

# From the Editor . . .

As you know, for the sake of the folks at the convention, and you that couldn't come, this issue will make up for the pages last month, and thus give us a special issue. Next month we will have reports and pictures taken at the convention that should be fun to see. . . Speaking of last month's short one, to have a short issue is not unusual, for the big magazines all do it—providing its made up later on. So don't jump the track when something new happens!

I want to say how nice it is to hear so regularly from our Eastern folks. Since we have so many branches in the East, why not have some articles from you folks about your own growing conditions? I try to watch that articles are not slanted to any one area—so how about a hand?

I want to comment a bit on the work done by Mrs. Florence Gee, our seed fund administrator. This is a part of our Society that each month sends in money regularly to the treasury. She goes along each month keeping track of the seeds, what's new, mailing them out—and it's a big job. Here is one time you don't have to write a letter of thanks entirely—you can also send for some seeds. Since she missed out on her article last month you have a double selection to make this month. Let's help Mrs. Gee in a big way remembering its part of the program that keeps our magazine and Society running!

If you find something new that seems to help in growing Begonias and assorted shade materials, let us know. Other members would like a report on it. This month we are showing some new containers that are very interesting and carry a fine report from one of our big African Violet societies here in the Southland.

As this issue goes to press I am reminded again in telling you to try to make the convention. Its going to be good and the convention manager and his committee are working hard to make this a real Begonia get-together.

The BEGONIAN will have a booth this year and in it will be a Redondo Beach member to sell subscriptions and memberships. Wouldn't it be wonderful by the end of the year to have 4,000 members? All we have to do is to go out and get them!

There are a lot of things that can be done to get folks interested. How about our metal signs that sell for \$1.00? We have one in our television garden and not a week goes by but what the camera sees it on the side of the lath house.

Why not have one in the front yard mounted on a little rustic sign near the front porch. Hang one in the lath house or glass house so when friends come over they will see it.

I like the first article this month written by one of our members who felt that their name should be left off because they are not interested in that, as much as the thought of why they like our Society. It occurs to me that pride in our Society can go a long way in making for more members.

Nuff for now. See you at convention time. Yours for more and better Begonias.

#### as ever - G.L.

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<sup>The</sup> Begonian

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## AUGUST, 1955

"Why I Belong ..

I am one of the newer members of the American Begonia Society, and I was asked the other day by a nearby neighbor—"Why do you belong to the Begonia Society." This got me thinking. Why am I a member. Why do I belong.

Every now and again, I think I, with all the rest of our thousands of members might do well to ask the same questions—and to give it a serious answer. So here is "Why I belong."

I joined the Society because I was interested in shade plants. At the same time I found out I could get a magazine each month even though I couldn't get to a meeting. This unique combination pleased me, because being very busy and frequently going out of town, I still could keep in touch with a gardening group.

After I joined, THE BEGONIAN actually sold me on growing Begonias. And I am an avid, beginner, died-in-the-wool one now! Belonging to the Society goes far beyond these easy to see and obvious reasons.

I am a member of a group of folks who are interested in beauty. Sure we may be more concerned with beauty in the shade and one special group of plants—but we love beauty. This beauty means so much to me and our family.

As one works with beauty—it rubs off, not only on oneself, but also on others. Those that work with beauty are different kind of folk—no, not set apart or "odd" . . . but folks that act like the plants they grow . . . thoughtful, kind, happy, unselfish.

## Our Cover..

Monicate Areo Maculate Crispa grown by Sally Dec Cou of Haddonfield, New Jersey one of the entries in the Philobgonia Branch Flower Show in June this year. —Photo by Ralph Holtsizer of Darby, Pen.

## — By A MEMBER

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It always struck me that our members are not complainers... or faultfinders, or stuck up. This registered on me in such a definite way, for being limited in time to attend meetings, I was at first a little dubious that my time might be wasted as it has in other meetings many times.

Now, maybe I should have been more concerned about learning about Begonias but this other phase was most important to me. To think of these branches meeting all over the country, all working to one aim of growing beauty.

That brings me to another reason why I am a member of the ABS. I like the idea of unity. Unity of many poeple scattered as I understand all over the world. That appeals to me and makes me proud of being a member of such a group.

The members I have met register a great deal of pride in being a member. Some groups I have belonged to in years passed had members that seemed to do except complain, find fault in everything from president to bank balance—and of course little knowing what they were talking about—and if they had been given the job they would have butched it still worse.

But Begoniaites seem to have much pride in what they are doing and the organization to which they belong . . . and our branch grows because their enthusiasm registers to neighbors, and friends that they meet.

I guess most of all I like to know I belong to a Society that is progressive and growing—just like young plants. Look what's happened to our magazine! Look what's happened to our reporting and the trend of articles towards us beginners.

Even our meetings have changed into meetings with lots of information instead of long drawn out wheezing affairs of bus-—Continued on Page 172 Begonia Catalina..

