

PREFACE

TO THE

MIMEOGRAPHED REPRODUCTIONS

OF THE

MONTHLY BULLETINS

OF THE

AMERICAN BEGONIA SOCIETY

for

January through June

of

1938

July 12, 1968

This six month set of the mimeographed form of the early Begonians for the interval of January through June in 1938 completes the reproduction work of all Begonians which were prepared before the letter press printing procedure was started in July 1938.

While these mimeographed bulletins were not as convenient to use as the printed form of Begonian they did serve very well for the members and Branches of that era. On page 3 of the attached February 1938 Begonian we find a brief tabulated history of the ABS from its beginning in 1932 through 1937. It will be noted that all expenses were kept at the minimum and it appears that the mimeographed form of Begonians was economical and adequately served the early size of the Society.

Our present-day members who have access to the real original Begonians for the first six months in 1938 will note that we have reproduced this last set in the same general format as for 1934 through 1937. Prior to the printed form of Begonian in July 1938 the national editor tried an unusual form of folded and cross-page mimeographing from January through June. The result was not completely satisfactory but the regular printed form in July solved all problems and in addition permitted the use of pictures.

The ABS, as indicated in these early Begonians, was really making progress in 1938. Its influence was developing over the whole nation and embryonic Branches were growing in several parts of the country. Analyses of the many cultural problems were being successfully handled. It is a pleasure to read the names of the begonias in their early culture. It is also intriguing to note that the members were becoming interested in many other types of plants, as companions to begonias in their yards and gardens.

If the members of 1932 could visit the ABS today they would find some improvements in begonia culture but they would also find that they could still compete quite successfully in our present-day shows.

We certainly owe a vote of gratitude to all of these early members. We benefit by the experience of every member who has gone before us or who is now working with us.

It has been a real pleasure working on these early bulletins. We regret, however, that it has taken a year to reproduce, for the ABS, 100 sets of the four and a half years of early Begonians. It was a job that had to be fitted in among a lot of other activities in our local Begonia Clubs, as well as in several other types of local Garden Clubs.

Sincerely and Cordially,
Elizabeth and Herbert Warrick,
in behalf of all ABS Branches
in the Pacific Northwest of
Washington and Oregon.

THE MONTHLY BULLETIN
of the
AMERICAN BEGONIA SOCIETY

10¢

\$1.00 a year

Vol. 5.

JANUARY 1938

No. 1.

Long Beach, California
M. B. Dunkle, Editor, 4543 Colorado Street

Greetings of the NEW YEAR to all our Members

THE PRESIDENT'S MESSAGE, by J. S. Williams.

Our thanks are extended to Tom H. Smith (our retiring President) and his committees for their consistent work which made 1937 a very successful year for the American Begonia Society.

As your new President I urge every member to help the officers and committee chairmen make 1938 another big year for your Society.

Miss Lena Higgins will conduct a Question Box, both for the meetings and for the Bulletin. Mrs. O. P. Palstine will have two or three specimen plants each meeting and there will be a short talk about each. Every other meeting Tom Smith will have the program presented by members from neighboring communities.

As you may know, the membership dues go to the expense of the Bulletin. All expenses of our local monthly meeting is handled by the sale of plants at our meetings. B. C. Smith and Thomas W. C. Burgess will have charge of this activity and will be happy to have members donate plants.

The new Membership Directory is 25¢; get one and learn the Begonia enthusiasts in your vicinity.

Start the New Year off right by promptly sending in your membership dues to the Treasurer.

Have you seen the Garden Movie about Begonias by Mrs. Schath in the January Sunset Magazine?

Patronize our members who are listed in the commercial directory on the back page.

There exists a very real need for a comprehensive check list of begonias. This will be no simple task. To make a start Mr. Dyckman is submitting each month a tentative list. All members are asked to send in additions or changes.

Begonia Check List - by H. P. Dyckman.

Bulbous and Bulbous Hybrids.

Socotrana, Island of Socotra in the Red Sea, 1880. W. Rose.	Gloire de Sceaux, W. Rose-pink.
Gloire de Lorraine, W. Rose.	Triomphe de Lemoine, W. Rose-carmine.
Incomparabilis, W. Orange-red.	Caledonia, W. White.
Turnford Hall, W. White.	Lady Mack, W. Pink.
Glory of Cincinnati, W. Pink.	Peterson, W. Pink.
Melior, W. Pink.	Lady Roberts, W. Yellow.
Dazzler, W. Crimson.	Fascination, W. Salmon-pink
Rose Queen, W. Dark Red.	

Semi-Tuberous

Dregei, S. White.	Weltoniensis Alba, S. White.
McBethii, S. White.	Weltoniensis Rosea, S. Pink
McBethii Pink, S. Pink.	Richardsonii, S. White.

Begonia Check List (cont'd)

Richard Robinson, S. White.

Natalensis, S. Rose.

S - Summer flowering

W - Winter flowering.

What are your Problems? by Lena Higgins.

A new department to help you with the simple little problems that will puzzle any of us at times. Send in your questions, the answers may not only help you but scores of others.

Do eucalyptus leaves produce good leaf mold for begonias? A.C.M.

No, there are substances in the eucalyptus leaf that are detrimental to begonias.

At what temperatures should tubercous begonia seeds be kept for the best germination? T.L.S.

The seed box should be kept continuously between 65 and 70 degrees, until after the seeds have germinated, when it can be gradually lowered. See the Tubercous Bulletin.

What should be done with old Rex plants that have unsightly rhizomes? G.B.

Divide the old rhizome into short sections and start new plants in leaf mold. See the special cultural bulletin for Rex Begonias.

In what direction should the lath on the roof of a lath-house run? H.L.

North and south, so that the sun and shade will shift continuously over the plants as the sun travels across the sky.

Are angleworms harmful to begonias and similiar plants? M.F.C.

They are beneficial to many garden soils, but are not considered desirable in pots. They consume the leaf mold too rapidly and make the soil soggy, and occasionally eat the fine roots of the plants. Deterrents such as vaporite or naphthalene chips will keep them out for awhile, but a little lead arsenate in the soil is more permanent.

REMINDERS FOR JANUARY - by J. Paul Walker.

Plant tubercous begonias in a warm place.

This is the ideal time to start fibrous cuttings in bottom heated frames.

Begonias require little water during cold weather.

Prune your fuchsias this month.

Trim bedding begonias several inches above the ground.

Tubercous begonia soil is better if prepared for use ahead of time.

Have you trimmed your fibrous begonias?

Leaf mold may be dug into begonia beds now.

Consult your special cultural bulletins for further suggestions.

A RECOMMENDED POTTING SOIL - by Mrs. Ella Marguerite Fewkes.

Having had such good luck this year with our potted plants, we thought perhaps it might be of interest to others bitten by the begonia bug to know what we think is the reason for our success.

We have entirely changed our potting mixture. It is now mixed as follows:

Two--8 quart buckets of sifted leaf mold (live oak preferred); One--8 quart bucket of sandy loam soil; One-half--8 quart bucket of Servall (Servall is dried, shredded sugar cane, and is used in place of peat moss. Write Gedchaux's Sugars, Inc., Masonic Building, New Orleans, La., for information as to where it may be obtained in your locality.); one-half--8 quart bucket of sharp river sand; and a 1 lb. can of Nitroganic (Information concerning Nitroganic may be obtained from the Nitroganic Sales office, Room 117, City Hall, Pasadena, California.)

Nitroganic is an A #1 plant food. It is effective for about six months during which time the plants grow steadily, have good color and bloom plentifully. The Servall merely breaks up the soggy mass created by the complete disintegration of the leaf mold.

LONG, LONG AGO - by Alfred D. Robinson.

Hunting for a tax receipt, I came upon letters from Miss Sessions written from England twelve years ago. She had made several visits to Kew Gardens and spent a whole morning with the begonias there; and she reported the following dissimilar names for varieties we know well.

(The first is our common name followed by the name Kew gives it). Mrs. Townsend--Heracleicotyle; Nigricans or Sunderbruckii--Trigonoptera; Wettsteinii--Carminata; The rubras--Maculata; Manicata variegata--Crispa; Peltata--Incana; Jessie--Phyllomaniaca; Foliosa--Fuchsioides minata; Glaucophylla scandens--just plain Glaucophylla.

She saw there the very different Luxurians, which I afterwards obtained from Golden Gate Park, San Francisco, under the name of Serratifolia. Also she saw there one labelled Scandens, which she described as having a much rounder leaf than Glaucophylla and bright green, growing in a basket. This was evidently not our Alba-scandens.

There was much of interest in her letters along this line; but I wish now to speak of the so-called winter-blooming tuberous, which are making one of their periodic Rip van Winkles. If I am not much mistaken these are the same that Miss Sessions went to interview at their birthplace, Altrincham, Cheshire, England. There was a firm named Clibran which produced them from a cross of socotrana and double tuberous, and at the time of her visit had a long list of named varieties in many colors.

She wrote with enthusiasm about them and I was sufficiently infected to consider importing some; but was saved by Mr. Koch of Garfield Park Conservatory, Chicago, who sent some half dozen tubers of the best (?) named sorts. They did not do a thing for me (though one was named Optimo!); and later Dr. Houghton, who had not then deserted begonias for cactus, told me he had equally disappointing experience with them. It is only fair to record that I have since read of one or two exhibits in Eastern Shows describing extraordinary specimens, three feet in diameter. I had forgotten most of this until I resurrected Miss Sessions' letters and heard from Mr. Kelly about the "new" winter blooming tuberous that two firms in California had under experiment.

Probably these need quite warm special greenhouse culture, as does socotrana; but if they can be grown in Europe they can be grown in California, given the conditions necessary. The socotrana blood is a handicap--very decidedly so-- for simple lath-house culture, though Melior and its relations have this strain and are produced in very large quantities in the greenhouses of the land. It is my considered opinion that they are chiefly responsible for a very prevalent belief that the begonia is necessarily delicate and hard to grow.

Mid-winter experiences of the Begonia Club Members, Mrs. Buxton.

VERMONT - I believe begonias dislike clay pots. Some of the most beautiful plants I have ever seen have been in tin containers, and I have come to believe that pots, unless they can be sunk in earth, cause the roots to dry out and die. In transplanting from a small to a larger pot, I find a mass of fine roots just under the surface of the soil until they reached the side of the pot. Then they mat down along the sides which, being porous, admit the air and kill the tiny rootlets. As I dig out the center of the ball of soil, I find there are no roots there. This shows that begonias do not require depth of soil but plenty of room to spread out.

We had the first frost of the season on October 21, and the last killing frost of the spring was April 27, so we have approximately 6 months of growing season here in Burlington. Of course this does not compare with the California seasons, but there are some pleasant things about our winters that I would not miss for a good deal. A variety quite common in this section is about the same as Feastii except that the leaf is as spiral as any spiral leaved Rex. Folks here call it the cork-screw.

Mid-winter experiences of the Begonia Club Members (cont'd)

NEW HAMPSHIRE - Is the long growing season in Burlington due to the proximity of Lake Champlain? Here in Penacook there was a severe freeze on September 11, and a heavy frost on May 27th.

MARYLAND - The spiral beefsteak is called *Feastii spiralis* at the Botanical gardens in Washington, D. C., and has two spirals in the center. The leaves are curled somewhat on the edges, but not so much as *Bunchii*.

MISSISSIPPI - Do not think it does not get cold here! It does. It freezes the ground an inch or two, but soon is pleasant again. My begonias and ferns are kept in a pit--a hole about two feet below the surface, with a concrete floor. It is 4 feet above ground at the west, and slopes down on the east side to 3 feet. It has shelves for plants, and glass sashes that slide for ventilation. The sun shining through the glass produces heat enough to keep the begonias in the moist, warm temperature they like.

MASSACHUSETTS - Root-gall, or Nematodes, cause a very considerable growth or swelling just at, or a little below the surface of the soil. If above the soil, it will be yellowish or reddish-green, slightly granulated on the surface like a large wart, and if cut, appears moist or watery, without grain or fiber. This is the growth on the very large roots or stems. On the fine, fibrous roots, there may appear a cluster or string of little round growths as large as a large radish seed, naturally of a dirt color, and quite hard. If you find anything of this kind, I advise throwing out the whole plant, completely destroying it, but I believe top cuttings may be free from the disease. Some writers think the germs may be distributed by walking on infected territory, by tools used in the garden, or by hands in repotting. I wet all my potting soil with about half a cup of formaldehyde to a 10 Quart pail of water; then let the soil remain in a dry place until well dried out, stirring or turning over a few times to give the formaldehyde a chance to escape.

