

PREFACE
TO THE
MIMEOGRAPHED REPRODUCTIONS
OF THE
MONTHLY BULLETINS
OF THE
AMERICAN BEGONIA SOCIETY
FOR
January through December
of
1936

October 12, 1967

In looking through the attached bulletin issues, of the American Begonia Society, for 1936, the first item that a person notices is the increased volume of the publications for the year as compared to 1934 and 1935. We used 77 stencils to reproduce the pages for 1936 while only 41 were needed for 1934 and 50 for 1935.

The average monthly bulletin for 1936 was larger and a reproduction of a revised constitution for the ABS was included with the October issue. Cultural bulletins on Tuberous and Fibrous Begonias were also included with the February issue. Another added feature was an index, which was attached to the December issue. This index listed the cultural stories and current news and information for all months of the year.

The splendid progress of the ABS in 1936 appears to be the result of the excellent leadership of the officers and the wholehearted participation by all of the members. The high quality of the articles that were written for the bulletin in those times most certainly provides good examples for us to follow even today.

In closing this preface today it would seem that a statement about the source of the present cultural knowledge of all growers of shade plants, would be appropriate. We all are the final products of our current interests, experiences, bulletins, texts, studies and researches on our plants --- plus another extremely important cultural factor. This factor is the contribution made by the history of all of the work done by our present co-workers and by all of the folks who have preceded us.

These early Begonians are part of this history so we should take advantage of every word on information that is recorded so wonderfully in all of these bulletins.

Very sincerely,
Elizabeth and Herbert Warrick

AMERICAN BEGONIA SOCIETY

Vol. 3.

JANUARY 1936

Number 1.
C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California.

JANUARY MEETING

The first meeting of the year which celebrates the fourth birthday of the American Begonia Society will be held Thursday evening January 9th in the Community Hall, corner Lime and 9th Street, Long Beach, at 7:30 o'clock.

Following the annual reports of officers and standing committees, the officers elected for the year 1936 will be installed.

Our Program Chairman, Mrs. Palstine, has arranged for Dr. Warren P. Davis, to tell us how bees assist in pollinating flowers in a talk on "Hobbies and Bees".

CONCERNING THE LAST MEETING

Eighty members and friends attended and enjoyed the December meeting.

The election of officers placed the leadership of the Society in the hands of Mr. M. B. Dunkle, President, Mr. M. Sherwood Bell, Vice President, Mr. C. M. Kelly, Corresponding Secretary and Miss Edna Ziesenhenné, Secretary-Treasurer.

Mr. Norwood's talk on "Begonias and how to grow them" was very instructive and was much enjoyed.

Plants brought by the members were exchanged, being drawn by numbers. The Refreshment Committee served cake, coffee and chocolate. (Mrs. H. D. Heinley, Sec.)

NEW MEMBERS

We are pleased to add the following names to our membership list:

| | | |
|------------------------|-------------------------|-------------------------|
| Mr. H. Paul Kegley | 224 - 5th Street | Manhattan Beach, Calif. |
| Mr. W. S. Sitch | 2529 Pacific Avenue | Manhattan Beach, Calif. |
| Mr. E. C. Wiesenhutter | 3842 East 10th St., | Long Beach, California |
| Alice Frackelman | 420 W. Imperial Highway | Brea, California |
| Mr. Florence Carrell | 214 N. Yale Street | Fullerton, California |
| Mrs. Martha Cass | 1711 East Bay | Balboa, California |

FROM THE RETIRING PRESIDENT - J. Paul Walker

The past year has been another banner year, in the history of the American Begonia Society, due to the efficiency of all those working in the numerous capacities, and to cooperation and lack of discord that is very evident in our organization.

To those elected officers, the society owes a great debt of gratitude. The monthly bulletin, second to none of its type, is due to numerous hours of untiring effort on the part of the Corresponding Secretary, Mrs. J. S. Williams, and her able assistant, Mr. C. M. Kelly, in securing and organizing desirable information from such authoritative sources over the whole world as Mr. C. F. Langdon of England, Mrs. Fannie Cheatham of Hawaii, Miss Oldroyd of India, and our own members, Frank Reinelt, Constance Bowers, F. A. McCrackin, Alfred D. Robinson, Roy Berry, and Rudolf Ziesenhenné, who has translated many excerpts from our German Book, "Die Begonien", for publication. The Secretary-Treasurer, Mrs. H. D. Heinley, has been not only very efficient in her work, but has been more than willing to do the many kindred jobs desirable in our growing society. The Vice President, Harry Roque, has filled his office especially fine, being largely responsible for the lack of discord in the society, due to his social diplomacy, and as chairman of the reception committee this characteristic has helped to make new members feel more at home. Roy Berry, elected member of the Board of Managers, has been a strong addition to the executive committee especially in those things affecting Begonia culture, and he has been most generous with his plants, always being willing to give them for any good cause. Our Past President, Fred Reidman, has been especially helpful in giving legal advice

FROM THE RETIRING PRESIDENT (cont'd)

affecting the society, although his practice of law has prevented his attendance as regularly as we would have liked. Clayton Kelly, also elected member of the Board of Managers, has been an inspiration to all those acquainted with his Begonia activities. Besides his work on the bulletin, he has linked our society with individuals over the whole world through correspondence and the collection of foreign seed. The lath house committee of which he is chairman has secured the allotment of a plot of ground for a future Municipal Begonia garden.

The type of work done by the different appointive committees this year has set a record that will be hard to equal. Our busy member, Mrs. C. A. Rodenburg, has spent hours in organizing the timely hints for growing begonias. She is to be congratulated on her practical dissemination of the subject. Her monthly hints have been a large factor in the success of the bulletin as well as a selling point to many new members.

Our program and social chairman, Mrs. O. P. Palstine, and her able assistants have made each meeting very enjoyable. Such speakers as Mesdames Buxton and Upjohn and Messers Norwood, Keane, Von Hofgaarden and Dyckman have added greatly to our information on begonias at the various meetings. The committee has directed us to many beautiful gardens and have developed the present social aspect of the society which is one of the major things in holding us together.

The membership committee, headed by Mrs. Chas. Patterson, is to be congratulated in its efforts toward securing the hundred or more new members the society has added to its list the past year. The music chairman, Mr. Tom Smith, has written our Begonia song and has added to the great pleasure of our meetings. The publicity chairman, Mrs. H. F. Logan has been instrumental in securing publicity in the local newspapers for our society and its meetings. Mr. J. S. Williams has worked hard to get our members to contribute pictures of their gardens and begonias for the club scrapbook. Mr. Dyckman and his committee have published very helpful bulletins on the cultural directions of both tuberous and fibrous begonias. Many members have helped to create interest in begonias, by placing their plants in the numerous flower shows.

It is impossible to enumerate the many services that every member of our organization has freely rendered in order to make this society worth while. I wish to take this opportunity in thanking each one for their cooperation. It has been a pleasure to help coordinate the services of the many pleasing and interesting personalities of which the American Begonia Society consists. I am pleased to congratulate the Society on its choice of officers for the coming year. If each member gives these officers the cooperation they gave during the past year, we may expect a greater year than we have ever enjoyed. (J. Paul Walker).

PRESIDENT DUNKLE'S MESSAGE

The past year, under the genial and inspired leadership of its President, J. Paul Walker, the American Begonia Society has not only enjoyed a remarkable success in its activities but has made a remarkable growth.

I trust that the harmonious and mutually helpful spirit which has characterized all the activities of the American Begonia Society in the past may be continued for the coming year. The rapid growth of the past year shows an increasing interest in the purposes of our Society and yet has multiplied the problems that will confront us this year. We must maintain the friendly, personal atmosphere of our meetings and, in addition, must make membership well worth while for our most distant members. With the bulk of our dues devoted to our most valuable activity, our bulletin, those who can participate in our meetings must plan to assist in the financing of these social and educational gatherings. There must be a larger number of committees to carry to completion these and other plans to enhance the benefits of our Society. I hope that all our members will cooperate in all matters that will further our common interests. (M. B. Dunkle)

TO THE MEMBERS OF THE AMERICAN BEGONIA SOCIETY

Mrs. Robinson and myself wish to convey to you our hearty greetings and best wishes for the coming year, which we are sure will show a continuance of the good progress of the past. I believe your platform is sound and I hope your budget is balanced, even if it be not, your record fully justifies your actions.

The bulletin has been so far in advance of the usual run of such things that it is almost unique, but it might be criticized as giving too much for the money, which is a burden on the giver and spoils a percentage of the recipients, and always someone has to pay. I would like to see a succession of articles which would form chapters in a Begonia book.

I shall deem it a pleasure to help the Society in any way possible and a hearty welcome awaits it if it care to put Rosecroft on its schedule of meetings for 1936.

Sincerely (Alfred D. Robinson)

(It gives us joy to report that Mr. Robinson has completely regained his health and strength, and as he puts it "is feeling bully". Editor)

EDITORIAL NOTE

With this, the January number, the newly elected Corresponding Secretary assumes the duties of assembling the material for and issuing the Bulletin.

He earnestly appeals to the members for their cooperation and assistance in making the Society's publication as instructive and interesting as it has been in the past. You can help by sending us suggestions; ideas for articles, subjects to be discussed or questions to be answered.

We will have articles written, when possible, on the subject desired by someone competent to do so.

CULTURAL NOTES - by J. Paul Walker

Most begonias are dormant at this time of year and require little care under average conditions. It is best to water during the warm morning hours, using only enough water to keep the dirt moderately moist, as excess moisture makes the plant susceptible to decay. It may not be necessary to water for several consecutive days as there is little evaporation from the plant at this time of year. One should keep a good lookout for slugs, snails, sow bugs and aphids. Bulletin # 2, Vol. 2 gives some good hints on controlling these.

You will get a lot of fun out of fixing up a cutting bed with bottom heat. This bulletin describes an inexpensive one. Cuttings may be started now that would otherwise have to wait for several months.

TUBEROUS - It is time to begin buying your tubers before they are picked over. Determine the types and colors you want by inspecting a good tuberous catalogue, or consult Bul. 2, Vol. 2. If you want something better than the average in plants, choice tubers, that should give you a longer and more profuse blooming season, are available.

Seed may be planted this month if you care to experiment with it. Seedlings seldom produce many flowers the first year, and they take a lot of care, so it is hardly practical for an amateur to bother with them. Directions for planting may be found in the bulletin "Cultural Directions for Tuberous Begonias".

The seed bed, or soil for planting tubers, should be prepared soon and allowed to lay until it is needed. The Cultural Directions bulletin describes how to prepare the soil as does Bul. 2, Vol. 1. It is well to dig naphthalene flakes, vaporite, or some such substance into the soil in order to get rid of the cut worms, wire worms, etc., as described in Bul. 2, Vol. 2.

FIBROUS - Many plants have been frosted or blown down during the past few weeks. These may be pruned back as far as you desire in order to develop good looking plants. The farther back they are pruned, the faster the plants will grow. At the present time, the roots are taking in only enough food to keep the plants at a

FIBROUS (cont'd)

standstill. If part of the stems are removed, the same amount of food will be more than enough to keep the remaining stems at a standstill, and consequently new growth will be hastened. The stems removed may be used for cuttings in the bottom heated cutting bed. The writer has had roots developing on this type cuttings in from ten to twenty days during December in the bottom heated cutting bed.

REX - Do not be alarmed if your rex plants have lost many or all of their leaves, for this is their resting period, and they are only marking time until the weather gets warmer. Don't try to determine the behavior of one rex by that of another, for each plant may react somewhat differently according to conditions. Bad looking leaves may be placed in a bottom heated cutting bed, if you have one, otherwise it is best to forget cuttings for awhile.

BEDDING TYPE - These plants should be cut back to within two or three inches of the ground if you have not already done so. The stems may be put in a regular cutting bed, although you will have a larger percentage of strikes and they will develop much faster at this time of year with bottom heat.

SPECIAL ANNOUNCEMENT

We are pleased to announce that we will have, in an early issue, an especially instructive article by Mr. C. F. Langdon, of the firm of Blackmore and Langdon, Bath, England -- foremost European producers of tuberous begonias.

We quote from a recent letter of Mr. Langdon's --

"It might interest your members to know that our exhibit at the R.H.S. Show at Olympia, London, in September, contained one hundred and twenty plants, each carrying three to six blooms, all double flowers, perfect in form, and from five to seven inches in diameter.

These plants were grown in 6" pots, and were arranged on a bank about ten feet deep, backed with bamboos and filled in with maidenhair ferns, etc. The whole exhibit occupying about four hundred feet super. All of these plants were grown from cutting tubers of the previous year, and were the choicest named varieties. The value of the plants used would be about 100 pounds, some of them being priced at 42 shillings each. These plants had to be carried from Bath to London, over a hundred miles. They were packed in a large van which was fastened to a Railway Truck, then hauled by horses from the Railway Station to the Show.

The work entailed in making a group like this is immense, as you can easily imagine. It is, however, worthwhile as it is our chief means of advertisement.

I must congratulate you on the continued progress of your Society, a tribute to the energy of your officers, especially your Secretary."

A REVIEW AND A SUGGESTION

In his discussion of "Begonias and how to grow them" Mr. Norwood addressed especially those members of the Society who are beginners in begonia culture, stressing these fundamentals -- The necessity of using clean pots, the thorough washing and sunning of old used pots to kill spores of fungus and mosses; providing perfect drainage by placing a layer of coarse gravel in bottom of pots, the use of a "three point potting soil" - 1/3 sharp coarse sand, 1/3 well rotted cow manure, and 1/3 oak leaf mold, not too fine. The proportions of this soil formula are to be altered as later experience, location or environment dictate.

The culture of each of the classes of begonias was briefly discussed.

It is the speaker's practice to leave the tubers of tuberous begonias in the pots after the blooming season, laying the pots on their sides under the bench during the winter. He said that the following spring, rootlets start from many of the old undisturbed roots and that these produce a more vigorous growth than if the tubers had been shaken out and the old roots brushed off.

He mentioned the need of "bottom heat" in starting early cuttings and seed. A simple way to do this he said was to place an old style carbon bulb electric light

A REVIEW AND A SUGGESTION (cont'd)

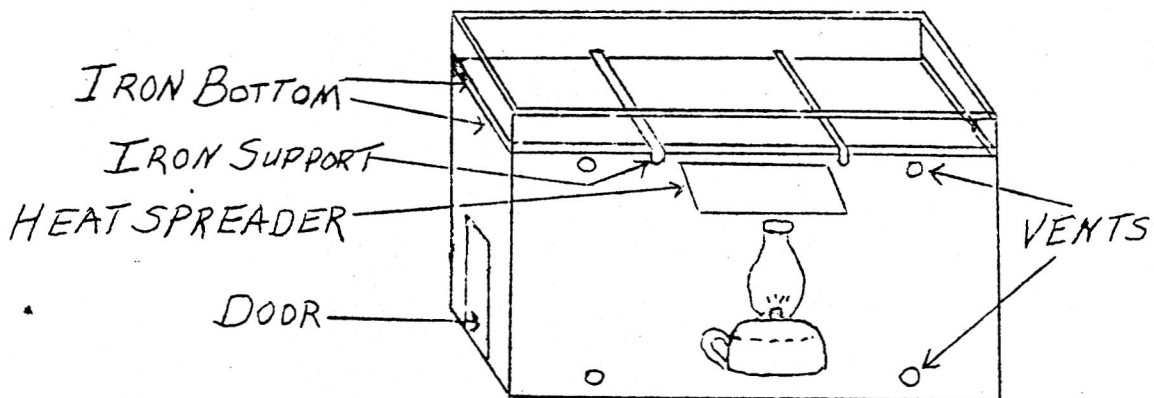
under the seed box. The talk was a thoroughly interesting and instructive one.

May the Editor bring to the attention of anyone contemplating the construction of a hot-bed, for the propagation of seeds or cuttings, the convenience and economy of the modern electrically heated and controlled hot-beds. Your local electric supply dealer can furnish literature describing necessary material, methods of installation, costs, etc., for large or small units. There are assembled units, of small size, ready to plug in and blue prints showing construction of hot beds of larger sizes.

I have been asked to describe a simple small home made affair that has been used successfully for three years. This "hot-bed" is made from a dry goods box 28" high and 24x36" on top. Five inches below the top is placed a false bottom of galvanized sheet iron. This is supported by cleats nailed to the sides of the box and by the 3/8" iron bars, crosswise. On this iron bottom is placed 1" of sand. Over the top of the box is placed a pane of heavy glass, which can be easily removed for watering or raised for ventilation. Heat is supplied by a low kerosene lamp, access to which is through a hole in end of the box. The top of the lamp chimney should be 4 or 5" below the iron bottom, with a sheet iron spreader, 8" x 10" suspended between to diffuse the heat. Vents in the sides of the box, near the bottom, for fresh air, and small holes just below the line of the iron bottom for the escape of fumes are necessary. Boxes or flats for seeds and cuttings are used, in preference to placing them in the sand directly on the sheet iron bottom. One caution:- when lighting the lamp, after refilling, the flame will gradually creep up and must be adjusted once or twice. Experience will teach one the correct height of flame to maintain required temperature. Use a Thermometer always.

The whole affair is simple and can be altered and improved as your needs and ingenuity dictate.

This sketch illustrates the construction.



RENEW YOUR MEMBERSHIP

Memberships in the American Begonia Society expire with December. Please be prompt in forwarding your renewal. \$1.00 per year. To Miss Edna Ziesenhenné, 3100 Theresa Avenue, Long Beach, California.

We think that the plans of the Society for the coming year, its monthly meetings with instructive talks on Begonias; the summer tours to Begonia gardens and authoritative articles in the Bulletin fully justify your continued membership.

SPECIAL BULLETINS

The Society has issued a special bulletin giving complete cultural direction for growing Tuberous Begonias. Price 10¢

A new and larger one has also just been published on Fibrous Begonias at 15¢.

A limited number of the regular monthly bulletins for the year 1935 can be had at 10¢ per bulletin. *Inflation in begonia?*

SUGGESTION FOR TODAY'S GOOD DEED

--- SEND IN THE NAME OF A NEW MEMBER.

AMERICAN BEGONIA SOCIETY
FEBRUARY 1936

Vol. 3.

Number 2.
C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California.

"GROWING BEGONIAS IS A ROYAL HOBBY"

NEW FEATURE FOR FEBRUARY MEETING

The program committee plans to have some member, at each regular meeting present a small group of begonias which will be named and discussed. Mrs. Heinley has charge this month.

Mr. Williams has been very successfully growing *B. Sutherlandii*. He will tell us how he does it.

The chapter on propagation, in the new book of Mr. Ottens, will be reviewed by Mrs. Dunn, followed by general discussion.

The planting of tuberous rooted begonias will be demonstrated also.

The meeting will be held in Community Hall, Ninth and Lime, Long Beach, California, Thursday evening, February 13th, starting promptly at 7:30 o'clock.

CONCERNING THE LAST MEETING

The fourth anniversary of the American Begonia Society was celebrated by sixty-two members and friends.

Following final reports of standing committees, Mr. Walker, retiring President, expressed his appreciation for the loyal support and cooperation of the members in achieving the marked success of the past year.

The newly elected officers were installed by Mr. H. C. Roque.

Our new President, Mr. Dunkle, outlined a progressive program for 1936 and announced the following chairmen of new standing committees:

Mr. J. Paul Walker, Program Committee
Mrs. Ruby Liedler, Social Committee
Mrs. Tom Smith, Membership Committee
Mrs. O. P. Palstine, Reception Committee
Mr. J. N. Nutter, Flower Show Committee
Mr. H. C. Roque, Ways and Means Committee
Mr. J. S. Williams, Scrapbook and Librarian

Dr. Warren P. Davis' talk on "Hobbies and Bees" was postponed until a later date.

Splendid colored motion pictures of begonia gardens were shown by Dr. Stirling G. Pillsbury. These included views of his own grounds.

A beautiful anniversary cake elaborately decorated with natural looking tuberous begonia blossoms, made and presented, to the society by one of its members Mr. F. Nickles, was served with coffee and chocolate.

NEW MEMBERS

| | | | |
|-----------------------|-------|-----------------------------|------------------------------|
| Mr. & Mrs. Alexander | Sim | 951 - 17th Street | Hermosa Beach, California |
| Miss Lillian Baldry | | Box 607 | Fortuna, Humboldt Co. Calif. |
| Mrs. Arthur D. Hough | | 381 Mira Mar Avenue | Long Beach, California |
| Mrs. C. J. Drant | | 6665 Gardena Avenue | Long Beach, California |
| Miss Florence Behr | | 122 Corona Avenue | Long Beach, California |
| Mrs. Charles Cranston | Bovey | 400 Clifton Avenue | Minneapolis, Minnesota |
| Elizabeth M. Buffett | | R. D. #3 | Freehold, New Jersey |
| Mrs. A. H. Adams | | 4052 Queen Avenue So. | Minneapolis, Minnesota |
| Fritz Kubisch | | 10778 Challon Road, Bel Air | Los Angeles, California |
| Emil Buyny | | 600 Sarbonne Road, Bel Air | Los Angeles, California |
| Mrs. L. C. Rudolph | | 87 Lincoln Drive | Ventura, California |

NEW MEMBERS (cont'd)

| | | |
|------------------------|--------------------------------|---------------------------|
| Mrs. H. F. Moore | 728 Emerson Street | Palo Alto, California |
| Mr. Dallas Bache | 327 Pennsylvania Avenue | Los Gatos, California |
| Mrs. Elliott Averett | | Chatham, New Jersey |
| Mr. Ernest K. Logee | | Danielson, Conn. |
| Mrs. Frances A. Mumper | 2036 Oak Avenue | Santa Barbara, Calif. |
| Mrs. E. A. Walker | 605 S. Bristol Ave. R. 4 Box 3 | Santa Ana, California |
| Miss Adele L. Guerin | 823 Sherburne Avenue | St. Paul, Minnesota |
| Miss Kate Walker | 1121 Cacique Street | Santa Barbara, California |

Added to the mailing list are the following:

Sunset Magazine, Norvell Gillispie, 576 Sacramento Street, San Francisco, Calif.
Cornell University, c/o Raymond C. Allen, Agricultural Dept., Ithaca, New York.
Los Angeles Public Library, Art and Music Department, Los Angeles, California.
Long Beach Public Library, Long Beach, California.
Alamitos Branch Library, 1836 East Third Street, Long Beach, California.

ABOUT FANCY-LEAVED CALADIUMS

From time to time we will endeavor to have described, in the bulletin, something about the culture of plants that may be grown as companion plants to begonias. In this issue we are privileged to give you an article by our member, Mr. J. M. Peddie of Los Angeles on fancy-leaved Caladiums. He specializes in caladiums and tuberous rooted begonias. If you have a situation sufficiently warm, they fit in nicely.

THE FANCY-LEAVED CALADIUM

Caladiums are often called "Elephant's Ears". which they somewhat resemble. The caladium is a semi-tropical plant and is found from French Guiana to Paraguay. Some of the most beautiful, coming from Brazil and Peru. The origin and name of the caladium is obscure. Hundreds of different varieties are grown today and are widely sold all over the country. The wide range of colors possible and the beautiful veined and two-toned effects produced by this arrow-shaped leaved plant, make it one of the most attractive of plants for the amateur to try his hand on.

The caladium being a tuberous plant should be started about the first of March in chopped moss in boxes or flats. The tubers may be arranged rather close together but must be covered over with the moss to the depth of about an inch. Although the tubers somewhat resemble the tuberous begonia they differ in root system. The roots of the caladium grow from the top of the tuber while the tuberous begonia roots grow from the bottom, therefore it is important that the top part of the caladium tuber be entirely covered to encourage the root development.

For starting caladiums a heat varying between 70 and 85 degrees will suffice. As soon as a healthy lot of roots make their appearance, the plants should be potted, using as small sized pots as possible. The soil for this potting should be principally leaf-mold, with a little sand. In a short time they will need another shift; the soil should on this occasion be a little stronger, being sure to shade the plants from strong sunshine.

New corms or tubers are raised from seed, this operation being an exceedingly easy one, as they cross-fertilize very readily.

The flowers, unlike those of the Anthurium, are monoecious, the females ripening first. To pollinate them, part of the spathe must be cut away. Seedlings at first have the foliage green, and it is not until the fifth or sixth leaf has been developed that they show their gaudy colorings.

Propagation is effected by dividing the old tubers, the cut surfaces of which should be well dusted with powdered charcoal to prevent decay.

Frequent watering with manure water is absolutely necessary to develop the foliage.

THE FANCY-LEAVED CALADIUM (cont'd)

As soon as caladiums begin to lose their leaves in the fall, water should gradually be withdrawn until the leaves are all gone. The corms should then be removed from the soil and placed in sand. During the resting period they should not be subjected to a lower temperature than 60 degrees and kept neither too wet nor too dry.
(J. M. Peddie)

QUESTIONS AND ANSWERS

A member in San Francisco, Mr. Robt. Hoefler, submits the following questions concerning tuberous rooted begonias, having been unable to find satisfactory answers elsewhere.

We thank Mr. Frank Reinelt of Capitola, another of our good members, for the complete and authoritative answers.

1. How to hybridize Double flowered Tuberous Begonias?

Answer: To secure seed which would produce high percentage of double flowers select groups of double flowered varieties, preferably the finest you can get hold of and grow them as vigorously as possible in pots. After a majority of large flowers have been developed in second half of the season stop feeding and keep the plants slightly dry so that they do not wilt. Some of them will weaken to a point where a few flowers on the side shoots will come single and regain the male organs, namely the petals will change back to anthers containing pollen. By taking the flowers when the pollen is ripe and dusting it on the stigma of a female flower on a plant which did not show any signs of weakening, that means stayed perfectly double - you will secure seed which will come double again.

2. Do Tuberous begonias suffer by taking cuttings?

Answer: Tuberous begonias do not suffer by taking cuttings provided it is done with good judgment. Young tubers producing only one sprout in spring are better left alone for another season, for if cut off the tuber will weaken considerably. Large older tubers producing several sprouts are best for this purpose. If two or more sprouts appear select the strongest one and leave it, the rest you can cut off at the base of the tuber so that they contain the basal ring. Do not injure the tuber by cutting deeper and do not cut above the ring, as without it, although they may form roots, the cuttings seldom produce new tubers. To secure more cuttings you can take side shoots off of the main stem when they are 2 or 3 inches long. To do this you will have to cut with a narrow, sharp knife, so that the cutting again contains the heel or ring, which you will notice close between the main stem and the leaf. Do not cut deeply into the stem and dust the wound with sulphur so it will heal. If you cut the leaf off or injure the stem, the chances are the wound would be attacked by fungus and destroy the stem entirely. To prevent it reaching the tuber cut off the stem through a joint, below the infected area, dust with sulphur and expose to mild sun for a day or so, or be sure of good ventilation, if kept in a greenhouse - so it can heal. Plants on which side shoots have been safely removed will continue producing excellent flowers until the end of the season, much larger in size than if they were left to grow naturally. As many as 12 to 20 perfect show flowers can be developed on a single stem during the season on the same principle as Sweet Peas are grown on single stem or many other flowers for that matter. If it is expertly done no deficiency of the tuber will be noticed but if the stem is destroyed the tuber will suffer. Best experiment on something you will not regret losing.