Begonia catalina was one of the early hybrids of Mrs. Theodoria B. Shepherd, one of our pioneer Begonia hybridists who had a famous general nursery in Ventura. Some forty years ago, she grew an outstanding new Begonia and named it B. catalina. Being an exporter and importer, she sent her new choice Begonia abroad to England. Both there and here in California it was grown extensively as a great favorite. About 1940, it came back as a title lady, from Kew Gardens to the New York Botanical Gardens under the name of Lady Waterlow. In Mrs. Helen K. Kraus' Begonias for American Homes and Gardens, it was given the synonym of B. improved digswelliana (B. digswelliana seedling). T. H. Everett described it in detail in one of their bulletins.

This particular hybrid in question is a low spreading or trailing Begonia. It is sparsely stiff-haired with pointed ovate leaves whose margins are toothed, undulate, and ciliate, with depressed veins and pronounced red petioles. The flowers, borne in the leaf axils are large, white on the inside and rose-pink on the outside. The leaves and flowers color up when the plant is exposed to the full sunlight. It is one of our best basket Begonias, and competes with the B. semperflorens group. Like them it is sun-tolerant and ever-blooming. It can be used effectively on sunny embankments and as an edging in front of Begonia beds. It is an excellent winter bloomer, and carries on for the entire season as an indoor pot plant.

Begonia catalina is not at all like B. digswelliana with which it has often been confused. This latter one is an early English hybrid (1865) of disputed heritage, developed by T. W. Early of Digswell, England. It is now generally agreed that the cross which produced it was B. odorata x B. fuchsioides. It, too, is of a low bushy, trailing habit. The leaves are small, shining, elliptical-ovate, irregularly and coarsely toothed. The flowers are similar to those of B. fuchsioides, perhaps a little smaller and not quite so intense in color. In early times it was often called the drooping heart and the cinnamon candy Begonia. It is now a collector's item and it is somewhat diffi-

## – By CHARLOTTE M. HOAK

cult to obtain plants of it. However, it makes a beautiful and showy basket, but needs protection from the sun and is not frost-tolerant as is B. catalina. With the two Begonias before you, there is no need of confusing them. Old-time Begonia lovers have grown them both and are perfectly familiar with their differences.

The appended Reference List for B. Digswelliana was prepared by a Rudolf Ziesenhenne of Santa Barbara.

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#### FROM LES BEGONIAS BY CHARLES CHEVALIER, 1938

page 297 — Begonia xDigwelliana Hort. (B. Sandersoni Hort) (?).

Obtained in 1865 by W. Early, gardener to Digswell (Angleterre). Son origine est obscure et controversee. Il est plus que douteux que ce soit, comme le pretendent certains auterus, un enfant des B. fuchsioides et B. semperflorens.

298—D'apres Uhink (1), les parents seraient les B. fuchsioides et B. disticha Link (2). Plante buissonnante, haute de 40-60 cm., tres florifere. Tiges minces, divariquees, rameuses, suffrutescentes, plus ou moins dressees, glabres, vert clair teinte de rouge, merithalles courtis. Stilules lineaires, blanchatres. Petites feuilles (7x4 cm.), pas tres nombreuses, ovales-acuminees, irregulierement dentees, ciliees sur les bords, glabres, vert brillant au dessus, plus pales en dessous. Petiole court, etale.

Inflorescence a l'aisselle des feuilles superieures, pluriflores sur un pedoncule oblique, assez long, grele. Bractees rougeatres, persistantes. Fleurs penchees, petites, rose pourpre. Fleurs males, peu ou pas ouvertes, a 4 petales. Fleurs femelles a petales; stigmate long, jaune orange; ovaire arque, triaile, dont une grande aile rouge. Floraison presque toute l'annee, abondante en hiver.

# Report from Show Chairman

The 23rd Annual Convention of The American Begonia Society will bring together once again, many of the finest Begonia growers of the Society. Some for the fun of meeting old friends, some for the friendly competitive spirit that always prevails at the Convention Begonia Shows. Many of you will travel many miles to see the interesting "new" hybrids in the nomenclature room. Each year the new introductions of the Begonia World seem to be more beautiful. From all appearances this year will be equally as fine as those in the past.

The Redondo Bay Area Branch has made every effort to make your stay in Redondo Beach an enjoyable one. Mr. Joe Taylor and his committee have worked diligently to complete plans for this annual event. The setting is pretty much the same as it was two years ago. Redondo Beach Union High School, nestled as it is in the hills just off Pacific Coast Highway offers splendid facilities for a Convention such as ours. Ample floor space for a fine competitive show, a spacious dining room where the banquet and the evening meeting will be held. Those of you who plan to stay over for the three days, motels convenient to the Convention site are available.

## *— CAL TROWBRIDGE*

An invitation to attend the Convention has gone out by several of the members of working committees during the last two months. May I extend my personal invitation as your National Flower Show Chairman to attend this National affair.