OUR NEW MEMBERS - Greetings to You.

Mrs. Alexander Reid
2539 California St.
Berkeley, California

Mrs. L. R. Green
541 Salvatiera
Stanford Univ. Calif.

Mrs. E. H. Warren
6540 Maraga Road
Oakland, California

Mr. A. E. Burson
2633 Hill Street
Huntington Park, Calif.

Mr. & Mrs. E. E. Suits
P.O. Box 53
Ventura, California

Mr. & Mrs. W. E. Koch
239 West Malvern
Fullerton, California

Mrs. Albert Rhomo, Jr.
120 S. Walnut Ave.
Brea, California

Mrs. Minerva Batchman
109 N. Cornell Ave.
Fullerton, California

Mr. & Mrs. F. P. Shaw
1183 Poli Street
Ventura, California

Miss Anna Grusing
Nashville, Oregon

E. Bernstein
885 Park Avenue
New York City

Elizabeth W. Farnam
236 Edwards Street
New Haven, Conn.

Mrs. Geo. Schuchert, Sr.
Belle Plaine, Iowa
Claude G. Howard

Rt. 1, Box 11
Kelso, Washington

L. W. Anderson
01649 S.W. Greenwood Rd.
Portland, Oregon

THE AMERICAN BEGONIA SOCIETY

Long Beach, California

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Hugh Hixson, Vice President
F. M. Harrison, Director
Miss Lena Higgins, Director
Tom H. Smith, Ex officio Director
J. Paul Walker, Long Beach Branch
Mrs. H. L. Weitz, Ventura Branch

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Burdell Bulgrin, Corresponding Secretary;
Bulletins, Information. 1732 Temple Ave.
C. M. Kelly, Research Editor; Special Bulletins,
Foreign Seed. 285 Park Ave.
M. B. Dunkle, Editor, 4543 Colorado Avenue

BOARD OF DIRECTORS DECEMBER MEETING

The Board met at the home of the Treasurer on December 30. The new form of the bulletin was authorized, involving an added cost of \$42.00 for the year. As the Tuberous Bulletin was reported exhausted, 200 additional copies were ordered. The Board voted to renew their affiliation with the National Horticultural Society. Mr. Kelly and Mr. Dunkle were appointed to nominate Honorary Directors at the next meeting. Other routine business was transacted and plans for the year's work were discussed.

LONG BEACH DOINGS

The January meeting will be held in the Community Hall, Ninth and Lime, promptly at 7:30 p.m. Thursday, January 13. This is the annual Anniversary meeting. Mrs. O. P. Palstine will lead the discussion on several selected begonias; and Miss Lena Higgins will conduct the Question Box discussion. Members from the Rivera district will present the program. Mr. R. E. Wilson will talk on Tuberous Begonias, Mrs. George Johnson will give a report on the history of the Society, and Mrs. Helen Lewis will speak on winter-blooming plants.

VENTURA NOTES

The next meeting will be on Tuesday, January 11, in Coco Cola Hall, and Mrs. Myrtle Shepherd Francis will give "A General Talk on Plants". Our meetings hereafter will be on the second Tuesday of each month in Coco Cola Hall at 7:30 p.m.

At the last meeting the following officers were elected to serve the Theodosia Burr Shepherd Branch of the American Begonia Society for 1938:

Officers	Directors
H. L. Weitz, President	Mrs. L. C. Rudolph
Walter J. Knecht, Vice President	F. P. Shaw
Mrs. H. R. Morris, Secretary-Treasurer	E. A. Wade
Mrs. H. L. Weitz, National Director in the American Begonia Society.	

CUR EASTERN MEMBERS, Bessie R. Buxton, Eastern Editor.

"Oh, East is East and West is West,
And never the twain shall meet."

Many miles separate us from our Western members and their gardens, but may we not meet in our Bulletin and compare the performance of our beloved begonias under widely different conditions of soil and climate? We hope that each and every one of our Eastern members, from Canada to Florida will send us brief reports for this department. Please tell us your favorite begonia and how you grow it, and your best source of supply. Tell us where and how you grow them. Tell us your difficulties, too--perhaps we can help you solve them. Good clear photographs may solve problems of nomenclature. Be sure to put your name and address on the back of each photo. Copy should be sent to Mrs. H. H. Buxton, 114 Central Street, Peabody, Mass., on or before the 15th of each month.

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It is a cost service to you and to members.

THE MONTHLY BULLETIN
of the
AMERICAN BEGONIA SOCIETY

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\$1.00 a year

Vol. 5.

FEBRUARY 1938

No. 2.

Long Beach, California
M. B. Dunkle, Editor, 4543 Colorado St.

Do you, who have not paid your dues for 1938, realize that this is the last Bulletin you will receive, until you have paid your dues. Do so now.

If you have suggestions to make about this new form of the bulletin, write them out and send them in to the editor. Send in experiences of yours with begonias and related plants. Send in ideas for making the bulletin better meeting your needs. The editor needs your criticism and assistance.

Attention! San Francisco Bay District, and New England members. Mrs. Verna Schath and Mrs. Bessie Buxton are initiating steps to organize branches of our Society in these respective districts. Get ready to participate. Let them know if you are interested in this development. Will similar interest be aroused in your sections as has been built up in the Ventura District?

REMINDERS FOR FEBRUARY - by J. Paul Walker.

Rain water is excellent for watering Begonias.

Much city tap water is unfit for Begonias.

Have you trimmed your fibrous Begonias and Fuchsias?

Warmer weather will soon start new growth.

Consult the cultural bulletins for good soil mixtures.

When in doubt as to soil mixture use more leaf mold.

All kinds of Begonia seed may be started now.

Tubers may be repotted when the roots reach the pot.

Prepare your soil now for spring and summer potting.

Fibrous Begonias and Fuchsias can be fertilized lightly once a month during the winter here.

Spray now to get a start on the insect pests.

Have you seen the new type cartridge sprayers?

EASTERN NOTES. By Bessie R. Buxton, Eastern Editor.

Now is the winter of our discontent—at least in frozen New England. The sun rises late, as reluctantly as a sleepy child, and goes to bed early, leaving us a scant nine hours of daylight. The snow whirls and howls about the house, and the windows are furred with frost—that is, if the air within is properly humidified, giving the necessary moisture for our begonias. Rex begonias, house grown, shed leaf by leaf, and go to sleep during these dark months, waking only with the spring. Many fibrous varieties, discouraged by cold and lack of sunlight, stand still, making little or no active growth. But some sturdy kinds are up and doing, sun or no sun.

The so-called Christmas-flowering begonias, all developed from the species *socotrana*, now light up the windows up and down the street. *Melior* superseded the earlier types, *Gloire de Lorraine* and *Glory of Cincinnati*, because the hybridist developed a split leaf which sheds water. The earlier types had inherited the peltate leaf of *socotrana*, which the florists, in disgust, called a water cup, as they removed the damaged leaves. *Lady Mac* succeeded *Melior*, and hereabout *Marjorie Gibbs* is very popular, as it has larger flowers of a deeper rose-pink than any other kind. It was developed by the Gibbs Brothers of Lynn, Mass.

Begonia incarnata, variety *Sandersii*, also in bloom now, a tall, well branched type, full of pale pink flowers. This variety has been improved by selection until

EASTERN NOTES (cont'd)

it is hardly recognized as *incarnata*, which had rather small leaves and inconspicuous flowers. Variety *Sandersii* has bright yellow-green leaves, six inches long, and the flowers are nearly two inches across. This plant was produced 30 years ago by Charles Sanders, gardener to Prof. Sargent, first Director of the Arnold Arboretum. No attempt was made to market it, and it remained in the hands of a little group of private gardeners on the North Shore, who grew it for cut flowers, as it bloomed freely. One of these gardeners told me he thought it was produced by "Old Charlie Sanders," but could not tell me whether he was still living. After many inquiries I found him, at the ripe age of 91, still engaged at his life-long occupation of gardening. A little old man, with bushy white beard, like a benevolent Santa Claus, he sat transplanting seedlings of a new everbearing strawberry. In his garden he showed me proudly choice rhododendrons which he had grown from seed collected in the garden of the Grand Lama in Lhasa, Tibet; and *eremurus*, from Persian seed. Every plant he knew and loved, but wondered sadly what would become of them when he was gone as his daughter, with whom he lived, considered them just so much trash! When he was shown the photograph of the *Begonia incarnata* which now bears his name (unofficially) he hesitated no longer than a man half his age. "*Begonia incarnata*", he said, "Oh, yes, I worked on that more than 30 years ago. I noticed one plant in a batch of *incarnata* seedlings that had somewhat larger flowers than usual. I grew that plant to perfection and planted seed from it. Again I chose the best plant in that generation for seed, and so continued until I was satisfied with leaf and flower and blooming qualities. I haven't seen it for years. I did not keep it but gave it to the boys that wanted to grow it for mid-winter cut flowers." Stock has now been given to Ernest K. Logee of Danielson, Conn., so we hope in the near future it will be available for all who desire it.

The rhizomatous begonias are now beginning to show their airy clusters of pale pink flowers in window gardens. *Sunderbruchii*, *Manicata aureo-maculata*, *Feastii* and its descendants are all mid-winter bloomers. Mrs. W. H. Kimball began blooming in January last year and continued without a break for more than six months. This year it is a bit late, perhaps because we had a very hot, dry summer. *Barkerii* unfolds its sprays of palest pink flowers in January, and *Peltata* blooms through our coldest weather, its white flowers protected against chill winds by the softest of white, woolly wraps.

A visit to the Logee greenhouses in Connecticut showed many plants in flower. The *Haageana* types were full of bud and bloom. *Foliosa* was sprinkled with delicate white flowers, as though the big snow flakes had settled there. *Rosea gigantea*, a vigorous plant, had big trusses of deep rose-red; *compta*, long stemmed sprays of small white flowers, golden centered. Washington Street (when, oh when, will this plant be given a proper name) was full of white flowers, and nearby tall plants of *Corbeille de feu*, or *Vesuvius*, equally full of scarlet flowers—a splendid foil. *Sachsen* and *Preusen*, of course, were in bloom—they never weary in well doing. *Chiala rosea* had many delicate pink flowers, filling me with envy, for my plant, though large and healthy, refuses to bloom summer or winter. *Multiflora rosea* had many soft pink flowers, and the *Rubras* had a few blooms. *Gloire de jouy*, a fairly small plant had a bunch of large pink flowers, and with its beautifully colored leaves was a joy to behold.

One of the handsomest plants was *B. fuchsioides*, with drooping branches dripping with tiny scarlet fuchsia-like flowers. Mr. Logee tells me that the plant which has been known to some of us as Huebner's Orange, has now been identified at the N.Y. Botanical Gardens as *B. dichroa*. I looked it up in Curtis' Botanical Magazine, and the fine colored plate proved it, beyond a doubt. The text said it was a tropical variety and needed heat for successful culture.

Another kind of begonia collecting which I have enjoyed lately is the collecting of the *Majolica* plates, made in the sixties, in the size, shape and color of *Rex* begonia leaves. I found one that was large enough to serve salads on, while the smaller ones make nice individual salad plates.

Outline of the Begonia Society. By Mrs. Johnson

In the fall of 1931, H. P. Dyckman made a begonia exhibit at the Long Beach Dahlia Show. This interested others and brought together several also interested in begonias, particularly Roy Berry and C. M. Kelly. The idea of a Begonia Society was conceived. On December 11, 1931, eleven enthusiasts met at the home of Mr. Dyckman and organized the present society, which at first was known as the California Begonia Society. Those present were: Mr. and Mrs. H. P. Dyckman, Mr. and Mrs. R. S. McGaughey, Mr. and Mrs. L. G. Wylie, Roy Berry, R. G. Hunt, C. M. Kelly, J. Paul Walker, and Carl Fisher.

The following is an outline of the Societies' growth.

Year	President	Members new	Total	Income	Expenditures	Balance
1932	H. P. Dyckman	21	32	\$54.95	\$35.27	\$19.68
1933	H. P. Dyckman		41	34.68	15.50	19.18
1934	Fred M. Riedman		105	119.63	125.48	13.33
1935	J. Paul Walker	Over 100		211.53	178.94	32.59
1936	M. B. Dunkle	156		499.20	402.39	96.81
1937	Tom H. Smith		380	643.80	471.72	172.08

The bulletin was started in 1934, with Mr. Walker the first editor, followed by Mrs. O. P. Palstine. The name of the Society was changed to its present form in 1934. Tom Smith composed the Begonia song in 1935. The first branch was organized at Ventura in 1937.