3. Do Begonias suffer if permitted to form seed?

Answer: No, provided you do not use every flower for seed and even then hardly any if well fed. Seed production, naturally will slow up by growth. Removing the male flowers on plants used for seed parents when they are in bud will help.

MORE FROM "DIE BEGONIEN"

The author of Die Begonien is Karl Albert Fotsch. The book was printed in 1933 by Eugen Ulmer, Stuttgart, Germany, price \$4.00. The American Begonia Society is

MORE FROM "DIE BEGONIEN" (cont'd)

given permission, by the copyright holder to translate and print the following excerpt, but no re-printing is allowed in another organ or separate pamphlet. Translation is by Rudolf Ziesenhenne.

UNUSUAL USES FOR BEGONIAS (Page 234)

An interesting problem arises when a thinking person considers the economic and esthetic value of begonias to mankind; an investigation will show that the plants have a more important meaning for humanity than one would realize. The cultural history is no less interesting when one investigates how widespread and deep their adoption has been by mankind and how the plants were named in relation to their uses.

The following, outlines for the first time the degree in which the genus *Begonia* was or still is useful to mankind as a healing, seasoning or ornamental plant.

We read in the old literature that the *Begonia Empetrum acetosum* (which we have discussed earlier) was prepared by the natives, the Europeans and Chinese as a kind of salad plant. The natives also cooked the plant, brewing a sauce from it which was served with their fish. The juice of the same *begonia* was even more frequently used for a sour, refreshing drink working at the same time as a sedative. Balian and Javanese utilize the juice of the same plant to dye their clothing if they can find no lemons. The same juice is used to clean all their iron and steel weapons which have been allowed to become rusty. The Ternat inhabitants are said to prepare a mixture of *begonia* and lemon juice which when applied to their weapons gives them a blue color. The rust-stained iron is allowed to lie in this extract over night and in the morning it is found clean. The juice of the *begonia* mixed with half its weight in sugar produces a pleasing, cooling jelly tasting like mangos and currents. (Page 235) A seasoning for fried foods is made by placing the entire plant in water stirring it continuously while cooking after which it is strained through a linen cloth and stored away in a pitcher to be used later.

Concerning *Begonia malabarica*, Lam., it is said that the natives of the Tsjeria (who call it *narinampuli*) cook the leaves with oil, the juice being used as a salve for sores; afterwards the leaves are warmed up with salt and formed into little balls which are found to be an effective remedy for toothache or applications on inflammations.

Begonia geniculate is also used by the natives as a means of removing rust from weapons and iron.

The long known *Begonia semperflorens*, Link et Otto, has been used as a vegetable plant. We read concerning this, "Because of its constituent parts of oxalic acid the leaves are used like sorrel in stew. In various regions of South America they have been eating it in this form a long time". - The South American muleteer drivers chew shoots of *Begonia fuchsioides*, Hook, in their effort to prevent thirst; like the German soldiers chew a blade of grass on the march.- In *Gardeners Chronicle* of 1871, Page 1098, it said, that the Parisian population during the siege of the town used *begonias* like spinach.

From the year 1650 we learn that a *begonia* named *Totoncaxoxo coyollin*, which cannot be identified as a fixed species, yielded roots (tuber) which had a peculiar and bitter taste, that tended to cleanse the intestinal tract.

Begonia Balmisiana, Ruiz, yields tubers, which are suitable as a remedy against syphillitis, according to Klotch in his "Begoniaceen" of 1854. The Archbishop of Mexico was so impressed by this remedy having himself witnessed the success of its cure that he had Dr. Balmis send 750 pounds to the King of Spain and asked him to make further experiments with the plant as a remedy. Berthold Seemann in describing his journey, noticed that the rhizome of a *begonia* in Central America is used as an emetic and in Peru tubers of two *Begonias* are used against dysentery.

CULTURAL NOTES by J. Paul Walker

This is the month for southern Californians to really get interested in starting

CULTURAL NOTES (cont'd)

begonias. The winter months are passing, and the time is near when new growth will be starting. The sooner we get our plants ready to grow, the better and larger plants we will have during the summer.

TUBEROUS - The time is at hand to begin starting the tuberous bulbs for early blooming. Sink the bulb, concave side up, about half way in moist leafmold, peat, or other mixture containing these soils. Keep the soil moist by watering, preferably from the bottom. Keep in the shade until the bulb gets a good start. Further information may be found in Vol. 1 and 2 number 2 and in the Special Cultural Bulletin for tuberous begonias.

Seed of tuberous-rooted begonias planted at this time should produce plants that will bloom by late August and make good tubers for next year.

FIBROUS - All pruning should be done by this time. If this has not been attended to, do not put it off longer. A few warm days, such as we are likely to get in February, will start the sap running into the stem, and the new buds will begin breaking out. Continue to keep the soil slightly on the dry side. It would also be well to begin repotting those fibrous plants which have shown that they have filled their pots by encircling the dirt along the inside of the pot with a network of fine roots. Repot into a pot one or two sizes larger, using your fibrous soil with a possible addition of bone meal and any other nitrogenous fertilizer, such as floraid, nitrophoska, or the like. Continue cuttings in the heated frame if you still have cutting material. If you have no heated frame, plant them in a warm shaded spot.

REX - This is a fine time to start cuttings from the old leaves, in the heated frame. Merely lay the whole leaf on top of the leafmold, sand or peat, with the stem running about an inch under the surface. Or the leaf may be cut into strips about 1½" to 2" wide, or into triangular pieces with the crossing of two veins forming the base, and these pieces planted into the soil only deep enough to hold the cutting upright. It is almost too cold to start cuttings without bottom heat, yet you might have some luck this time of year. Water the cuttings only enough to keep slightly moist, as excess water will cause decay, or damping off during these cool nights.

BEDDING TYPE - The plants pruned early are beginning to show some signs of growth. This is your last chance to prune without damaging the new growth. Plants from seed should be in flats or pots by now for early spring use, although it is not too late to plant seed for later plantings. Hold off the water as much as is necessary to merely keep the plants from dying out.

A NEW BOOK -

The library of the Society has received a copy of the new book "Tuberous-rooted Begonias and their culture" by Geo. Otten. A gift from the publisher, A.T. De La Mare Co., New York City. Mr. Otten's begonia gardens are at Seaside, Oregon, and there he continues the experiments with tuberous begonias he began over 50 years ago. So he speaks from much experience, though he says - "I do not claim my advice, in the treatment of these plants, represents the only correct method." His book gives detail of general culture, propagation and hybridization. The price is \$1.40 postpaid.

SPECIAL BULLETINS

We bring to the attention of new members the special bulletin giving cultural directions for tuberous begonias at 10¢ and a similar one on fibrous begonias at 15¢ postpaid.

MEMBERSHIP DUES

The Board of Directors decided that, on account of the expense, future bulletins cannot be mailed to those whose 1936 membership dues are not paid. We hope that your benefit from the Society justifies your continued membership.

Send your check for \$1.00 now, to Miss Edna Zieshenne, Treasurer, 3100 Theresa Street, Long Beach, California.

AMERICAN BEGONIA SOCIETY

Bulletin On

Cultural Directions for Tuberous Begonias

Composed By

H. P. Dyckman - J. Paul Walker

HABITAT - Tuberous begonias were originally found in Central and South America, largely around Bolivia, and on the slopes of the Andes Mountains in Peru. They grew at heights ranging from sea level to an altitude of twelve thousand feet.

Our tuberous begonias of today have developed a long way from the first simple forms. They are especially adapted to Southern California, particularly that part along the ocean, in which location they will grow largely in either sun or shade. However they prefer a location where they secure a strong filtered light and are free from the wind. The flowers blight easily if the sun strikes them when they are wet, and they will also sunburn if a hot sun hits them over too long a period.

APPEARANCE OF PLANT - These plants are the most gorgeously flowered of the begonia family. They average 12 to 15 inches in height, have a fleshy stem, miscellaneous branching habits, and flowers that range in size up to nine inches in diameter and six inches in depth.

Several different types may be secured in a variety of colors. Double varieties may be secured that resemble camellias, peonies, or carnations (double frilled). Single varieties may be secured either plain frilled and crested, resembling daffodils or hollyhocks, pearcei (small single yellow), or Evansiana, with hardy clusters of pink flowers. Hanging basket varieties may be obtained as Lloydii (with multi-colored flowers, both single and double), Boliviensis (with single pinkish-red flowers), or Sutherlandii (semi-tuberous).

THE TUBERS - The tubers are roundish saucer shaped on the bottom, with a depression of the top. They range in size from almost nothing to several inches in diameter. The size does not seem to be affected materially by age, nor does size seem to affect quality. A two year old tuber seems to produce a little the best flowering plant, and many growers think that a medium sized tuber of good depth is preferable.

Tubers may be secured from a commercial grower, any good begonia nursery, or most large nurseries and seed houses, between Dec. 15th and March 1st. If one is anxious to get a certain tuber, he may pick the plant he desires out of the commercial growers growing bed during the summertime, and either take the plant with him or have the tuber sent when it matures. However there is always a chance of a mix-up if the plant is left.

PROPAGATION BY TUBER - Plants from the same tuber are alike each succeeding year. Tubers are easily grown and form a better plant than those from seed the first year. Practically all growers of tuberous begonias, outside of commercial growers, propagate entirely from tubers. The tuber may be started from Feb. to June.

The tuber may be placed depressed side up in pots or flats filled with leaf mold, moss, sand or a mixture. Most authorities advise sinking half of the tuber in the leaf mold, placing in a shady location and keeping barely moist. A cool atmosphere seems conducive to stronger plants and tubers. Heat causes faster starting, but plants, and especially bulbs, seem to suffer from the forcing.

When a good sprout and good roots have developed, the tuber should be placed in as small a pot as the tuber allows, placing the top of the tuber $\frac{1}{2}$ to $1\frac{1}{2}$ inches below the top of the soil. The pot should then be set in water and allowed to soak until the top soil in the pot shows moist, and then not watered again until the soil is dry on the surface.

PROPAGATION BY SEED - Tuberous begonias are seldom propagated from seed by any one except commercial growers, as this method of growing these plants is too slow and uncertain for one requiring desirable plants in their garden. In the U.S. most

PROPAGATION BY SEED (cont'd)

of these commercial growers are found between Santa Cruz and Watsonville, California. The seed may be secured from plants that have been self or cross pollinated or from commercial growers.

Tuberous seed are very small, and should be planted in a flat or seed pan between December and March. The bottom of the seed box should be filled with coarse sand, or some good drainage material, with one or two inches of moist coarse leaf mold mixed with sand above it, and about one inch of mixed fine leaf mold and sand on top. The seed should be scattered over the top and left uncovered. Place the pot in a pan of water, preferable rain water, and leave until the top shows moist. Do not water again until the top soil becomes dry, and then water as before. If the seed box is placed in a shady place and covered with a glass, the seedlings will often show up before the second watering. After the plants begin to show their fourth leaf they may be pricked out and transplanted into any good begonia soil that does not contain manure. They may be watered from the bottom or sprinkled with a very fine spray as water is needed. When well established, each seedling should be planted in a small pot, using about the same soil as they were first transplanted into.

PROPAGATION BY CUTTINGS - This method is seldom used except by commercial growers and hobbyists. It is used largely to propagate more plants of a given kind, and is the only known way to produce other plants exactly the same as the parent plant.

When the tuber starts growing little sprouts appear at the top. When these sprouts are one or two inches in height, they may be cut off near the bulb. (Some growers cut out a little piece of the bulb with the sprout. This tends to give the cutting a better chance of growing but removes the eye from the bulb and no other sprouts will start in that place.) These slips are then planted bottom down in a shaded sand bed with about $\frac{1}{2}$ of the tip showing above the sand. While bottom heat is not absolutely essential to these cuttings, it is a much surer and faster way to produce plants. When the roots have formed, the plant may be put in a pot using the regular tuberous begonia soil, minus fertilizer.

Many growers do not allow the plant, from cutting, to flower the first season as most plants are not strong enough to produce good flowers and also produce a good bulb.

CARE OF THE YOUNG PLANT - As the roots fill the soil just inside the pot, it is time to shift the plant to the ground or to the next size pot. A full grown tuber will finally fill a 5 to 8 inch pot. Many people prefer to keep the plant in a pot rather than planting it in the ground, in order that the plant may be faced in different directions, or taken out and replaced with another plant. If the first blooms are removed, and the seed pods are kept picked off, the plant will develop into a stronger individual.

POTTING SOIL - Most authorities, on an average, advise a soil made up of about 3 parts oak leaf mold, 2 parts well decayed compost or cow manure, and one part coarse sand. One or two parts German peat are often used in addition to this. A five inch pot of bone meal may be added to each wheelbarrow of this mixture. This soil should be used moist. It is also advisable to use only moistened pots.

PREPARATION OF BEDS FOR TUBEROUS BEGONIAS - In clayey soils where the drainage is poor, it is best to dig a hole 2 to 3 feet deep and fill to within a foot of the top with broken brick or rocks. The top foot of the bed should be filled with soil that is slightly acid. This may be secured by adding leaf mold, peat, well rotted cow manure or sand to the regular soil. Another way to secure drainage in clayey soils is to build the bed 8 to 10 inches above ground.

If the regular soil is undesirable, it is often best to remove it entirely and make a mixture of about three parts leaf mold, one part German peat, one part well rotted cow manure, and one part coarse sand.

It is a good plan to dig up the bed each year and dig in vaporite in order to get rid of the many undesirable pests that infect the ground.

WATERING THE PLANTS - Tuberous begonias require a great deal of water, and they should be kept damp, not soggy, at all times. This varies from one watering

WATERING THE PLANTS (cont'd)

in a number of days in cool shady places, to two or more waterings a day where potted plants are in a hot sunny location. It seems preferable to irrigate the ground, or pour the water in the pot, yet sprinkling seems to work satisfactorily if the sun does not strike the plant directly, and the atmosphere is warm enough in evaporate the water within a few hours.

Rain water is the ideal water for use on all begonias, as city water is often treated with chlorine, which is somewhat harmful to plant growth. Water that is alkaline is not fit for use on begonias as they require an acid condition.

FERTILIZING PLANTS - The tuberous begonia is a profuse bloomer and necessarily requires a great deal of food. Liquid cow manure or any good balanced plant food may be used every two weeks, but only when the plants are in good growing condition. Never fertilize a dry plant, and always water the plant several times between fertilizing.

STAKING - These plants ordinarily bloom so heavily that they are unable to stand erect without staking. Therefore it is best to stake early. Green bamboo stakes and raffia may be used, making the staking hardly visible to the casual observer.

MATURING THE PLANT - When the plants begin ceasing to bloom and start showing yellowing foliage, they should be watered very sparingly until the stem has dried down entirely.

STORING THE BULBS - Pots may be turned on their sides and stored in a dry place. Tubers, that have been removed from the soil, may be placed in flats filled with leaf mold or peat and stored in a moderately cool, shady location. They should be inspected regularly to see if the tubers are still in good condition. In case certain tubers begin to sprout early, it is best to put the rest in a cooler drier place. Tubers should be kept in storage until around the first of February at least.

AMERICAN BEGONIA SOCIETY

Bulletin On

CULTURAL DIRECTIONS FOR FIBROUS BEGONIAS

J. Paul Walker, Editor

H. P. Dyckman, Assisting

HABITAT - Fibrous begonia varieties originated in nearly every tropical country of the globe where the climate was moist and free from drafty conditions. Mexico, Central and South America, the East and West Indies, the Hawaiian Islands and even some parts of China and Japan have furnished most of our original species. These original varieties have produced under cultivation the numerous forms and hybrids which we have today.

APPEARANCE OF FIBROUS BEGONIAS - These plants have the appearance of being sappy or succulent herbs, or herb-like shrubs, and they vary greatly in their habits of growth, foliage and flowers.

The height of the plant varies from the taller, tree (or Bamboo) type that reaches a maximum height of about twenty feet, to lower intermediate types, low growing branching types, Scharffiana types, climbing and scandent types, the popular easy growing bedding type to the thick stemmed procumbent types that rise only a few inches from the ground. The roots are fibrous, with few varieties having more than a small rootstock, if any at all.

The foliage of the plants is usually green, but it varies in different varieties. In some varieties the leaves, and in some cases even the stems, are spotted or speckled, while others vary in color to grayish, yellowish, silver, bronze, pinkish, purple or are variegated.

The leaves vary in texture from thick to thin, and are found to be fern-like, glossy, ruffled, crested, spiraled, wavy, round, straight, pointed, almost palmate, narrow and long, and with corrugated edges or are serrated. The leaves vary in size from a fraction of an inch to almost a foot in length.

The male and the female flowers are borne on the same stem, and generally they are similarly colored. They are found single, double, and in clusters, the latter measuring from a fraction of an inch to a foot and a half across. Such colors as red, white, pink, scarlet, coppery red, orchid, rose, yellow and orange are found. Some varieties bloom during the winter, although most bloom during the spring, summer and fall.

The same variety varies according to it's location and conditions.

PROPAGATION - Fibrous begonias may be propagated by either seed or cuttings. Cuttings produce duplicates of parent plants, while seeds may produce many variations, due to cross pollination of hybrid plants. A large plant may be grown much more quickly from cuttings than from seed.

PROPAGATION BY STEM CUTTINGS - Cuttings may be made at any time of the year. The early spring seems particularly adapted to good growing conditions for cuttings, and good cutting material is more available during this season than later. Cuttings continue to start fairly well during the summer and early fall, but very few will start during the late fall and winter without bottom heat. With bottom heat, winter propagation of many varieties is desirable due to the fact that the temperature and humidity can be better controlled.

The cutting bed should be prepared before the cuttings are made. This may consist of a pot, a flat box, a hole in the ground, or a specially built frame. The best location seems to be on the east or north side of a wall, or under the cover of a lath, muslin or glass house where the sun seldom reaches. Cuttings require a moist humid atmosphere and mild temperature around the tops of the cuttings, and

PROPAGATION BY STEM CUTTINGS (cont'd)

wherever this can be secured or produced artificially, the cuttings will do well.

SOIL FOR CUTTINGS - Two to four inches of sharp river sand free from alkali is preferred by many growers, while three to six inches of coarse leaf mold is preferred by others. German or Swedish peat has been used with considerable success with bottom heat, but without bottom heat, the cuttings tend to rot due to the peat's high water holding capacity. Sand gives good drainage, which is absolutely necessary, is warm, and cuttings start quickly in it, however the cutting should be removed soon after roots develop as the sand has little food value. Leaf mold requires less watering and care, and the plants may be left where they start as long as the grower desires.

WOOD TO USE - The new tender shoots to half ripe wood is preferable as it starts quicker. Cuttings taken after the flowering period are not so likely to strike as those taken earlier, as the flowering takes a great deal of strength out of the stem.

NODES - (Joints). In most varieties, roots will develop anywhere along the stem, although they develop much more rapidly around the node. The stem of the new plant will not develop (in case of stem cuttings) except where there is a node. Therefore it is desirable to have two nodes or more on each stem cutting. The tip end and heel end also have the ability to start growth the same as other nodes.

MAKING THE CUTTINGS - The cutting may average three inches, more or less, in length according to the depth of the cutting bed soil material. The upper cut should be made one-half inch or more above the node, except in the case of the tip end, which will be the top of the cutting. The bottom cut is made directly below a lower node nearest the length desired. The whole stem may be used. All leaves on the lower half of the cutting should be removed. Part or all of the leaves on the upper half may be removed according to the humidity of the cutting bed, and the chance of drying out the cutting by evaporation from the leaves. However, it is best not to cut off all leaves above unless necessary to prevent evaporation, as they seem to furnish some plant food to the cuttings from the air.

PLACING THE CUTTINGS IN THE BED - The stem cuttings should be placed about one-half its length in the soil material. The closer the bottom node is to the top of the moist soil, the quicker the starting will be. Too shallow planting is to be avoided, however, due to the fact that the surface soil may become dry, and the tender roots will dry out. Usually a pointed stick is used to make a hole, the stem is placed, bottom end down, to about half its length below the surface and the soil is pushed around it and a light spray of water is applied to settle the soil around the cutting and provide moisture and humidity.

PROPAGATION BY LEAF CUTTINGS - Some of the Fibrous begonias may be started from leaves. This method is much slower and the percentage of strikes is much smaller than by stem cuttings. They may be made similar to Rex begonia leaf cuttings and will form plants under very favorable conditions. If the leaf stem is cut two to three inches below the crown of the leaf, planting it in the cutting bed with the crown resting firmly in the surface soil and with the stem penetrating the soil, a fairly high percentage of strikes will develop under favorable conditions. The outer edges of the leaf may be cut off to save room. Spring propagation is advisable.

CARE OF CUTTINGS - The securing of a large number of young plants depends more on the care of the cuttings than any other factor. Under natural conditions, proper watering is the predominating factor in caring for the cuttings. The soil material should be moist at all times, but not wet enough to keep the air out. The air above the cuttings should be kept quite humid by using a fine spray when watering.

CARE OF CUTTINGS (cont'd)

A humidity thermometer may be purchased to test the humidity of the air, yet it does not take long to get onto the "feel" of the proper atmosphere. During the hot summer it may be necessary to water once or twice a day where evaporation is very fast, and yet it may not be necessary to water for several days as the days become cooler, or the evaporation is controlled by use of glass, muslin, etc., over the cutting bed. Each individual will have to try to secure the above favorable conditions himself, as each bed differs according to location, shade, soil material, temperature and air currents. Excess watering causes decay of the cuttings, too little watering causes drying out and low night temperatures (below 50 degrees) will cause "damping off" if the soil is slightly on the wet side. Watering during the summer should be shortly before sunset or after sunrise, thereby getting away from the scorching mid-day heat. In the winter it is desirable to water during the early warm hours.

POTTING THE YOUNG PLANT - When leaves and roots have developed on the cutting, the young plant is ready to put into a pot. Early transplanting furnishes food possibly lacking in the cutting beds and allows the placing of the plant where it gets better light for uniform development.

It is best to transplant into soil containing about one-half leaf mold, one-fourth compost or well rotted manure and one-fourth sharp sand. Each grower has a favorite soil of his own, and you will possibly need to change this formula somewhat by adding more soil to suit your location and conditions.

By lifting gently from underneath the roots of the cuttings the young plant may be removed from the cutting bed with little harm. The roots should not be harmed, either in removing from the cutting bed or in transplanting, as they contain the mouths that feed and water the plant.

The young plant should be placed in a clean, moist pot about two to three inches in diameter, using the smallest size capable of holding the roots without excess crowding. A little drainage material should be placed in the bottom and a shallow layer of the transplanting soil on top of this. Hold the plant in the center of the pot slightly deeper from the top of the pot than it stood in the cutting bed. Work some soil around the roots until the pot is filled. Press down rather firmly toward the outside of the potting soil with the fingers. Water from the top and place in a location somewhat similar to the cutting bed, from which the young plant was taken. Care should be taken not to use too large pots, especially in winter, as the large amount of dirt may furnish too much moisture for the small plant.

PROPAGATION BY SEED - Most seed grows very easily, takes a long time and lots of care to produce a good sized plant, and the seedling may be similar to the parent plants, or it may vary in many ways.

The seed bed should be prepared by using some coarse material (such as sand, small rocks or broken pots), in the bottom of the seed bed for drainage. On top of this should be placed some coarse leaf mold or coarse sand and leaf mold to within one-half to one inch of the desired top. Above this should be put the top layer of very fine leaf mold and fine sand or similar material.

A good way to water the seed bed is to place the bottom of the pot or container in water and let the moisture rise to the top. After removing from the water allow to stand a day and then scatter the seed on top of the ground. Do not cover the seed with soil. Cover with a glass to prevent evaporation, place in a fairly warm, but not sunny, spot. If the soil is moist before planting, the seed may come up without further watering. Should the surface show signs of drying out spray lightly or water from the bottom.

Seed may be planted any time after August. After the third leaf develops the small plant may be transplanted into flats or pots, the same as for cuttings. The bedding type come very uniform from seed and this method is used almost exclusively in starting this type.

HYBRIDIZING - A hybrid begonia is one secured by crossing one begonia with

HYBRIDIZING (cont'd)

another that has different characteristics of any kind, such as color, type or shape of flower or foliage. Different species of the Fibrous begonias may be crossed with each other or with species of the tuberous and rex varieties.

Hybridization is accomplished by taking the yellow dust-like appearing substance called pollen from the stamen (male part of the plant) and placing it on the roughened surface of the ovary called the stigma (female part of the plant). The female flower has a capsule just below the flower with a three celled triangled pod. The pollen from the stamen may be shaken over the stigma when both are ripe. The pollen is ripe upon becoming yellow and the stigma is ripe when it becomes sticky. A camel's hair brush may be used to transfer the pollen to the stigma or to a bottle from which it may be used within a few days when the stigma is ripe. To be sure of the right cross, it is safest to keep a paper tied around the stigma, removing the paper only long enough to put on the pollen. From the stigma the pollen is carried down to the ovary where the fertilization takes place and the seeds are formed. Plants from these seeds will resemble the parent plants in varying characteristics. They will vary in their good and bad qualities. Hybridization is all a chance. However, it is lots of fun if you have the time and you may be the lucky one to get the exceptional plant.

CARE OF GROWING PLANT - The plant is ready to transplant to a larger pot when the roots begin to grow around the inside of the pot and the stem has made considerable growth. A pot one to two inches larger in diameter than the present one should be used. Place drainage in the bottom of the new pot. Remove the plant from the old pot by turning it upside down and shaking the pot downward against some object. Take away old drainage material and put enough transplanting soil on top of new drainage in pot, to hold plant within a half an inch of the top. Fill around with soil and press down with fingers against the outside. This allows a space of one-half to one inch at the top of the pot for water. The same kind of soil may be used as for the first potting, yet it is well to add a little bone meal or other commercial fertilizer if you desire to push the plant along faster.

LOCATION FOR PLACING PLANT - Most Fibrous begonias prefer a humid atmosphere and cool soil, with good drainage. After the young plant has become well established, it can be placed in an ordinary lath house until ready for use. If it is desirable to plant outdoors, it will be found that some varieties prefer north exposure, while others prefer east exposure, or even full sun where the humidity is very high. The best way to determine the location most desirable for the plant, is to place it in different locations and watch the progress. If the plant is to be placed in the ground where the soil is poor, good soil should replace the poor soil for several inches around the plant. Where a whole bed is to be worked over it is well to dig in such required materials as leaf mold, sand, well rotted manure, and peat. It is also best to dig in sufficient quantities of vaporite or naphthalene flakes to get rid of such harmful pests as wire worms, cut worms, slugs, etc.

