American Begonia Society, and the daughter of Eva Kenworthy Gray.



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