PLANTS FOR WINTER BLOOM. By Mrs. Helen Lewis

Many people get discouraged when winter comes and their begonias, fuchsias, and other kindred plants cease blooming and begin to lose their leaves. We should remember, however, that there are many plants available for winter bloom, either as house plants or in the protected California garden. The following list may have suggestions for many of our members.

Begonias	Begonias	Other Plants
Socotrana hybrids	Bunchii	Primula Malacoides
Lady Mack	Feastii	Primula Obconica
Westport Beauty	Manicata	Camellia
Incarnata	Manicata aurea	Cyclamen
Jessie	Manicata Cristata	Azalea
Haageana	Manicata Cristata aurea	Daphne
Viaude	Mrs. Townsend	Bilbergia
Washington Street	Verschaffelti	Saint Paulia
Wallow	Sunderbruchii	Strepsolen
Pink Chiala	Carmen	Fuchsia Fulgens
Rosea Gigantea	Indian Maid	Begonia vesusta
Duchartrei	Bertha de Chateau Rocher	Impatiens

The Semperflorens Types

The original species came from Brazil in 1821. It has been crossed with Lynchiana, Fuchsioides, Fuchsioides miniata, Ascotiensis. In developing the gracilis type it was first crossed with Schmidtiana and then with Gracilis. The gracilis types have more attractive and smaller leaves, while the semperflorens types have coarser green leaves and more vigorous shoots. The Gracilis varieties are better for winter bloom. Our knowledge of these types is very confused and we hope our members will respond with suggestions that may hope to clarify the situation.

Semperflorens Check List. H. P. Dyckman

Gracilis Types

Carmen, Fiery rose
Luminosa compacta, scarlet-red
Primadonna, Brilliant rose
Blutenmeer, Rose
Mignon, fiery scarlet-red
Feuerzauber, carmine-scarlet

Semperflorens Types

Schwabenland, yellow
Wintermarchen, carmine-rose
Gruba, deep carmine-rose
Zauberin, Red
Rosabella, bright rose
Feuermeer, fiery dark red

Semperflorens Check List (cont'd)

Types of mixed colors

Vernon, red, pink, white
Christmas Cheer, red, pink

Picotee edged types

Mermaid, white, with pink
Rosabella, white, with mallow-pink
Elegance, shell-pink
Seashell, white, with pink

Tanager, white, with orange

Double flowered types

Bejou de Jardin, red, pink
Westport Beauty, red
Dresden, Pink, white. D.

Mixed Types

Schmidtii, white
Dresden, white
Carmine, pink
Pearl, white
Enchantress, Pink
Erfordii, rose-carmine
Corbeille de feu, coral-red
Indian Maid, red
Ascotiensis, Red
Bertha de Chateau Rocher, red
Luminosa, bright red
Mrs. Margaret Ham, Dark red

Question Box. By Lena Higgins

Members not attending the Long Beach meeting should mail their questions.

1. Are all of the bedding type begonias hybrids? Answer by C. M. Kelly.
They are--if we consider the term "bedding type" to refer to those begonias that are catalogued as semperflorens, gracilis, Vernon, etc. We understand hybrids to mean crosses, as distinguished from original species.

2. What conditions should be maintained to prevent fibrous begonias from dropping their leaves? Answer by J. P. Walker.

Fibrous begonia leaves always drop after they age or mature. Any causes that tend to disrupt normal growth, such as too much or too little water, cold weather, wrong soil, etc., will cause these leaves to age faster, and thus drop earlier. Correcting the faulty conditions will cause the plants to hold their leaves longer.

3. Why do Rex begonias lose their leaves in the winter? Answer by Fred Riedman. Rex begonias lose their leaves all during their life. New leaves come on with normal growth, and as they age turn yellow and drop off. If kept sufficiently warm, Rex begonias will continue to grow new leaves all through the winter; however, if the temperature is allowed to drop, new growth is checked, sometimes entirely stopped, forcing the plant to go dormant, and of course, when this happens, the leaves will be shed. Even if the plants are kept the required temperature, ventilation of a glasshouse may be faulty, or the plants kept too wet, when decay will set in and the leaves drop off.

4. Is the dropping of leaves by fuchsias in winter due to weather or do different varieties differ in this respect? Answer by M. B. Dunkle.
Both questions should be answered yes. All varieties tend to drop leaves during cold weather, but different varieties show a great variation. Some varieties shed all their leaves in the fall while others will retain most of their leaves unless frosted. Many fuchsias are normally winter bloomers and develop buds that drop off before opening during cool weather.

THE AMERICAN BEGONIA SOCIETY

LONG BEACH CALIFORNIA

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Burdell Bulgrin, Corresponding Secretary; Bulletins. 1732 Temple Avenue

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BOARD OF DIRECTORS JANUARY MEETING

The Board met at the Paul Walker home on January 27. Five honorary directors were elected for 1938. Authorization was given for the printing of 2000 informational circulars. C. M. Kelly was given a vote of appreciation for his work with the seed fund, and directed to continue his work. Other minor business was transacted.

LONG BEACH ITEMS

The February meeting will be held in the Community Hall, Ninth and Lime, promptly at 7:30 p.m. Thursday, February 10. In addition to the plant display, question box, and plant sale there will be several talks on the pruning and winter and early spring care of begonias, fuchsias, roses and other garden shrubs.

Summaries of the interesting talks at the January meeting will be found elsewhere in this issue. Many members of the Society attended the January meeting of the Long Beach Garden Club, and enjoyed the interesting and informational talk given by Miss Kate Sessions, of San Diego.

VENTURA BRANCH

The next meeting of the Theodosia Burr Shepherd Branch will be held Tuesday, February 8, in the Coco Cola Hall. Mr. Austin Perley, Park Superintendent of Ventura, will give an illustrated talk on landscaping.

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Rex, 15¢, Tuberous, 10¢, Fibrous, 15¢, Membership Directory, 25¢.
Some commercial dealers stock our bulletins for the convenience of their patrons.

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THE MONTHLY BULLETIN
of the
AMERICAN BEGONIA SOCIETY

10¢

\$1.00 a year

Vol. 5.

MARCH 1938

No. 3.

Long Beach, California
M. B. Dunkle, Editor, 4543 Colorado Street

Special informational folders were mailed out with the last bulletin. Pass these on to others who are or may be interested in Begonias. If you wish more of these write to the Corresponding Secretary.

This Bulletin is yours in a particular way. It can only contain what the members contribute. You have had experiences that other members ought to know about. Your editor is a man whose major activities are not with begonias, and he has no time to write, asking you for material. The bulletin is merely a clearing house between you and our other members.

Begonias and similar plants are grown in lath houses, glasshouses, cloth houses, conservatories, and in sheltered corners of patios and other enclosed gardens. Cannot someone suggest a name for this type of a sheltered garden --- something that will be picturesque, descriptive and inclusive of all the types of begonia gardens. We have the rock garden, the water garden, and ferneries. Remember that begonias and other plants we grow in our sheltered gardens are mostly tropical or semi-tropical plants that need humidity, even temperature, freedom from wind, and more or less shade. Let us have your ideas about a good name for such a garden.

EASTERN DEPARTMENT -- by Mrs. H. H. Buxton
Planting Notes from the East

MASSACHUSETTS: A method for planting *semperflorens* seeds that has always brought us good results is to plant in shallow pans, as we never water from the top. Use considerable leaf mold in the soil, and a few hours before planting the seed set the pans in water long enough to obtain the desired moisture. Firm the soil, then scatter the seed as thinly as possible, sprinkle very lightly with a little finely sifted sand and leaf mold, firm them down again, and cover with a pane of glass. The moisture gathers on the glass, and at night the glass should be turned over. The little plants will appear in about two weeks. Do not keep too wet. If you plant the seed in May, you will have fine fall plants. (Note--this member is a commercial grower, and this is greenhouse practice).

PENNSYLVANIA: I planted seeds of Rex, tuberous and cane types on the 25th of last April, some in 4-inch jars, the rest in flat seed pans. Those in the 4-inch jars were transplanted on June 17th, when those in the seed pans were just coming up. I used soil from under an old wood pile, mixed it with sand, and heated it in the oven; or boiling water may be poured over it, then let it cool and dry. This kills insects and weed seeds. Fill jars to within an inch of the top with the finely sifted soil. Put the begonia seeds on a paper, mixed with a teaspoonful of the soil and sand, then sprinkle thinly over the top of the jar. Turn a glass--a dessert dish from the 10-cent store will just fit the top of a 4-inch jar--over the top of the jar, and set in an east window well back from the glass. Pour about one tablespoonful of soft rain water around the edge of the glass every morning. About every other day put some water in the saucer under the jar. If it is very hot and dry weather, I water again about four o'clock in the afternoon. I do not keep the soil either very wet or very dry. They must not be neglected for a day, or they will dry up I think the California seeds ripen better than our eastern seeds.

WEST VIRGINIA: Sowing begonia seed takes much patience, but the waiting is

WEST VIRGINIA (cont'd)

well repaid by the wealth of plants one may have for bedding. When the plants first come up, they are so tiny they look like green moss. Soon there are a few that are larger and stronger than the others. These should be removed. Take a match, shave thin on one end, and cut a V notch to slip under the tiny plants. The roots, at this stage, run straight down. Punch a hole in the soil and set the root down just to the base of the plant; with the other end of the match press the soil firmly around the tiny root. Water only from the bottom, being careful not to give too much.

MISSISSIPPI: Here in our damp Southern climate begonia seeds do not ripen properly. I have often planted seeds of the Rubras, but they do not germinate. Seeds of Luminosa and Semperflorens do mature—I find them growing outdoors in damp places. My greatest trouble here is the blight, which is very severe on a pink fragrant Rubra. I always keep several plants on hand, for any day it is likely to turn gray when in full bloom and promptly die.

NEW TYPE SEED PAN -- by Chas. C. Hay

I am using a new type of seed pan which is proving very successful. It consists of a wood frame, 9 inches square, with a copper wire screen bottom. The sides are of 3/8" x 1 1/4" strips, with cleats underneath to hold the wire in place, and to give an air space. The cleats are of 1/4" x 3/8" material. No coarse drainage material is needed. I use a 1/8" screen for the bottom soil and a 1/16" screen for the top soil which is filled to within 1/4" of the top.

Do not press the soil down but set in a pan of water, and it will settle enough. For soil I use 2/3 oak leaf mold and 1/3 German peat moss with a good sprinkling of charcoal. I prepare the soil six months in advance of planting and keep moist until ready for use.

The seed pan is set on a piece of glass after planting and covered with another sheet of glass and a sheet of paper in the usual way. Never water a seed pan from the top, but always set in a pan of water (about 70°F). The wire bottom of the box gives perfect drainage and ventilation.

From a Letter -- by Mrs. W. H. Goering, Tacoma, Washington

. . . Two years ago a small exhibit at our S. W. Washington Fair kindled my interest in tuberous begonias, so last year I started with about 60 tubers, assorted types and colors. They produced such satisfactory results that I'm trying more this year--our cool, moist climate in Tacoma seems to be ideal for growing the plants outdoors. I am also wondering if the water helps, as our tap water is almost like rain water. I do so hope to see interest in begonias spread--no one seems to know much about them here.

I was in California for three weeks during January and visited the Rosecroft Begonia Gardens, Vetterle and Reinelt, and also spent a fascinating hour with Mrs. Schath. Everyone was friendly and helpful, so I came home with inspiration to grow more and better begonias this year.

Last year I started the tubers on flats of peat moss on April 6, and moved most of them to open beds late in May. This year I have a new little greenhouse, so I plan to start two or three dozen tubers this week (dated Feb. 6). My plants bloomed all through October last year. This year I have specimen plants from Mr. Reinelt and hope to exhibit some at our fair--there wasn't a single tuberous begonia there last year. . . In time I hope to see enough begonia fans here in Tacoma to organize a branch of the Society.

VINES FOR THE SHELTERED GARDEN -- by B. Norwood

These are all vines that will do well in partial shade. With each is given the minimum temperature that the vine will stand. Large vines should not be permitted to smother a small lath house, but they can be very effective on fences, separate trellises, or pergolas.

Ampelopsis henryana, a very effective variegated foliage vine for a shaded wall.

VINES FOR THE SHELTERED GARDEN (cont'd)

Hedera canariensis variegata is a somewhat similar and very showy vine. Both are quite hardy.

Begonia violaceae, violet trumpet vine, a rather slow growing vine with luxuriant foliage and large violet flowers in late winter and spring. 18 degrees.