Friday night, August 12th, will be preview night where we will have a preview showing and good old-fashioned get-together. We always look forward to this informal gathering because we meet some of the old gang that perhaps we haven't seen for a year or more. Saturday morning the doors are open to the general public. The afternoon will find us in a business meeting.

A highlight of the Convention will be the evening meeting where the awards are presented to those winners of the competitive show. The installation of officers, for those who will hold and guide the destiny of the Society for the next year. Rounding out the evening, The BEGONIAN editor, Mr. Gordon Baker Lloyd will be the featured speaker. Mr. Lloyd's subject will be, My Garden and I, a most interesting title and a talk you will not want to miss.

Interest is mounting hourly, so get aboard and head for Redondo.

# Clayton M. Kelly Seed Fund

The following new seed are offered for your selection. Some of these varieties are scarce and hard to find, therefore the pack ets will be small. No. 1 B. aborensis Var. Rare and unusual Rhizomatous species, native in Himalaya. Leaves are large, twisted, variegated glossy-green. Flowers are numerous, clear pink and are about one and one-half inches across. No. 2  $B_r$ Griffithi. Rex type, small, leaves heartshaped, olive green. Flowers are white, outer petals pink. Outstanding. No. 3 B. Evansiana. Alba and rosea mixed. Asiatic species. Hardy. Grows to one foot or more tall; the stems are erect, and bubils form in the leaf axils. If grown in the open ground, the bubils will drop to the ground and new plants will spring up. This is a very hardy and practical Begonia to grow with ferns or tropicals. No. 4 B. American rex hybrids. Mixture of many ornamentalleaved rex Begonias. New seed from a famous greenhouse. Sow thinly. Above collection 4 packets for \$1.00.

During the past few months we have received many Begonia seed from India. Some of them are not grown to any great extent in this country, therefore we were not able to list descriptions of them. They are all outstanding varieties and will make a nice addition to any collection. They are as follows: No. 1 B. Cathcarti; No. 2 B. Flava laciniata; No. 3 B. India spotted; No. 4 B. megaptera; No. 5 B. Bowringiana; No. 6 B. India species. The above six varieties may be purchased for \$1.00.

The list of fern spores we offered a few months ago proved to be so successful we are repeating the offer in part as follows: No. 1 Pallea adiantioides. Maiden hair. Basket or pot culture. No. 2 Adiantum capilles veneris. Venus's hair. Maiden hair. No. 3 Polystichum adiantiforme. Maiden hair. No. 4 Polypodium mandeanum. Basket fern. 4 packets for \$1.00. We suggest the following planting method which we have found successful. Plant spores in a large wide mouth jar with a tight cover which should remain closed during germination. Planting medium should be damp, well decomposed leaf mold to which a *little* soil sulphur has been added. Jars should be kept where they are undisturbed. As soon as plants are large enough, transplant by same method as Begonia seedlings.

Seeds of other genera are: No. 1 *Ti-bauchina bi-color*. Brazil. Handsome tropical, hairy shrub. Can be grown outdoors in

mild climates, temperate hot house or similar conditions elsewhere. Flowers are violet or reddish purple. No. 2 Tibauchina mutabilis. Brazilian tropical with variegated foliage, Culture the same as above. No. 3 Alloplectus, Gesneriaceae family, Grown in greenhouses for its colorful foliage and showy tubular flowers. No. 4 Aphelandra tetrogona, Acanthaceae family, Beautiful tropical foliage plant with scarlet flowers. Showy, No. 5 Stapaelia nobilis, South African cactus-like plant. No. 6 Bauhinia monondra, French Guiana, Orchid tree, Flowers pink streaked with purple in showy clusters. Seeds will germinate in about two weeks. No. 7 Aechmea caudata varigata. Bromeliaceae family, Strong growing plant with strikingly beautiful variegated leaves. Flowers form a large head of orange and yellow. Fresh seed from a famous California collection, No. 8 Ricinus - Red Castor bean. Fast growing bronzy red, tropical leaves. After flowering, clusters of brilliant red seed pods form. Used extensively in flower arrangements. The above 8 packets for \$2.00 or you may select any 5 for \$1.00.

We also have the following new seeds for your selection: No. 1 B. Fishers ricinifolia, Rhizomatous. Low and creeping; leaves ovate-pointed. Bright green above. Redtinged beneath. Flowers like those of B. Ricinifolia. No. 2 B. nelumbiifolia. Some times called water lily Begonia. Large rhizomatous, leaves round, peltate; not unlike a lily pad, smooth green; flowers white or pink-tinged on tall erect stems. Beautiful specimen plant for outdoors and mild climates and as a house plant elsewhere. No. 3 B. Dichroa Brazil. Low, spreading; leaves pointed, glossy green, faintly silver-spotted; flowers large, orange in dense clusters close to the stem. Beautiful house plant. No. 4 B. Mexican species No. 1494 came from Mexico with no description. The above selection is four packets for \$1.00.