MULCHING - The roots of Fibrous begonias grow close to the surface of the ground and do not like to be disturbed. Soil cultivation is not advisable. It is best to put some mulch like peat, leaf mold, compost, or dried grass cuttings over the top of the roots. This keeps the ground cooler, saves water by preventing evaporation and keeps the weeds down. Most mulch material will finally decay into food for the plant.

WATERING - Enough water should be applied to keep the soil moist, not wet, at all times. Daily waterings are usually necessary, during the hot summer days, for potted plants. Plants in the ground may go for several days if they are well mulched, as they draw on the surrounding ground for water by capillary action. The soil should never get so dry that the plant wilts, or so wet as to exclude air from the soil. The amount of water should be cut down as the days become cooler and evapo-

WATERING (cont'd)

ration from the plant becomes less, until the resting period, when only enough water should be added to prevent the plant from drying out. It is advisable to water during the early morning or late afternoon during the summer and a little before mid-day during the winter.

FERTILIZING - Plants live by taking food in a somewhat similar manner to humans. The water in the soil dissolves the chemical plant foods contained in soils and various animal and commercial fertilizers. The roots take in these chemicals and send them to the leaf where they are changed to suit the plants' needs. Sufficient food makes a plant thrive, excess food may kill it. If the repotting soil is fairly rich, it may not be necessary to fertilize the plant from one repotting till the next. Well rotted animal fertilizers, compost, and bone meal are slow acting but long lasting, making good material for potting soil mixtures, never use fresh manure as it will burn the plant. Most commercial fertilizers are quick acting, yet short lived. They are good to give a little at a time every few weeks during the growing season in order to make a more thrifty plant.

One commercial grower advises floranid, another nitrophoska, but any well balanced fertilizer will give results by placing it on top of the ground or mixing it with the mulch and watering several times. If the fertilizer touches the stem it may start decay, so it is advisable to crown the dirt higher toward the stem.

After the flowering and growing period slows up which occurs in the late fall, except for the winter blooming varieties, the use of fertilizer should be stopped.

PRUNING -It is desirable to trim out excessive old wood and dead or broken stems. You may largely shape the future plant by the way you prune. Cut out the center, leaving a uniform grouping of stocks around the outside if you wish to make a plant low and bushy and vice versa if you wish a tall straggly plant. In the case of the bedding type begonias, it is best just to cut them two or three inches above the ground during their resting period.

If the flowers of the Fibrous begonias are allowed to go to seed, a great deal of strength is taken out of the plant. It is advisable to pick off the dead flowers as they begin going to seed if you wish to get the very best bloom from them.

STAKING - The taller varieties of Fibrous begonias require staking in order to keep them from breaking off. This should be done early in the season to support the plant and allow it to grow straight.

AMERICAN BEGONIA SOCIETY
MARCH 1936

Vol. 3.

Number 3.
C.M. Kelly, Cor. Sec'y.
285 Park Avenue
Long Beach, California

"GROWING BEGONIAS IS A ROYAL HOBBY"

THE MARCH MEETING

DATE - Thursday March 12th, at 7:30 p.m.

PLACE - Community Hall, Southeast corner Ninth & Lime Avenue, Long Beach, Calif.

PROGRAM - Dr. Warren Bee Davis will talk on "Bees".

H. P. Dyckman on "Propagation of Fibrous Begonias".

Display of Begonia plants.

BUSINESS TO BE CONSIDERED - The type of summer meetings will be discussed and voted upon.

NOTES OF LAST MEETING

The program of the February meeting was carried out as planned and proved to be of exceptional value and interest.

Mrs. Dunn guided the discussion on the propagation of tuberous begonias, after reviewing the subject as presented by Mr. Otten in his new book.

A new feature - an exhibit of begonias with instruction in their culture was in charge of Mrs. Heinley.

A timely demonstration of the planting of begonia tubers was given by Mr. Walker. He and Mr. Williams told how to grow *B. Sutherlandii*.

The personnel of the 1936 Board of Directors was completed by the election of Mr. Tom Smith and Mr. H. D. Heinley.

NEW MEMBERS

| | | |
|---------------------|-----------------------------|-----------------------------|
| H. J. F. Berkeley | Soulsbyville | Tuolumne County, California |
| Gustaf Fresk | Poly-High School | Long Beach, California |
| F. C. Blaur | 1317 Spurgeon Street | Santa Ana, California |
| Ferd P. Neels | 426 East Maple Street | El Segundo, California |
| Wilfred Sheppard | 1709 Castillo Street | Santa Barbara, California |
| Mrs. Emma L. Dunlap | 65 East Curtis Avenue | Woodbury, New Jersey |
| Arthur H. Miller | 1456 Bellevue Avenue | Burlingame, California |
| John C. Haartz | 295 Pleasant Street | Watertown, Mass. |
| W. S. Dirker | 2668 Northwest Cornell Road | Portland, Oregon |

SPECIAL NOTICE

Our nomenclature committee requests that those members who have introduced new, named begonias -- hybrids of their own or importations -- submit the following data concerning each kind: name, classification, description, date introduced, parentage, etc. This information will assure the accuracy of the records of the Society and give credit to the originators. Communicate with, H. P. Dyckman, 2105 East 6th Street, Long Beach, California.

MONTHLY CULTURAL HINTS by J. Paul Walker

The rains we have had during most of February have not only produced the humid atmosphere desired by begonias and to which they are accustomed in their natural habitat, but it has also made soluble a great deal of plant food in the ground ready for their use. The warm days following the rains have started the plants in the ground pulling this available plant food up into the stem, and the result is shown by the new growth now visible.

Where moisture evaporation has been curtailed as in muslin enclosed houses the atmosphere during prolonged rainy seasons might become excessively humid. Cases have been reported of plants decaying under such conditions. This condition should

MONTHLY CULTURAL HINTS (cont'd)

easily be rectified by allowing more air to enter the houses.

This growing weather requires more plant food. Rotted cow fertilizer, leafmold or compost, should be placed over the roots of any Begonias growing in the ground. Do not dig or cultivate any of this soil into the dirt, as begonias all have roots very close to the surface and are easily broken. Potted plants that have formed a fine network of roots around the inside of the pot should be transplanted to a larger pot using fairly rich potting soil. The Fibrous Begonia Bulletin explains exactly how to do this.

It is not time yet to begin feeding commercial fertilizers although a sprinkling of bone meal to outside plants or in the potting soil will prove beneficial.

TUBEROUS - Tubers may be started any time during the next few months. They may be kept in storage as long as they remain solid and do not sprout, but the sooner they are started the better results you should have. As soon as the sprouts are about two inches in height, the tuber may be carefully removed from the flat and placed into a pot large enough to accommodate the roots without crowding. The tops of the tuber should be planted about an inch below the top of the pot and covered one-half to three-fourths of an inch with your own soil or a suggested preparation of three parts leafmold, two parts compost or well rotted cow manure and one part coarse sand. Keep the plant in a shaded location and the soil moist.

If you are going to buy tubers, they should be secured before the last of March, or good ones will be hard to get. Seeds may still be planted this month at the latest to secure blooms this fall.

FIBROUS - These plants have now started their annual growth cycle, and more care must be given them than during the winter. The soil above the roots should be kept moist and cool. A good mulch is desirable.

Cuttings will do very nicely in some shaded location from now on without bottom heat. Tip cuttings should develop very fast and make fine plants. Excess pruning now will retard proper development of the plant.

BEDDING - This type show the same reactions as the other fibrous. Seed may still be planted for late plants. Glass house plants may now be hardened gradually to outside air. It is also possible to divide old plants as long as each division has its own root system.

REX - The rains probably started these plants growing, yet the nights are still too cool to expect much growth. Each plant should be checked to see if it needs re-potting. Cuttings may be started without bottom heat now, however, better striking may be expected a little later for these plants. Keep the soil moist and the atmosphere, surrounding the plants, humid.

A LETTER FROM MEXICO

The following letter from Mr. W. H. Fraser, is in reply to a letter of inquiry concerning the native begonias of Mexico, written in course of our endeavors to contact begonia growers in foreign countries. We are sure you will find it interesting.

The Society appreciates the spirit of co-operation expressed by Mr. Fraser. It will welcome him as a member and anticipates securing new begonias through his assistance.

The sample leaves he sent will be exhibited at the March meeting for classification.

"American Begonia Society"
Long Beach, California

Mexico, D.F., February 12th, 1936

Dear Sir:

I have to acknowledge receipt of your letter dated January 20th and shall be only too glad to cooperate with you in endeavoring to obtain Mexican begonias. There are several varieties of begonias in certain sections of Mexico, chiefly along the eastern slopes of the tableland, at elevations around 750 to 1500 meters.

A LETTER FROM MEXICO (cont'd)

In order to obtain different samples, it will be necessary to be in contact with others who frequently visit, or live in these sections of the country and I shall endeavour from time to time to obtain the samples which you desire. I believe, however, it will be difficult to obtain seeds as few persons have knowledge of how to collect the seed and I shall be glad if you will assist me by forwarding specifications as to how the seeds should be collected. It would be easier to forward small plants, which could be collected and forwarded in good condition, but there may be difficulty in obtaining permission for the importation of the plants into the United States and I wish you to advise me regarding this possibility. I am enclosing herewith a few samples of leaves of different types of begonias native to Mexico, and send them with the object of your advising me whether you are interested in these species, as they represent the general run of begonias which can be obtained locally.

I have not cultivated to any extent the local begonia but have imported the tuberous, chiefly double, begonia from England, and judging from your letter you are not interested in these.

In regard to your suggestion that I contribute an article, to be published in your Bulletin for 1936, on my experience with begonias and the varieties of begonias in Mexico, I am afraid that I shall not be able to help you in this respect, as my cultivation of the begonia has been in the nature of an agreeable diversion rather than a study. At the present time my knowledge of the Mexican varieties is somewhat limited and I have only seen them while traveling through Mexico. I shall, however, be glad to be a member of your Society and to receive your publications. If you will advise me the amount of the annual dues, I shall forward you a check covering the payment.

Yours faithfully,
W. H. Fraser.

A NEW METHOD OF PROPAGATION

A great deal of valuable assistance has been rendered the Begonia Society by Mr. Frank Reinelt of Capitola. He now sends us this new method of seed propagation. The warning is given that to be successful the directions concerning the sterilizing process and the opening of the seed dishes must be carefully followed.

DIRECTIONS FOR THE PREPARATION OF AGAR MEDIUM FOR THE GERMINATION OF SMALL SEEDS

The following description of a technique which has been found to be successful in the germination of seeds of a considerable number of species. The advantages of this germination technique are the following: 1. A clean, homogeneous medium, on the surface of which moisture conditions automatically remain constant. 2. Seeds of many species germinate more rapidly in light and give stronger seedlings if the light requirements for active growth are supplied from the beginning -- in this technique the seeds may be exposed to light from the time of sowing. 3. The seedlings can be extracted from the germination medium with unbroken rootlets so that they do not show the usual retardation of growth due to damage to the young roots exhibited by seedlings pricked out from soil. We have successfully employed this technique in Tuberous Rooted Begonia seed germination and it is doubtless important for all species whose seed is small and germinates early.

THE MATERIALS

1. Dry agar agar in shredded form (to be obtained in most drug stores).
2. Glass dishes 6 inches in diameter and 2 inches deep, preferable Pyrex casseroles with covers.
3. The mineral nutrient solution, consisting of :

| | |
|--------------------------------|------------|
| Calcium nitrate - $Ca(NO_3)_2$ | 1.18 grams |
| Potassium nitrate - KNO_3 | .50 " |

THE MATERIALS (cont'd)

| | |
|--|------------------|
| Magnesium sulphate - $MgSO_4 \cdot 7H_2O$ | .49 grams |
| Potassium dihydrogen phosphate - KH_2PO_4 | .13 " |
| Iron chloride solution (ferric) - $FeCl_3$ - 5% Solution | 1.00 cc |
| Water (preferably distilled) - H_2O | <u>996.70 cc</u> |
| One Liter | 1000.00 cc |

NOTE:

1000 cc. is approximately equivalent to one quart, and a satisfactory nutrient solution may be obtained by dissolving the above quantities of salts in one quart of water. For accurate purposes, however, the above formula is recommended. For quantities of more than one liter, multiply the above amounts by the number of liters of solution desired. (Most drug stores will be able to supply the agar agar and chemicals necessary for the culture medium in the required proportions).

THE PROCEDURE

1. Dry agar agar is dissolved into Hoaglands mineral nutrient solution by boiling, to make a 1% solution. For example, in preparing one liter of the mixture, 10 grams of dry agar agar are weighed out and dissolved in a litter of the mineral solution.*
2. When the agar is entirely dissolved, the mixture is strained through two thicknesses of cheese cloth into a pyrex or other heat proof glass container, preferably an Erlenmeyer flask. The mixture is then placed in an autoclave (an ordinary pressure cooker can be used) and sterilized at 15 lbs. steam pressure for thirty minutes. It is then allowed to cool for 10 minutes.
3. During the sterilizing of mixture the glass dishes and glass covers are to be sterilized in boiling water (5 minutes) and stacked on blotting paper or cheese-cloth to drain.
4. The liquid (partially cooled) agar is now poured into the glass dishes** to a depth of not less than $\frac{1}{2}$ inch and not over $\frac{3}{4}$ inch. The covers are immediately put on and the agar mixture allowed to solidify by cooling. Do not remove covers until just before sowing the seed.
5. The seed is sown on the surface of the agar mixture.*** Careful sprinkling of the seed will obviate later crowding of the seedlings. To obviate entrance of Fungus spores, etc., the covers should not, unless absolutely necessary, be removed until the seedlings are ready to be pricked out. The course of germination and early growth can be observed through the cover or sides of the glass container. A certain amount of mold and bacterial growth may appear on the surface of the agar and particularly along the surfaces of the seeds, if they have not been sterilized. In our experience no serious damage is done by this fungus infection even when quite severe. In other words, do not discard the infected jar until it is clear that normal germinations and seedling growth is being impaired. If uninfected and still moist, the jar may be used at least a second time.

* $\frac{1}{3}$ oz. of dry agar in 1 quart, 1- $\frac{1}{3}$ oz. to 1 gallon etc. These proportions give us a rather firm jelly and if a thinner mixture is desired use slightly less dry agar (9 grams per liter).

** Operations 2 and 3 should be so timed that the glass dishes are still warm.

*** It is best to sow as soon as possible, although the dishes may be kept in a cool place for several days.

RARE BEGONIAS

Mrs. A. H. Buxton and her "Round Robin" begonia friends, have instituted a hunt for those rare begonias, survivors of varieties once commonly cultivated, that may now exist only as occasional specimens in out of the way places and they suggest that the American Begonia Society join in the hunt. This was first presented to our

RARE BEGONIAS (cont'd)

members in the December 1935 issue and the following varieties are added to that list.

RARE BEGONIA LIST by Mrs. Buxton, Peabody, Massachusetts.

The following list and brief description of the missing plants will stimulate the search. Anyone finding a plant which answers any of the descriptions should notify Mrs. Buxton or the Society. If stock is scarce, urge the owner of the plant to propagate, if possible. If the plant can be bought, it should be taken to a good grower, for propagation and distribution. A record of the time and place of discovery would be interesting, to show how far the plant has traveled.

BEGONIA STIGMOSA - Quite a distinct variety, with a good habit of growth, compact, and a good bloomer. A native of Brazil, introduced into England in 1845. Rhizome creeping, twisted, short jointed. Petioles, 12 inches long, light green, covered with lacinated scales which are white, turning brown with age. Leaves, when mature, 7 inches wide by 10 inches long, green, blotched with brown at the junction of the mid-ribs and veins. Young leaves light green. Mid-ribs light yellowish-green. Leaf edges ciliate (hairy). Under surface light green, the brown blotches from the upper surface showing through. Mid-ribs scaly. Flowers whitish, 3/4 inches in diameter, the sepals blotched with rose. Possibly the same as *B. strigillosa* or *daedalea*.

(Ed. Note: Johnson's Gardener's Dictionary lists the three separately, thus: "daedalea, pink flowers, leaves netted brown, from Mexico 1860". "Strigillosa, flowers in summers, from Central America 1851". "Stigmosa, white flowers, spotted leaves, a hot house plant".)

BEGONIA GOGOENSIS - A distinct and beautiful variety, a good grower and a free bloomer ranks among the best of its class. A native of Gogo, in Sumatra, introduced in 1881. Received a First Class Certificate at the Royal Horticultural meeting in London, July 25, 1882. Shown by Veitch & Son. A few of the California growers possess stock of this variety, but it is practically non-existent in the East. Rhizome creeping, very short jointed, stipules brownish, persistent. Petioles 18 inches long light green, tinted red at the base, unevenly quadrangular, slightly hairy at the apex. Young leaves a beautiful reddish-bronze, the veins green. Leaves 7 inches broad, 9 1/2 inches long, surface very puckery, mid-ribs and veins yellow-bronze-green, the intervening spaces dark olive-green, smooth, margins undulate. Edges ciliate. Under surface of leaves shaded red. Young leaves a beautiful reddish-bronze, veins green. Flowers on long peduncles, white, tinted pink on underside of sepals, 1 1/4 inches in diameter. A fall bloomer.

(Ed. Note: Good specimens in Lincoln Park Conservatory, Los Angeles, California.)

BEGONIA CATHAYANA - Another Chinese species, very beautiful, with crimson-hairy stems, leaves somewhat like the Rex types, velvety-green with ruby veins above, bright crimson beneath. Flowers large, bright orange. Deciduous in winter, stock very scarce.

(Ed. Note: Mr. Robinson has grown a good specimen, by much coaxing.)

MAGAZINE ARTICLES

Appearing in recent magazines are the following:

Tuberous Begonias - From Jungle Simplicity to Urban Sophistication.

by Lucile C. Cloud. Illustrated in Color. Garden Quarterly.

Begonias More Popular and Beautiful by Miriam Milner French

in Flower Grower, January 1936.

Breeding Rex Begonias by Alfred D. Robinson (Illustrated) in American Horticultural Magazine for October 1935.

Don't let Begonias Fool You, by H. A. Baake. L.A. Times Garden Magazine Sunday February 23, 1936.

Surely the Tuberous Begonia has "arrived"!

Tubers are offered for sale by the "5 and 10"! While these tubers may not satisfy the experienced grower, others may become interested through them, demand better stock another year and eventually become fans and members of the American Begonia Society. Who Knows?

We will accept advertisements from members of the Society at very reasonable rates.

ROSCOE S. BALDWIN, Fern Specialist.

Ferns from all the World.

Begonia Club Members especially welcome.

550 Atlanta Street, Pasadena, Calif.

The September and October bulletins for 1935 contain articles, on ferns, by Mr. Baldwin. 10¢ each.

Special bulletin giving cultural direction for fibrous begonias. 15¢ each.

AMERICAN BEGONIA SOCIETY

Vol. 3.

APRIL 1936

Number 4.

C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California.

"GROWING BEGONIAS IS A ROYAL HOBBY"

THE APRIL MEETING

The next regular monthly meeting of the Society will be held Thursday, April 9th, at 7:30 p.m., in the Community Hall, Ninth and Lime Avenue, Long Beach, California. The Program Chairman has arranged the following program:

1. Mr. T. S. Wessels will continue his talk on "The Propagation of Rex Begonias"
2. Begonia plants will be displayed and described by Mr. and Mrs. H. C. Rocque.
3. An exhibit of cuttings of Fibrous and Rex Begonias, showing various types of cuttings and different stages of root and plant development.
4. Plants are to be distributed as prizes to holders of lucky numbers.

NOTES OF THE MARCH MEETING

Mr. T. S. Wessels exhibited Rex Begonias from his collection explaining his method of culture and gave suggestions for selecting small plants that would develop true to type.

Various methods of making cuttings of fibrous begonias were demonstrated by Mr. H. P. Dyckman.

Flowering plants on display were a gorgeous Clivia and a pot of Japanese ground orchids. (Bletia Hyacinthina).

One of our Eastern members, Mrs. H. H. Buxton of Peabody, Massachusetts, author of "Begonias and How to Grow Them", sent to the Society for exhibition, four beautifully colored copies of pictures of begonias from the French book "Jardin Fleuriste". Of the kinds pictured, Rubro-venia and Xanthina are native of North India. We hope to secure seed of them. Mr. Robinson writes of Thawaiteisii: "I think it may be the source of the coloring in the Rexes such as Louise Closson, etc". These pictures and the leaves of begonias from Mexico added a pleasing feature to the meeting.

Dr Warren Bee Davis gave a very interesting talk on his hobby "Bees", giving the history of the life of bees. He finds them not only interesting but profitable as well.

The Chairman of the Nomenclature Committee reported the cataloging of three hundred begonia names.

Departing from the custom of the past, the Society will hold regular monthly evening meetings during the summer months. The usual Garden Tours will be taken on Sundays, the dates to be announced later by the Program Committee.

NEW MEMBERS

| | | |
|------------------------|-------------------------|------------------------|
| Mrs. J. C. Thornton | Box 303 | Chattanooga, Tennessee |
| Mrs. Annie C. Robinson | | Point Loma, California |
| Mr. J. P. Fackelman | 420 W. Imperial Highway | Brea, California |
| Mr. C. E. Johnson | Sonoma County | Sonoma, California |
| Mr. C. E. Steinbeck | 1245 Bellevue Avenue | Burlingame, California |
| Mr. George Otten | | Seaside, Oregon |
| Mr. Ernest L. Moyer | 62 Virginia Street | El Segundo, California |
| Mr. George A. McLeod | 9753 Chenlot Avenue | Detroit, Michigan |
| Mr. W. H. Fraser | Apartado, 124 Bis, | Mexico, D. F. Mexico |

EDITORIAL NOTE

The English firm of Blackmore and Langdon which has been growing tuberous begonias for more than forty years is largely responsible for the phenomenal improve-

EDITORIAL NOTE (cont'd)

ment of these flowers and for their great popularity.

The first work done by them was with hybrids which were only a slight improvement over the original South American species. By scientific hybridizing and selection they have developed a strain renowned wherever begonias are grown. Those plants having the choicest flowers are perpetuated through propagation by cuttings, method little practiced in this country, but commended to those growers who desire first quality stock for exhibition purposes.

In the following article, written for our Society, Mr. C. F. Langdon describes this method by which they have built up a collection of 200 superb, named varieties.

PROPAGATION OF TUBEROUS BEGONIAS BY CUTTINGS by C. F. Langdon

When Begonias are so readily propagated by sowing seeds, and these are so easily obtained, why trouble to take cuttings?

The answer to this question which may be and often is asked, is that in the first place, in the growing of thousands of seedlings, it is found that a plant here and there shows characteristics that are distinct and are sufficiently outstanding to make it desirable to retain it, and because there is always a danger of losing the tuber during the resting season or of losing the plant by damp or neglect during the growing season. The only way of making sure of retaining the particular qualities exhibited by the plant in question is by taking cuttings, and thereby raising a number of plants to guard against it's loss. Especially is this desirable when the hybridist is keen on his job, as he then can be sure of having the particular plant with outstanding merit to cross-fertilize, and thereby transmit it's particular merits to succeeding generations. This method, if persisted in, ensures a gradual improvement of the strain, although not quickly apparent. After a number of years the hybridist with good taste and right judgment will possess a number of varieties that are as far ahead of the ordinary strains as the "Koh-i-noor" is in value above an ordinary diamond.

Now as to method of propagation:

The tuber, being planted in the ordinary way and potted first into 4" or 5" pots and shifted to it's final pot, say 6" or 7", will grow away freely in a mean temperature of 70 degrees. The plant should normally produce laterals in the axils of the leaves; that is, above a joint. These laterals can be taken off as cuttings, when about 3-4 inches long. They must, however, be very carefully taken, making sure that the dormant eye, which can be seen at the base of the lateral, is retained when it is severed from the main branch. This is best done with a narrow and sharp penknife, making two incisions, one above and the other below the base of the cutting, taking care at the same time not to injure the parent stem, and, if possible, to save the leaf, above which the lateral is produced. I hope this is clear, because it is not at first an easy job, but after a little practice it becomes so.

Having taken the cutting it should be inserted at the side of a three inch pot, in a mixture of loam, leafsoil or peat, and clean sand - equal proportions of each. The pot should then be plunged in gentle heat in a propagating frame, keeping close and shaded, and in a temperature of 70 degrees. The frame should be uncovered and dried every morning, to guard against damp. This is the greatest danger to the successful propagation of Tuberous Begonias; the growth being generally very succulent. For this reason, plants that are to be propagated should not be grown in too moist and close an atmosphere, thereby causing soft and sappy stems.

The cuttings should be rooted in about 4 weeks, when they can be taken from the propagator, and if desired, potted into larger pots.

Propagation can be effected at any time during the Summer and early Autumn; the later cuttings being left to ripen their tubers in the pots in which they are struck.

CULTURAL HINTS FOR APRIL by J. Paul Walker

The warm days of the past month have started new growth in all types of Begonias. Continued cool nights and occasional cool days however retard fast growth.

CULTURAL HINTS FOR APRIL (cont'd)

During April warmer days and nights should hasten growth materially.

TUBEROUS - Continue to start tubers, preferably in a cool place. Forcing tubers with heat rather diminishes the vitality of the plant, resulting in poorer blooms the first year and weaker bulbs the next year. After the plant is placed in a pot and the roots develop and fill the pot, it should be transferred to a larger one using good rich tuberous soil. When a tuber is secured with two or more stems starting, why not try cutting as explained in a recent bulletin and by F. M. Langdon in this issue.

FIBROUS - Most of these plants are showing a great deal of new growth, and now they require more attention than during the winter. If you have not given those growing in the ground their spring tonic of a compost, fertilizer or leafmold mulch, it is time to attend to this or you cannot expect large, early healthy plants. Be sure to water sufficiently in order to keep the ground fairly moist. Sprinkling on the top of the mulch is preferably as the water takes the plant food from the mulch into solution and feeds it to the plants. Potted plants should also be transplanted by this time into a larger pot with good rich fibrous soils.

Cuttings will start in any shaded spot as described in the Fibrous Begonia Bulletin. Stem cuttings that you remove while pruning are fine to use. New growth tip cuttings will start quickly if you are sure to make the base cut below a node or heel. A few cuttings started and later planted along the east or north side of your buildings will surely pay you good returns.

BEDDING TYPE - Mulch and water as you do the fibrous variety. If they have grown tall and spindling they may be pinched off or cut back anywhere above the first few nodes. Tip cuttings will make fine cutting material for the lath house cutting bed.