Dioclea glycinoides, scarlet wisteria, a slender climbing vine with scarlet flowers in racemes, evergreen if not frosted. 20 degrees.

Gelsemium sempervirens, Carolina yellow jasmine, a slender twining vine with fragrant bell-like flowers. 12 degrees.

Hardenbergia comptoniana, a medium sized evergreen vine with racemes of violet-blue pea-like flowers. 22 degrees.

Hardenbergia monophylla, half climbing shrub with handsome foliage and racemes of deep blue flowers. 20 degrees.

Hoya carnosa, wax plant, a succulent climber very slow in growth. It has dull pinkish-white flowers. 20 degrees.

Lonicera japonica halliana, Hall's honeysuckle, a vigorous vine with white or purplish flowers. 0 degrees.

Muehlenbeckia complexa, wire vine, a dainty, small leaved vine rather slow growing with no flowers.

Rhynchospermum (Trachelospermum) jasminoides, star jasmine, a strong growing vine with large leathery leaves that make a dense covering. The flowers are white and extremely fragrant. 18 degrees.

Thunbergia grandiflora, sky flower, a rapid growing vine with large leaves that make a dense covering. Magnificent large blue flowers. 22 degrees.

Thunbergia gibsoni, orange glory, a moderate rambling vine with medium sized golden orange flowers standing well out from the foliage and almost constantly in bloom. 25 degrees.

Reminders for March

Cuttings of Rex and Fibrous begonias may now be started without heat.

Bottom heat, of course, will still speed them up.

Watch your tubers and as they sprout plant in flats of leaf mold and peat.

Seeds planted now will produce late fall blooming plants.

Prepare your potting soil now for the potting of summer plants.

Soil for either seeds or potting should be prepared well in advance.

Consult our special cultural bulletins for detailed information.

THE QUESTION BOX — by Lena Higgins

How can you entirely rid your lawn of angle worms? Answer by H. P. Dyckman. I don't believe that it can be done, but you can get rid of them for a while. Dissolve two ounces of bichloride of mercury in 50 gallons of water. This is enough for 1000 square feet of lawn.

Is it the time of year for *Alba scandens* to shed its leaves and should it be pruned back? Answer by F. M. Harrison.

Alba scandens, a clinging ivy-like variety, will shed its leaves with a sudden drop in temperature in lath houses. In glass houses where the temperature is more even it should retain its light green foliage the year around. *Alba scandens* should not be pruned back. However, if used for hanging baskets, it may be cut for slips or shaped by pruning without injury to the plant.

Do Walnut leaves make good mold? Answer by P. J. Fackelman.

Walnut leaves make a good mulch, but are not good for mold as they are of the "soft leaf" type and do not contain a very high percentage of the necessary elements needed for good growth. It is best to use a leaf of the "hard leaf" type, such as oak of the evergreen varieties.

Should *Browallia* leaves turn yellow in the winter? Answer by J. Paul Walker. *Browallia* are annuals grown mostly for the blue flowers. Leaves are turning yellow

THE QUESTION BOX (cont'd)

now on plants that have bloomed and are now ready to die, at the end of their season.

Is there any good way to test soil for acidity? Answer by M. B. Dunkle.

There are several ways for testing the relative acidity or alkalinity of soils. Litmus paper may be used in damp soils but it is not accurate. The usual practice is to use chemical indicators, which change color when applied to small quantities of moist soil. The color obtained must be compared with a color chart to determine the exact percentage of acidity or alkalinity. Usually a series of several indicators are used. The chemicals and equipment for soil testing may be obtained through any chemical supply house. Electric soil testers that depend upon the electrical conductivity of the soil are extremely accurate, but are too expensive for the amateur.

The Research Department has done and is doing, under the charge of C. M. Kelly, a most valuable lot of work for the Society members. Special bulletins, foreign seeds, special investigations, and the collection of information makes up most of the work. Write in to Mr. Kelly about your special problems.

BEGONIA CHECK LIST -- by H. P. Dyckman

These simple and rather incomplete lists are intended to provide a basis for understanding the principal types of begonias. It is hoped that members will make corrections or additions. New varieties of begonias should be listed with our nomenclature committee, of which Mr. Dyckman is chairman. Write to him for the correct identification of begonias about which you may be in doubt. Send leaves or flowers whenever possible. Mr. Dyckman's address is 3762 Falcon Ave., Long Beach.

Tuberous Begonias.

Davisii, S. Red.	Rosaeflora, S. Rose red.
Froebelii, W. Scarlet.	Veitchii, S. Cinnabar red.
Octopetala, S. Greenish white.	Boliviensis, S. Cinnabar scarlet or copper.
Sutherlandi, S. Salmon red.	Pearcei, S. Yellow.
Evansiana, S. Pink.	Gracilis, S. Pink.
Gracilis Martiana (Hollyhock), S. Pink.	Crispa Marginata, S. Mixed colors.
Narcissiflora, S. Mixed Colors.	Fimbriata Plena, S. Mixed colors.
Lloydii or Pendulata, S. For baskets. Both single and double, mixed colors.	
Tuberhybrida or garden hybrids, S. Both single and double, mixed colors.	
Multiflora, S. Both single and double, mixed colors.	

Consult the January bulletin for socotrana hybrids with Tuberous, and semi-tuberous varieties.

S - Summer blooming.

W - Winter blooming.

THE AMERICAN BEGONIA SOCIETY

LONG BEACH, CALIFORNIA

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F. M. Harrison, Director
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Frank Reinelt, Capitola, California

BOARD OF DIRECTORS FEBRUARY MEETING

The Board met at the Hixon home in Compton on February 24. Attention was called to the fact that Fred Riedman had acted as Secretary during the first year of the Society's existence. Discussion was held in regard to the publication of the monumental work of the late Arthur D. Houghton, Ph. D., on the classification of Begonias. Action was taken to further investigate the invitation of the National Association of Gardeners to affiliate with them in the editorial work of the Gardeners' Chronicle. The question of the reorganization of the Long Beach Parent Organization of the Society was introduced but no decision was reached pending further study. Several bills were allowed and minor business matters transacted.

LONG BEACH MEETING

The March meeting will be held in the Community Hall, Ninth and Lime Avenue, promptly at 7:30 p.m. Thursday, March 10. The members from Inglewood are planning a most interesting and timely program.

At the February meeting Mr. Hans Von Hofgaarden gave a most entertaining talk on Roses, their selection, planting, pruning, and general care. Mrs. O. P. Palstine directed a very delightful discussion on the begonia plants exhibited by several of the members. Miss Lena Higgins conducted a splendid question box. The subjects of this feature will be found elsewhere in this issue.

WHAT IS DOING AT VENTURA

The next meeting of the Theodosia Burr Shepherd Branch will be held Tuesday March 8, in the Coco Cola Hall. Mrs. C. A. Rodenburg, of Santa Monica, will talk on "Planting and the Moon Signs". Refreshments will be served.

NEW MEMBERS

Mrs. Elsie Riggs, 475 E. 60th St., Long Beach, California	Mary Blanchard, 1049 So. Garfield, Alhambra, California
B. S. McBurney, 2220 Channel Drive, Ventura, California	Mrs. Frank H. Mather, 515 Windover Road, Hatboro, Pennsylvania
Mrs. M. H. Baum, 55 W. 51st St., Long Beach, California	Mrs. Mary H. Sorter, R.F.D. #1, Box 94A Tulare, California
Mrs. W. S. Dye, 2107 Poli Street, Ventura, California	Mrs. W. R. Givens, Rt. 4, Box 174, Ft. Scott, Kansas
Mrs. Frank Little, 3625 Linden Ave., Long Beach, California	Mr. H. T. Budzein, 2828 Modesto Ave., Oakland, California

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THE MONTHLY BULLETIN
of the
AMERICAN BEGONIA SOCIETY

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Vol. 5.

APRIL 1938

No. 4.

Long Beach, California
M. B. Dunkle, Editor, 4543 Colorado Street

March Director's Meeting

Although 500 Bulletins were printed for January, they are about exhausted and 100 more were authorized. Mrs. T. J. Simmons of Puebla, Colorado was authorized to proceed with the organization of a new branch in that district. F. M. Harrison of Inglewood was appointed Advertising manager for the Bulletin.

Long Beach Meeting

The next meeting will be held Thursday, April 14, at the Community Hall, Ninth and Lime, at 7:30 p.m. Mr. Cecil Houdyeshal of LaVerne will speak on Clivias and related plants. Mr. J. R. Maxwell of Pasadena will speak on the subject of Fertilizers.

Ventura District

The next meeting of the Theodosia Burr Shepherd Branch will be held on Tuesday, April 12, at Coca Cola Hall, Thompson Blvd., Ventura, at 7:30 p.m.

Mr. E. O. Orpet of Santa Barbara will be our guest speaker, speaking on "Plant Propagation". Come prepared with questions as Mr. Orpet will be happy to answer all questions. Refreshments will be served.

NEW MEMBERS - Ventura District

Mr. & Mrs. Walter Selmitt, 362 Hurst St., Ventura.
Mrs. J. J. Streets, Box 668, Ventura.
Mr. & Mrs. T. R. Fellows, 504 Ojai Road, Santa Paula.
Mr. & Mrs. F. G. Pellow, 283 S. Evergreen, Ventura.
Mr. & Mrs. W. T. Kemper, 56 N. Laurel St., Ventura.

The Spring flower show of the Garden Section of the North Long Beach Women's Club, will be held at Houghton Park, April 23-24.

EASTERN DEPARTMENT -- by Mrs. H. H. Buxton

It appears evident that the time is not yet ripe for a New England Chapter of the A. B. S. Only six faithful friends of the Begonia assembled at the time set, although 16 others had written of their interest and inability to attend. But unless others write me very soon, we shall postpone the matter until some later time.

North of Boston, a sudden snow storm made traveling difficult, and some went to the flower show, feeling that their absence did not matter, for others would carry on. The bright spot is that several have heard, for the first time, of the A. B. S., and expressed a desire to join.

I was much impressed, when I attended a meeting of the A. B. S. in Long Beach in 1935, to hear that several members had journeyed more than 100 miles to attend. The West is a place of magnificent distances, and its people think little of long journeys, while the New England tradition is to stay closely at home. Any journey over five miles, in the old days, was only undertaken after fasting and prayer, and that spirit still hovers over us.

The little group of six, representing three New England states, while waiting for others to come, naturally discussed begonias, and a bright woman from Maine told us some revolutionary things about that "enfant terrible" the Cally Lily Begonia.

EASTERN DEPARTMENT (cont'd)

Apparently it will grow in Maine, no matter what is or is not done to it. Almost any soil, container or location will suit it--in Maine. One woman grows it in a large box, and in summer it is a glorious sight. But in winter, it just cannot grow, for the kittens persist in sleeping in the box, so the plant sleeps, too.

One of the men present has a small greenhouse, in which he has grown fine specimens of *B. Cathayana*, nearly three feet tall, with nine inch leaves. It does not flower well, however. He has also had unusually fine blooms on *B. compta*, airy white flowers on three foot stems. A young lady is experimenting at College, growing begonias in water, adding certain chemicals. Fine growth is made, but constant supervision is necessary. This method would never do for the hit-or-miss gardener! At the Flower Show we enjoyed the Logee exhibit of blossoming begonias. I noted a fine specimen of *B. vitifolia*, full of white blooms, and an equally fine *B. Rosea gigantea*, with fine clusters of rose-red flowers, the popular Westport Beauty, and many others.

My plant of Westport Beauty is the nearest thing to an everblooming plant I have ever seen. I have had it a year, and never has it been out of bloom. It has doubled in size in that time, and every little branch has several clusters of bloom. How a plant can continue to produce flowers so long and so constantly is remarkable.

Spring is really coming to New England, in spite of this morning's snow, which the country people call a "sugar snow" -- one which stimulates the flow of sap in the maple trees, and melts quickly. (March 18). Snowdrops and crocuses are in bloom, and the Lenten rose, *Helleborus orientalis*, has five fat buds. It will be two months yet before begonias can be put outdoors, but we can begin propagating, in a glass bowl or terrarium, and the cuttings will make fine plants for next winter's window garden.

(Editor's note.) "Great oaks from little acorns grow". The A. B. S. began with only seven members! Why be discouraged with six? See how the Ventura chapter has grown from only a few. Go ahead with the good work.