SPECIAL AUGUST CLEARANCE SALE OF BEGONIA SEEDS. Our files are becoming overcrowded and in order to make room for new seeds we are offering you a real bargain. All easy to grow and have sold for a much higher price than we are offering them now. They are listed below: No. 101 Hawaiian species, No. 103 picta tuberous, No. 106 hiretella, No. 109 scandens, No. 110 Mexican species No. 38, No. 111 Mixed semperflorens, No. 112 Josephi tuberous, No. 114 leptotricha, No. 127 Everblooming semperflorens, large and dwarf, No. 129 Costa Rican species. The above collection may be purchased, ten packets for \$1.00. We cannot break the collection at this low price.

Recently we have received interesting fern spores from the Philippine Islands. We are not able to give the true botannical name on these spores but have received pressed specimens which indicate they are of the so-called maiden-hair variety. No. 1 resembles *Adiatum capilles veneris*, No. 2 has a much larger leaf and grows tall. They are both outstanding ferns. We offer the above two varieties with *Polypodium Vulgare*, a basket type, and *Polypodium Mandeanum* basket. Collection of fern spores \$1.00.

Our Australian seeds have been so popular we have secured more and have the varieties listed below: No. 1 Cassia eremoplila. Shrub with feather-like foliage. According to instructions the seeds are to be soaked in boiling water before planting. No. 2 Melaleuca elliptica, tea tree. Widely grown outdoors in milder climates for its ornamental value. Greenhouse elsewhere. No. 3 Hardenbergia monophylle rosea. Semi-climber. Popular vine with large clusters of pink flowers. No. 4 Clianthus dampieri, desert pea. Prostrate. Beautiful scarlet flowers. Soak seeds twelve hours before planting. Sow where plants are to remain. Four packets for \$1.00.

remain. Four packets for \$1.00. A MESSAGE TO THE SEED FUND PATRONS. As the year draws to a close we wish to thank you for your loyal and generous support. You have been wonderful. We will be at the National Convention in August where we will have hundreds of beautiful plants for you. We

# Your Editor's Lectures

Due to the great demand for your Editor's special "Let's Make this a Real Christmas" Show, requests must come in at once to the Editor's office. Special arrangements have been made for this show to ABS Branches only this year. It comes complete with a front house setting, with arrangements made from the garden for door, mantel, window, etc. The program is all new for the 1955 season. It is ready beginning October 15. The show was given to over 85 clubs in the season last year and is rated as one of the finest shows of its type for any home owner.

hope to see you there.

MŘS. FLORENCE GEE Seed Fund Administrator 4316 Berryman Avenue Los Angeles 66, California

# BEGONIA CONVOLVULACEA . .

Introduced from Brazil in 1853, *B. con*volvulacea is a fibrous species. The stem or stalk is very fleshy and has swollen joints where the petiole joins the stem. Roots will form from each joint along the green succulent stalk, so it is an ideal Begonia for basket culture. Especially a wire basket covered with moss where the stem may contact the moss and cling as it roots. Begonia convolvulacea, has large leaves, wider than they are long, heart shaped with a dull point. The leaf surface is medium green and very shiny.

The underside is pale green. The flowers are white and fall in large pendulous clusters with both male and female florets opening at the same time. It blooms in spring. Keep this specimen in a cool mild temperature. It will grow rapidly and make an outstanding plant. It may also be grown in a protected area as a landscape subject where it can be used as a vine. Try it in a pot with a trellis for support. It is sturdy and may be easily propagated by tip cutting or by hammer cuttings from the stalk using r swollen node section in each cutting.

The Begonian Date Book . . .

List dates here for two months in advance

EL MONTE—Pot luck dinner, Sunday, August 21, 4:00 p.m., 815 Roses Rd., San Gabriel.

GRAY'S HARBOR—5th Annual Begonian Show, August 18 and 19, Star Room of Marck Hotel, Aberdeen, Washington.

NEW ENGLAND—Sept. 10, 1-8:00 p.m. at Natick Federal Savings Bank Auditorium, 49 Main St., Natick, Mass.

# Contest Information . . .

During some of the ABS. contests, sad to say, the staff of 5 who were ready to review said contests could come up with no winners due to such few entries. In two of the contests only one entry was entered. In other contests the same thing happened. Contests in order to be judged must have competetion and must be worth judging. It is the hope of this committee that in future contests we can be of help again.

-O. S. Wilde, West Los Angeles

# Begonia Growers Ask:

Q—Please advise what causes the lower leaves of my Tuberous Begonias to turn yellow and drop off, and the remedy?