REX - Plants that have not been repotted should be changed soon in order to secure large plants as early as possible. All the ripe or broken leaves should be removed as they merely take extra food and are of little use to the plant. These may be used as cutting material for either a heated or lath house cutting bed. If the plants have grown too large, they may be broken apart, using the stems with roots for potting. The stems without roots, but having numerous nodes may be cut into small pieces containing two or more nodes each and placed in the cutting bed. Where the old soil is not satisfactory most of it may be broken away from the roots, and the plant transferred to new soil. Most growers use only fairly coarse oak leafmold as soil for the Rex type; however, compost, well rotted cow manure, sand, peat or commercial fertilizers are sometimes added to the leafmold. While these plants are somewhat particular about their growing conditions, you will have missed one of the most interesting experiences with begonias if you do not try starting some from cuttings.

FROM MRS. CHARLOTTE A. RODENBURG

For the past few weeks I have had in my possession a book loaned me by a friend. The book was published in London in the year 1865. It was written by E. J. Lowe and has the title "Beautiful Leaved Plants" and it further states that it contains descriptions of the most beautiful leaved plants in cultivation in England at that time. The book contains sixty colored illustrations. These color plates are really wonderful. Five of the plates are illustrations of Rex Begonia leaves. Believing that what has been written in the book about the Rex Begonia will be of general interest I have taken the liberty of quoting such parts and only regret that our members are deprived of the pleasure of seeing the beautiful plates.

"The Begonia family is a numerous genus of stove evergreen shrubs, herbaceous perennials, or tuberous rooted plants. Native of Jamaica, Brazil, the West Indies, East Indies, Guatemala, Mexico, Peru, Cape of Good Hope, South America, Nepaul, etc. Varying in height from six to sixty inches. A most lovely tribe of plants, beautiful both for their leaves and flowers. Begonia Rex is a native of South America. It was introduced into this country (England) in the year 1857 by Messrs. Rollisson of Tooting, who received it from M. Linden, a nurseryman at Berlin. B. Rex is the

FROM MRS. CHARLOTTE A. RODENBURG (cont'd)

most magnificent of the species, and will give place only to seedling varieties raised from it last year by Messrs. Rollisson of Tooting. Amongst them are some of the finest variegated foliaged plants that it would be possible to conceive and the cultivator of this class of plants will hail these additions with gratification. Requires a moist atmosphere. Summer temperature from 70 to 80 degrees, winter temperature from 60 to 65 degrees. Begonia Rex leaves are large, of an oblique-oval shape. Ground color of the leaf a dark green, having a broad band of pure white about midway between the margin and the center. Petioles reddish-green, covered with short hairs. Stem short. Flowers pretty but not showy and of a pale yellowish white on the upper surface and light brown underneath.

"Culture. Soil a light rich compost of sandy turfy loam, sandy fibrous peat, and decayed leaves in equal parts. The plants should be rather under potted, as when in too large pots the variation is not so clear. Propagated by the leaf. Take a moderate sized leaf lay it flat on the surface of a pot filled with sand, cut the ribs into several divisions and peg the leaf down with small hooked sticks, place the pot on a heated surface and cover with a hand glass. Shade from sun and keep the internal air moderately moist. In a very short time roots will be produced at the base of each division and young leaves will appear, gradually forming a new plant, which may then be carefully taken up and potted and replaced for a short time in a close moist heat until growth is perceived, after which gradually inure them to bear the full light and air. Repot frequently. In six months the plants so treated will be a foot across bearing numerous large splendid leaves."

"B. Rex Variety Grandis. Raised from seed in 1858 by Messrs. Rollisson and Sons. The leaves are eight inches long and six inches wide and of an oblong oblique heart-shaped form. Color brownish olive-green, with an irregular zone of white, which shows through the leaf. The stem and leaf covered with scarlet hairs, the ends tipped with white; on the underside the leaves are a rich crimson. Flowers large and of a pink color".

"B. Rex Variety Isis. An exceedingly beautiful hybrid, raised at Tooting Nursery from Begonia Rex in the year 1858. The leaves which are without spots or hairs are of a rich metallic silvery hue, having border of an olive-green, which later is slightly covered with hairs. Near the stem the leaf is green. The stem is red and hairy".

"Begonia Rex Variety Nebulosa. Another of those beautiful seedlings raised in 1858 at Tooting Nursery. The leaves of this variety are covered in clusters with white spots; in the center of each spot is a single red hair, which gives the plant a very distinct appearance. All its parts densely covered with a red pubescence".

A NEW FEATURE

Through the courtesy of Mrs. H. H. Buxton, we are permitted to print, excerpts from the letters of her Begonia Circle.

The members of this unique Club live in many States, from California to New Hampshire. Each contributes personal experiences, suggestions or comments on begonia culture to these Round Robin letters.

These letters, as a monthly addition to our bulletin, will help to give us a keener interest in our hobby -- growing more and better begonias.

FROM CALIFORNIA - JUNE 1934

I discarded Haageana for Croftonii, which is somewhat like it, but a better color, and a more profuse bloomer. The flowers are held well above the foliage. Sandersonii - coral - has bright crimson flowers, but Robusta has the bi-color flowers. The Calla-lily begonia and Mme. Fanny Giron are very hard to keep. I believe that Ellen could grow them successfully in Honolulu. They require a steady temperature and humid atmosphere. My six favorites are Mrs. W. S. Kimble, Croftonii, Desdemonia - wrongly names Fewkes, Geneve-Annabelle, Mrs. Helen W. King, and Indian Ricinifolia. These are the best of each kind, to my notion, all good growers, fine bloomers and desirable in every way.

FROM CALIFORNIA (cont'd)

Win, did you notice that recently, in *The Flower Grower*, someone said that she used coffee grounds on her pots and it seemed to keep the flies away? It is worth trying, but use it sparsely at first on some plant you do not care especially for, so if the diet does not agree with it you will not feel the loss. I don't believe the grounds would injure the plant, but one would have to be cautious about over watering.

It is hard to identify a plant from an outline. It really takes the color and markings. Take, *Otto Hacker*, for instance. To glance at it one would guess it might be *Coralline Lucerne* but turn the leaf over and note the underside is not a brown-red, like C-L, but green, flushed red. The leaves and flower clusters are both much larger. I've counted 40 flowers to a cluster and the leaf is often 11 inches long. *Olbia* is also known as the *Maple Leaf*, not so much from the shape but the coloring, which is a bronzy-green. The flowers are drooping clusters, white, tinted pink in the sun, same as *Coralline Lucerne*. *Argentea Guttata* a much spotted leaf is known by some as the *Trout Begonia*. *Henry IV, Rex*, has a very pointed leaf of black-purple with pinkish spots in the light zone. I grow most of my begonias in the lath house. I have four of these beside the greenhouse. They are fed leaf mold brought from the oak trees, 60 miles up in the mountains. I use well rotted cow manure spaded into the loamy soil. I expect, next winter, to begin digging out all the old plants and making over the soil renewing it, adding leaf mold and replacing with young plants. The old plants get hard and woody in four years time, and do not bloom as well as young plants. I have been growing and studying begonias nearly 25 years, and still have plenty to learn. I grow a few of the tuberous begonias, but much prefer the fibrous, as I want some bloom all the year, and not just in the summer. I just pollenized a *Dregei* with *Sutherlandii*, to see what it would bring forth. I am also trying another trick with seeds. Last spring I took some gallon bottles and put charcoal in the bottom, then some small pebbles and coarse sand, then took some good mixed potting soil and after scalding it to kill weed seeds and any worm eggs, I put about 3 inches of this soil on top of the other, had it just crumbly wet. Then I took a few begonia seed and mixed with a spoonful of dry sand and threw it in the bottle, as scatteringly as I could, put a small piece of glass over it and awaited events. In one bottle a few of the tuberous begonias are growing luxuriantly, in another a seed I got from Florida has come up and now fills the bottle; in another I put a sprig of *Selaginella* moss and it is coming out the mouth of the bottle. Then I filled some wide mouthed jars the same way and have put other begonia seed in them. I might have turned the bottles on the side and put in the dirt that way, but thought that if any plant showed a difference I could break the bottle and take it out. You know that is the way they start orchid seed, though they have a special bottle for them.

Ellen, I am coming to Honolulu some day to grow orchids. I have a few fine ones - some *Cypripediums* and a *Laelia*. Got three new kinds this spring.

"Lita"

THE ROSECROFT BEGONIA GARDENS
Give promise of excelling all previous years
Alfred D. Robinson, Annie C. Robinson
POINT LOMA, CALIFORNIA

AMERICAN BEGONIA SOCIETY

Vol. 3.

MAY 1936

Number 5.
C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California

"GROWING BEGONIAS IS A ROYAL HOBBY"

THE MAY MEETING

The May meeting of the American Begonia Society will be held Thursday evening, May 14th at 7:30 o'clock in the Community Hall, Lime Avenue and Ninth Street, Long Beach, California.

The program:

Experiences of an Amateur Begonia Grower, Miss Lena Higgins.

Potted Begonias will be displayed and their culture discussed by Mrs. Henry Ludwick.

Mrs. Helen Lewis donates plants of a choice variety of perennial phlox, which will be sold for the benefit of the club treasury.

SUMMER GARDEN TOURS

On Sunday afternoon May 17th, the first of the season's garden tours will be held. Club members and their friends are invited to visit the garden of Mr. and Mrs. Tom H. Smith, 3601 East Broadway, Mr. and Mrs. J. Paul Walker, 515 West 20th Street and Mr. and Mrs. H. D. Heinley, 5722 Lewis Avenue, all in Long Beach.

These gardens will be open after 2 p.m.

You can assist the Program Committee in arranging the Garden Tour schedule by giving the chairman, Mr. Walker, the date you would like the Club members to visit your garden.

NOTES OF THE LAST MEETING

The monthly meetings of the Society continue to be well attended. On April 9th, eighty enthusiastic "fans" heard Mr. L. S. Wessels tell more of his method of growing Rex begonias successfully.

His advice is: In propagating Rex begonias select a healthy leaf, do not cut it from the plant; snap it off close to the base. Cut through the ribs on the under side of the leaf, then lay it on leaf mold in a well filled "flat". Secure good drainage by placing crushed brick in the bottom of the "flat" and keep leaves in place by covering with a sheet of hardware cloth, tacked down around the edges.

Mr. Walker exhibited rooted cuttings of Rex and fibrous, in all stages of growth up to mature plants.

In Mr. Rocque's talk he cautioned the beginners in begonia culture not to be confused and discouraged by differences in methods used by various growers. Plants in one location may require treatment that would be unsuccessful in another.

NEW MEMBERS

| | | |
|--------------------------|----------------------|------------------------------|
| Miss Eva Rodrigues | 736 East Meta Street | Ventura, California |
| Mrs. Marie C. Wells | 1438 Reeves Street | Los Angeles, California |
| Mr. T. J. Courtney | 16 Black Street | Halifax, Nova Scotia, Canada |
| Mrs. Frank Powell | 6312 Walker Avenue | Bell, California |
| Mrs. Margaret W. Tillman | | Rockville, Maryland |

MAY HINTS

The warmer weather during April has given our plants a good start. However, we will have to wait for a few more weeks for warmer nights before we can expect faster growth. This year has been cold longer than usual and the result is less new growth.

It is time to build that lath house you have been planning. Here in California a lath house is generally better for begonias than a glass house. The begonia house

MAY HINTS (cont'd)

may be entirely lath or it may be partly enclosed with muslin or substitute. Many are trying to get away from the muslin covering, due to the expense and care of upkeep. Most lath houses are built with the lower four feet of the sides solid and the upper part covered with lath, spaced slightly apart. In case laths are used entirely for the top, they should run north and south in order to secure the best effects from filtered sunlight. The laths may be placed as far apart as their width in very humid atmospheres close to the ocean, or less than half that distance, where the atmosphere is very dry. Good ventilation without drafts or without too fast a change of atmosphere from the desired humidity of the lath house to the outside air is the ideal to be worked toward.

TUBEROUS - Don't worry if your tubers are slow starting. These generally make better plants than forced ones, and you will have flowers later than those that are now almost ready to bloom. If the soil your tubers are placed in is kept moist, not wet, the new sprouts will make fast progress as soon as the nights warm up a little. If you are anxious for early growth, you might place a glass or cloth over the top of the box.

FIBROUS - Most of these plants are making very satisfactory growth. Many cuttings put in during the past few months are now rooted. If they were started in leaf mold, they may be left until quite large, but if they were started in sand they should be potted while quite small into some soil that contains plenty of plant food, such as one half leaf mold, one fourth compost or well rotted cow manure, and one fourth sharp sand.

BEDDING - Many new plants that were grown from seed are now large enough to set out. If they have become leggy setting in a shady place, they may be cut back. This will cause a more compact plant to form and the stems may be used for cuttings.

REX - Many growers have failed to repot and trim their Rex due to the continued cool nights. Those Rex that have been cared for, however, have made considerable growth during the past month. Cuttings are beginning to strike. One bed of stem node cuttings referred to in the last month's cultural notes, is beginning to show dozens of new plants starting. Be sure to keep the plants moist, and the atmosphere around them at a high degree of humidity.

REVIEW OF "BEAUTIFUL LEAVED PLANTS" by Mrs. Charlotte A. Rodenburg.

Continued from April.

"B. Rex Variety Marshallii. Another beautiful hybrid, between B. Rex and B. Splendida Argentea raised by a gardener of Mr. Marshall.

The leaves are nine inches long and six inches broad. A very broad band of silvery hue occupies the greater part of the leaf. In the very center there are some long radiations of bright green, amongst which the silvery part meanders, on the margin there is an edging of bright crimson hairs and next that a kind of Vanduyking of green runs in and out of the silvered part.

The leaf stems are one foot long and covered thinly with long white hairs. The finest of the numerous hybrids."

NOTE: C.A.R.

It would be interesting to know if any of the above described Rex varieties are still grown.

SOME PROBLEMS FOR THE HYBRIDIST

There are several aspects of genetics that are not considered by most hybridists of perennial plants, such as begonias. These will be given brief consideration in the following paragraphs.

Plants used as parents in hybridization are usually hybrids themselves, consequently their seedlings would, without further crossing, show a wide range of variation. Most of our plants commonly reproduced by cuttings are the first generation hybrids from the original cross, and by the laws of heredity the second generation of descendents shows a far greater range of variation than the first.

Again in hybridizing it is the common commercial practice to dust the pollen

SOME PROBLEMS FOR THE HYBRIDIST (cont'd)

from the flowers of one plant to the stigma of another without isolating the pollinated flower, that is, without covering it with a small paper or cloth bag. If not isolated the wind or insects will probably carry pollen from the flowers of the same plant or of other plants to the pollinated flower. It is the nature of plants that the pollen from the same plant or other plants of the same variety will germinate and grow the pollen tube more quickly than will the pollen from a different variety. Consequently no cross may result and one cannot be certain of the male parentage.

Thus to get a true cross that will definitely secure a recombination of certain characteristics it would be desirable to follow a more involved procedure. First, one must grow seedlings of the present hybrids by pollinating with pollen from the same plant. These seedlings upon maturity should show a wide range of variation, and in a small proportion of them the desired characteristics should be more definitely fixed. Second, select as parents those plants, seedlings of different varieties, showing the desired qualities you wish to combine and cross-pollinate them, isolating the female flowers both before and after pollination. Seedlings from this cross should show a small proportion of the desired recombinations. Third, in order to get the full value of the crossing each desirable seedling should again be pollinated; but this time again by pollen from the same plant or similar plants. These seedlings should show other and perhaps more desirable combinations of the desired qualities.

However, it is never possible, by cross-pollination, to create new qualities but only recombinations of existing characteristics. Entirely new qualities are only produced by fundamental changes within the germ plasm of the immature seeds. In nature such a sport or mutation is produced, apparently by chance, and only rarely. It is thought by some that cosmic rays may play a part in the production of these mutations. Recent experimenters have actually been able to produce mutations much more freely by bombarding the seeds or pollen with powerful X-rays. The Universities of California, Missouri, and Texas have conducted some interesting experiments along these lines. Some serious experimenter among our Begonia growers might find such an experiment interesting, with some possibility of producing remarkable new types of plants.

M. B. Dunkle.

TUBEROUS BEGONIAS OF INDIA

In the course of our foreign correspondence searching for seed of native species of begonias we have contacted a seed man in Bengal, India, who can furnish tubers of *B. picta* and *B. rubra-venia* at \$1.50 per dozen; *B. laciniata* tubers and *B. roxburgii* roots at \$2.50 per dozen.

We have not ordered any of these for the contributors to the "Seed Fund" because of the restrictions on the importation of plants. The rules of the Bureau of Plant Quarantine require the importer to grow imported plants or tubers in a designated plot or garden for a period of two years, subject to inspection for new diseases or pests. Neither the original plants nor plants propagated from them can be distributed until released. This makes it impractical to purchase these tubers for a group.

However, seed of these species has been received or ordered.

Any member who would like to send for the tubers can do so independently and the Corresponding Secretary will be glad to give details of the procedure.

FROM THE ROUND ROBIN BEGONIA LETTERS - We print this interesting explanation of the color in leaves.

SEPTEMBER 29, 1934. MASSACHUSETTS

The letter relating to the spots on begonia leaves has touched upon one of the most fascinating things in all plant life, namely the color of leaf, flower and stem. Some basic facts will help toward an understanding of the matter. The leaf is made up as follows: on the upper surface is a layer called the epidermis, which is transparent and is made up of cells. Just below this layer is a series of cells in a vertical position, that is, at right angles to the upper surface, then below these up-

SEPTEMBER 29, 1934 (cont'd)

right cells are known as the palisade cells, from their resemblance to palisades in shape. The group of irregular cells, is known as the spongy parenchyma. The palisade cells and the spongy parenchyma are collectively known as mesophyll (meaning middle of the leaf). The green coloring matter, called chlorophyll is found in the mesophyll and is not a dye permeating this area, but is found there in the protoplasm, in the form of grains, which have a definite shape. The protoplasm is found in the cell walls and is the physical basis of all the phenomena of life. Under the mesophyll is the under surface of the leaf, which consists of more epidermal cells, somewhat like those on the upper surface of the leaf, but differing therefrom in a number of particulars. If you take a cross section of a leaf, the above construction would appear. The natural color of plant tissue, when there is no coloring matter present is a sort of creamy-white, but one of the most universal characteristics found in plants is the presence of this green coloring matter called chlorophyll. Yet there are plants which do not contain this green color, such as the molds, mushrooms and others. But one of the most interesting things about this is, that these plants are generally dependant upon other plants or animals for food, when they are called parasites; or they may be dependant upon their own decaying remains, when they are called saprophites. The plants with the green coloring matter practically all take their food from the air, soil or water. On the underside of the leaf are myriads of openings of microscopic size, called stomata, through which air is taken in by the leaf and in the mesophyll the food of the plant is manufactured under the action of the sunlight. Probably all members are familiar with the lessons of physics and the colors of the spectrum. As the light plays upon the leaf all the colors of the spectrum are absorbed by the chlorophyll except the green and the yellow, which gives the leaf the appearance of yellowish-green in varying degrees. That is, their color is due to the rays which are not absorbed. This means that the food of the plants is manufactured largely by the red and blue rays, which furnish the chemical energy to produce the necessary starch and sugar for plant life. There is, however, a group of foliage plants like coleus, beets, etc., in which the color is probably due to other causes, and then there are the young shoots of many plants, and wild plants, where there is a red color in the veins and the underside of leaves and at other points of the plant structure. This red, however, is due to another substance called anthocyan or erythrophyll. Its particular value in plant life is not yet fully understood. The above statements, however, do not explain the color changes in fall leaves, as these are due to the chemical changes which take place as the leaf prepares the tree or plant for the winter. As one examines a begonia leaf, upon which are white spots, it will be observed that the white color is not present in one complete mass, but is more or less punctured by small green spots within the white spots. Those white spots are the natural color of the leaf tissue with no pigment or coloring present at these particular points. This in a general way is the explanation of the white color in other plants where it appears as part of the variegated foliage, such as, Snow on the Mountain, Wandering Jew or Cerastium. As far as the color changes in the fall leaf is concerned, the yellow is probably present in the leaf but is obscured by the green or the chlorophyll, and as the green fades away, as the leaf changes take place, the yellow color (called Xanthophyll) becomes apparent. The red however, in the fall leaf is due to the anthocyan which is probably not present in the leaf, but is manufactured under the action of sunlight and occurs in those leaves which contain sugar and tannin, among other substances, from which the color is built up. These processes of plant life are among the most remarkable in all the plant world, subtle, mysterious and marvelous, inspiring and assuring that, as Dr. Milliken says, there is a Creator continually on the job. And the more they are studied the more alluring do they become.

AMERICAN BEGONIA SOCIETY

Vol. 3.

JUNE 1936

Number 6.

C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California.

"GROWING BEGONIAS IS A ROYAL HOBBY"

JUNE MEETING

On June 11th at 7:30 p.m. the American Begonia Society will hold its regular monthly meeting in the Community Hall, Lime Avenue and Ninth Street, Long Beach.

Mr. Paul Walker, Program Chairman presents:

Mrs. C. A. Rodenburg, speaking on "Hanging Baskets".

A display of Begonia Plants by Mrs. O. P. Palstine.

GARDEN VISITS IN JUNE

On Sunday June 14th the following Long Beach members open their gardens for your inspections and enjoyment:

Mr. and Mrs. Chas. Paterson, 3020 East Third Street

Mr. and Mrs. Geo. G. Randall, 4125 East Fifth Street

Mira Mar Nursery, Mr. Von Hofgaarden, 4015 East Tenth Street

Park Nursery, Mr. and Mrs. Wiesenhutter, 3842 East Tenth Street

The members of the Society and their friends are invited to visit the gardens of the following members in the Santa Monica district on Sunday, June 28th.

Mr. and Mrs. W. H. Rodenburg, 1111 Yale Street, Santa Monica

Mrs. and Mr. E. J. Cade, 274 Westgate, Brentwood Heights

Baake Nursery, 2616 South Sawtelle Boulevard

SPECIAL NOTICE

Make a note of this date - JULY 12th - The annual trip to Rosecroft Begonia Gardens, the home of Mr. and Mrs. Alfred D. Robinson, Point Loma. Details in the July Bulletin, with list of other San Diego gardens to see.

NOTES OF MAY MEETING

Mrs. Henry Ludwick exhibited begonias from her collection, both rex and fibrous varieties, all of which she had grown from cuttings, among them a "Paul Bruant" in bloom.

The account of Miss Lena Higgins' early experiences in begonia culture, developed under her guidance into a general discussion of lath house construction; control of light and use of muslin cover over head; sprays for caterpillar attacks, soils and propagation of fibrous begonia by leaf cuttings. Begonias, it seems, have been successfully grown in soils varying from black clay to light leaf mold. The advice of the experienced is to learn by experiment.

A rare bog plant - Darlingtonia Californica - the Cobra Orchid, which "eats" hamburger and liver was exhibited by Mrs. Palstine. Mr. Woodriff told of finding them growing in the mountains of Northern California.

Mr. Walker demonstrated the transplanting of tuberous begonia plants from flats into pots and into larger pots as they attain size.

INTRODUCING "VAN-EX", A NEW BEGONIA

Mr. Roy Berry has again demonstrated his ability to put the "go" in be-go-nia--- to use his expression---by developing another sensational hybrid, a cross of tuberous and rex varieties.

The pollen parent is a rex; the exact variety is not recorded, and the seed, or female parent, is Evansiana. The child, which has been christened VAN-EX, is a plant far superior to others of similar mating, such as Abel Carriere and Ed. Pynaert, and deserves the enthusiastic praise it receives whenever shown.

INTRODUCING "VAN-EX" (cont'd)

Van-Ex resembles each parent in some respects, the leaves being rex-like in shape and coloring, somewhat like Mrs. E. G. Clift, and the habit of growth being more like Evansiana, upright and branching.

The roots are not tuberous, though slightly swollen. The flowers are carried on pendant stems high above the leaves. There is no tendency to go dormant in the winter, but grows well throughout the year.

There can be no question of the quality of this begonia. It is the most outstanding introduction in recent years and will take its place with the standard varieties.

Mr. Berry generously donated to the Society a number of rooted cuttings of Van-Ex, which were sold to members, the proceeds going into the treasury.

A magnificent specimen of Van-Ex was displayed by Mr. Berry at the May meeting.

NEW MEMBERS

| | | |
|----------------------------|----------------------|-----------------------------|
| Mrs. Lucy Myers | R. #1, Box 599 | Hawthorne, California |
| Mr. C. L. Vernon | 3818 West 107th St. | Inglewood, California |
| Mr. Lester Woodriff | 3618 West 107th St. | Inglewood, California |
| Mr. G. L. Dyer | 1798 Rose Avenue | Long Beach, California |
| Mrs. Mathe Sturges | 1139 Raymond Avenue | Long Beach, California |
| Miss Alice Kimball | 543 East 19th Street | Long Beach, California |
| Mrs. Mildred Davis | 353 - 19th Street | Santa Monica, California |
| Miss Ingeborg H. Schneibau | 1443 Laveta Terrace | Los Angeles, California |
| Mrs. Dorothy Ashbridge | 636 Banning Blvd. | Wilmington, California |
| H. Ray Balcom | 28 Encinal Court | Ventura, California |
| Mr. and Mrs. R. E. Wilson | 3118 California St. | Huntington Park, California |
| Mr. Wm. P. Morrow | 237 East 6th Street | Long Beach, California |

BEGONIA SHOW

The Society will hold a two day begonia show July 25 - 26, at the Agricultural Center, 1300 East Twenty-third Street, Long Beach, California.

Ribbons will be awarded the best specimen plant; the best exhibit, in various classes, and sweepstakes prize. More complete details will be published in the July bulletin. Meanwhile make plans to exhibit your choice plants.

Exhibits by commercial as well as amateur growers are solicited.

Mr. J. N. Nutter, show manager, announces the following committee chairmen:

Committee on Judges, Prizes and Ribbons, Mrs. O. P. Palstine.

Committee on Classification, Herbert Dyckman.

Committee on Exhibits & Arrangements, Mrs. H. D. Heinley.

Committee on Publicity, Mrs. H. F. Logan.

Address inquiries to J. N. Nutter, 1050 East 19th Street, Long Beach, California.

Mrs. Palstine, chairman of committee on prizes, asks that anyone willing to donate plants to be used as prizes or willing to assist otherwise in providing awards to communicate with her. 2443 Maine Avenue, Long Beach, California.

THE OUT-DOOR LIVING-ROOM

The "front-yard" is an American idea. In no other country do home-owners beautify a portion of their property and dedicate it to the passing public -- a public often not very considerate. A street in a well "groomed" city, becomes a drive-way through a park.

Seeking privacy we are now developing the outdoor living room and the "back yard is "passe".

Here in Southern California our particular floral pets -- begonias -- are most successfully grown in lath-houses. The usual lath-house is not a practical sitting-room, though we think with a little alteration it could be made so. Why not remove a section of the over-head lath, permit the sun to fall on a grass plot, where one could sit in comfort and enjoy a combined lath-house and out-door living-room?