NEW MEMBERS, Outside of California

Mrs. Fredrick O. Houghton, 363 Adams Street, Milton. Mass.
Mrs. Burgess Fisher, Scarborough Road, Hartford, Conn.
Mrs. E. C. Drew, Box 331, Narbeth, Penna.
Ernest M. Dickens, P. O. Box 131, Lake Worth, Fla.
Mrs. E. Peterson, Route 3, Box 468, Miami, Fla.
Miss Emily Lauzer, 1214 - 8th Street, S. E. Minneapolis, Minn.
Mr. C. C. Wilkins, 6952 - 55th Street, Seattle, Washington.

Tulips are not usually a success in California. But the pre-cooled bulbs which are being grown for George Lawler of Gardenville, Tacoma, Washington, are making a splendid growth this spring, comparing favorable with those grown in the north. Three experimental growers were selected by Sunset for California, and your editor, one of the three is making this report.

QUESTION BOX -- by Miss Lena Higgins.

How does one treat leaf miners to get rid of them? Ans. by Mrs. O.P. Palstine. Keeping the plants by frequent sprinkling is the best preventative. It is best to remove the leaf that is affected. If leaf miners are a threat spray the plants with Black Leaf 40 once a week.

Should fuchsias be repotted each year, and if so in what month? Ans. by Mrs. G. E. Collins. Yes, fuchsias should be repotted at least once a year, sometimes more often. Before they become pot bound, fuchsias should be shifted to larger pots, for this condition, a stimulant to bloom for many plants, is an inevitable check to fuchsias, resulting in loss of buds and lack of health. As spring is the most active

QUESTION BOX (cont'd)

growing season it would be best if the repotting were done before this growth starts, really it should be done by February in ordinary winters.

What shall I do to get rid of scale on eugenias? Ans. by W. S. Bell.

First, by the use of one of the many ant control products on the market to get rid of the ants that are practically always found taking excellent care of the scale insects. Second, spray with any of the oil emulsion sprays on the market, such as Volck, Nicon, etc. Be sure to do a thorough job as the pest is only killed by coming in contact with the spray. For a good clean job the first spray should be followed by a second and a third about a week to ten days apart.

How are ferns crossed to form new varieties? Ans. by Mrs. Maud Wilson Dunn. There are two types of generations in the fern life cycle. One (the green plant) is the sporophyte generation and is asexual; the other is the gametophyte generation producing male and female sex organs. New types of ferns develop during the gametophyte generation when the spores of two or more varieties of fern are mixed and sown very close together. The male gamete from one variety may then fertilize the female gamete from another variety. The resulting plants may vary considerably in appearance from either parent or may resemble either one of the parents, or may have some characteristics of both parents.

MARCH MEETING PLANT DISPLAY -- by Mrs. O. P. Palstine.

Mrs. Liedler: Margaritae, a splendid tall plant reported as successful in almost any sort of a place.

Mrs. Anderson: A magnificent Rajah Rex, and a Diffenbachia, reported as a scandent climber in the lowland swamps of Central America. There are 18 to 20 species. It should have light but no direct sun.

Mrs. Drant: Hemanthus, a tender plant that does best in the house. It grows from the large seed. The summer is the blooming season and the red berries that follow are most attractive.

Mrs. Day: Two fine fibrous begonias that no one ventured to name in the absence of Mr. Dyckman.

Attention is called to a misprint in the article on vines in the March Bulletin. Bignonia violaceae was given as Begonia Violaceae.

NEW MEMBERS, California, outside Ventura District.

R. T. Lovell, 290 Park Avenue, Long Beach, California.

Dr. J. T. Lovell, 344 Carroll Park, East Long Beach.

Esther L. Randall, 3638 Cerritos Avenue, Long Beach.

Mrs. Harry D. Ailman, 2366 Linden Avenue, Long Beach.

Mrs. L. D. Robinson, 1444 Hungerford St., Long Beach.

Larain Raupe, 1017 E. Wilshire, Fullerton, California.

Red Sheridan, Box 881, Corcoran, California.

Miss Mable Andrews, 313 Castro, San Francisco, California.

Mrs. A. C. Schaller, 209 Chapman Avenue, Fullerton, California.

Dr. & Mrs. J. K. Retickel, Glen Una Drive, Los Gatos, California

LATH HOUSE REJUVENATING -- by Mrs. Lucy Graham

The first warm days of March is the time when a lath house gardener goes into their lath house, takes a good look all around, says a little prayer of thankfulness that no plants are frosted; then after another look gives a long sigh at the amount of work there is to be done. But it is such pleasant work that no gardener really minds.

All the beds need a dressing of fresh leaf mold after having been beaten flat with the heavy rains--it does sometimes rain in California. All plants in pots will either need repotting or a dressing of leaf mold. In re-potting I like to put a square of copper screen wire over the hole in the pot. Before re-planting be sure

LATH HOUSE REJUVENATING (cont'd)

that the pots to be used are well cleaned, if old--new pots should be soaked for twenty-four hours. To wash old pots soak in a small tub of soapy water for an hour or two and then scrub with a metal sponge.

Use snail and slug poison now, before they have grown large and fat on your new leaves. Spray with a light nicotine spray or dust for aphids at least once every ten days.

Watch your Rex pots that the leaves don't turn aside all the water. Don't allow hanging baskets to become too dry. In making new wire baskets with green moss it is advisable to put a pot saucer in the bottom of the basket.

The bright showy flowered impatiens plants are good to use through the lath house, both for their color and as hygrometers. The impatiens plants will wilt more quickly than the begonias and you can tell at a glance if the lath house needs watering.

In between times and while there seems to be nothing to do--wash pots.

APRIL REMINDERS -- by J. Paul Walker.

Practically all fibrous begonias do well, along the west coast, if planted in good soil on the east side of a house.

Improved Digswelliana is reported to grow in direct sun along the Coast.

Rex begonias do nicely on the north side of a house with a little lattice covering to shade them.

Why not try an open faced lath house looking toward the north or east.

Fuchsias, camellias intermixed with the taller fibrous make a good background, with lower fibrous and Rex forming the mass of the bed, and bedding begonias planted in front.

A good application of rotted cow fertilizer will put pep into your begonias growing in the ground.

Don't let your begonias dry out just because we had rain recently.

FIBROUS BEGONIAS --- by H. P. Dyckman

Thick Stemmed Upright Types

Verschaffelti, W. Pink

Ecuadorensis, S. White to Pink

Paul Bruant, W. Pink

Vitafolia, S. Pink

Mrs. W. Kimball, S. Pink

Templini, W. Pink

Ulmifolia, S. White

Carolinaefolia, S. Pink

Florida species, S. White

Gilsoni, S. Pink

Silvador, S. Pink

Jessie (Phyllomanica) W. Pink

In growing Begonias the first essential is the will to do. Here is how a business woman in Hollywood goes at it:

From a letter . . . But I had a great urge to see what I could do, so I sent to Vetterle and Reinelt for seed a year ago in December--and they were just about the smallest things in the way of seed I ever saw. So I proceeded as per instructions, sand, leaf mold and peat moss. I set these boxes in the bath tub, with water almost to the top all night. After they had drained I sowed the seed.

Now what to do to keep them warm? My kitchen was all right in the daytime, but what about nighttime! Then I thought of my service porch with the hot water tank, so every night I set my seed boxes on top of my ice box--and behold! a fine crop of the tiniest little plants. These were watched with much interest by my family and friends, for no one had ever seen such a small specimen of plant life.

So the kitchen and service porch met my needs and I brought to maturity one hundred and twenty-five plants for beds and pots. I hope this will encourage more to grow Begonias.

Mrs. E. T. Boeshar.

TRANSLATION (continued) -- by Rudolf Ziesenhenn

Excerpt from "Die Begonien", Karl Albert Fotsch, author. Published by Eugen

TRANSLATION (cont'd)

Ulmer, Stuttgart, Germany. Price \$4.00. Permission to print the following has been granted the American Begonia Society, but no re-print is allowed in another or separate pamphlet.

7. The Begonia in Saga and Folklore.

(Page 239) "Jungfernherz" (Maiden Heart) we find in 1855 as the German name for the genus Begonia, also as a special name for Begonia discolor, R. Br. It is said that this name is especially known in the schwabischen parsonages. (Deutsche Magazin fur Garten und Blumenkunde, 1855, Page 18, 33 & 34).

A long list of names alludes to the color of species with red leaves or red undersides. Species such as Beg. discolor, R. Br., Beg. sanguinea, Raddi, Beg. maculata, Raddi and Beg. rex and others, are called for example "Beefsteak-plant" and "Fleischblatter". An unnamed species of America carries the name "Beefsteageranium". In Denmark a species having leaves which are purple on the underside is designated "Skjult Schonhed", that is "Verborgene Schonheit" (hidden beauty) (the hidden or underside of the leaves being the beautiful part). A Danish author had employed this last designation particularly in regard to tuberous begonias, declaring that in winter the plants die, their beauty being therefore hidden. In Denmark the people also call Beg. discolor, R. Br. "Liv og Dod" (Life and Death) on this account also, as in winter it goes dormant and in summer grows and blooms. Following the same reasoning people in Germany call them "Auferstehungspflanze" (resurrection plant), and in Denmark "Opstandelseplante". In Treichel: "Volkstumliches aus der Pflazonwelt". IX, Page 269, it is set forth that the tuberous begonia, especially in West Prussia, is designated as "Totenblume" (dead flower), "Starbeblume" (dying flower) and "Auforstehungsblume" (resurrection flower). The juice of many Begonias is, as already mentioned, aciduous, and since they grow mostly in forests, people also call a few species "Sauerklee" (wood sorrel).

Beg. nitida, Dryand, is called by the inhabitants of its native island "Jamaica Wood Sorrel" and "Oseille des bois" (Sorrel of the Forest). Beg. malabarica, Lam. is called "Oseille sauvage" (wild sorrel); Beg. scandens, Schwartz "Climbing sorrel"; Beg. apters, Blume and Beg. hirsuta, Aubl: "Oseille des bois" (Sorrel of the Forest), the latter also "Oseille moronne"; Beg. acuminata, Dryand: "Wild rhubarb" and "Rhubarbe sauvage". Continuing further, for Beg. conchaefolia, Dietr. "Shell-Begonia" and for Beg. maculata, Raddi: "Fischbegonia" (Fish-begonia) and "Forellenbegonia" (trout-begonia). Beg. Weltoniensis, Clarke is called Schleswig (Sleswick) "Tarrebegonia" or also only "Tarre". It bears a resemblance to the buckwheat which in common speech is called "Tarre". The same species is also called "Liv og Dod" (Life and Death).

The French name of Beg. scandens, Schwartz is "Herbe a l'echauffure". This name possibly originated from the use of its cooling leaves on burns. Beg. rex, Putz., people in Norway have named (page 240) "Ror mig ej" (that is "Fuhr mich nicht an") (Don't touch me), in Germany it is called "Konigs-Begonia" (King's Begonia), which is a characteristic translation of the botanical name.

GARDENERS OF THE CROOKED BILLET

From another letter:

....In the winter time, in a house with twenty-three windows, I have seventeen of these windows filled with house plants (also one cellar window). And when my family josh me about my flowers, and tell everyone we live in a greenhouse, between you and I, I think they would miss them; and here again my daughter says, "Huh! one would miss a boil on top of one's head."

But no matter, come spring and fair weather, these pets of mine (flowers, not the family) need sunlight and air, and must be put outside. Both porches are high with a wonderful sweep of wind across them, doubly increased with a thunder storm chasing it, and many times I returned home to find the porch floor littered with broken flowers and pots. Last year I conceived the brilliant idea of making a flower bed on the ground, along side the porch--only--this bed was filled with pebbles,

GARDENERS OF THE CROOKED BILLET (cont'd)

and provided with a denim curtain, attached to the porch floor. My plants, kept in the pots, were set upon these pebbles, and freely watered with the fine spray attached to the hose. My cacti collection was also put in this place and watered as freely as the others--the pebbles afforded perfect drainage. On very sunny days the denim curtain was lowered. This year I am planning to have a split bamboo curtain or screen to replace the denim. And I call this spot "The Shelter Nook."

Mrs. Frank H. Mather.

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LONG BEACH, CALIFORNIA

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A few more business cards like the above yield those growers or dealers more business, would give our members a wider field of selection, and would insure a bulletin of this size for the balance of the year.

BEGONIA WESTPORT BEAUTY

by Joy Logee

The new double flowering begonia, Westport Beauty, introduced in this country in March 1937, is still a sensation among begonia growers. Like many new plants that have been introduced, it's history is somewhat hazy. From all that can be ascertained, it originated in Sweden, was exhibited in Dresden, Germany in 1936, under the name of Gustave Lind, and was brought to this country and exhibited in New York under the same name by Askenbach Brothers of Westport, Conn. They later renamed it Westport Beauty, for the town in which they live.