A-As the question merely indicates a condition of the lower leaves, there is no information as to the general physical appearance of the whole plant, however, when nitrogen deficiencies occur, the yellowing of the tissues occurs first in the older leaves, follows the mid-rib from the leaf tip. The tip begins to dry and the whole leaf may become involved showing an effect we often refer to as firing. This symptom is often found in sandy soils in dry weather and even in heavy soils during a prolonged hot dry period the plants become definitely starved for nitrogen and such plants may be benefited by application of nitrogen fertilizers. When plants suffer from lack of water, the tissues wither and dry out without the leaves necessarily becoming yellow. Yellowish green to yellow almost invariable indicate nitrogen deficiency. In some certain cases, however, they may be due to phosphorus deficiency. Here is one way to make a test for nitrogen deficiency. Cut out a small piece of the stalk or slice a portion of a leaf into small bits. Place these pieces in a glass vial or on a clean porcelain plate and apply a few drops of concentrated sulfuric acid containing 1 percent of diphenylamine (this can be procured from the druggist and must be used with utmost caution as it is very corrosive). If nitrates are present in the tissues a blue color is produced immediately. If no blue color results then nitrogen deficiency is indicated.

#### Q-Why won't my Semperflorens bloom? They grow but do not bloom.

A—Many over-estimate the amount of shade that is good for certain plants. Semperflorens require more light than many other types of Begonias. The answer to this problem generally lies in too little light, or too low a temperature. Most Begonias need a minimum temperature of 55 degrees and a good light position but not subjected to the full blast of the hot summer sunshine. Also too much nitrogen and lack of other balancing elements as phosphorus and potash in the soil will cause this condition.

Q—What causes the leaves of my Begonias to pucker and crack at the edges? A—This is generally indicative of potash or phosphorus starvation or both. The attendant color of the foliage would serve as a guide to which. The addition of a little super-phosphate together with sulfate or muriate of potash might help to overcome this condition.

#### Q-Is the acid food advertised for Camellias and Azaleas also suitable for Begonias?

A-(There is no reason why they should not be, provided that the same proportion of corrective ingredient is required in your particular soil. Each product has a label indicating the ingredients and at times aluminum sulfate is added to create an acid reaction and sometimes soil sulfur is used. Of the two, soil sulfur is to be preferred. The main thing to remember is to apply sparingly rather than in abundance, and only at a time when growth is active and the temperature and moisture correct. Remember that most growth becomes inactive under extremes of temperatures either heat or cold. Begonias generally prefer food from organic sources and diluted liquid cow manure is still the most favorable. If the plants are potted, do not feed until the pot is well filled with roots.

#### Q—My bulbs are growing well but the buds are falling off and the cases seem to be empty?

A—The inquiry does not state what the bulbs are, however, when the foliage of the bulbs is apparently abundant and the color satisfactory, and the flower stem produces only empty cases, a nutrient deficiency is indicated. This may be due to poor soil and insufficient pre-preparation.

The soil may be well supplied with nitrogen but low in available potash and phosphates. The bulbs could have been planted too close to one another, crowding causing too much competition for food. These bulbs were moved and transported across country and if they were moved at a time before they were fully ripened and matured, this too would have considerable effect upon their subsequent behavior.

Unless the soil is naturally rich, a thorough preparation recommended is to dig out eighteen inches and place a layer of six to eight inches of well-rotted manure together with a generous supply of bone meal. Cover this with virgin soil and plant

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the bulbs the recommended depth on virgin soil or clean washed sand and cover with soil free from any fertilizer. Drainage must of course be perfect.

Q—Please tell me how to grow "Cathay-ana?"

A—The answer to this question may fit most varieties if applied individually. Cathayana is of Chinese origin and although it originates in an altitude of about 5,000 feet the district is fairly warm and the moisture quite heavy. Many people make the error of not carrying on the cultural conditions as they existed at the location from whence the plant came. It is imperative to know the extent of the root growth in the pot and treat the application of water accordingly. This plant suffers a shock when watered with cold water the temperature of which varies much or little with the temperature of the atmosphere in which it is kept. If properly potted no feeding should be necessary until the pot is full of roots. This plant also will not tolerate the full rays of the sun but will easily scorch.

Q—Why are cuttings of macbethi, Weltoniensis dregei, richardsian<sup>a</sup>, and the like *l*:ard to root?

A—All leafmold, no matter what the source, is good for the promotion of plant growth. It is nature giving back food material that it has taken from the soil and stored up for future use. The danger lies in it being diseased, and one should know the history of the crop from which the leaves have originated. All leafmold is acid in its rawer state, the acidity diminishing as decomposition advances. Pine needles are very acid but take a longer time to decompose than the broader leaves.

Q—Why are cuttings of McBethi, Weltoniensis Dregei, Richardsiana, and the like hard to root?