THE OUT-DOOR LIVING-ROOM (cont'd)

Our members, Mr. and Mrs. E. P. McMillen are pioneers in the development of this idea, and at Avalon, on the "Magic Isle" - Catalina - have such a garden, one so well designed and cultivated that they have been awarded prizes in garden contests and received much favorable comment from noted landscape architects.

In the following article, they give us suggestions for the development of an out-door living-room. They also generously furnish the attached picture of their garden which shows the grass plot, bordered by lath-covered begonia and fuchsia beds and the inviting recess with its table and chairs.

Members visiting Catalina will be welcome to inspect the McMillen garden.

DEVELOPING THE OUT-DOOR LIVING-ROOM by Mr. and Mrs. E. P. McMillen.

We are just now passing through a period of increased interest in creating a truly livable portion of the home grounds, which is being called the out-door living-room. The yard about any home can be made into an out-door living-room, affording a charming back-ground for family life and an ideal spot for social affairs.

No large expenditure of money is required, even the labor becomes a pleasure, and plans become actuality.



Regardless of the size or slope of your grounds, level or uneven, fertile or barren, in sun or shade, one's home grounds can be made into a garden room.

Make a plan before doing any actual construction work. Planning the out-door living-room can be a thrilling and exciting experience. It is a new world of enjoyment.

On a sheet of paper, sketch the size and shape of grounds and building, all to scale. Designate the trees and shrubs to be left. Plan the lawn or open area, and such features of interest as cozy-corners, fire-place, ornamental seats, tables and chairs.

Place trees and shrubs in front of property line walls, bordered by flowers. Taller trees in the back-ground are a protection from winds and unsightly objects beyond your property.

Nature will help in your plans if you select the type of plants and flowers that can be happy in your location. Plants do not do well in drafts. A property line fence of solid construction, boards or masonry, three or four feet high is best.

Plan the installation of electric lights, for full lighting and for soft, moon-light effects.

Such lath construction as is used, might be in sections to be shifted as required. It is unnecessary to paint the lath; it soon weathers and will be hidden by the growth. The sun-light can be controlled by proper spacing of lath and the use of light weight muslin overhead. Use few vines, as they litter the ground and interfere with the control of sun and shade.

Rearranging on paper until the desired effect is secured, is less labor than moving plants after placing them in the ground.

Our own garden is divided into two sections. The front yard, 30x50 feet, is

DEVELOPING THE OUT-DOOR LIVING-ROOM (cont'd)

open to the street and public. The back yard, an out-door living-room, 35x50 feet, is private and is enclosed with lath on four sides, with a grass plot or patio, 20 feet square, in the center.

We were told that flowers would not do well here, as the soil and water were not good, so we decided to find out. Our soil is very poor. To overcome that we built beds surrounded with rocks, and filled in with a foot or more of good soil. That gives us full control of our soil and drainage.

Plants such as begonias and fuchsias, ferns and other novelty plants of like similar habits, are our favorites. They have a long flowering period, and when not in bloom are attractive. They have few pests. Under lath, protected from the hot sun and winds, they thrive all the year.

Catalina has a wonderful climate, free of extreme heat and frost. The ocean air gives color to plants and flowers. With the aid of a good fertilizer they grow vigorously.

We are very fond of begonias and fuchsias because they do well in the environment of the out-door living-room. We have most of the begonias in pots and hanging baskets. They can be shifted from one location to another. The fuchsias are left in the ground.

Yes, it takes some work and it must be done regularly. Your flowers eat and drink to live. just as you yourself. If you expect them to look their best make them happy.

Some can pot a begonia
Some can bud a rose
But some cannot be trusted
With anything that grows.

SOMETHING-BUT FAR FROM EVERYTHING-ABOUT SOILS by Alfred D. Robinson.

An ancient wisecracker said "The study of religion either finds a man mad or leaves him so"; And I am inclined to say the same of soils. Soil is a generic term which covers a wide variety of material which for the purpose here may be grouped as gravel, sand, loam and clay, classified by the size of the particles. By the use of these either separately or in combination we get an open and warm soil, or a closed and cold one. A very important added element is humus, vegetable decay which is largely responsible for the moisture retaining quality. Soils are also classified chemically; but here we limit ourselves to acid, neutral or alkaline; and there are now on the market simple testing sets to determine these factors. Here water also plays a most important part. The majority of soils in Southern California tend to be alkaline; and as an equal percentage of the water supply is on the same side, irrigation is apt to increase this tendency.

Begonias, ferns and most lath house subjects prefer an acid soil, and it is mainly for that reason that leaf mold is the foundation of the compost used in their culture.

The mixture used at Rosecroft is one-third leaf mold (a mixture of oak and man-sanita, not screened and containing a lot of unrotted matter), one-third cow manure as fresh as it can be obtained, and one-third a sandy loam, a material that never bakes hard, but however dry will immediately absorb moisture. These three are composted in a bin, built up in layers of four inches with a liberal sprinkling of fine but granulated charcoal over the cow manure. Moisture is added as the bin is filled. This composting is merely a mixture and a waste of time unless it can stand three to six months, as one of the main objects is to take up the loss of bulk, amounting to some twenty percent, before using. The bin is above ground, so that one side can be removed and the contents sliced down, so obtaining a real mixture.

A continual check for acid or alkaline content is maintained on the material going into the bin.

Very little sand is used, and that only to modify the above mixture. Sand is one of the most dangerous elements and has shown the highest degree of alkalinity; and a national authority says that when sand is alkaline it is useless to try and

SOMETHING-BUT FAR FROM EVERYTHING-ABOUT SOILS (cont'd)

correct it. Further, it is not an essential with so open a mixture as that described, particularly if the loam be really sandy.

Avoid silts or clay, or any fine soil.

I have given basic mixture. For ferns and Rex Begonias we add more leaf mold, for tuberous Begonias more loam.

If anyone is growing plants successfully it would be stupid to change techniques just because a different one was advocated. Nature is absolutely littered with evidence of the adaptability of plant growth to varying conditions.

Soils in Southern California present a bewildering multitude of variety, and everybody has one or more autos which are used continually. Why should not the plant growers carry paper bags on their excursions and collect for experimental growing, soils from a number of sources.

Dealing more specifically with the compost ingredients:

LEAF MOLD. All leaf mold is not acid, only that from a hard leaf, but of course all leaves make humus. The value of leaf mold lies in its acid control, humus quality, and its tendency to open stiff soil. It has very little food value. Some oak leaf mold has a tendency to promote fungus root trouble and should be watched for lumps of gray fungus.

COW MANURE. This gives humus and plant food; the latter is chiefly in the form of ammonia, a very volatile subject, the most of which escapes in drying out. A well rotted manure is not produced naturally in so dry a climate as Southern California.

SANDY LOAM. This is added to the compost to fill in and compress the coarse and light leaf mold and manure. So called garden soils are to be suspected for alkaline quality, as are any form bottom lands. Get it from hill tops which have never been irrigated.

Recent experiments with soils used in greenhouse benches have shown that the practice of renewing soils every year has been based on false premises; for the rejected soil often proved better than the substitute. The old soil failed to crop satisfactorily because of too great a food content rather than too little. In one experiment covering fifteen years, growing the same crop annually, the same soil gave as good results in the fifteenth as in the first year.

There is an excellent book on Soils and Fertilizers by Alex Laurie.

CULTURAL HINTS FOR JUNE by J. Paul Walker

If your begonias are still slow in starting new growth, it is probably due to location or soil or the watering. Too much shade will retard growth. Worn out soil cannot furnish sufficient plant food for fast growth, and in such a case, the plant should be transplanted into new soil or fertilizer added. The lack of water, more especially the lack of a humid atmosphere surrounding the plants, is the more usual cause of poor growth. Most begonias originated in countries of excessive rainfall; and we may well imitate this condition by watering with a fine spray. With good air circulation there is little danger of producing too humid an atmosphere. However, there is danger of the potting soil becoming soggy if drainage is poor or soil too compact.

Tuberous - Some of the more advanced plants are now in bloom. Be sure to transplant into larger pots before the roots become pot bound. If you are going to remove one from the pot and transplant it into a bed, a hole considerably larger than the pot should be dug and filled with good tuberous soil. Tuberous varieties do best when placed in strong filtered light; the sun tends to blight the flowers. It is not necessary to start feeding until they have reached their peak of bloom.

If you have not grown the variety, *Sutherlandii*, you should try one. It grows very similar to the *Lloydii* type of hanging basket begonia.

Bedding - This type gives so much color in the summer that one should not be without them. They prefer half sun or more, but will do well in almost any location. They tend to become leggy in the shade, and stubby and red in full direct sun. They are easy to grow from seed, and the seed may still be planted. However, the earlier

CULTURAL HINTS FOR JUNE - Bedding (cont'd)

the plants, the more one gets out of them. If you have never grown the variety called "Jewel of the Garden" it would be worth your while to try it.

Rex - This has been a pleasant month for growers of this type. The plants have responded to good care, and one can almost see them grow. One should watch to see that they are repotted in time.

It is claimed that a four inch pot of Scotch soot mixed with a wheelbarrow of the rex potting soil will discourage earthworms, and add color to the leaves.

Watch for slugs and other chewing pests that may be eating the leaves. It may be possible to get rid of them with a good contact spray. One grower recommends "Pestless Greenhouse Spray". In using any preparation it is best to experiment with different strengths, as one may ruin leaves and possibly plants by too strong a solution of "Black Leaf 40" or similar mixtures.

AMERICAN BEGONIA SOCIETY

Vol. 3.

JULY 1936

Number 7.
C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California

"GROWING BEGONIAS IS A ROYAL HOBBY"

JULY MEETING

The meeting this month will be held on Thursday, the 9th at 7:30 p.m., in the Community Hall. Lime Avenue and Ninth Street, Long Beach, California.

Mr. Hans Von Hofgaarden will talk on "Ferns".

The exhibit of begonias will be by Dr. Nellie Schenck.

JULY GARDEN VISITS

On Sunday July 12th, the members of the Begonia Society will visit "Rosecroft", the begonia gardens of Mr. and Mrs. Alfred D. Robinson, at Point Loma. Take a picnic lunch; plan to start early and inspect the gardens before the talk by Mr. Robinson at 11 o'clock.

Announcement will be made at Mr. Robinson's of other gardens in San Diego which may be visited during the afternoon.

In Corona Del Mar, at 503 Coast Highway, on the route to San Diego, is located "Cardoza Gardens", the lath houses of Mrs. H. Cardoza Sloan.

DO NOT FAIL TO STOP HERE, preferably on the down trip -- you have a special invitation to do so. Mrs. Sloan has many beautiful well grown begonias.

Members making the trip to Point Loma who have room in their cars for extra passengers please notify Mr. Walker.

SPECIAL NOTICE

We are invited to visit the gardens of several of our members in Ventura and Santa Barbara on Sunday August 9th. All who can make this trip please report to Mr. Paul Walker the number going in their party. Also please conform to this plan and itinerary: take picnic lunch and start early; on entering Ventura keep on Route 101, then at the first lumber yard turn left onto Front Street; stop first at 955 E. Front Street, the home of Mr. and Mrs. Weitz. There you will be given directions to reach Mr. and Mrs. Hamilton's at 1684 Poli Street. We will lunch at 11:30 in the barbecue court in the veranda garden of Mrs. Rudolph, 87 Lincoln Drive. Our Ventura hosts are furnishing coffee and ice cream.

On to Santa Barbara after lunch, where the garden of Mrs. Murphy and Mrs. Worden, 1224 East Montecito Street, and that of Mr. and Mrs. Rudolph Ziesenhenné, 1130 North Milpas Street will be open for your enjoyment.

NOTES ON THE JUNE MEETING

The exhibit of begonias at the last meeting was one of young rex plants, grown and shown by Mrs. O. P. Palstine who is a very successful grower of this class of begonias.

A specimen of a new fibrous begonia -- Mrs. Fred D. Scripps -- was also exhibited. Of it Mr. Robinson says:

"It originated as a chance seedling. I am reasonably sure it is a hybrid between Scharffiana and Luxurians -- it has the rudiments of the auxiliary leaves at the stem juncture, prominent in Luxurians and the leaf tends to split up more as the plant ages, while the Scharffiana blood is well marked. Our big plant is magnificent now though the bloom is inconspicuous".

The plant is a vigorous and rapid grower, having deeply serrated, large hairy leaves, olive-green on the surface and red on the underside. We are told that it was produced on the Scripps estate in San Diego.

NOTES ON THE JUNE MEETING (cont'd)

Mr. Vernon, of Inglewood, a commercial dahlia grower, exhibited his new creation, a superior white dahlia.

A large Sutherlandii hanging basket was donated by Mr. and Mrs. Rodenburg. Ten dollars was realized from its sale.

Plants of several kinds suitable for lath house culture were furnished by Mr. Dyckman and distributed to those present.

The subject of the talk of the evening "Hanging Baskets" was thoroughly discussed by Mrs. C. A. Rodenburg. Her valuable remarks, with a list of begonias, fuchsias and other plants suitable for hanging baskets and cultural directions for growing them are to be reported in full in the bulletin, beginning with this issue.

BEGONIA SHOW

Plans for the Begonia Show sponsored by the American Begonia Society are progressing satisfactorily. The exhibit will be held July 25th and 26th in the lath house at the Agricultural Center, 1300 East Twenty-third Street (between Walnut and Orange Avenue) Long Beach, California.

We must have your cooperation. The show management solicits small exhibits, even single plants, as well as larger and varied groups. There are classes for amateur and commercial growers. (This is a personal appeal to all members to assist the show management in making this exhibit a success.)

Prizes and ribbons will be awarded in various classes of begonias, fuchsias, ferns, coleus and similar plants.

Entry blanks and classification lists can be obtained from Mr. J. N. Mutter, 1050 East 19th Street, Long Beach. Entries may be made and placed on the 24th and until 9:00 a.m. the 25th.

No entry charge. No admission fee.

NEW MEMBERS

| | | |
|------------------------------|-----------------------|-----------------------------|
| Mr. Ernest Morgan | 1515 Garfield Avenue | So. Pasadena, California |
| Mrs. Dagmar J. Goold | 1512 Mill Street | San Luis Obispo, California |
| Miss Gertrude Pauson | Mt. Hamilton Avenue | Los Altos, California |
| Mrs. J. Dent | Rt. 1, Box 130 | Ventura, California |
| Mrs. O. R. Bounds | 270 McFarland Drive | Ventura, California |
| Mrs. E. T. Boeshar | 1875 N. Vermont Ave. | Hollywood, California |
| Mr. & Mrs. G. W. Anderson | 1436 Studebaker Rd. | Artesia, California |
| Mr. C. C. Hay | 1362 East 59th St. | Los Angeles, California |
| Mrs. W. C. Sterrett | 123 West Maple St. | Fullerton, California |
| Mr. & Mrs. Alfred J. Reichel | 4265 Crenshaw Blvd. | Los Angeles, California |
| Mrs. Gertrude Lamb | 314 So. Sycamore | Santa Ana, California |
| Mr. Ronald Seymour | 3818 West 107th St. | Los Angeles, California |
| Mrs. William McKay | 202 Seventh Street | Balboa, California |
| Mrs. Perry Grant | Rt. 1, Box 228 | Santa Ana, California |
| Mr. Frank L. Marrin | Palm Station | Los Angeles, California |
| Mrs. E. M. Maxseiner | 1118 Chautauqua Blvd. | Pacific Palisades, Calif. |

CULTURAL HINTS FOR JULY by J. Paul Walker.

All types of begonias should be near their best during this month. Care should be taken to protect them from excessive sunshine. If this cannot be done precaution should be used to keep the roots moist at all times. With the good drainage required by begonias, the soil tends to dry very fast. This can be largely overcome by placing a good mulch on top of the ground. German or Swedish peat form one of the best mulches as either is said to hold ten times its weight in water. Grass clippings work very well. It is stated that dry Bermuda clippings will not germinate however, the amount of grass that starts from the fresh clippings is so small that the drying process hardly seems necessary.

Pests are always with us and one must be continually on the lookout for them. Slugs and snails may be killed by placing Snail Foil, Pestless garden bait, or a

CULTURAL HINTS FOR JULY (cont'd)

good home mixture (1 tablespoon Paris Green, 16 heaping tablespoons bran, 4 tablespoons molasses) around the plants. Other chewing insects may be destroyed by dusting lead arsenate, while most sucking insects may be disposed of by using any good spray.

TUBEROUS - Keep continually moist; be sure the pot is large enough, give as much light as possible, at the same time shielding from direct rays of the sun, and you should have good plants. (Direct sun rays will blight the flowers.) If the plants have been sending out lots of bloom, it will be advisable to fertilize them every two to four weeks. Be sure the soil is moist, before feeding. Barnyard manure water or any commercial fertilizer such as Floranid, Nitrophoska, or Vigoro may be used according to directions.

FIBROUS - Lack of water may ruin a plant in a few days at this time of year, especially if the plant gets much sunshine. A good mulch can be made by mixing peat and barnyard manure, or peat and commercial fertilizer. By top watering the food is leached down to the roots and the plants show quick results. Fertilizer sold as "Steer Fertilizer" is especially rich and free from weed seeds, as it is secured from cattle fed on cotton seed meal.

It may be advisable at this time to prune plants to make them better shaped. Cuttings should start very readily now.

BEDDING - These may be treated the same as fibrous. Pulling off the seed pods makes better plants. Plants may be divided if necessary; and it may even be possible to start new plants from cuttings placed where they are desired to grow permanently.

REX - These plants should be very fine now. Good ventilation, lots of water if the plant has good drainage, and a moist atmosphere contribute to the making of good plants. Rex feeding roots grow almost entirely within the top inch of soil. Whenever these roots show the least sign of forming around the inside of the pot, place in a larger, slightly deeper one, in order that the new roots may grow in the new rich leaf mold added above the old soil. Most growers seem to think it is unnecessary to feed this type of begonia with fertilizer of any kind.

BEGONIA EXPERIENCES by Mrs. H. Cardoza Sloan

For the benefit of the beginners in begonia culture may I mention a few begonias which have given great satisfaction and pleasure in my own garden. These are by no means "rare", yet I am surprised to find how often they are unknown even to people who have been growing begonias in variety for some time.

One of these is the fibrous begonia called - so unmelodiously - "Wallow". I consider it the finest fibrous begonia I have grown. A specimen in my garden, not over three years old, is 5½ feet tall and has maintained all winter its full complement of beautiful leaves, dark, satiny-green with reddish backs, and has blossomed magnificently for months, large, crisp clusters of pinkish bloom.

It is a vigorous grower, branching well. The leaves are long and narrow, about 10 inches by 3½ inches wide, and slightly waved at the margin. The flowers are borne on long stems. Several blossom clusters have measured 15 inches across. If I seem to dwell on size, it is not because I consider size the outstanding quality of this begonia. Mr. Robinson, in the Rosecroft catalog, says "Wallow" has great elegance. And elegance is just precisely the word to express the special charm of this fine begonia.

Odorata alba is another splendid fibrous begonia. My own is crowded in a rather dark corner, so I am doubtful if it will ever make the fine, bushy plant it would under more favorable conditions. But, even so, it blooms freely and fills the air with delicate, lemon-scented fragrance. Fragrance not being one of the usual attributes of the begonia, it is the more gratefully received from Odorata alba and the pink-flowered (but less vigorous) variety, Odorata rosea. O. Alba has rounding, glossy leaves and spraying clusters of white blossoms. Both the leaves and the flowers of the pink type are larger.

Much well-merited enthusiasm is being expended on the tuberous begonias in the

BEGONIA EXPERIENCES (cont'd)

lovely hybrids with their truly marvelous forms and colors. But I want to record a growing affection for three more humble sisters of the tuberous rooted begonias, the species *Evansiana*, *Pearcei*, and *Sutherlandii*.

Mr. Robinson says of *Evansiana*, "The easiest grown of all the tuberous - one of the oldest and worthy of more attention". The *Evansianas* are not only easily grown but they know nothing of birth control. Wherever they are planted this year, next spring you will find baby *Evansianas* springing up by the score. These come from the little bulblets which are profusely produced in the axils of the leaves after the plant has flowered. The new leaves of the plant are extremely dainty, with a satiny sheen. Mature plants, especially if they get strong light, lose something of this exquisite texture, but are always pleasing, the back of the leaf netted with red veins which show their color on the upper surface of the leaf. The plant is of branching habit, and blooms in showers of lovely clear pink flowers with little balls of yellow stamens. The leaves are moderately large, the whole plant very handsome. They combine beautifully with ferns and their extreme ease of culture makes them exceedingly desirable. Anyone who grows this plant will join Mr. Robinson in the sentiment that *Evansiana* is worthy of more attention.

Pearcei is equally as good in a different way. It is a lower growing plant and is excellent for bedding. It makes a charming border to a fern bed. I had it last summer bordering a bed of mixed ferns, where the soft yellow of the flowers, mingled with the green shades of the ferns was enchanting.

While *Pearcei* does not trail, it has a pretty, graceful, spreading habit and grows attractively in a hanging basket. The flowers are a soft sulphur yellow, up to two inches across, and freely borne. But if *Pearcei* never flowered at all it would be worth growing for its extremely attractive foliage. The prettily shaped leaf with pointed tip is of a soft dark, mottled, velvety green.

All summer long *Sutherlandii* receives as much favorable attention as any plant in my garden. While this is attractive for bedding, I grow mine in baskets. Everything about the plant is delicate and graceful. The slender, but firm, reddish, branching stems; the prettily shaped light green leaf with its serrated edge; the profusion of dainty pale orange flowers.

The notes on *Sutherlandii* in Bailey's *Cyclopedia* state this species is "of little decorative value". I feel sorry for the person who wrote that and missed the graceful charm of this little plant.

Like *Evansiana* it bears innumerable little bulblets. If you set your potted plant on a flat of leaf mold when the bulblets begin to fall, you won't even have to gather them. They will plant themselves and come up gayly in the springtime.

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

An increased interest has been manifest in the past few years, in the growing of plants of various kinds that may be used in baskets. Many kinds of hanging-baskets and wall-baskets are now obtainable at the numerous pottery sales shops. It is sometimes sad to see, the beautiful containers holding a sorry, much abused plant. Our plants are dependent on us for their simple needs and we must constantly remember to love them enough to supply them with the necessary care to keep them growing well, so the plant may be the outstanding object and not the container.

Many of our best winter blooming begonias are readily adapted to use in hanging-baskets. *Manicata*, a low growing rather procumbent type sends up many stalks of flowers which remain in bloom for weeks. *Manicata Aurea* is of the same type of growth but has yellow and white blotches on the leaves. Both kinds have collars of red hairs on the stems and the pink flowers are very dainty. They are graceful and lovely in baskets. Fisher's *Ricinifolia* has somewhat larger pointed leaves and sends up even more flower stalks. Its flower stalks are higher; the flowers larger and of a beautiful shade of pink.

Then we have a group of four varieties, all of which are especially good growers and bloomers, during the cooler months. They are *Bunchii*, *Feastii*, the spiraled *Feastii* or *Conchaefolia* and Mrs. Townsend. *Bunchii* makes such attractive baskets with its ruffled and crested leaves and when it is in bloom it is outstanding

BEGONIAS FOR HANGING BASKETS (cont'd)

in beauty. *Feastii*, one of the older types, is very procumbent and has rather thick, round and shiny leaves. Its blooms are also pink in color and it blooms very profusely, the flowers showing well above the foliage. The foliage of *Conchaefolia* is even more lovely with its well defined spiral. The flowers are the same color as those of the other two kinds and the blooms are just as plentiful. Mrs. Townsend has a somewhat darker leaf. The foliage is not round but has a number of points. The blooms come later and are larger and a deeper rose-pink, with a brownish over-cast.

Rubella, also has points on the leaves, which are spotted with reddish-brown spots. These spotted leaves show up in a lovely way when the light shines through them. *Rubella*'s flowers are a much lighter pink and it is still in bloom at this time. (June 25th). *Marian* is another begonia with pink flowers and pointed green leaves. *Sunderbruckii* is one of the so-called Star group. Its foliage is quite dark brownish-green and very palmate. The blooms are rosy-pink and it has been in bloom for some time. *Guatemala*, another of the Star begonias has a leaf similar in shape to Mrs. Townsend. The leaves are not so dark in color and are marked with dark brown spots. At the present time stock of *Guatemala* is rather scarce. *Sanguinea* or leather-leaf as it is some times called has a pink olive-green leaf. The foliage is the most attractive part of this plant; the flowers being almost white and really not outstanding in beauty.

There has been added a new trailer, a cross by Mr. Robinson of Rosecroft, which he has called a trailing *Fruticosa*. It has especially attractive, very dark reddish-green foliage, the leaf having a dark red underside. Have not as yet seen it in bloom, but likely its flowers will be similar to those of others in the *Fruticosa* group. It is more of a trailer than some of the others I have described. It makes a very desirable basket plant. (to be continued)

TWO SHORT LETTERS FROM CIRCLE #1.

1934. Connecticut.

I have a large Colonial garden, with a mammoth, drooping English elm in it; and under its spreading branches I rest, work and have tea. At one end of the garden is a vine covered pergola. In June, my begonias were set, pot and all, in the ground along the edges of the pergola, and all did well except Mrs. Kimball, which died. Should I have treated her differently? My new *Calla* begonia is doing beautifully and I am so proud. She did not go to the pergola. I have two little *Maple*-leaves with tiny white flowers. I thought they were *Weltoniensis*, -- aren't they? I have a very lovely *Rex*, with white hairs on a pink stem; the leaf is smooth around the edges, very silvery on top and very red underneath; the large veins radiating from the top of the stem form a beautiful star on the leaf. Can anyone give me its name? I am glad to know that my gorgeous *Rex* is *Henry IV*.

New Hampshire.

This seems to be a section for *Calla*-lily begonias. I have no doubt if one took a trip into the country, one would see on porches ten or more in an hour's drive. I have two now and I think part of a third, but long before Halloween I'll have none, I'll wager. Some farm women pay no attention to them; they put them outside and leave them all summer and they thrive amazingly. The most marvelous specimen that I have ever seen is about two miles from here, owned by a farm woman. It is fifteen inches across and ten inches tall. It has been a mass of white foliage all summer, with many red flowers. A farmer's wife has a begonia which was brought to her from Cape Cod. The leaves are medium green, shaped somewhat like *Weltoniensis rosea*, with very fine white specks, no larger than a pin prick. The stalk is also green. It is the cane type. I wonder what it might be. My *Compta* has 7 laterals now, a very showy plant; but never a bud or bloom, though I have had it 15 months.

SPECIAL SALE

We offer a choice selection of well grown, symmetrical begonia plants at half price for immediate sale.

MILLER'S BEGONIA GARDENS
West Seventeenth Street
Garden Grove, California

AMERICAN BEGONIA SOCIETY

Vol. 3.