We have grown this begonia for almost a year, and find it presents no difficulties. A hybrid of *B. multiflora* and *B. semperflorens*, it is a very prolific bloomer and a strong grower. Basal cuttings root easily in sand or peat. Potted in a light compost of 1/4 loam, 1/2 leaf mold and 1/4 well rotted cow manure, with a little sand, they will be ready to shift in four to six weeks. Never allow the small plants to become pot-bound as it will seriously affect the growth. If grown as a house plant it must be kept moist at all times and the temperature must be warm and even.

The flowers are a lovely rose-pink in color and almost totally double. We have noticed on rare occasions one or two single flowers which I think might be encouraged to set seed, if hand pollinated from some other variety of begonia. People on the west coast should watch for them. Possibly some clever genius might give us this beautiful plant in various colors.

Unlike any begonia of the *semperflorens* type, Westport Beauty will flower at any and all times. Commercial growers keep the blooms picked to encourage basal growth for propagation. When the plants have been repotted in five inch pots, they can be fed with liquid cow manure once a month or top dressed with bone meal.

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Long Beach, California
M. B. Dunkle, Editor, 4543 Colorado Street

The University of California is planning another plant exploration expedition to South America under the leadership of Dr. T. H. Goodspeed, one of our honorary directors. The general expenses of the expedition are being met by popular subscription.

As the last expedition brought back many begonias we have thought it desirable to ask our members to share in a contribution to be made by our Society. Especially those interested in the foreign seed importation will be interested. It has been very difficult to get foreign seed, and this expedition offers the finest opportunity of this generation to get new begonias and other plants from South America. If our contribution is enough to help in a material way in extending the activities of the expedition we may expect valuable returns.

As time is now short kindly send your contributions immediately to our Research Editor, C. M. Kelly, 285 Park Ave., Long Beach, Calif. He will forward the funds to Dr. Goodspeed. In this way even the most modest contributions will help in this great enterprise.

Now is the time to begin selecting and grooming your plants for our Third Annual Begonia Show. The show manager, J. S. Nutter, is planning for a larger and better show than we have yet had. Additional space will be made available, and every member available to Long Beach is urged to make as complete an exhibit as possible. Keep in mind that while this is primarily a begonia show all types of plants that thrive in our lath or glasshouses, or our sheltered gardens should be well represented. If distant members are planning to visit Long Beach this summer plan to come during the show. Members at remote spots should plan to show begonias at local flower shows. That is the best way to interest other folks in our own Royal Hobby.

F E R N S

Requests have come in for bulletins containing the articles on ferns. These bulletins, of 1934, 1935 and 1936, are not out of print. Accordingly your editor has taken the liberty of summarizing the articles by Roscoe S. Baldwin, F. A. McCrackin, and Hans Von Hofgaarden.

Ferns belong to an ancient group of plants, the phylum Pteridophyta, that once predominated among plants, but are now relatively scarce. The eight thousand species of ferns we find on the earth today are but a handful to the great number which grew on the earth millions of years ago. As the temperature was higher and more humid then, ferns attained their maximum growth. The great coal beds in lands that are now covered with ice for a large part of the year indicate that they once supported a luxuriant fern growth. Although individual fronds seldom live more than a year, nearly all ferns are perennial, and many are evergreen. Tree ferns with their erect trunks and tufts of fronds at the summit are probably the typical form.

Ferns differ from most of our cultivated plants in not bearing flowers or producing seeds, though one species is called the flowering fern. Ferns carry on their race by means of tiny reproductive cells called spores. The ordinary fern plant bears these spores as fine dust in the brownish spots on the under side of the fronds. In the process of reproduction the fern goes through a complicated process called the Alternation of Generations. In this process the spores which fall into a suitable moist location sprout and grow, not into a fern plant, but into a small structure called a prothallus. This small, flat scale-like structure bears sexual

FERNS (cont'd)

organs which produce sperms and egg cells. The sperms are active and swim about in the film of moisture on the prothallus until they find an egg cell which they fertilize by uniting with it. After fertilization the egg cell begins to grow. In time this growth develops into a mature plant, the fern with which we are familiar. The green fern is called a sporophyte, or spore bearing plant, while the prothallus, which bears the sexual cells, or gametes, is called a gametophyte.

Ferns can only be crossed, or hybridized, during the gametophyte generation. Due to the microscopic size of the gametes, ordinary methods of hybridizing are impossible. The usual method is to bring together two of the small prothallus plants, produced from the spores of different species of ferns, and trust that some of the sperms will cross over to the other prothallus. Ferns also multiply by means of runners, sent out from a mature plant.

While ferns extend over the entire surface of the world they are by far most abundant in tropical regions where heavy rainfall, equable temperatures, and wide ranges of elevation occur. Far from being rooted in the ground, as in our native species, more than two-thirds of the ferns of tropical forests are likely to be found on trees. The Island of Jamaica has nearly 500 species of ferns, the larger island of Haiti a few more, the Andean region from Chile to Mexico has several thousand, but it will require a generation of exploration before the real extent of the fern flora is even approximately known. In our own country we have in the fern flora of Florida a connecting link between tropical and temperate regions. Only about 200 kinds of ferns are native to the United States and only 25 of these have been found to have horticultural value, though others may be grown with special care and add a delicate charm to the sheltered garden. California has 50 native species but only two of these are common in cultivation; the chain fern, *Woodwardia radicans*; and the five-finger fern, *Adiantum pedatum*. The most common and most widely distributed fern in North America is the common brake, *Pteris aquilina*, but it is usually regarded as a weed, though it gives a tropical effect to the undergrowth of our northwestern coast.

While we commonly think of ferns in moist situations some of our most interesting ferns occur on our deserts and on the dry rocks and cliffs of our mountains. Most interesting adaptations have been made by these ferns in order to withstand the sun and arid atmosphere. They grow mostly in the seams or clefts of the rocks where the meager and infrequent rain drains off into their root systems. They have small thick leaves, mostly covered with close-set hairs or overlapping scales to better retain the moisture. As a further aid from drying out, most desert ferns have the habit of rolling up their fronds during the driest periods.

Constrasting sharply with the thick-leaved desert ferns are the Filmly ferns, an extensive group found mainly in the cold, cloud-drenched mountain forests of tropical regions. They grow mostly upon logs and mossy tree trunks. A few kinds occur in the lowlands, on trees or banks, or clinging to moist rocks. The forms of frond assumed by the "Filmies" are many, ranging from simple or coarsely lobed to many times finely divided, the divisions flat or ruffled, devoid of hairs or so thickly covered with them as to glisten with a silvery, golden, or warm-brown silky sheen. Some kinds grow stiffly erect, but the most beautiful are those that hang limply from the mossy trees. All are alike in having leaf tissue but one cell thick, which explains their liking for spray and mountain fogs. They have no means of storing water. A few can live where it is merely damp, but most kinds cannot let their delicate fronds dry out. The covering of hairs is commonest in species of drier and more exposed situations. With few exceptions the Filmly Ferns are plants of extreme delicacy, and their translucent, lace-like fronds are among the most beautiful of natural objects.

The largest of all ferns are the Tree Ferns. They are the glory of the tropics. They develop erect trunks which grow from 20 to 80 feet in height. They are crowned by a palm-like crown of huge dissected fronds. The Australians call them Fern Trees, certainly an appropriate name.

The American Fern Society has fostered an extensive study of the ferns of this

FERNS (cont'd)

country, and our National Herbarium, at Washington, is pursuing studies of Central American ferns. Yet England had taken a far greater interest in ferns. Fully 2000 ferns are listed and grown in England, some under glass with tropical conditions, but hundreds are grown there in the open air. Most kinds of ferns will do well in a lath house for a short time, but they are especially suited to our sheltered gardens and lath houses. Any good begonia soil will do excellently for ferns.

The most popular fern in America is the Boston fern. The parent form of the Boston fern is the Sword fern common in Florida and the tropics, which was first introduced in 1793 from Jamaica. About thirty years ago the present Boston fern was produced apparently as a sport or mutation from the original parent. Among the northeastern ferns of special interest are the Christmas fern, the common Wood fern, and the Cinnamon fern. The first two are exploited by the florists for their fronds. The Cinnamon fern is useful in a different way. Its great root-tussocks, rising well out of the moist areas where it grows, supply thick masses of wiry interwoven rootlets, which are regarded by those who cultivate tropical orchids as an ideal medium on which to grow the kinds that occur naturally on tree trunks.

Ferns have other economic uses besides those of the florist trade. Various Polypodies were used in medicine by the ancients. The roots of our western Polypody are intensely sweet and give the plant its name, Licorice fern. The huge stems of the Hesiian Ytrr Grtn formerly provided the native Hawaiians with food in time of need. In tropical America the tall columnar trunks of several kinds of Tree ferns are occasionally used as telegraph poles, and rather commonly as building timbers and upright supports. Not only are they resistant to decay, but to the attacks of termites as well. The interior network especially is of almost glassy hardness, and is often used as inlay material by cabinet makers of South America. In Java the lone inner strands of a Vine fern are woven into cigar cases and light weight hats, and in Siam small closely woven covered boxes of oval form and exquisite design and workmanship are made from the strands of a native Climbing fern.

NEW MEMBERS

Mrs. A. Denvei	5020 Wall Avenue	Richmond, California
Minnie Heaton	5893 Brayton Avenue	Long Beach, California
Berheimer Oriental Gardens	16980 Sunset Blvd.	Pacific Palisades, Calif.
Mrs. T. R. Morris	Route 1, Box 247	Buena Park, California
Mr. & Mrs. W. D. Monmoncier	210 McFarlane Drive	Ventura, California
Mr. A. H. Weiberg	State University	Missoula, Montana
Mrs. W. W. Pope	Route 1, Box 245	Santa Paula, California

QUESTION BOX DEPARTMENT by Miss Lena Higgins

What should be done with Rex begonias that have lost their leaves?

If the root stalk is firm wash off the roots and put it in the leaf mold propagating bed, or cut the stalk into several sections first, if you wish more plants. If the root stalk is withered or rotted put in the trash can. See the Rex Begonia Bulletin.

Is the faucet water of Long Beach good for begonias?

The faucet water here is somewhat on the alkali side, but apparently not enough to seriously affect the plants. After the Colorado River water is added to our system the water will be much more alkaline than now. Rain water is always the best water to use for begonias or other plants liking acid conditions. Hard or alkaline water can be softened by the addition of aluminum sulphate (Common alum). Again consult the Rex Bulletin.

How do you care for palms in pots?

Use commercial fertilizer occasionally. Repot once a year. Water every two or three days. Wash off the leaves occasionally.

How should peach trees be treated for leaf curl?

While the trees are still dormant dust with dry lime-sulphur. If the tree is leaved out it helps to pick off the infected leaves and burn them.

Mrs. H. S. Ewoldsen of Big Sur Writes:

I still have difficulty in wintering *Begonia baumannii*--I wonder if other growers of this begonia have my sad experience? I find the seed of first generation crosses between *B. baumannii* and *B. tuberhybrida* have good vitality, but the second generation are weaker. My best results are from seed started by the nutrient agar-agar method.

APRIL MEETING PLANT DISPLAY by Mrs. O. P. Palstine

Mrs Young of Balboa had a beautiful plant of *fuchsioides multiflora rosea*. She reported it suitable either for hanging baskets or pots. She feeds it with Vigoro, a little frequently.

Hans Von Hofgaarden showed a gorgeous plant of Westport Beauty. He reported that cuttings root easily. He also stated that all the flowers are apparently male flowers.

Mrs. Palstine had a robust plant of *argentea guttata*, saying that the flowers are white in the shade, but tinged with pink in the sun.

Mr. Dyckman and Cecil Houdyeshel exhibited splendid plants of *Clivia*. Mr. Houdyeshel gave a very interesting and instructive talk on *Clivias*. He emphasized their slow growth, about one leaf a year until blooming age is reached in seven years. *Clivias* must have an acid soil, porous and with perfect drainage. They must be grown in dense shade with no direct sun.