A—These are of the semi-tuberous kinds and are of African origin and came from parts as far south as the Cope of Good Hope to as far north as the Island of Socotra near the Gulf of Aden in the Indian Ocean. Warmth and atmosphere moisture are necessary. I find most failures come from a lack of these two requisites combined, very definitely, with improper care as to preparation of the rooting medium. If sand is used, and it is generally considered as the best rooting medium, it should be of a grade generally known as a plaster sand, drainage is good and yet is not so coarse that it will not pack snugly around the stem when inserted. All sand should be thoroughly washed to be sure that all dirt particles, as far as is possible, are floated free from the sand. An additional precaution would be to sterilize the washed sand in one of the prescribed ways. The next consideration is the time at which the cuttings are taken, the type of cutting taken and the condition of the plant from which the cutting is taken. Late winter and spring are generally acceded to be the best times to take cuttings. Tip cuttings with three to five leaves, and the base cut having a heel of semi-hard wood. To reduce transpiration to a minimum is most important and of course this calls for a covered container which will conserve the humidity in the surrounding air. If glass is used and the under surface shows moisture, the cover should be raised a little to refresh the air. An even temperature should be maintained and when watering becomes necessary for the rooting medium, use water at room temperature of the air in which the cuttings are being grown.

Q-What to do with lanky, soft-stemmed Begonias?

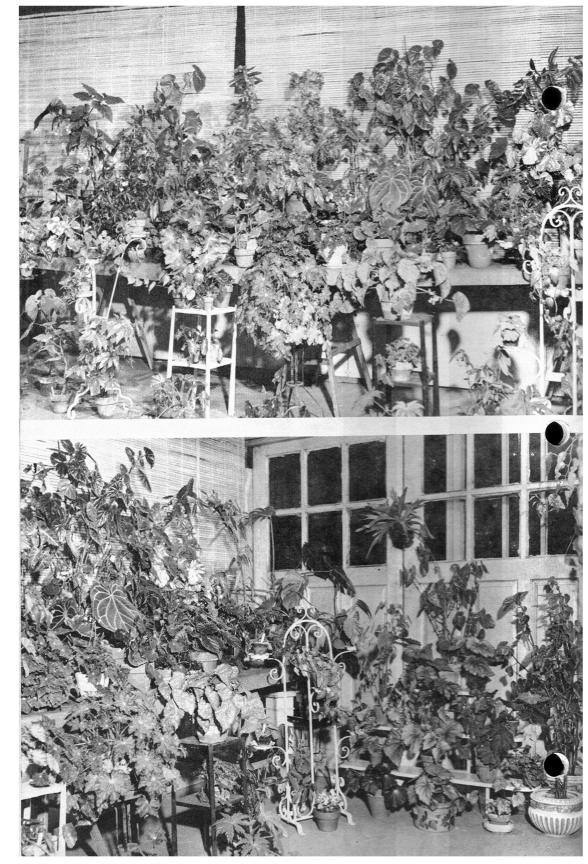
A—A lanky, soft-stemmed Begonia, or any herbaceous perennial is an indication of one or several factors, viz., too little light or too much nitrogen or both. Prevention is always preferable to a cure. The cure is of course to give strict attention to location. A little more filtered light is of more importance than too much shade. Drafts must be avoided or corrected. Cut your plant back and when new growth starts and has advanced to reasonable height, start pinching out the center not only of the main stem but also of the laterals forcing each branch to throw out more laterals.

If excess nitrogen is indicated stouter stems may be encouraged by the application of a little superphosphate and muriate or sulphate of potash.

Q-Do different Begonias excepting semitubers have different periods of dormancy?

A—Yes. Some South Africans and Socotrana types rest during the summer. A good many require partial rest following the period of bloom and some continue growth the year round. It must be remembered that Begonias originate from many quart-

-Continued on Page 178



# THE MEMBERS ASK ... AND SAY ...

-Headed by SAM COOKE

Will Amy Breshears follow up by further details her article on Begonia leaf propagation, May 1955 and further details as to what Begonia varieties she has succeeded in propagating from leaves; why she starts with water and transfers to a different medium rather than sand, etc. from the beginning. — Request by Mary Drew, William Penn Branch.

How about someone giving me a list of Begonias that will bloom each month of the year in our area in a fine sunny attached glass house to our sun room—Mrs. Close, La Cresenta.

What is the latest book on Begonia growing?—Richard Sale, Dallas.

# $\leftarrow \parallel \parallel$

Elsa Fort, Eostern Chairman of ABS Public Relations sends to us these two fine pictures of their show of June 2 and 3 taken by Ralph Holtsizer of Darby, Penn. Hats off to this fine Philobegonia Branch. These pictures may give some of the rest of us ideas on how to arrange Begonias in shows. If all branches all over the country to add to any flower show a Begonia division—or to any type of community show, it would not be long before the ABS would be known by any lover of flowers.

# New Planters . . .

Every indoor gardener has hoped that someone would come along and make a perfect planter for growing any type of indoor plant . . . good looking and horticulturaly designed.