AUGUST 1936

Number 8.
C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California

"GROWING BEGONIAS IS A ROYAL HOBBY"

ACTIVITIES OF THE SOCIETY FOR AUGUST

The August meeting will be held at the usual place, the Community Hall, Lime Avenue and Ninth Street, Long Beach, California, on the Thirteenth at seven-thirty p.m.

At this meeting, Mr. H. C. Baake of the Baake Nursery, West Los Angeles, an experienced grower of lath house plants, will talk to us on "Fuchsias".

The exhibit of begonias will be made by Mrs. Helen Lewis of the Rivera Begonia Gardens.

The schedule of the trip to Ventura and Santa Barbara on August the ninth was in the July Bulletin. Members may refer to it and in going conform to the plan as outlined and phone Mr. J. Paul Walker, 646-143 or address 515 West 20th Street, Long Beach, California, the number in their party. To the original program has been added a conducted tour of one of the finest estates in Montecito.

On Sunday afternoon, August twenty-third, the gardens of Mr. and Mrs. John D. Fredricks, 10778 Chalon Road; Mr. and Mrs. Furthman, 10824 Chalon Road and Mr. and Mrs. Ray Thomas, 600 Sanbonne Road, all in Bel-Air, will be open to members of the Society and friends.

Bel-Air Estates should be entered through the western gate and cars can be parked near the above addresses. Visitors have been asked to walk from one garden to another; they are within a two block radius.

The program committee has arranged an evening garden tour for August eighteenth. The gardens of the following members will be open from seven-thirty to ten p.m.

Mr. and Mrs. Palstine at 2443 Maine Avenue

Mr. and Mrs. Nickel at 2001 Golden Avenue

Mr. and Mrs. J. S. Williams and Miss Jewell at 2034 Florida Street

Mr. and Mrs. C. M. Kelly and Miss Kelly at 285 Park Avenue

The first garden tour in September will be open on the sixth. It will include the Lewis garden, 300 Burke Street, Rivera, and Wilsons, one-half mile west of Downey on Firestone Boulevard. Other places to visit may be announced later.

NOTES OF THE TALK ON "FERNS" by Mr. Von Hofgaarden, given at the July meeting.

Present day wild ferns are the survivors of a botanical family that preceded our flowering plants. They were much more numerous in early geologic times and those now existing in nature might be called living fossils.

They do not flower but reproduce by spores formed on the underside of the fronds, or runners.

Of the 4,000 species, 200 are native of America and only 25 of these are of horticultural value.

Ferns vary greatly in size. Some are no more than an inch or so in height while the Australian tree-fern attains a height of forty feet.

Thirty kinds of hardy hybrid ferns, all of easy culture and suitable for outdoor or lath house planting here in California, were exhibited, named and described by Mr. Von Hofgaarden. He generously donated them all to the Society and they were later sold.

Ferns like a moist well drained soil, containing sand and leaf mold. They thus fit in well with begonias.

In feeding use "Vigoro" or similar nitrogenous fertilizer, rather than bone or

NOTES OF THE TALK ON FERNS (cont'd)

blood-meal. To control scale and mealy-bug the plants should be washed off with a spray from the garden hose under considerable pressure. A moist atmosphere will prevent thrip and red spider infestation.

Plants, unlike people, will endure ill treatment without "talking back" and show their appreciation of your understanding care by growing thriftily into things of beauty.

Among the kinds shown were several hybrid varieties of the Sword fern, others of the Pteris group, various Maidenhairs, four Asparagus ferns, Holly ferns and a specimen of the Australian tree fern in a four inch pot, two years from the spore.

Dr. Nellie Schenck recounted some of her experiences in growing begonias and exhibited several plants of the Ricinifolia type.

REPORT OF THE SAN DIEGO TRIP

Members of the Society and their friends to the number of nearly one hundred made the annual pilgrimage to "Rosecroft" on Sunday, July 12th, and were cordially and graciously welcomed by Mr. and Mrs. Robinson.

The gardens were, if possible, even more beautiful than ever before. There were begonias of the cane type and other tall growers, and fuchsias all in glorious flower, in the background, fronted by lower, equally floriferous varieties; hanging baskets of Lloydii, bearing unbelievable double flowers; pendent fuchsias, achimenes, white and blue, and Sutherlandii in baskets; beds of tuberous begonias with full formed flowers six and seven inches in diameter; rex varieties in the more shaded section of the lath house; old time varieties in profusion, and new rare and unusual ones to intrigue the "fan".

Arrangement reveals the master hands of the Robinsons; order and health of the plants, show the care of the able assistants.

The Robinsons and their garden are our constant inspiration.

Mr. Robinson addressed us informally in his genial, witty manner. We can report his remarks only in part. He said:

"Southern California is now the center of begonia culture and probably never has there been a larger group of devotees than this Society. Undoubtedly more begonia seeds are now being planted by hybridists than ever before, in an unending effort to produce that gift of the gods--a new variety."

He advised a continuance of the search for seed of the native species, saying there are endless possibilities. Many that were imported into Europe and there cultivated by the early investigators are now lost, and should be recovered for possible use by present day hybridists. Of the one hundred and fifty kinds pictured in Curtis' Magazine, which were in cultivation at one time, only twenty-five have ever been seen by him. Of the seven kinds of India seed planted, two have germinated and are growing slowly. Do not be impatient if begonia seed are slow in germinating. He told of a planting of seed of a Dregei-Cathayana cross that sprouted in due time; these seedlings were pricked off and an even larger number of seed sprouted the following year from the same planting.

Commenting on begonia culture, he said, "begonias like best an even temperature --little variation between night and day--not a tropical heat, and a constantly moist atmosphere. The quality of the water used is a very important factor in success. It must be soft. Hard water can be successfully softened by using the government formula--one-half ounce of super-saturated solution of alum to one gallon of water, letting it settle, using only the water from the top".

A new variety of the Vernon type, "Mrs. Margaret Hands", received by Mr. Robinson from the Garfield Park Conservatories of Chicago, was exhibited--and carefully guarded: It has green leaves and dark red flowers, blooming well into the winter.

Mr. Robinson read a letter from Mrs. Buxton of Peabody, Massachusetts. It is here reproduced with comments or replies to questions therein.

"Greetings to the Begonia Society, from the far East to the far West. The

Letter from Mrs. Buxton (cont'd)

miles between prevent attendance at your meeting, much to my regret. How I would like to attend, to see Mr. Robinson's beautiful lath garden, to renew old acquaintances and make new ones. I remember with pleasure the meeting I attended in Mr. Walker's patio. Tell him I am trying to grow plants like his on the walls of the open shed which connects our house and barn. Remember me to my kind hosts, the Palstines and the Rosses and the other friends whose gardens I visited.

"I have never seen such Rexes as you grow in California. They do not like our northern winters. I struggle to keep mine alive. The Clossons are too much for me--they die, pronto! As old New Englanders would say, they enjoy poor health.

"I remember, at Kew Gardens, that the begonias were rooted in clear peat. I am using peat and sand, half each, with excellent results. The cutting has a bunch of roots as large as a golf ball and it holds the soil well, making transplanting safer. Recently I read that peat gives an unexplained stimulus to root growth. What has been your experience? (Peat is good in summer but death in the winter, holds so much water that it causes damping off. A.D.R.)

"The best Rex for year round growth here in New England, is the Queen of Hanover. Using that as a parent, cannot you breed a race which will give the finer colors--like Mr. Berry's brilliant 'Autumn' and 'Red Berry' and will grow the year round, so we Easterners may enjoy them as you do? (Hybridists take notice.)

"Have you any fibrous begonias with such large, scarlet flowers as Mme. Fanny Giron? Cannot you breed vigor into that fickle type and keep the lovely flowers? (Another experimental hint.)

"I especially like the free bloomers and I also like the spotted foliage. I should like to see these combined.

"Is there such a thing as a Sunderbruckii, variety Nigricans, with a clear dark leaf? I have quite a dark specimen, but there is a slender light green mid-rib. (With us the same plant will have leaves with varying shades of markings and color, some very dark with no green. Think they are not different varieties. A.D.R.)

"Does Acuteangularis bloom in California? It does not here. (Angularis Zebrina blooms freely during the summer. A.D.R.)

"What do you consider the cause and cure of crumpled leaves on begonias? Washington Street or Peach Leaf is badly affected, in the house, but not in the garden. Other varieties are also affected. At Harvard Botanical Gardens they told me it was a pathological condition inside the leaf tissues, and sprays would do no good. Some declare it is caused by hot air in the house, others say it is mite. My small microscope shows no insects. (This trouble is undoubtedly a pathological condition. A.D.R.)

"The cane types are poor bloomers in the house, while the Sunderbruckii types never fail to bloom each spring. Multiflora, and Fuchsioides cocinea rarely bloom in the house. I suspect they need cooler and moister air. I remember the beautiful ones, heavy with blooms, in Mrs. Rodenburg's garden. Never have I seen such a sight.

"I wish the Society's bulletin could have an article on the care of begonias during their dormant period. I have much trouble with this. The varieties that are dormant in summer, like Socotrana, come through nicely but those that are dormant in winter, like the Rexes and that lovely star shaped Ecuador species do not. I kept the latter through two winters but last winter was too much for it. (We will try to have the desired article. C.M.K.)

"Luxurians I find impossible to keep and Olbia is difficult. The Manicata with the ruffled leaves, does not exist here--I have never seen it, even in the Botanical Gardens of Boston, New York, Washington or St. Louis. Is it a fable like the barnacle goose? (It is alive, in the "flesh" here in California. At one time Mr. Berry had several hundred of them, raised from seed. C.M.K.)

"My memories of California gardens are a joy. The Ross conservatory, Mrs. Wepper's beautiful Rex collection, the Palstine and Berry lath houses and my two visits to Rosecroft are as clear in my mind as though it were yesterday. Tell Mr. Walker that I have not forgotten that delicious steak supper in his lovely patio,

Letter from Mrs. Buxton (cont'd)

nor the pretty garden he took me to see in the evening, a long walled garden, flood lighted, with an open fire at one end. (The Heinley's garden.) So, though the miles divide us, I can still visit your lovely gardens and see the glorious colors of your begonias.

"Good luck to you all, and more and (if possible) better begonias".

Bessie R. Buxton.

After a picnic lunch many of the visitors went to the begonia nursery of Mr. and Mrs. Fewkes, 4453 Montalvo Avenue, and that of Miss Constance Bower, 2412 "L" Street, both of San Diego. The Fewkes have a choice assortment of well grown begonias and other lath house plants. Their maidenhair ferns, many in baskets, were especially attractive.

Miss Bower has a divided interest--begonias and cacti. Of begonias she has many rarely seen varieties, arranged very artistically.

Most of those who made this trip to San Diego, stopped enroute at Cardoza Gardens at Corona Del Mar. Seldom does one see Rex Begonias to equal those of Mrs. Sloan. They thrive in a cloth covered house.

REPORT OF FIRST ANNUAL SHOW by M. B. Dunkle, President.

Our first Begonia Show was a splendid success. The lath house at the Signal Hill Agricultural Center was transformed into a fairyland of beauty by the many carefully arranged exhibits and the scores of individual plants. It is estimated that there were about 1500 visitors, all of whom showed intelligent interest and pleasure in the variety and perfection of the begonias.

It is impracticable to list all prize winners, the exhibitors, or the donors of prizes, but it was the splendid cooperation of many members from Redwood City to San Diego that made an outstanding success of the undertaking. The Show Committee consisted of J. N. Nutter, manager, Mrs. O. P. Palstine, awards, H. P. Dyckman, classification, J. S. Williams, entries, and Paul Walker, general arrangements. Judges were S. Nishida, George Carpenter, and H. S. Norwood.

Among the outstanding features of the show were the educational exhibit of Nutter and Dyckman, the complete and well arranged display of Rex, fibrous, and tuberous begonias, and ferns and other beautiful plants by the Palstines; the marvelous display of tuberous begonia blossoms by Vetterle and Reinelt; the exhibit of tuberous begonia cut flowers from the Redwood Begonia Garden, Redwood City; the charming arrangement of beautiful plants by Mrs. H. Young; a beautiful display by the Heinleys and begonias and unnamed seedlings by Dyckman. Exceptionally fine displays of Rex were made by P. E. Hatch and the Lewises; outstanding displays that featured fibrous were made by Kelly, Haydon and Williams.

The personal contacts by Society members and visitors, the interesting cultural and nomenclature discussions by everyone, and the practical expressions of mutual assistance and cooperation by committee members were the real benefits derived from the show. Society members and civic authorities all combined to make this first show a lasting memory to all who participated.

CULTURAL HINTS FOR AUGUST by J. Paul Walker.

Water applied to the soil around a plant immediately absorbs soluble chemical plant food from it. Warm weather and other conditions that cause evaporation draw part of this food-laden water from the soil into the plant roots, up through the plant stem to the leaf by a process known as osmosis. As the moisture evaporates out of the leaf, the plant food is left to be changed into "plant-builder" by the green chlorophyll in the leaf.

Warm weather therefore causes rapid growth, if plenty of water and fertilizer are available and other conditions are favorable. Excess fertilizer may cause undesirable growth or in extreme cases even death of the plant. During cool weather it is possible to over water, especially if the soil is not well drained and the plant may be drowned. This is not apt to occur to begonias as they should be

CULTURAL HINTS FOR AUGUST (cont'd)

planted in loose, open soil.

Be sure there is sufficient fertilizer in the soil. Many commercial brands have been suggested. This past month one commercial grower informed us that he uses only cotton seed meal, and that he uses it on all types of begonias.

Do not forget the compost bed. This is one of the cheapest and best ways to produce plant food and humus, which is one of the best soil builders.

TUBEROUS - It is best to stake each plant before it gets too tall. As the plant produces an abundance of flowers, it requires food for them to develop, so more water and fertilizer are required. Warm weather sometimes causes the buds to drop, especially when the soil moisture and humidity are too low. Keep all broken or decayed leaves and stems cut off or decay may start in the main stem and kill the plant.

FIBROUS - These plants are better adapted to our warm weather than the other types, as their roots reach deeper in the ground for their water and food. See that they do not lack for water, as a large plant may evaporate a gallon or more in a single day.

BEDDING - This type blooms very profusely and during the summer heat requires a great deal of water and plant food. Seeds may be planted at this time for late winter and extra early spring bloom.

REX - Under most conditions it is necessary to water at least once or twice a day during the warm weather in order to keep the humidity as high as the plants require. To insure continuous growth, re-pot the plant when the roots reach the side of the pot, and this added leaf mold will supply the plant food required.

A LETTER FROM HAWAII

Mrs. Cheatham of Makaweli, Kauai, Hawaiian Islands writes us:

"In looking up notes for our garden club here I found in Hildebrands 'Flora of the Hawaiian Islands' a paragraph on begonias which stated that the wild tuberous one found on this island, Kauai, is the only representative of the order in all Polynesia.

"We all know that India, Central and South America and most of the warm countries have contributed begonias to the marvelous collections we see in lath house and gardens, but nowhere do you see the lovely one from here, called Sandwicensis. I have tried sending the tubers to Mr. Robinson and to my brother, Mr. Shelhamer of South Pasadena but with no success.

"It grows here at three thousand foot elevation, in damp, shady places and I have seen whole hillsides covered with them.

"They bloom in April and May. The flowers are quite large and borne upright, well above the plant and can be found in three colors, pink, pale pink and white.

"The leaves are large and round, very light green and the stems are green. Habit of growth is like other tuberous begonias. I have never been able to find seeds but hope to some day."

THE BEGONIA "MRS. W. A. WALLOW"

Miss Constance Bower brought to the attention of the members at the meeting at "Rosecroft" the incorrect use of the name "Wallow" for the begonia properly and originally named "Mrs. W. A. Wallow". As Miss Bower was "in" at the christening, she should know.

The original name is so recorded by Mr. Dyckman, Chairman of the nomenclature committee.

THE ATTACHED CARD

We request that you hand the enclosed folder-card to an interested begonia friend. If you can use more cards write for them.

It is the purpose of the Board of Directors to improve and enlarge the bulletin as funds are available from an increased membership.

THE ATTACHED CARD (cont'd)

It is gratifying to report that we now have two hundred and sixty members. Since the last bulletin we have enrolled the following:

NEW MEMBERS

| | | |
|------------------------------|--|-------------------------|
| Mr. and Mrs. A.A. Lowdermilk | 1144 E. Santa Clara Street | Ventura, California |
| Mr. and Mrs. F.A. Gowdy | 919 East Main Street | Ventura, California |
| Mrs. Pearl McNally | 60 South Kalorama Street | Ventura, California |
| Mrs. B.C. Wildman | 5826 Linden Avenue | Long Beach, Calif. |
| Mrs. J.V. Kelsey | Brookhurst Road | Garden Grove, Calif. |
| Mrs. Mary E. Brown | 93 North Ann Street | Ventura, California |
| Vatcher's Nursery, | 11971 San Vincente Blvd., Brentwood Heights, | Los Angeles, Calif. |
| Mr. P.N. Lilienthal | 111 Sutter Street | San Francisco, Calif. |
| Mr. H.N. Clift | Charleston Bldg., 251 Kearny St. | San Francisco, Calif. |
| Mrs. Jean Huston | 4848 Trimble Court | Long Beach, Calif. |
| Mrs. E.P. Gable | 900 Rose Avenue | Long Beach, Calif. |
| Mr. Frank N. Fox | 2112 South Sixth Avenue | Arcadia, California |
| Mr. and Mrs. L.G. Wiley | 812 Junipero Avenue | Long Beach, Calif. |
| Mrs. Alva F. Lee | 4674 Grisham Avenue | Long Beach, Calif. |
| Mr. Lloyd E. Marble | Box 121 | Needham, Mass. |
| Mr. Lloyd F. Whiting | Box 555 | Omak, Washington |
| Mr. B. Cedric Aldrich | Rt. #1 | Glenn Falls, N.Y. |
| Mrs. Lillian Goodrich | 3865 Inglemar Street | Hawthorne, Calif. |
| Mr. Wilfred Reep | 388 Roswell Avenue | Long Beach, Calif. |
| Mrs. John E. Railsback | 765 Cherry Avenue | Long Beach, Calif. |
| Mrs. Rosa I. Kennedy | 1765 Stanley Avenue | Long Beach, Calif. |
| Mr. Hugh W. Hixson | R.F.D #1831, San Marcus St. | Compton, Calif. |
| Mrs. Martha M. Thurber | 253 Loma Avenue | Long Beach, Calif. |
| Mr. C.E. Dessery | 211 West 17th Street | Santa Ana, Calif. |
| Mrs. A.G. Rees | Vista Inn | Vista, California |
| Mrs. Mary E. Rankin | 311 Junipero Avenue | Long Beach, Calif. |
| Miss Cora E. Hicks | 3643 Virginia Street | Lynwood, Calif. |
| Mr. Owen Feltham | 4905 East Broadway | Long Beach, Calif. |
| Mr. R.A. Stubbs, Jr. | 466 South Anacapa Street | Ventura, California |
| Mr. N.H. Chappelle | 2640 E. State St., State St. Nursery, | Long Beach, Calif. |
| Mr. J.A. Alff | 1870 Pasadena Avenue | Long Beach, Calif. |
| Mr. John Klenke | 1042 Lecaunreur Street | Wilmington, Calif. |
| Mrs. A.E. Garten | 2708 East Second Street | Long Beach, Calif. |
| Miss C.S. Cook | Rt. 1, Box 611 | Compton, Calif. |
| Mrs. Philip McCaughan | 119 Mira Mar Avenue | Long Beach, Calif. |
| Mr. C.E. Davis | 269 Grand Avenue | Long Beach, Calif. |
| Mr. C.H. Brumund | 1129 West Chestnut St. | Santa Ana, Calif. |
| Mr. Rodney Collins | c/o First National Bank | Garden Grove, Calif. |
| Mrs. Theo Maino | 1424 Mill Street | San Luis Obispo, Calif. |

BEGONIA SOCIETY SONG

Songs are a feature of the social hour at our monthly meeting. The following begonia song was written by Mr. Tom Smith and is sung to the melody of "We've been working for the railroad".

We're the lovers of begonias, of the U.S.A.
We're the growers of begonias, to brighten up our day.
How we love our Rex and fibrous, love our tuberous too.
Now we spend our nights and Sundays, begonias--just for you.
How we'd love to have a lath house, in some sunny spot,
We could show our Rex in winter, instead of just the pot.
We dislike those slugs and aphids, worms and sow bugs too,
Any yard is made a garden, begonias--just by you.

Announcing the opening of THE RIVERA BEGONIA GARDENS
300 Burke Street Rivera, California
Hubert B. Lewis Helen H. Lewis
Booking orders for the new begonia VAN-EX, for spring delivery.

We offer for sale a choice lot of young begonia plants at very attractive prices.
Mrs. E. P. Saunders Orr and Day Road Santa Fe Springs
One-half mile south of the Telegraph Road on Orr and Day Road, which is the first
road east of San Gabriel River bridge on Telegraph Road.

AMERICAN BEGONIA SOCIETY

Vol. 3.

SEPTEMBER 1936

Number 9.

C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California

"GROWING BEGONIAS IS A ROYAL HOBBY"

SEPTEMBER MEETING AND GARDEN TOURS

The regular monthly meeting will be held on Thursday, September the Tenth, at seven-thirty, p.m. in the Community Hall, corner of Lime Avenue and Ninth Street, Long Beach, California.

The following program has been arranged by Mr. Walker:

Talk on "Winter Blooming Fibrous Begonias", by H.P. Dyckman.

A demonstration of making ornamental concrete flower pots, by Mrs. Norman Lucas of Hawthorne.

Mr. J. S. Williams will display various types of tuberous begonias.

A garden tour on Sunday afternoon, September the Sixth will include these gardens:

Amsbury Begonia Nursery, 1529 West Beverly Blvd., Montebello.

Mr. and Mrs. Geo. C. Johnson, 1012 Passons Blvd., Rivera.

Mr. and Mrs. H. B. Lewis, 300 Burke Street, Rivera.

Wilson's Begonia Garden, two miles east of Atlantic Avenue on Firestone Blvd.

Mr. and Mrs. L. S. Wessels, 838 Center Blvd., Bellflower.

On Friday evening, September the Eighteenth, the lath-house of Mr. Roy Berry will be open from seven-thirty to ten o'clock for your inspection and enjoyment. Located on Dolores Street, South of Carson. (Dolores Street parallels Harbor Boulevard, 1 mile east).

Another Sunday afternoon tour will be taken on September the Twentieth to the gardens of the following members:

Mrs. Elva Hartley, 716 Hardy Street, Inglewood.

Mr. and Mrs. Frank Harrison, 724 Hardy Street, Inglewood.

Mr. Chas Vernon, 3818 West 107th Street, Inglewood.

At the same address, Mr. Woodruff and Mr. Seymour.

Mr. and Mrs. Norman Lucas, 3856 Redondo Street (115th), Hawthorne.

Mrs. Esther Thompson, 3826 Kenwood Avenue (119th), Hawthorne.

All of these addresses are near Prairie Avenue in Inglewood and Hawthorne.

REPORT OF THE AUGUST MEETING

The following brief notes are from the talk on "Fuchsias" given by President Dunkle.

From the original South American species of Fuchsias over two thousand varieties have been developed. In cultivation they like to have their roots in cool, moist, rich, well-drained soil and their branches in more or less sun. They are gross feeders and relish liberal applications of fertilizer and water. Frequent spraying with water will control red spider, aphids and thrip. Old plants should be pruned in December. Sprays of flowers of most of the seventy-five kinds grown by Mr. Dunkle were exhibited.

We expect to have a comprehensive article on Fuchsias in the bulletin later.

The begonia exhibit at this meeting was made by the Lewises of the Rivera Begonia Gardens and included the following Rex varieties: Brooks, Dorothy, a Berry Rex named Audrey, two unnamed ones, two named Capt. Nemo, but differing in leaf markings; a seedling and a Fire-flush. A large specimen plant of King Edward was donated by Mr. and Mrs. Lewis and sold for the Society.

THE VENTURA AND SANTA BARBARA TRIP

An unseasonable shower on August Ninth failed to dampen the enthusiasm of the one hundred and twenty-five begonia fans who journeyed to Ventura and Santa Barbara, accepting the invitation of our members in those cities to visit their gardens.

Lack of space in the bulletin prevents us from making a complete report of the trip.

The outstanding features of the stop at Ventura were: the hospitality in the early California manner with which we were greeted and entertained; the beauty of the gardens--Mrs. Weitz, the five finger ferns; Mr. Hamilton's well grown tuberous begonias; the collection of fibrous ones at Mrs. Rudolph's; the rustic clubhouse in the canyon, where the ncontime picnic lunch was eaten and the presentation by Mrs. Weitz of the guest of honor, Mrs. Myrtle S. Francis, whose mother, Mrs. Theodosia B. Shepard was an early day California begonia hybridist (the creator of Marjorie Daw" and other well known begonias). Mrs. Francis was made an honorary member of the Society.

At Santa Barbara very brief stops were made to see the large collection of luxuriant Rex begonias at the home of Mrs. Worden and Mrs. Murphy and at the new lath-house of Rudolph Ziesenhenné where he has numerous young seedlings. This completed the visits to the gardens of our members. More time could have been profitably and pleasantly spent at each of them.

In Ventura, Mr. Hamilton arranged a side trip to the lath-house of Mr. Sprague and in Santa Barbara, Mrs. Worden and Mrs. Murphy guided us on a tour of the two hundred and forty acre Knapp estate -- a noted model of landscape architecture.

The evening garden tour on August Eighteenth and the one to Bel-Air Sunday afternoon August Twenty-third were held as scheduled.

CULTURAL HINTS FOR SEPTEMBER by J. Paul Walker.

The Tuberous season is passing but the other types, especially the fibrous are at their best. As the nights become cooler, the plants should be watered less and that done in the morning. Feeding should be cut down as the plant passes its heavy blooming period and discontinued before it goes dormant.

It is now time to plan the winter garden. Replace those begonias that are going dormant with the winter blooming fibrous and semperflorens kinds and such complimentary plants as Cinerarias, Primulas of various sorts and Pansies.

A few of the new multiflora type of tuberous begonia, imported from Europe, have been grown locally this year. These plants resemble the semperflorens in growth, are low and bushy and hold their small flowers well above the foliage. The flowers are like the other tuberous in form and color and the stems are stiff enough to hold the flowers upright. We will probably see more of them in the future.

TUBEROUS - These begonias have not done well this year in this vicinity. Decay has developed in the stems of many plants and this rot is apt to follow down the stem into the tuber, destroying it. A plant showing wilt should be removed from the bed and the soil in the pot watered only enough to keep it from being actually dry. Remove broken and dead stems and leaves which tend to start decay if left in contact with other parts of the plant. Early blooming plants are now beginning to go dormant and require less water. Healthy growing plants may be treated as one usually treats them.