FUCHSIAS FOR HANGING BASKETS by Mrs. C. A. Rodenburg

During the past few years fuchsias have become very popular for basket purposes. Some fuchsias are real trailers, and others may be pinched back and made to trail. *Fuchsia procumbens* has many-branched, trailing stems that hang gracefully, slightly spreading at the tips. The foliage is small; the tiny flowers, borne upright, are dainty, a deep purple with orange tube and blue anthers. Others which are naturally drooping are Cascade, Trailing Queen, Trailing King, Balkon, Covent Garden, Prince of Orange, Caledonia, Elsa, Nonpareil, Evelyn Little, and Marinka. Some of these hang down in graceful cascades, and others arch gracefully out from the basket. Coralina is of the arching type but suitable only for a large basket.

Many other varieties may be made to trail by heading them low, and keeping the tips of the new growth pinched back. For this purpose a selection should be made from varieties that are naturally of a slender and drooping habit. Mrs. Roberts, Mrs. Rundle, Mrs. Marchall, Wave of Love, and Ballet Girl are examples of this class. Some of the small flowered varieties such as Reflexus, Thymifolia, and Victrix are especially good.

One must not neglect fuchsias in baskets. They soon become root-bound and must be moved to larger containers so that they can have additional soil and food, and thus be able to continue their vigorous growth, producing the display of flowers that has made them so popular as basket plants. Remember that fuchsias are gross feeders and must be fed regularly if a good supply of bloom is to be maintained.

"BUG" NOTES FROM THE EAST by Mrs. H. H. Buxton

Massachusetts: Some one speaks of brown spots on the begonia stems. This may be mites of some kind, and may be eradicated by frequent spraying with Wilson's O.K. or Lemon Oil.

Maryland: A nurseryman who had just heard a lecture on nematodes told me there was a theory that soil from under or near fruit trees, especially apple trees, was apt to contain nematodes. Blackberry vines also cause them. I had nematodes in soil which came from under apple trees.

New Jersey: I lost many plants by small black flies which apparently sucked the sap from the under side of the leaves, causing them to shrivel and drop. The flies evidently laid eggs in the soil, and a small white grub ate the feeding roots. I used Wilson's O.K. on the flies, and a weak lime solution, but too late to save my begonias. Cyanogas will help kill the flies, also, but do not use it in the house.

"BUG" NOTES FROM THE EAST (cont'd)

Connecticut: As we are troubled with snails and slugs in the greenhouse, here is a formula which will not fail. One part Paris green to 50 parts bran. Moisten with molasses, add a little lemon juice and place on small pieces of paper in pots or where the pests abound, try every week. Be careful not to let the mixture wash into the soil.

New York: Cuttings should be free from insects, and I suggest dipping in Spraytox, 1-40-1 of water, as this is most satisfactory against mites, mealy bugs, and other soft insects. Mite is the worst pest we have in our greenhouse. Pomo-green is highly recommended for mites, a slight dusting. Any mixture which contains sulphur is good. During such treatment the foliage should be kept on the dry side and in half-shade. Even cuttings planted in sand can be dusted with sulphur, as it pays to keep on the safe side.

Massachusetts: If you are annoyed by mealy bug, spray the plant with a sharp spray of cold water once a day for ten successive days, and you will be rid of them. The cold water treatment is also good for aphids or any bug. My plant of Faureana has always had little white glistening spots on the underside of the leaves. In time they turn black. I tried all kinds of insecticides, in vain. So I sent some leaves to the Arnold Arboretum where they were examined under a compound microscope, and found to be juice exuding from the plant, and not a bug. The Impatiens or "Patient Lucy" has these translucent drops on stem and leaves also, it comes when a plant is brought into the house air from the outside.

New Jersey: I had hoped to have a small lath house this summer, but found it would cost too much, so worked out another scheme. I had a large box made, deep enough to hold the largest pots, and filled it with damp peat moss. A layer of stones in the bottom provided good drainage. The box was set on blocks in the ground. For shade, I have a lattice top which can be raised with ropes to let in light and air, and for a wind-break, there are old porch screens on two sides. The lattice alone was not sufficient protection from the hot sun, which unfortunately shines on that spot most of the afternoon, so I use burlap over it. So far, this arrangement has been very successful as the peat moss holds the moisture and the plants never dry out. The only danger is that they may be too wet, and perhaps mold, so I watch for this and scratch up the peat occasionally to let in the air. I spray the leaves every evening. There are no earthworms and only one small slug which disappeared as mysteriously as he came, so these two pests are practically overcome.

FIBROUS BEGONIAS by H. P. Dyckman
Procumbent Type

Ricinifolia W. Pink
Fischer's Ricinifolia, W. Pink
Feastii (Beefsteak), W. Pink
Bunchii, W. Pink
Conchaefolia, W. Pink
Mrs. Townsend, W. Pink
Manicata, W. Rose-pink
Manicata aurea, W. Rose-pink
Manicata aurea cristata, W. Rose-pink

Immense, S. Pink
Mrs. Mary Pease, S. Pink
Rubella, S. Pink
Sunderbruckii, S. Pink
Guatemala, S. Pink
Braziliensis, S. White
Goegoensis, S. Pink
Palomar, S. White
Nelumbifolia, W. White

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SPECIAL CULTURAL BULLETINS

A few more business cards like the above might yield those growers or dealers more business, would give our members a wider field of selection, and would insure a bulletin of this size for the balance of the year.

VENTURA DOINGS

The May meeting will be held at Coco-Cola Hall at 7:30 p.m., on Tuesday, May 10. Mr. H. P. Dyckman of Long Beach will be the guest speaker.

The editor enjoyed a short visit at the new home of the Weitz' at 1655 Thompson Blvd. The lath house is already a place of beauty. They are now building a display room in front. Mrs. Weitz says it will be something like that of Mrs. Sloan's at Corona Del Mar, and she hopes it will be as attractive.

Word is received of the passing of Willard Hugo Francis. In 1906 he assumed the management of the seed and plant business of the late Theodosia B. Shepherd,

VENTURA DOINGS (cont'd)

retiring in 1929. Our sincerest sympathy is extended to Mrs. Myrtle Shepherd Francis, who is a life member of our Society.

LONG BEACH MEETING

The next meeting will be held at the Community Hall, Ninth and Lime, on Thursday, May 12, at 7:30 p.m. The Fullerton delegation will furnish the program for the evening.

RARE BEGONIA DISCOVERED

A rare kind of begonia, not found wild anywhere else, so far as is known, was discovered recently by a visiting botanist, Prof. Leslie Kanoya, of Kalamazoo College.

The begonia, found near Monterrey, Mexico, on Saddle Mountain which dominates the town, will be called "Monterrey". — Christian Science Monitor.

Mrs. E. T. Boeshar.

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of the
AMERICAN BEGONIA SOCIETY

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JUNE 1938

No. 6.

Long Beach, California
M. B. Dunkle, Editor, 4543 Colorado St.

We note with pleasure that the American Fuchsia Society is now publishing a regular bulletin. We welcome them to the new undertaking which should add much information in regard to this large and interesting group of plants that fit in so well with our begonias. In the June "Sunset" we find the Editor of the new bulletin, Gus Neiderholzer, has just introduced a new Fuchsia, "Sunset", a cross between Aurora Superba and Rolla.

Now is the time to begin your preparations for the mid-summer shows. The annual show of the American Begonia Society will be held August 20th and 21st.

This year an additional lath house will be available for our show and there will be room for several commercial exhibitors. Every member within reach of Long Beach should arrange to exhibit at least one good plant.

For a general display the Show Manager, J. N. Nutter, is planning to use a profusion of the semperflorens and other bedding types. Get as many of these plants as possible in shape for the show.

Even if you live at a distance from Long Beach plan to come to the National Show, here you will not only see the finest collection of begonias, but you will have a chance to meet with all the other Begonia enthusiasts of the Pacific Coast.

If you can't exhibit at the Long Beach show plan to exhibit at the shows in your vicinity. Make new friends for yourself and new enthusiasts for begonias.

A new Special Bulletin will be available this month, on Begonia Pests and their Control. No Begonia grower can afford to be without this.

EASTERN DEPARTMENT - Mrs. H. H. Buxton

BEGONIAS IN SCHOOL — H. Linwood White

I am happy to contribute to the MONTHLY BULLETIN at the request of Mrs. Buxton, to whom I owe much for Begonia lore, cuttings, and seeds, and most for fanning to flame a spark of interest in the Begonia tribe.

At the Essex County Agricultural School in Hawthore, Massachusetts, where I am instructor in floriculture, a section of the greenhouse is devoted to semi-tropical plants. A minimum night temperature of 60 degrees Fahrenheit is maintained in winter, and the air is kept humid the year around. The roof is shaded from April to September. Under these conditions we grow begonias other than *B. semperflorens*; these occupy the warmest bench in the cool house. One bench in the warm house carries blocks of heavy plants of *B. Credneri*, *B. metallica*, and *B. argentea-guttata* for use in decorating our assembly halls and offices. Needless to say, *B. Credneri* stands handling and the dry air of rooms very acceptably while the last named has to be watched most carefully as to moisture. Periodical feeding with Clay's fertilizer alternating with dried blood or tankage intensifies the color and improves the gloss of the foliage.

Another bench is devoted to our collection. Varieties of *B. rex* occupy half the bench. The many young plants are due to the activities of a Senior student who successfully sprouted and rooted the long rhizomes of the oldest Rex plants in boxes of leaf mold. Tip and two-eye cuttings of other begonias were rooted in a mixture of equal parts of peat moss and sharp sand. The propagating boxes, 6 x 12 x 4 inches deep, were placed under the branches of a Norfolk Island pine. Several *B. feasti* and *B. manicata aureo-maculata* were rooted and sprouted similarly. We use these and others as hanging plants, and experience our greatest thrill of the Begonia year when

EASTERN DEPARTMENT ---- BEGONIAS IN SCHOOL (cont'd)

they blossom, during February. *B. heracleifolia*, *B. ricinifolia*, and a star-leaved sort unknown to the writer are also fine in hanging pots.

(We hope that further contributions from Mr. White will appear later --Editor.)

LATHHOUSES IN THE EAST -- Mrs. Elizabeth M. Buffet, Freehold, N. J.

Every begonia lover in the East is, I am sure, looking forward to an eastern branch of the American Begonia Society. The bulletins from California, while mighty interesting reading, do make one feel rather lonesome. Through an eastern branch one might even locate a fellow Begonia enthusiast right close by--and what fun that would be.

I love the old friends among my plants, the Lucerne group, *Multiflora rosea*, *Medora*, *Odorata alba*, *Faureana*, *Sunderbruchii*, and all the *Semperflorens*; but a well grown plant of any kind is a joy to the flower lover. Old compost is my soil for begonias. The heap I am using now is four years old, every year I build up at the end of the old pile, so I always have plenty and some to spare for friends in town.

Our summers here are very hot and dry, usually with a strong wind. I have found the lath house almost indispensable--mine had to be very inexpensive and very sheltered from both wind and sun. The garage makes the west wall, a seven foot board fence the north wall, while east and south are partly lath and shrubs and vines, with just the entrance left open. It is so protected that plants placed there May first, and sometimes earlier, have never been harmed by frost. I have wondered that more gardeners do not build a lath house, to me it is a real comfort.

(Enthusiasm is indeed building up for a New England branch of the A.B.S. This extract from a letter from Mrs. Harold R. Alford, of Kennebunkport, Maine, well illustrates both the need and the method. Editor.)

Possibly I dream too much, but I am looking forward to community meetings of Begonia growers. People with interest enough to show their plants, and talk over failures and successes, comparing notes for mutual benefit--this to take place at monthly or bi-monthly meetings. Occasional joint meetings could be arranged with garden clubs. In regions like mine, not one woman in five hundred could take her hand from the cookstove or cradle long enough to attend a meeting out of town. "Little shows" at home would awaken interest among those who now grow only a begonia or two as an inheritance from "mother" or "Grandmother". Such gatherings would provide an uplift that many need. I believe in the gospel of the growing plant--I wish you might see mine.

RESEARCH NOTES ON MUTATION PRODUCTION -- C. M. Kelly

Something over a year ago we reported in the bulletin our experiment in subjecting the pollen, seeds, and plants of *B. Schmidtii* to exposures of X-rays in an effort to produce mutations or variations of this species. This work was undertaken without previous experience and the results have so far been entirely negative. The young plants grown from this treated seed, and seed fertilized with treated pollen, are all identical with the parent plant. Evidently much longer exposures than were used are necessary. It is an interesting field for experimentation and we would like to encourage other members, who have sufficient room to grow the seedlings, to continue it.