Begonian readers will be glad to know that one of the supporters of begonia growing has brought out a group of planters pictured below, for the purpose of growing better indoor plants.

These planters, both glazed and partially unglazed, have been designed for long root areas; bottom or top watering; and most of all, proper air circulation throughout the planter.

They have been approved by several violet societies and carry approval of the Begonian editor, who has done a great deal of testing and work with them. These planters will be shown at the Begonia Convention and should atract a great deal of attention.

For more information on them. write Ro-tainers, their name, in care of The Begonian. Tests have shown that they will water easier; hold moisture longer than any planters now on the market. They are priced right which should make them popular with all Begonia growers everywhere.



# Begonia Show

The Whittier Begonia branch's booth won first prize in the "Shady and Cool" Division at the Whittier Community Beautiful Show held at the Walter Dexter School in Whittier.

The Community Beautiful Show is an annual event and entries from each of Whittier's garden clubs compete for awards in the various divisions. With a long record of winners in this show, Whittier's Begonia group were happy to be honored again this year with the award of a blue ribbon.

The booth committee consisted of William Spitz, President of the branch; Ann Rose, Peggy McGrath, and Edna Hill. Gladys Holmes was chairman of the committee.

Whittier is noted for its several very active garden clubs and an award over the competition presented by the displays represents a real achievement.

> Submitted by GLADYS HOLMES, Show Chairman 11143 Aldrich St., Whittier, Calif.

# "Why I Belong ...."

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iness and rigamarole. Our branch has participated in town plantings, in hospital help with boquets and flowers; in flower shows; even in all types of civic shows and events, we have been there—until now we are recognized as the leading group in beautification for our town . . . and we get plugs for begonias too!

I belong to a group of people who, like the plants they tender, are concerned in doing little things to make life easier. Just like we do little things that make them grow, so we in turn do little things for our families, our neighbors, and our community.

What we are doing will never make headlines, but they make happiness lines in the faces of our friends, they will never be written up in a leather bound book, but written forever in memory.

The smiles I get, the slips given to me, the fun I have—at our Begonia Branch meeting—make me glad and proud to be a member of the ABS.

Yes these are the reasons why "I belong"

# Correction . . .

The Flower Show Preview, Friday, August 12, should be from 7:00 to 9:00 p.m. instead of from 5 to 7 as stated in the July Issue of THE BEGONIAN.



# Tuberous Begonia Culture . . .

- Reported by WILLIAM DAMEROW, San Francisco Branch

The members of the San Francisco Branch recently were privileged to hear Mr. Todd Gresham, chief hybridizer for Vetterle & Reinelt. He is also in charge of all departments of proprogation of tuberous Begonias for these world famous growers. His interesting talk was very informative, and all of the local "experts" learned a lot about the culture of tuberous Begonias. To assist in his demonstrations, he had two beautiful specimens of his hybridizing plants with large perfect blooms, and a number of cut blooms in individual containers. In substance, the highlights of his talk were:

"The culture of tuberous Begonias can be divided into a 12 month cycle, with a good starting place being the breaking of the dormant period, about February 15th. Earlier starting is not advisable, as the tubers should complete their dormant period, and only those tubers which have started to sprout are selected for starting at that time. Those still dormant are not started until a sprout appears. The best starting medium is coarse oak or madrone leaf mold. This should not be ground or pulverized but should be used as received. This leafmold is placed in nursery flats or boxes not over 3 inches deep. The tubers have three rooting surfaces, bottom, sides and top. Merely laying tubers on the starting medium eliminates all but the bottom roots, and the top of the tuber will grow hard and scaly in an effort to conserve moisture. Therefor the tubers should be completely covered by the leafmold so that no surface is visible, and at least  $\frac{1}{4}$ inch covering on top. With this coarse leafmold, it is practically impossible to overwater the flats of tubers. As growth starts, the flats should be in strong direct light to keep the plants stocky and compact. Insufficient light will cause the plants to become leggy and drawn out. This method of starting in coarse leafmold causes the development of a heavy root system, and this is essential for good plants.

The plants are ready for potting when the first two leaves which develop have reached equal size. The potting mixture is best kept simple, and a mixture of two thirds leafmold and one third sand is good. Do not mix steer manure or other fertilizer in this medium prior to potting. The use of pots gives easier control, as the shift of a few feet in location often means the difference between a good or poor plant. Fern pots are best, with a 9" being large enough for any Begonia, and 8" being about right for the smaller tubers. When potting, layer in one handful of fish meal in the bottom two thirds of the pot, sprinkling it in from the bottom to the top of the potting medium. This gives a sheen to the foliage which is not obtained by other fertilizers.