FIBROUS - Now is the time to sit back and enjoy your fibrous begonias. They still require considerable water and may be fed such plant food as one usually uses. Visit your neighbors garden and pick up new kinds of begonias to grace your own.

BEDDING - These kinds are easily grown. Water and plant food keep them blooming profusely. Seed may now be planted for late winter and early spring flowering plants. Some kinds grow well in winter and bloom out in the open sun.

REX - Most of the Rex are now at their best but will soon show signs of becoming dormant. As this occurs water less, for they do not need it as when growing rapidly.

BEGONIA PLANTS RECEIVED FROM MEXICO

Mr. W. H. Fraser, a member of the Society living in Mexico City, had expressed his willingness to assist us in our efforts to secure some of the species of begonias native of Mexico and other sorts growing there that might be new to us and in May sent us a package containing fifty-seven begonia plants.

A permit for their importation had been secured from the U.S. Department of Agriculture at Washington.

When received by the Bureau of Plant quarantine at San Francisco some of the plants were found to be infested with nematode (root-knot), so none of the consignment could be released to us. This was a great disappointment. We appealed to the Inspector to remove the roots and send us those portions of the plants which could be used for cuttings, in the hope that some could be saved. This he consented to do. Only with this helpful cooperation were we able to salvage any plants from this shipment, which represented much effort and expense to Mr. Fraser.

We quote from the letter accompanying the package from San Francisco:

"Many of the plants had no top growth so that the number of cuttings will probably not conform to the number of plants contained in the shipment. However, we have forwarded every piece of material that we thought would be of any possible value to you, at the time assuring that the nematode infested portions of the plants had been fully removed.

"It is of interest that in removing the roots we intercepted a number of lepidopterous larvae doing serious damage to the crowns and which had not previously been detected. There was no external evidence of their presence in the roots and it was only when they were being removed that they were noted. It was necessary to submit the larvae to Washington for determination as they are not known to us. I do not know that the hot water treatment would have been effective against this stage of this type of insect and it was, therefore, rather fortunate that you elected the manner of handling you did. Otherwise, we might have introduced a very undesirable pest of begonias into your plantings".

Receipt of the cuttings was delayed, awaiting our notification and reply; and further by the fact that they arrived in Long Beach on a double holiday and had to be again inspected by the local horticultural authorities. Three weeks after the shipment left Mexico it was received by us.

Begonias of Mexico must come of sturdy stock, for most of the cutting material quickly revived under Mr. Duckman's care and rooted readily. At this time, we have eighteen or twenty growing plants, some with leaves four inches in diameter.

Among those that have attained sufficient size to identify, are *Manicata*, *Nelumbifolia*, *Semperflorens* and *Incarnata*. A few others are probably new varieties.

The Society is very grateful to Mr. Fraser for this assistance.

THE GRAND HOBBY OF BEGONIA GROWING by Mrs. Worden of Santa Barbara.

This is a message to struggling fellow begonia growers. Those of you who have successfully raised begonias may "skip it".

When my twin sister and I were five years old, our mother took us to visit the greenhouses of John Lewis Childs on Long Island. There we saw a riot of color and beauty that was beyond belief. I remembered that sight for years but never again did I see a Rex begonia until three years ago at Christmas time, when I found my dream plants and bought one.

We were told that it would grow perfectly in the house and it did for almost three months. Then it started to look "pale". Someone said "it needs more water", so when the water lowered one inch in the jardiniere we filled it up. When the leaves began "to go bad", someone else came to the rescue (?) saying, "it needs sun -- full sun". Back came the curtains and into the beating sunshine we set it and within two hours it was lying down over the sides of the jar. I was frantic, my dream plant was dying.

We did not have a lath house nor was there a tree in leaf for shelter but against the garage, facing southeast was a chicken pen, three feet high; in the house were curtains not in use. Combining the two we secured broken sunlight, plenty of

THE GRAND HOBBY OF BEGONIA GROWING (cont'd)

air without drafts and a warm, damp atmosphere — exactly the conditions that a Rex begonia needs. It took two months for our begonia to recover from being treated -- first as a bog plant and then as a cactus. And it took longer for our--backs to stop aching from stooping in our improvised shelter with its low ceiling, our "back-ache house". For birthdays and anniversaries we gave each other begonias until they soon outgrew our small place.

Since that day, when we did not know that there was such a thing as leaf mold, we have discovered some things that begonias like and dislike.

Rex begonias cannot stand wet feet. Perfect drainage and soil that permit the water to disappear immediately through the bottom of the pot is ideal. If a plant is in a jardiniere, rocks under the pot will prevent the soil from re-absorbing the excess water. It is best to keep it moderately damp but not soggy wet. A screen or glass porch, with thin white curtains to break the sun's rays makes a satisfactory place for Rex begonias. A lath house with a cheese cloth sun and wind break is perfect for a location such as Santa Barbara. For soil, we use straight leaf mold. From time to time as the roots appear on the surface, we re-pot into larger containers, using well dampened leaf mold. If the plants outgrow their containers they may be planted out in the ground in beds in the lath house as we have done. We "wash their faces" with a fine spray for the leaves need water as well as the roots, we do not fertilize the Rex begonias. We have proven by experimenting that any fertilizer stimulates a growth that suffers in the cooler weather of winter. We spray with Red Arrow three times a year and use Snarol to kill snails and slugs.

Fibrous begonias are potted in straight leaf mold also. We water them with a lawn spray and keep the soil damp. These begonias are not so susceptible to attacks by pests but we spray them about once a year.

For us, tuberous begonias have yielded large bloom and sturdy plants with green healthy foliage when potted in one-half leaf mold and one part each of well-rotted cow manure, sand and garden soil. As they start blooming they are given weak manure water every three weeks.

To us Rex begonias are the aristocrats of plants. They have given us enough pleasure to repay a thousand times the care and time it takes to grow them. We think it is a grand hobby.

BEGONIAS FOR HANGING BASKETS by Mrs. C. A. Rodenburg. (Continued from July Bulletin)

In the Scandent group we have three varieties that make good long trailers. Marjorie Daw, with a green pointed leaf, has numerous bright red blooms in pendent clusters. It is a wonderful grower and soon fills a large basket. Alba Scandens has a much smaller leaf, light green in color and rather crinkled. It is a good grower with insignificant, white flowers and needs a somewhat warmer location during the winter months. Glaucophylla Scandens is a wonderful basket plant. Stock of it is not plentiful. It blooms very profusely, having a reddish-orange flower. It seems to be rather hard to propagate by cuttings but its runners may be covered at the joints and with a little bottom heat numerous plants may be obtained. At one of the recent meetings Mr. Walker demonstrated his success in using this method. To this group, Mr. Robinson has added a seedling of Glaucophylla Scandens which will likely prove a valuable basket plant.

Many of us have seen the beautiful Scharffiana baskets at "Rosecroft". Scharffiana easily fills a large basket and is a lovely thing when the light shines through the thick, hairy, red leaves. Its large whitish-pink blooms, on long stems are very attractive. A smaller, hairy leaved sort given to me under the name of Trailing Haageana also makes a fine basket plant. It has a brownish leaf with underside red and as with Scharffiana the color is beautiful when the light strikes it right.

Braziliensis is a low growing spreading type with light green, rather hairy leaves. It has white flowers, is not hardy but likes warmth and protection in the winter.

Schmidtii has a leaf somewhat like a geranium. It is low growing, very trail-

BEGONIAS FOR HANGING BASKETS (cont'd)

ing with fluted bronzy-red foliage. The flowers are plentiful, rather small and pink-white. A variation of this which I thought might be the one called Schmidtiana has larger leaves, is also beautifully colored and blooms almost continuously. It is a larger grower and seems to be much more hardy. Another one very similar to these two has been given the name Elena; it has not quite so much color in the leaves but is a very good bloomer; it is a stronger grower and more sprawling so it quickly fills a large container.

Many begonias of the semperflorens type, commonly known as bedding begonias make very lovely baskets. Some of these kinds are lower growing and more trailing than others and because they are such constant bloomers they make very colorful baskets. They may be had with pink, red or white flowers. The one called Carmen with the dark wine-red leaves and pink flowers, is one that is very hardy and suitable for baskets.

A number of small leaved Rex begonias can be so used. The one known as Abel Carriere (Argentea Erecta) being at its best in a basket. Illustrata and Speculata may also be used this way. Modesty, Silver Queen, Bronze King, Prince of Hanover, Rajah and a number of others with their beautifully marked leaves make very attractive baskets. If hung low enough to show the lovely foliage.

The Lloydii type of the tuberous family is becoming very popular. It may be had in many colors and forms of flowers. For late spring and summer, we have nothing more beautiful. Sutherlandii, one of the semi-tuberous group, with its small orange flowers is an especially good bloomer at this season. The foliage is good and it shapes up well.

In another bulletin I will write of other plants suitable for use in baskets.

NEW MEMBERS

| | | |
|------------------------------|------------------------|-----------------------------|
| Mrs. Code C. Haslette | 385 Second Street | Laguna Beach, California |
| Mr. C. F. Crang | Box 37 | Summerland, California |
| Mr. Willard Connick | 185 So. Santa Cruz | Ventura, California |
| Mrs. Myrtle Shepherd Frances | 606 Poli Street | Ventura, California |
| Mrs. T. J. Simmons | 2520 Spruce Street | Pueblo, Colorado |
| Mr. Martin L. Boyd | 1550 Sonoma Street | Berkeley, California |
| Mr. and Mrs. F. J. Taylor | Box 311 | Pittsburg, California |
| Mrs. Emma Broadwell | 2363 Pacific Avenue | Long Beach, California |
| Mrs. J. F. Fletcher | 346½ West Gage Ave, | Los Angeles, California |
| Mr. William Ernst, 3rd. | 140 East London Street | Philadelphia, Pennsylvania |
| Mr. B. B. Honaker | 6686 Rose Avenue | Long Beach, California |
| Miss Marguerite E. Jones | 557 Via del Monte | Palos Verde Estates, Calif. |
| Miss Eva A. Jones | 557 Via del Monte | Palos Verde Estates, Calif. |
| Mrs. M. G. McDonald | Box 134 | Bellflower, California |
| Mrs. A. Beno | 795 Stanley Avenue | Long Beach, California |
| Mrs. Alta Wellman | 4547 Colorado Avenue | Long Beach, California |
| Mrs. R. Hayes Wilson | 3104 Theresa St. | Long Beach, California |
| Mr. August Piedmont | | Gilroy, California |
| Mrs. Irene Carpenter | 1637 Morro Street | San Luis Obispo, California |
| Mrs. Laura L. Boutell | 549 South Ninth St. | San Jose, California |

Mr. and Mrs. Robert E. Ross of Newport Beach, on a world tour, wrote to the Society from Switzerland that they have seen specimens in Europe of all the varieties of Rex begonias that are grown here, even a "Stella E. Ross" which is an introduction of "Rosecroft".

Young begonia plants for sale at very attractive prices.

Mrs. E. P. Saunders
3256 Day and Orr Road
Norwalk, California

Day and Orr Road is first road east of San Gabriel River bridge on Telegraph Road.

AMERICAN BEGONIA SOCIETY

Vol. 3.

OCTOBER 1936

Number 10.

C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California

"GROWING BEGONIAS IS A ROYAL HOBBY"

OCTOBER MEETING

The next monthly meeting of the Society will be held on Thursday evening, October the Eighth, at the Community Hall, Lime Avenue and Ninth Street, Long Beach, California, at Seven-thirty o'clock.

A symposium on "Lath houses" will be conducted by Mr. W. Sherwood Bell. An exhibit of tuberous-rooted begonias will be made by Mr. Leslie Woodriff and he will tell something of their culture.

GARDEN TOURS DISCONTINUED

The garden tours which have been an enjoyable activity of the Society during the past few months will, now with the advent of fall, be discontinued.

The Program Committee wishes to again thank the hosts of these occasions for generously opening their gardens and lath houses to our visiting members.

REPORT OF THE SEPTEMBER MEETING

At the September meeting, Mrs. Lucas demonstrated her method of making fancy concrete flower pots. Briefly the method is this: A form on which to build the pot is made by filling a bowl or container of suitable shape with wet sand, which is packed hard, then the whole inverted and the container lifted off leaving a mound of sand. On this the Concrete mixture is spread to the thickness of about one-half inch--the mixture made of three measures of sand, one of cement and one-half of fire clay. This is allowed to dry and harden for three days, then a second coat of concrete, colored with dry metallic colors if desired, is applied. Before this hardens bits of rock or shell may be pressed into the surface; then all permitted to thoroughly harden, and then the sand used for the mold is shaken out and the pot is ready to use.

The program also included a talk by Mr. Dyckman on winter blooming fibrous begonias. The plants that he exhibited and others donated by Mrs. Palstine and Mrs. Florence Robinson and an ornamental flower pot, the handywork of Mrs. Lucas, were all sold and the proceeds added to the treasury.

In the September bulletin we told of a shipment of begonia plants that the Society had received from Mr. W. H. Fraser, a member in Mexico City.

It is with deepest sorrow that we report the death of Mr. Fraser in August, due to a gunshot wound received during a labor demonstration against the Mexico City Light and Power Company, of which he was General Manager.

CULTURAL DIRECTIONS FOR OCTOBER by J. Paul Walker

There need be no alarm if some begonias cease their rapid growth or even lose some of their foliage at this time of year. Evaporation is much less than during the hot weather and plants are unable to absorb sufficient plant food to continue their fast growth. Extra feeding may now do more harm than good. While begonias may be forced for winter growth in greenhouses, most amateurs in this section think that to do so is at the expense of future vitality.

Practically all begonias require half shade or even more during the summer but many of them, especially those of the bedding type, may be grown in the full sun during the winter.

TUBEROUS - Many of these plants are going dormant and those that have ceased blooming may as well be forced into dormancy. This may be done by gradually withholding the water. Where this is impossible the plant may be balled and placed

CULTURAL DIRECTIONS FOR OCTOBER (cont'd)

TUBEROUS (cont'd)

where it may dry slowly. Potted tubers when mature may be stored in a cool, dry place, laying the pots on their sides; or the tubers may be shaken out, dried in the sun a few days and stored in single layers in a cool, dark, dry place.

FIBROUS - These require little care during October. The summer bloomers should be watered less. The winter bloomers will still require frequent watering and may be fed as soon as they show signs of blooming.

BEDDING - Plants that have flowered through the summer need little water now. Dead branches should be pruned and the seed pods, which sap the plants vitality and may even cause the plant to die, should be removed.

Many new varieties of this type have been developed during the past few years. Most begonia nurserymen can supply kinds that bloom well during the winter.

REX - Watering may be cut down as these begonias start to become dormant. Re-potting at this time of the year is not advisable as oversized pots permit too much moisture to collect about the roots. New leaf mold may be added on top of the old soil to take care of any new roots.

CARE OF REX BEGONIAS IN WINTER

An Eastern member recently asked for information on how to care for Rex begonias during the winter when they are more or less dormant.

We have inquired of experienced Eastern growers for helpful advice and have the following from Mrs. Gruenbaum of the Green Tree Flower Gardens of Philadelphia:

"Rex begonias as a whole are not satisfactory house plants here in the East. Some wholesale growers have perhaps a couple of hundred, of four or five varieties. When a plant seemingly dies they push it under the bench where it gets little light and later bring it forth again for the next season.

"Our instructions to the purchaser are: These begonias will show a resting period; when they apparently die do not throw them away but put them away from the light; see that they get some moisture and as soon as they show new leaves bring them into the light again, give them some liquid cow manure, place in a north or north-east window where they will get some sun but not too much and they will become beautiful plants again. How long will they rest? We do not know. The location, light and moisture will have much to do with it.

"Quite a few people are making miniature conservatories of their basement windows which face the east or north-east. If your inquirer has some such place where there is a moist atmosphere and will place the dormant Rex there not permitting the soil to dry out entirely but keeping it on the dry side, it will grow again for her.

"The experience here is that those who have conservatories, flower-rooms or greenhouses carry their Rex over the winter very well but home-owners of this class are in the minority".

Mrs. W. J. Lynch of Long Beach has had several years experience growing begonias in the East and says--"Some varieties of Rex begonias will naturally go dormant in the winter when grown as house plants, while others will continue to grow throughout the year. Those that tend to drop their leaves should be watered lightly, placed in a darkened place and kept at a temperature above frost and in the spring they will start new leaves".

Perhaps our "Farthest North" member is Mr. T. J. Courtney of Halifax, Nova Scotia. His interest and experience with begonias, he writes, is confined to the tuberous varieties but of the Rex he says,--"They are fairly popular here as house plants. I saw a dozen or so in eight inch pots in a local greenhouse. These particular plants seemed to be pretty much neglected but survived in spite of the indifferent attention they received. They were wintered in a house that was carried along at about a chrysanthemum temperature and the only rest they got was when they were overlooked during the busy seasons".

The advice given in the German book "Die Begonien" is to keep Rex begonias on the dry side during the winter.

CARE OF REX BEGONIAS IN WINTER (cont'd)

A request from Central California for information on how to care for Rex begonias there in a lath house during the winter has also been received. Will some of our members in that section please give us their experience?

SPECIAL NOTICE

Mrs. Vera Schath, of Redwood City, California, a member of the Society has had several years of successful experience growing tuberous rooted begonias, first as an amateur, growing them as a hobby and later when her experience and stock of plants increased, as a commercial grower of tubers and cut flowers for the market. Much of her time is now devoted to speaking before garden clubs and others interested in her specialty. Mrs. Schath has agreed to write a series of articles on the culture of tuberous begonias for the bulletin, the first, on "The Preparation of the Soil" to appear in the November issue and others to follow in the succeeding months on timely cultural subjects.

We are very fortunate in securing these articles and members can be of service to the Society by bringing this information to the attention of those of their friends who are tuberous begonia "fans" with the advice to become members of the American Begonia Society and thereby receive this complete series.

NEW PLANT ROOT-GROWTH HORMONE by M. B. Dunkle

Several recent articles in scientific publications and in the public press have emphasized the discovery of a chemical substance that greatly stimulates root growth in plants. A "hormone" is a chemical substance that causes or stimulates organic activity. This particular hormone is called Auxin and was first obtained from the tips of buds. The chemical has now been synthesized as Hetero-auxin, or Beta Indole Acetic Acid.

This chemical substance is mixed with 500 parts of lanolin or wool fat, forming what is called Indole Acetic Acid Lanum paste. An ounce of paste will serve for from 500 to 1000 cuttings. To apply the paste carefully scratch off the outer bark near the tip of the cutting until the greenish living tissue is reached, then with a toothpick smear a thin layer of the paste over the bare area. In green-wood cuttings like begonias one may apply the paste directly to the tip of the cutting. Repeated applications have no effect, and no beneficial effect has been obtained from applying it to young plants. (Note that the paste is placed on the tip or upper end of the cutting and not on end placed in the soil. C.M.K.) Dr. F. W. Went of the California Institute of Technology, who has carried on much of the research in regard to this hormone, says not to be too optimistic, as Auxin is but one of the factors needed to produce root growth. He states that the factors are 5 to 1 that some other factor may be lacking, so that this possibility must be adequately considered in experimenting with the hormone. Dr Went writes that the hormone has worked well with lemon cuttings but not at all with apple cuttings. Best results generally have been secured with softwood or greenwood cuttings. Experiments have been tried with many plants but so far as I can find none with begonias or related plants, so that practically a virgin field of experimentation is opened to our plant propagators.

The Indole Acetic Acid crystals can be obtained at the rate of \$1.00 for a 100 milligram vial, or \$1.25 for a one ounce jar of the Indole Acetic Acid Lanum paste, from Merck and Company, Rahway, New Jersey.

A LETTER FROM MR. GEO. OTTEN

"American Begonia Society
Long Beach, California

The following may interest growers, or would-be growers, of tuberous rooted Begonias.

There has been a general conception that these begonias can be grown only in locations where large bodies of water are close by, so that evaporation from this source will create the necessary humidity for these plants to thrive in. My exper-

A LETTER FROM MR. GEO. OTTEN (cont'd)

ience has taught me that if the natural environments, which these begonias demand, do not exist naturally, they can be created artificially with perfect success.

An amateur and lover of these begonias, living in Walla Walla, Washington, recently sent me his report of the growth of tuberous begonias. We have to consider that Walla Walla is about two thousand feet above sea level, that there is no dew during the night, and the humidity during the summer months, when the thermometer registers 105 Fahrenheit or above, is about nil. My instructions to this man were to use a fine spray of water two or three times during the heat of the day, for about one-half minute at a time, so that flowers and foliage are wet, and in the evening keep the soil moderately moist.

The result was that these plants developed perfectly, showed healthy foliage and strong flowers.

A clipping from the Walla Walla newspaper gave a detailed report, stating that some of the flowers ranged in size from five to seven inches in diameter and that this show was the admiration of that locality. It pleased me that an amateur, in his first endeavor to grow these wonderful plants, was successful.

Very truly yours,
Geo. Otten."

(Mr. Otten is the author of the book "Tuberous-Rooted Begonias and their Culture).

NEW MEMBERS FOR OCTOBER

| | | |
|--------------------------|----------------------------|-------------------------|
| Mr. Wilbur C. Kinney | c/o California Polytechnic | San Luis Obispo, Calif. |
| Mr. Bertsil C. Smith | 1409 East State Street | Long Beach, California |
| Mrs. Bessie W. Gifford | 66 South Pleasant Street | Fairhaven, Mass. |
| Mrs. Ellen Williams | P. O. Box 3350 | Honolulu, T. H. |
| Mrs. Eddy and Miss Hogle | 609 De La Vina St. | Santa Barbara, Calif. |
| Eva Rosberg | 2068 San Francisco Ave. | Long Beach, Calif. |
| Mrs. Helen Jeanne Cox | 330½ Carroll Park West | Long Beach, California |
| Mr. E. J. Barb | 1600 Molino Avenue | Long Beach, California |
| Mr. Earl Martin | 1513 Newby Street | Rosemead, California |
| Wepper Begonia Garden | 508 Centinela Blvd. | Inglewood, California |
| Mrs. F. O. Bottorff | 29 Sicilian Walk | Long Beach, California |
| Miss Martha L. Allen | 172 Santa Rosa Avenue | Oakland, California |
| Mrs. John McCallim | 1561 Thompson Blvd. | Ventura, California |
| Mr. H. A. Pitts | 3625 Lemon Avenue | Long Beach, California |
| Mr. Edward L. Greenleaf | 120 W. Micheltorena St. | Santa Barbara, Calif. |
| Mr. D. J. Kenning | 2232 Marvin Avenue | Los Angeles, Calif. |

FROM "DIE BEGONIEN"

By special permission we give another excerpt from "Die Begonien" by Karl Albert Fotsch. This book is published by Eugene Ulmer, Stuttgart, Germany, price \$4.00. The translation is by our member Mr. Rudolph Ziesenhene of Santa Barbara.

No re-print in any other magazine or pamphlet is permitted by the copyright holder.

7. The Begonia in Saga and Folklore. (continued) (Page 235).

In paintings one comes upon Begonias now and then, especially in China and Japan. We have already mentioned Begonia sinensis, Ait, in the first named country; in Japan, on the other hand, Begonia discolor, R. Br. has gained importance. In the European artistic pictures we find the Begonia occasionally as the object in the still life or in varicolored flower paintings. In the North Gallery in the Kew Gardens, one finds paired off two portraying Begonias, namely No. 81 where Begonia maculata, Raddl, is represented with Coccocypselum discolor and a tropical bird, and in No. 443 which pictures Beg. natalensis, Hook, in a group with other South American flowers. -- In 1920 a Danish artist portrayed in a Paradise picture, among other

FROM "DIE BEGONIEN" (cont'd)

plants, Beg. hydrocotylifolia, Hook. X Beg. manicata, Brong. (Beg. Feastii). The latter named plant was noticed by a gardener who called to the artist's attention that this Begonia came from the new world. The artist replied by asking the question as to whether the gardener knew where Paradise was situated and whether or not plants of all parts of the world could not grow in Paradise.

Today the Begonia is the most widely known tropical plant in our climes. They are found in numbers in parks, in small gardens and in greenhouses as well as in the homes of the rich and poor. With closer consideration of this matter one can easily arrive at the thought that a plant so universally known and loved as the begonia would like many other plants play a role in various fantastic tales and sagas, and that they bring many names given by each race with various objects in mind. It is really interesting to consider this phase of the subject.

The strong, colored bud of the tuberous-rooted begonia has awakened the following lyric in which it is portrayed. "Amusing is the bud of the tuberous-begonia. First like a small, red, brightly polished shell, the over-and under-leaf closely shut, one upon another, growing seemingly, while you watch. The curious part is that these leaves follow a three-leaved tender, which, becoming more and more puffed up, holds the many little grains of seed. After it has attained considerable size, in the early sunshine it opens the two closed shell-lips, allowing a look deep into the fiery blotched shell in which appears a large golden lantern, burning, seemingly in a fiery grotto". -- Fritz Von Oheimb: Gartengluck Von Heute, Page 53.

A CIRCLE LETTER FROM CALIFORNIA - September 1934.

Argyrostigma was discovered by Guiseppe Raddi, of Italy, who in 1829 found it in the wilds of Brazil. He called it Maculata, but it is now known as Argyrostigma, both names referring to the silvery spots on the upper side of the leaves. The under side shades from rose to crimson. The seedlings lack the color on the under side.

Hipolito Ruiz Lopez, a Spanish writer of flora in Peru and Chili, in 1815 brought us the Peruvian begonia which we know as Rubra. An old grower here says she doubts if we have it now but have only its seedlings. It has glossy leaves, heart shaped, purple margined and wavy toothed. It is a tall grower and has long, waxy, red flowers. I think all the Rubras we now have differ from the original plant. They do not have the purple edging.

Many of the begonias credited to Veitch were really introduced by an Englishman, Sir William Jackson Hooker, who died at Kew in 1841 and whose work was carried on by his son, Joseph Dalton Hooker. B. Griffithii, Pearcei and Fuchsioides were his introduction.

B. Manicata bears flesh colored blossoms on long pedicels of the same color -- the whole flower is self colored.

As I understand the Diademas, there is Palmata, a large, deeply cut leaved variety with silvery blotches. Diadema erecta is of slimmer growth, with leaves darker green, blotches smaller and more regular, Diadema Clementine is smaller with deeply cut leaves, large blotches and different form of leaf divisions. It is more like Palmata than Erecta. Some believe that Palmata and Diadema Clementine are the same begonia but I think they are different, probably seedlings or sports. My seedlings of Palmata have leaves with colorings and markings not at all alike. Even the flowers vary. One will have an all white flower, another will show a marking on the bud of pale pink or lavender that will give to the blooming spray a different tint. In the tall ones they come in shades of pink, from light blush to a deep rose-pink. Some have larger florets than others, the light pink seemingly larger than the deeper colors.