Experiments to induce mutations in plants by juggling of the chromosomes--the carriers of hereditary characteristics--have been carried on by several scientific institutions using various methods. Heat treatment, exposures to radium and X-rays, the aging of seeds, and more recently the application, to seeds and plants, of chemical substances, such as chloral hydrate and other narcotics, have been tried. The most encouraging results have been obtained by the use of the alkaloid colchicine, a substance related chemically to morphine and codeine. This chemical in effect doubles the chromosomes in the pollen grains and thereby induces variations in the progeny of the plant subjected to the treatment. Larger flowers, hardier stock,

RESEARCH NOTES ON MUTATION PRODUCTION (cont'd)

sterile hybrids made fertile thus producing true breeding forms, result from the use of this treatment.

While this is a most important discovery and may lead to gratifying results in the hands of skilled scientists, it must not be supposed that by the mere spraying of the chemical on the plant new varieties can be produced as by magic. However, we are assured that the amateur experimenter possessed of reasonable scientific knowledge and familiar with the use of the compound microscope--in detecting the increased size of pollen grains--may expect satisfactory results by this method. The first evidence of the effect of the colchicine on the plant will be a dwarfing and stunting of it, while the variations may be expected only in the second generation.

A report of the work done by Blakeslee and Avery, at the Carnegie Institute of Washington's laboratory at Cold Springs Harbor, N. Y., will be found in the Journal of Heredity, December 1937, under the title--Methods of Inducing Doubling of Chromosomes in Plants.

JUNE HINTS -- J. Paul Walker

This is a fine time to start Rex and Fibrous cuttings in the lath houses.

The sooner you cut off bad looking Rex leaves, the sooner you will get new leaves to take their place.

Bedding type begonias that grow too high may be cut back to the desired height, and if cut close above a leaf will hardly show that they have been pruned.

Never fertilize a potted plant heavily unless it shows signs of growth.

Begonias growing in the ground will do better if fed lightly every month.

Remember that begonias need to be kept moist, not wet.

One cannot expect a fuchsia to continue flowering profusely unless it is given sufficient food.

FIBROUS BEGONIAS -- H. P. Dyckman

Low Growers

Floribunda Rosea, S. Pink
Fuchsioides Coccinea, S. Red
Vedderi, S. White
Preusen, S. Pink
Bayern, S. Pink
Sachsen, S. Pink
Wettsteini, S. Red
Incarinata, W. Pink
Syhria, W. Pink
Marquerite, S. Pink
Imp Marquerite, S. Pink
Robusta, S. Red
Deckers Robusta, S. Red

Washington Street, W. White
Odorata Alba, S. White
Odorata Rosea, S. Pink
Undine, S. Pink
Rosea Gigantea, W. Red
Medora, S. Pink
Foliosa, S. White
Bertha Von Lothringen, W. Pink
Sandorsoni, S. Red
Nitida, S. White
Luxuriant or Olbia, S. White
Francois, S. White
Argentea Gutatta, S. White

HOUSE CULTURE OF BEGONIAS IN COLD CLIMATES -- A. H. Weisberg, Missoula, Mont.

It is one thing to grow begonias under the ideal conditions prevailing in Southern California, and quite another to grow them where real winter lasts from four to six months, and frosts may occur during eight or nine months of the year. It is of begonia growing in the home, under conditions prevailing in Western Montana, that I write.

Under lath house and greenhouse condition plants receive much more light than plants growing in a dwelling house window. This means, of course, that house plants cannot assimilate as much food as lath house or greenhouse plants. Therefore a soil mixture containing one third manure, with perhaps the addition of some commercial fertilizer, is too rich for house plants.

Leaf mold as a constituent of potting soil is also out. Our forests are composed almost entirely of evergreens such as pine, spruce, hemlock, etc. Leaf mold from pine needles and the like is a total loss for begonia soil. Repeated trials have proven this beyond doubt for me. Leaf mold from maple trees was no better. We have no oak trees here, except occasional specimens on lawns.

HOUSE CULTURE OF BEGONIAS IN COLD CLIMATES (cont'd)

Shortly before leaves drop in the fall, the unused plant food material which they hold is absorbed back into the twigs and branches of the tree. What remains in the fallen leaves are substances which were drawn up with the sap during the growing season, but which are not suitable for plant nutrition. Without wishing to question the almost unanimous use of leaf mold by begonia experts, I do wonder how decayed fallen leaves can be good for plants.

For the foundation of my begonia soil I use a compost made from a medium garden loam composted with wastes from the kitchen garden such as old pea and bean vines, root tops, in fact, the usual by-products of garden, lawn and weed patch. This is all mixed, piled, and allowed to decompose for a year or more. This compost contains no manure. Fortunately it tests slightly acid. To this I add not more than ten percent sifted manure, five to eight percent sand, and ten percent peat. A little vigoro, superphosphate, or cotton seed meal will increase the acidity. I never use bone meal as it is inferior to superphosphate in every respect. Bone meal has an odor which is noticeable in a dwelling house where there are about 40 large pots and as many as 100 small ones during the propagating growing season. Bone meal also leaves an alkaline residue in the soil.

For supplementary feeding I use ammonium sulphate, Floranid, or nitrophoska dissolved in water. I do not care for liquid manure for pots, because the fine particles which it holds in solution tend to gradually clog up the surface soil, excluding air in part. Besides liquid manure on so many pots in the house would give off a noticeable odor.

Back to soils. The first calla lily begonia I had was given to me by a lady who was moving away to Canada. She had several plants and gave me the largest, which well filled a five inch pot. It was by far the handsomest Calla I have every seen. The white leaves were clear snow white without yellow or creamy tinge, or red margins or blotches. It was growing and blooming luxuriantly in a light colored sandy soil which evidently contained some clay, for it became bone hard when on the dry side. The soil looked like nothing but packed light colored road dust, without a sign of humus, manure, or sand.

The plant was watered like any other begonia. I felt rather elated and wondered why everybody said Calla Lily was hard to grow. I reasoned that if it did so well in such contemptible soil, what would it do in real begonia soil. So several weeks later, when it came time to repot, I filled in with begonia soil containing the usual trimmings. Poor Calla Lily! The ignorant thing did not know what was good for it and it began to shed tears (leaves). I made cuttings which did fine in the sand, but when potted up in orthodox begonia soil, they just held their own. For four or five years I struggled with the Calla Lily. I grew them on the dry side, and on the wet side, watered from above, below, and from the side, in light and in shade, in heat and in cold, in dry air and in moist under a glass bell. I crossed Calla with a hardy *semperflorens*, raised scores of plants of the first and second cross, but it was no use. Finally I gave up the struggle. I am sorry I did not think of it before, but if I ever try Calla Lily again I will go out and scrape up some clayey sandy road dust and give the dear thing a treat.

It is not worthwhile to grow tuberous begonias here. The summer is short, the winter long, and the air is dry. The semi-tuberous are also hard to keep here.

PLANTS FOR HANGING BASKETS (Continued)

Mrs. C. A. Rodenburg, Santa Monica, California

Blue flowered plants are always desirable. Among them are the Lobelias; the hybrida and sapphire varieties are especially fine. These plants are annuals but they are strong growers and bear masses of blue flowers through the season. Rather common is *Plumbago larpentea*, dwarf rock plant, which grows from six to ten inches high and bears numerous deep blue flowers.

Anthericum (St. Bernard's lily) has graceful foliage and makes a handsome basket. The leaves are dark green marked with broad stripes and bands of creamy color.

PLANTS FOR HANGING BASKETS (cont'd)

It bears large spikes of white flowers.

Plants having more trailing tendencies are the candle vines, so called because they produce flowers resembling miniature candles. *Ceropegia woodii* is the one most usually seen, although we have three others belonging to this group.

The lotus or pigeon's beak is a trailing plant with very showy, finely cut, light gray foliage. The scarlet flowers, which are shaped like a beak or claw, are in clusters. There is one with yellow flowers resembling small sweet peas.

The ivy geraniums have attractive foliage and being procumbent in growth may also be used in baskets. The flowers are plentiful and they bloom over a long period of time. They are lovely and come in various colors of blooms. Our old time friend, *Impatiens*, may be headed back and trained low; because they are free flowering and very showy, they add much color. In *Holstii* mixed or the sultani hybrids, we find a wide range of colors, white, flesh, pink, rose, salmon, orange, carmine and even some tinged on violet shades. We also have the *coleus* which are valued highly on account of their brilliantly colored foliage and strong growing habit. Some kinds may be headed low and by judicious pinching may be kept as trailers. One variety known as *Trailing Queen* is naturally a trailer and is certainly a beauty with its wonderful rich ruby coloring.

Among tuberous rooted plants that may be grown as trailers we find *gloxinias*, *gesnerias* and *achimenes*. The first has dark colored leaves, of soft velvety texture; large bell-shaped flowers in rich colorings, white, red, purple and intermediate shades, some being blotched or spotted. The *gloxinia* is rather tender; a warm place is needed in which to start the tubers, but by summer it may be placed in baskets with only lath protection. The *gesnerias* have leaves of similar texture and rich velvety coloring. The flowers are not as large as those of the *gloxinias* but are of rich reds, browns and orange. The *achimenes* have a smaller leaf, are more trailing in habit and bear flowers that are white, rose, light lavender, light or dark purple. One or two of the small bulbs is sufficient for a wall pocket; or a dozen or more may be placed in a large container; a wire basket is best, for the shoots come through on all sides; as they grow and bloom a more lovely thing cannot be imagined.

QUESTION BOX — Lena Higgins

My Madonna lilies are coming up with weak stems. The bulbs have been in the ground several years and did splendidly until last year. Are they worn out or starved out?

Answer by Leslie Woodriff. Madonna lilies to do well should have at least a square foot of space for each bulb, if they are left for several years there may be a dozen bulbs in that space. Under good growing conditions they should be replanted every three years. They will stand a lime soil and full sun. Keep them well away from your native lilies as most of them carry a virus mosaic disease which will ruin most native and oriental lilies.

What should be done with a plant whose roots are matted with angleworms?

Answer by J. N. Nutter. Mix vaporite with the potting soil. Shake out as much of the old soil as possible and repot with the treated soil.

What soil should be used with *Saintpaulias*?

Answer by Orion Pettengill. The soil should be $\frac{1}{4}$ loam, $\frac{1}{4}$ sand, $\frac{1}{4}$ leaf mold, and $\frac{1}{4}$ German Peat. Bone meal or Blood meal may be added. Keep the soil loose, never packing it with the fingers. In starting *Saintpaulias* make a clean cut, and put the petiole of the leaf in sand to about $\frac{1}{2}$ inch of the leaf blade. Never spray with an insecticide as the leaves absorb the poison very quickly, wash off pests with a fine spray of water.

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AMERICAN BEGONIA SOCIETY

1732 Temple Avenue, Long Beach

A few more business cards like the above might yield these growers or dealers more business, would give our members a wider field of selection, and would insure a bulletin of this size for the balance of the year.

LONG BEACH NOTES

The June meeting will be held at the Community Hall ninth and Lime, on Thursday, June 9th, at 7:30 p.m.

LONG BEACH NOTES (cont'd)

Lloyd C. Casper of Altadena, Streptocarpus specialist will speak on plant experimentation. There will be other talks on pest and disease control for plants.

At the May Directors' meeting, which was held at the home of Mr. and Mrs. H. P. Dyckman, authorization was given to C. M. Kelly to proceed with the printing of the special research bulletin on "Pests and their Control." It was also voted to suggest the idea of a dinner meeting to the Society at the June meeting. The date for the Annual Begonia Show was set for Saturday and Sunday, August 20th and 21st. The show will again be held at the Signal Hill Agricultural Center.

VENTURA MEETING

The June meeting will be held at the Coco-Cola Hall, at 7:30 p.m. on Tuesday, June 14th.

OUR NEW MEMBERS

Due to the absence of our Treasurer this list is very incomplete this month, and names left out will be added to the July list. We hope to issue a new membership directory in the near future.

F. H. Brown, Rt. 2, Box 553-A, Long Beach, California
Elizabeth B. Butz, 8 Dunston Road, Great Neck, N. Y.
Mrs. Pauline Ney, 3112 W. 81st St., Inglewood, Calif.
S. L. Robinson, P.O. Box 55, Hobe Sound, Florida

MAY PLANT DISPLAY — Mrs. O. P. Palstine

A tall decorative plant of B. Clement was shown by Miss Fackelman. The branches were arranged in a symmetrical ladder pattern.

Mrs. Rodenburg exhibited a Mrs. Wallow, with pink bloom. She reported that it would climb to a height of eight feet. She also exhibited B. Chiala alba, a sturdy upright plant with large bunches of white flowers, and Chiala rosea, with pink blossoms and longer, narrower leaves, but the plant not so tall as Chiala alba.