The leaves of the Palmata seedlings are all different, either in form, color or markings. One of the semi-tuberous ones, Kathii, is about 50-50 in the green and silver colorings. I call this "Silver Wings". "Nydia Starr" is entirely different from the other Kathii forms -- the leaves are smaller, it is a bushy grower and a profuse bloomer, in contrast to the others' sparse bloom. Nydia has never failed to

A CIRCLE LETTER FROM CALIFORNIA (cont'd)

bloom since the first year and this year is so full of flowers that the stems are bent with the load. The flowers are waxy-white and smaller than the old Palmata. The leaves are plain green. As they get older they take on a bronzy tint.

My new seedlings of Incarnata have extra large leaves, much larger than the old variety. Now it remains to be seen whether the flowers will be any better. Plants have a different appearance in different locations. Environment, soils and treatment all cause variations.

Rose--the Sylvia begonia is greatly like Incarnata in leaf and the flower is somewhat like it but more like the Weltoniensis varieties.

AMERICAN BEGONIA SOCIETY

Proposed Constitution

Article I. Name

This organization shall be known as the American Begonia Society.

Article II. Purpose

The purpose of this organization shall be to stimulate interest in Begonias, and to disseminate knowledge in regard to their forms and culture.

Article III. Membership

Any person, interested in the culture of Begonias, may make application for membership, accompanied by the regular dues, and will become a member unless rejected by the Board of Directors by majority vote, within 30 days of the date of the receipt of the application.

Life members may be recommended by the Board of Directors and passed by a two-thirds vote at the annual meeting.

Article IV. Dues

The dues shall be one dollar, payable in advance for the calendar year. Members accepted after July 1st may pay 10¢ for each remaining month of that year, and one dollar for the ensuing year.

Members in arrears by February 15th may be dropped from membership by a majority vote of the Board of Directors.

Article V. Meetings

The annual meeting shall be held in Long Beach during the month of November, at a time and place designated by the Board of Directors.

Special meetings may be called at any time by the Board of Directors.

Article VI. Officers and Elections

The officers shall be President, Vice-President, Secretary-Treasurer, Corresponding Secretary, Bulletin Editor, Research Editor and two Directors.

Commercial growers or dealers shall not be eligible for any elective office.

The nominating committee shall, at least six weeks before the annual meeting, place in nomination at least one eligible member for each office and report their action in the October Bulletin. Additional nominations may be made by a petition signed by at least fourteen members. A ballot with these names shall be sent to each member at least 10 days in advance of the annual meeting.

The officers shall be elected by a majority vote, including mail votes post-marked on or before the date of the annual meeting, and shall serve until their successors are duly elected and qualified, unless a vacancy shall be declared previously by a two-thirds vote of the Board of Directors.

A Board of Directors shall be formed, consisting of the elected officers, and one representative from each duly organized branch Society.

Article VII. Duties of Officers

The President shall preside at all meetings of the Society and of the Board of Directors. He shall appoint all special officers and committee members, with

the approval of the Board of Directors, as ordered by this constitution or by the Board of Directors.

The Vice-President shall perform the duties of the President in his absence, or at the request of the President.

The Secretary-Treasurer shall keep the minutes of meetings of the Society or of the Board of Directors, shall have charge of all papers and documents of the Society, shall be custodian of all moneys of the Society, and shall pay out money only upon order of the Board of Directors, signed by the President.

The Corresponding Secretary shall conduct the correspondence of the Society, shall notify all members of committees of their appointment, shall have charge of printing, stationary, and membership list, and shall furnish a copy of all notices to the Bulletin Editor.

The Bulletin Editor shall prepare and have published the regular monthly Bulletin, and have a copy mailed to each member and to such other individuals or organizations as the Board of Directors shall direct. He shall furnish suitable reports on activities of the Society, and developments in Begonia culture to papers and other publications.

The Research editor shall have charge of the preparation and distribution of all special bulletins, and other publications of the Society other than the monthly Bulletin, as ordered by the Board of Directors. He shall have charge of all books, pictures, and other publications pertaining to Begonia culture and shall preserve three complete files of the monthly Bulletin.

The Board of Directors shall determine the policies of the Society, transact all routine business, pass on all applications for membership, declare and fill all vacancies in the elective offices, arrange for special meetings of the Society, establish such special offices and committees as may be necessary, approve all branch Societies, recommend life members, and act as trustees for all property of the Society.

Article VIII. Standing Committees

The standing committees of the Society shall be as follows:

- Auditing Committee
- Nominating Committee
- Nomenclature Committee
- Show Committee
- Program Committee

Article IX. Quorum

Fourteen members shall constitute a quorum at any meeting of the Society. Five members shall constitute a quorum for the Board of Directors.

Article X. Branch Societies

Branch Societies may be organized by any group of seven or more members wishing to affiliate themselves to forward the purposes of this Society, provided that such organization meets the approval of a majority vote of the Board of Directors.

Branch Societies may determine their own officers with their respective duties, make additional qualifications for membership, determine the manner in which their local activities shall be financed, and determine their own activities and meetings.

One member is to be designated as a representative to the National Society. He shall be, ex officio, a member of the Board of Directors. He shall attend meetings of the Board of Directors when possible, or make such reports and communications as will further the interests of the Society.

Some officer shall be designated to forward to the National Corresponding

Secretary the names and addresses of all new members with their National dues, and at the first of each year the names and addresses of all members with their National dues for the calendar year. He shall also file with the Corresponding Secretary a copy of the by-laws for the Branch Society.

Article XI. Amendment

This constitution may be amended at the annual meeting, at any special meeting called for that purpose, or by any special election called for that purpose by the Board of Directors. A two-thirds vote shall be required for adoption. Notice of the proposed amendment must be mailed to each member at least 10 days prior to the date of the meeting or of the special election.

Proposed by the Committee on Revision of the Constitution:

J. Paul Walker,
W. S. Bell,
M. B. Dunkle.

Approved by the Board of Directors, August 27, 1936.

Presented orally to the meeting of the American Begonia Society,
September 10, 1936

Ballot ordered by the Board of Directors, September 24, 1936.

Election date set for October 8, 1936.

INSTRUCTIONS FOR VOTING

If in favor of adopting the proposed constitution place an X after the word YES.

If not in favor of adopting the proposed constitution place an X after the word NO.

Detach the ballot and follow either procedure below:

Either the ballot may be mailed to the Corresponding Secretary, C. M. Kelly, 285 Park Avenue, Long Beach, California, on or before the date of the next meeting, October 8.

Or the ballot may be taken to the meeting and deposited in the ballot box provided for that purpose, upon entering the hall.

CONSTITUTIONAL BALLOT

AMERICAN BEGONIA SOCIETY

In favor of adopting the proposed Constitution: YES _____ NO _____

AMERICAN BEGONIA SOCIETY

Vol. 3.

NOVEMBER 1936

Number 11.
C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California

"GROWING BEGONIAS IS A ROYAL HOBBY"

NOVEMBER MEETING

The regular monthly meeting of the Society will be held on Thursday, November the Twelfth, at Seven-thirty p.m., in the Community Hall, corner of Lime Avenue and Ninth Street, Long Beach, California.

Mr. B. Norwood will talk on "Plants suitable to grow with begonias".

As usual there will be an exhibit of begonia plants.

REPORT OF THE SEPTEMBER MEETING

At the September meeting Mr. Leslie Woodriff demonstrated the method of hybridizing tuberous begonias that he has used in developing his double flowered strain.

The soil he uses in rooting tuberous begonia cuttings is a mixture of peat moss and sand, one-half of each.

The ideas presented in the discussion of lath house construction, ably led and directed by Mr. Sherwood Bell, will be fully reported in a later bulletin.

CONSTITUTIONAL VOTE RESULT

The new constitution of the Society has been ratified by a vote that was practically unanimous.

REPORT OF THE NOMINATING COMMITTEE

The nominating committee, Mr. Walter Randall, Chairman, Mrs. Smith and Mrs. Drant, present the following nominees for the elective offices of the American Begonia Society for the year 1937.

For President - Mr. Tom H. Smith

For Vice President - Dr. Warren B. Davis

For Secretary-Treasurer - Miss Phyllis Cole

For Corresponding Secretary - Mrs. H. D. Heinley

For Bulletin Editor - Mr. C. M. Kelly

For Research Editor - Mr. M. B. Dunkle

For the two elective Directors - Mrs. Winifred M. Young

Mr. H. P. Dyckman

Mr. F. M. Harrison

Mr. W. S. Bell

Other nominations may be made as provided for in the Constitution.

A ballot with the complete list of nominees will be inclosed with the December bulletin. The election will be held at the December meeting.

The group of members meeting as the Long Beach Branch of the American Begonia Society is entitled to representation on the Board of Directors by one additional Director. He may be nominated at the November monthly meeting.

A NEW CULTURAL BULLETIN

The special bulletin of the Society, on the culture of tuberous begonias has been revised and in pamphlet form will soon be ready for distribution, at ten cents. This price is made possible by the financial assistance we receive by accepting advertisements from our members. A limited amount of space in this bulletin is available for this purpose and any member wishing to use it should send in their "copy" immediately. A "card" -- name of firm, address and stock for sale -- will cost \$1.00.

You will want a copy of this up-to-date bulletin for yourself, order it now and

A NEW CULTURAL BULLETIN (cont'd)

some for those of your friends who will be growing tuberous begonias next year. Also tell them of the series of articles on this subject, by Mrs. Vera L. Schath, beginning in this issue of the monthly bulletin. Everyone interested in tuberous begonias should have both.

NOTES

This word of warning in a recent letter from Mr. Robinson: "In getting some Narcissus this fall I find that in addition to the eel worm nematode there is a quite wide infection of a bulb miner. This is said to be very destructive to tuberous begonias. I had intended to put Narcissus down my wall walk in the lath house but shall not do so".

Mrs. Palstine reports that the wire baskets have been received and that they will be at the next meeting for delivery to those members who have ordered them.

CULTURE OF TUBEROUS BEGONIAS by Mrs. Vera L. Schath
Written exclusively for the American Begonia Society

NOVEMBER - Digging and storing tubers

During November most of the tuberous begonias will be dormant and should be properly cured and stored away.

While the plants still have green leaves continue to water them very lightly. If they are dried too fast the tuber will tend to shrivel. The main stalk should drop off before lifting the tuber. When dug the tubers can be placed on trays in the sun or first washed with water to remove the soil and then dried. The latter way is cleaner, otherwise it would be necessary to keep shaking off the dirt as it dries from day to day.

One should make sure that the stem end of the tuber is thoroughly dry as it is here that rot might start. Care should be taken not to skin or bruise the tuber when lifting from the ground. Exposing a cut or bruise to the sun will, as a rule cause the injury to heal over and save the tuber from rotting.

If the tubers have to be lifted early, to make room for some other plants, they should be very carefully dug with as much soil as possible, placed in flats and kept moist until the main stalk drops off.

Tubers of potted plants can be left in the soil in the pot, placed in the sun and thoroughly dried -- then stored away for the winter. They must be shaken out and planted in new soil in the spring, that is after they have sprouted.

If tubers are planted in a lath house, under a large tree or in a place well protected from frost and in well drained soil, they may be left in the ground all winter, covered with two or three inches of oak leaves, which should be carefully removed in the spring when the tubers start to sprout. My suggestion is that you try leaving a few tubers, that are not so choice, in the ground and mulch over. The results next year will be unbelievable. As many as four or five stalks will sprout from a seedling tuber, each bearing an abundance of flowers.

The tubers that are lifted, when well dried in the sun, should be stored away in flats in a cool, dry, well ventilated location, where they will be free from frost. Some growers prefer to cover the tubers with dry peat, which is another good plan.

Rooted cuttings or small tubers will shrivel and dry out if not planted back in flats. They should be planted in shallow flats of dry leaf mold and stored in the greenhouse or in a dry place. By watering them about February first most of them will start.

We cannot over emphasize the fact that tubers should be thoroughly dried in the sun for at least a week, two or three days is not long enough to dry out all the moisture, especially if they have been washed. It is this moisture that will start

CULTURE OF TUBEROUS BEGONIAS (cont'd)

decay and rot. The sun will not injure the tubers in any way.

The most important thing to remember is to keep the plant moist as long as the stem shows green. When the proper time comes the leaves will start to drop and nature will do the rest. Drying up a plant too early only destroys the vitality it is now storing up for next years growth and flowers. A little added care and patience now will repay one next summer when tuberous begonias again bloom and glorify the garden.

MORE FOREIGN PLANTS

We have received from Mr. H. E. Hurst, an American orchid collector living in the Dominican Republic, roots and cuttings of four kinds of begonias, two kinds of corms of gesneria-like plants and roots of a plant that resembles our saxifrage commonly called the "strawberry begonia". They came in good condition and should soon be growing well.

We quote these interesting notes from Mr. Hurst's letters:

"I have several kinds of begonias growing on my place; some may have been brought into this country at some time; others I have brought in from the bush, where they grow on the banks of rivers in the hills, all in deep shade and in moist places. One has huge round leaves a foot or more in width, on long two or three foot hollow stems and bears small, pure white flowers in clusters on long stems. I know of none that make tubers. Most of them have thick roots that run on the top of the ground.

"There are other plants that the natives call begonias but I do not think they are. One grows very close to the ground and puts out runners like a strawberry plant; the leaves are thick, light green, with many metallic, silver markings; the flowers are bright red and it blooms all the year. In cultivation it makes a fine hanging basket. The runners hang down and every six or eight inches new plants form and send out roots into the air. It requires lots of water and shade.

"Another that makes long, worm-like tubers (corms) has soft, velvety, purple leaves and puts up a central stem bearing orange-red flowers. These plants die down during the dry season (summer) and start again with the rains in September.

"Still another plant which has similar habits of growth, has purple flowers with a mint scent. It's tubers are a little larger".

Mr. Hurst has sent these plants to the American Begonia Society without charge and we wish to acknowledge our appreciation of this goodwill and cooperation.

Such an importation of plants is received through a permit from the Agricultural Department and is subject to inspection for two years. If they should prove to be new and of value they can then be propagated for distribution to those members who may desire specimens.

When seeds are received from such sources they are distributed among those members who have contributed to the "Seed Fund".

These plants, as well as those received from Mexico, are in the care of Mr. Dyckman.

NOVEMBER CULTURAL NOTES by J. Paul Walker

Begonias require very little care during this month. One need water them only every few days, with an extra watering on warmer days. Ground grown plants of all types stand up better than pot grown ones and one may now find Rex, fibrous and even some tuberous plants in good condition.

FIBROUS - Potted plants are showing signs of dormancy. Plants in the ground, especially those in an east exposure, should continue to do well all month. It is best not to fertilize or force any of the summer bloomers at this time, though small amounts of plant food may be given those winter bloomers that are showing blossoms or buds.

BEDDING - Summer grown plants should be cut back any time now. They will then make strong bushy growth next year. This is especially true of plants that are heavy with seed, as the seed saps the vitality of the plant and may cause it to die

NOVEMBER CULTURAL NOTES (cont'd)

during the cool weather.

Seed may now be sown in a warm place for spring planting. Winter blooming varieties may be planted in the full sun or on the east side in a protected place.

REX - Large plants should still be holding up very well, especially if they were not forced by feeding or by the heat of summer. One need not be alarmed if many or all of the mature leaves fall off of small plants. Such plants generally put out more vigorous growth in the spring.

One may well be planning a heated frame for starting Rex cuttings during the winter. (A good illustration of one may be found in the January bulletin for this year.) By using this method one will usually secure earlier and larger plants the first year.

INQUIRIES

We have inquiries from Eastern members for information of where the following varieties of begonias can be obtained. Any growers who can supply them please communicate with the Corresponding Secretary.

| | | | |
|---------------------|------------------|-----------------------|-----------|
| Albo-coccinea | Acuminata | Venosa | Dichotoma |
| Glabra | Englerii | Imperialis smaragdina | |
| Imperialis Maculata | Rubra fragrans | Glorie de Sceaux | |
| Cathcartii | Mme. Fanny Giron | Frankoides | |
| Bronze nelumbifolia | Polygonata | Plantanifolia | Cathyana |

WINTER BLOOMERS by Mr. Dyckman

This list of winter and early spring blooming begonias is compiled from that given by Mr. Dyckman in his talk on that subject before the Society at the September meeting.

| Name | WINTER BLOOMERS Color of Flowers | Origin |
|-----------------------|-------------------------------------|---------------------------|
| Washington Street | White | San Diego garden |
| Incarnata | Pink | Mexico |
| Mrs. W. A. Wallow | Pink | Seedling by Mr. Wallow |
| Rosea gigantea | Red | Lyncheana X semperflorens |
| Vitafolia | White | Brazil |
| Alba coccinea | White above, red below | India |
| Deliciosa | Pink | India |
| Ulmifolia | White | Colombo |
| Polyantha | Pink | Mexico |
| Glaucophylla scandens | Brick red | Brazil |

EARLY SPRING BLOOMERS

| | | |
|-----------------------|-------|---------------------------|
| Jessie | Pink | Phyllomaniaca seedling |
| Templinii | Pink | Phyllomaniaca seedling |
| Olbia | White | Brazil |
| Concheafolia | Pink | Mexico |
| Feastii | Pink | Hybrid |
| Bunchii | Pink | |
| Mrs. Townsend | Pink | Mexico |
| Manicata (four kinds) | Pink | Mexico |
| Fischer's ricinifolia | Pink | Hybrid |
| Verschaffelti | Pink | Manicata X carolineafolia |
| Sunderbruckii | Pink | Mexico |
| Nigricans | Pink | Mexico |
| Longifilla | Pink | Mexico |
| Nine Point | Pink | Mexico |

NOTES

There has been a report that the governmental restrictions on the importation

NOTES (cont'd)

of tuberous begonia tubers were to be removed this fall. However it proves to be false. The same restrictions prevail.

They do not prevent one from importing tubers from European growers or other sources, but if imported the plants must be grown in a designated location, subject to inspection, and cannot be resold nor can stock propagated from them be sold or grown elsewhere for a period of two years.

We have referred to the description of a new type of tuberous begonia, the multiflora type, given by Mr. Geo. Otten in his book "Tuberous Begonias and Their Culture" and now can furnish the names of European growers of whom the tubers can be purchased. It is our understanding that seed of some of the varieties of this type can also be secured. We know of no grower in this country who has as yet a stock of these plants.

FROM A NOVA SCOTIA MEMBER

A thousand miles north of the Society's headquarters their tuberous begonia is as happy as a child's song. In this little province by the sea these gorgeous flowering plants are set out early in June in any location from rank shade to positions fully exposed to the sun, and strange as it may seem to California growers the plants set in full sun are by far the best. Planted out from 5-inch pots they will bloom continuously until October's hard frosts if a few simple details are given attention. We find them to have even bigger appetites than accused of and provide for this with a generous handful of pulverized sheep manure evenly spread about each plant immediately after they are set out. On top of this we place a two or three inch mulch of sphagnum moss, gathered from the woods, which will keep the soil moist, provide a cushion for heavy rains and prevent the earth from being splashed on the flowers, and at the same time furnish the moisture so essentially required by the foliage. Plants are lifted after one or two hard frosts and when the stems have dried and parted from the bulb the tubers are stored in a frost-proof cellar in peat moss. They start eagerly the following March and make good plants for many years.

Good results are had in growing under glass by disbudding until strong plants are established and then judiciously feeding until they reach their peak. The only shade we find necessary on the glass is a thin wash of bon ami.

Tuberous begonias are at their best in Nova Scotia about August 1st, and are quite popularly used. A very notable recent planting was in the form of a huge cross in one of the cemeteries. Measuring about 30x20 feet and very closely planted with mixed doubles it presented one of the most imposing floral spectacles imaginable.

To the delight of those of us here who know that "growing begonias is a royal hobby" we are happy to report the feeling is being extended and that our favorite plant is getting more attention and admiration each year.

T. J. Courtney

NEW MEMBERS FOR NOVEMBER

| | | |
|---------------------|----------------------|--------------------------------|
| Mrs. O. W. Dreyer | 3757 Chestnut Avenue | Long Beach, California |
| Mrs. R. R. Wershing | 4230 West 111th St. | Inglewood, California |
| Mr. A. Alan Jackson | 3662 Dunn Drive | Palms, Los Angeles, California |
| Dr. J. Elton Lang | 1234 Tremaine | Los Angeles, California |
| G. Ghose & Co. | Town-End | Darjeeling, India |
| Mr. Chris Moore | 3327 East 3rd St. | Long Beach, California |
| Mrs. L. A. West | 2117 Victoria Dr. | Santa Ana, California |
| Mrs. E. E. Heinlein | 1616 Cedar Avenue | Long Beach, California |
| Mr. J. C. Gilbert | 1122 California Ave. | Santa Monica, California |
| Mr. Howard R. Rich | | Atlantic, Maine |

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AMERICAN BEGONIA SOCIETY

Vol. 3.

DECEMBER 1936

Number 12.
C.M. Kelly, Cor. Sec'y.
285 Park Avenue,
Long Beach, California

"GROWING BEGONIAS IS A ROYAL HOBBY"

DECEMBER MEETING

At the last meeting of the year to be held on the evening of December tenth, at seven-thirty in the Community Hall, Lime Avenue and Ninth Street, Long Beach, Mrs. O. P. Palstine will present a short Christmas program, which will be followed by the usual Christmas exchange of plants. Every member desiring to enter into the exchange is asked to bring a plant and a card with his name on it.

Mr. J. Paul Walker will discuss the use of bottom heat as an aid to propagation.

An exhibit of winter flowering begonias will be made by Mr. H. P. Dyckman.

The expense account of the local society should be substantially increased by the sale of the rare plants donated by Mr. George Randall. These include two kinds of Sanseverias, two specimens of Tillandsia Zebrina, one Tingley Mallet and one Metallica begonia.

NEW MEMBERS

| | | |
|---------------------------------------|-------------------|-------------------------|
| Mr. and Mrs. R. P. Tillotson | Box 277 | Costa Mesa, California |
| Mrs. E. G. Arbuckle | 5932 Seville Ave. | Huntington Park, Calif. |
| The Horticultural Society of New York | 598 Madison Ave. | New York City, N.Y. |
| Mrs. L. E. Ingraham | Little Compton | Rhode Island |
| Mrs. William P. Slattery | 50 Roanoke St. | West Springfield, Mass. |
| Miss Adelaide M. Sporer | 112 Park Terrace | Hartford, Connecticut |

BULLETIN NOTICES

With this issue, volume three of the bulletin of the American Begonia Society is completed.

On behalf of the Society, the Editor sincerely wishes to thank all those, who by their willing and helpful cooperation have given generously of their time in the preparation of articles. It is only by this gratuitous service that so much valuable information is published.

On the last page of this number there is a listing of the year's articles.

And now, in announcing the following names of contributors for the coming year, we think we are justified in making the assertion that the 1937 publication will be of equal value.

Mr. Alfred D. Robinson, of Rosecroft Begonia Gardens, Point Loma, California, will give us a monthly letter dealing with timely begonia subjects.

Of special interest to those who are growing begonias under conditions that prevail in the East, will be the suggestions of Mr. Ernst K. Logee, of Danielson, Connecticut, a begonia grower of many years experience.

The tuberous begonia culture directions by Mrs. Verna L. Schath, begun in the November issue will be continued through the year.

We are glad, also, of the promised articles of Mr. Frank Reinelt, of Capitola, California, whose marked success with tuberous begonias is well known.

To be certain of receiving the bulletin continuously, members should renew their memberships promptly, by sending the annual fee of one dollar to the treasurer, Miss Edna Ziesenhenne, 3100 Theresa Street, Long Beach, California.

THIS IS IMPORTANT. MEMBERSHIPS EXPIRE DECEMBER THIRTY-FIRST

DECEMBER CULTURAL NOTES - by J. Paul Walker.

This is the resting period of practically all begonias (Except a few of the winter bloomers), and therefore very little care is required. A small amount of

DECEMBER CULTURAL NOTES (cont'd)

moisture to prevent the plant from drying out meets most of the needs of the average plant.

FIBROUS - Dead branches and leaves should be trimmed off and plants kept slightly on the dry side. Winter bloomers may be fertilized sparingly. Cuttings made now should be started in heated frames.

BEDDING - One may either cut back old plants now to within a few inches of the ground or do it next month. Plants from the September sowing are large enough at this time to transplant into flats. Seed for spring plants should be sown now in a warm, shaded location.

REX - Cuttings may be started in heated frames. Because of the cool nights many of these plants have lost part or all of their leaves. This is natural, especially if the plants were a bit forced during the summer. They will probably make better plants next season because of a good rest.

TUBEROUS BEGONIA CULTURAL BULLETIN

It is not too early to plan your selection of tubers for next year. Reliable dealers carry advertisements in our new and revised edition of the tuberous begonia cultural bulletin now for sale at ten cents each.

PREPARING THE SOIL FOR TUBEROUS BEGONIAS - by Mrs. Verna L. Schath.

Written exclusively for the American Begonia Society.

By this time most of the begonia tubers have been dug, dried and placed in storage and we are thinking about preparing the soil for next year.

To those who for the first time are planning a tuberous begonia bed, I should like to give some suggestions. An ideal place would have an eastern exposure as it would get the morning sun and afternoon shade. A location on the west can be used if the sun does not reach it before four o'clock. One of the finest beds I have seen was on the west side of the house; a large oak tree shaded it so that it received only the late afternoon sun. The flowers were large and numerous, the plants short and bushy.

A good location for a tuberous begonia bed is in a lath house or under an oak or some other large deep rooted tree which does not absorb all the moisture from the ground. That shady spot which has been a garden problem may be made to blossom as a begonia bed. Of course, in a very shady place the plants will grow quite tall and need staking; and the blossoms will not be as brilliantly colored as if they received more sun.

It is important to remember that tuberous begonias do not like drafts or windy spots. This is one cause of blossoms dropping off before they open.

The soil for these begonias should be coarse and well drained. If the soil is very sandy, leaf mold and peat should be well mixed into it. If it is clay or adobe, it is best to remove eight to twelve inches of it and fill in, first, with two or three inches of coarse gravel for drainage, and then add clean top soil, leaf mold and peat, about equal parts of each. Good clean top soil will absorb water readily so will not be a problem during the summer time. Water should not remain on the top of the ground but should be absorbed quickly. If the ground is sloping it is naturally well drained.

Fresh manure and a small amount of raw bone meal should be worked into the soil to remain all winter. If the bed has had begonias in it this season nothing further need be done now. If the ground seems a little heavy, in April add the yearly amount of leaf mold and peat.

If your begonias are to be planted in pots, the potting soil should also be prepared now. Take equal parts of coarse leaf mold, peat and good river sand and mix thoroughly. Add a generous amount of fresh manure and a small amount of bone meal. Be sure that this compost is where it will be kept wet all winter, otherwise it will be necessary to water it at least twice a week.

The older the soil mixture is, the better the begonias like it. It should be