As soon as growth starts, use supplemental feedings. It is important that these feedings be started early, as this tends to help develop a heavy plant stalk at the point of attachment to the tuber. If undernourished at this stage, the stem attachment to the tuber will be weak, and there is danger of it breaking off at the tuber. For this supplemental feeding use a liquid fish emulsion and California Liquid Fertilizer 8-8-4. These can be used in mixture or at alternate feedings, at intervals of a week or ten days. At one time it was thought that a handful of fishmeal was sufficient to carry a Begonia plant through the season, but experiments have proven that better results are obtained with frequent supplemental feedings. After the plants produce their first large blossoms, fish emulsion and California Liquid Fertilizer 2-10-10 is used for additional feedings throughout the remainder of the growing season. Underfed plants do not have the energy necessary to form good tubers, and as a result second year tubers sometimes do not develop full petaled blossoms. Begonias do not revert unless they are mistreated.

As plants come into bloom they should be staked and tied with twistems, the plastic type being preferred. This is better than using raffia.

Begonias are comparatively free from diseases and pests, but powdery mildew has

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Easy Gardening..

# - By GORDON BAKER LLOYD

## Lesson 6 — "THE WHY OF SHADE SOIL

Now that we have gone through some of the basic fundamentals on soil and the need for good soil, let's dive right into the application of these principles in our shade gardening.

#### IN TWO PARTS THE GARDEN

If we could divide our garden soil wise into two kinds of soil, we might do a better job of overall gardening. By this I mean, realize that the shade garden takes a different soil than the sun

garden. The shade plants are botanically different. They require a different medium in which to grow than the more hardy, stronger rooted sun lovers.

SHADE I wouldn't want to say that all plants that grow in shade have different roots ROOTS than those in the sun garden, but on a general survey we can safely say that their roots are fine and fibrous. Their roots must move easily in the

soil with no restriction. Their roots must never go to dry extremes. Their roots must have good air circulation. To get this type of area for the roots we then build a type of soil that will give this condition.

INDIVIDUAL<br/>SOILWhat has puzzled me a great many times is this type of a garden—<br/>the shade gardener wants to grow some Begonias, Fuchsias, Camel-<br/>lias, Ferns, and Stroptocarpus. Each plant has much material written<br/>about it, and most of them have societies that feature special plants,

just like the Begonia Society. In reading up about each plant the beginner gardener finds a special growing formula for each one. As each plant or group is planted a hole is dug and into each hole goes the special formula.

What happens now if the Camellia roots grow over into the Begonia formula, or the Fern roots grow into the Fuchsia formula? Now don't laugh, for this is done by a lot of folks—and once I did it too! Here is the point I am trying to make. Now we are first talking about the garden outside. If I was a grower of only one type a plant, I would then no doubt try this formula and that, and even develop one of my own. As I did this and folks saw my garden they would want the mix I used too, and I would give it to them. But are we such extreme specialists? Even with our Begonias in greater number in our gardens we want to grow background materials, use new edging, and so on. Is there then something that we can do in the overall picture in which all shade plants will do well?

Another thing we may as well mention is that plants put into little homes of formulas never do as well as those planted in beds of mix that have been prepared over a wide area. Roots never want to be confined to one spot in an outdoor bed because they don't grow that way in their natural habitat and plants don't grow that way best in any outdoor soil.

OVER-ALL<br/>FORMULATests for many years have shown that a shade plant of nearly any<br/>kind can be grown in a soil of the proportions of two thirds organic<br/>matter and a third of the native soil. Boiling this down still further,<br/>1 part each of leaf mold or compost; peat moss or like material; and<br/>the soil in the garden will do the job. This will grow Camellias, Azaleas and Begonias<br/>equally well.

HOW DEEP Any shade garden on the shade side of the house, in the lath house or in THE SOIL? the floor of the glass house, must have well drained soil, or a well drained area out from the heavy soil. Shade plants grow best in soil two feet or even more in depth. If the soil is heavy, clay or adobe, use that soil in the mix as 1 of the equal parts. To this heavy soil add some sand and hence into the mix. Even then don't depend upon the sand entirely for drainage. It would still be better to drain out with a soil pipe going to a sump, or to extend with a post hole digger holes three or more feet in depth from the bottom of the bed. These can be filled with gravel to carry away excess water. In sandy, loamy or rocky soil this is not needed.

When drainage is solved, try then to dig up the entire shade bed and do it in the proportions suggested. If it cannot be done at once, do it for the more permanent plants and do the rest later. If this is too hard, do it for the shallow rooted plants or foreground plants first. But try to do it—remembering that its work to start with, but will stay with you for 15 or more years and never have to be touched.

This type of bed with humus added to it each year in the form of mulches will never wear out. That will not only cut on your time involved in redoing beds but will save money in the long run by easier and cheaper maintenance. I have seen wonderful shade beds at only 18 inches in depth.

The point is that we want a bed to cover the entire area in shade gardening, not individual holes, and that we want to be able to grow all types of plants there without having to change a formula for each one.

MOISTURE Part of the reason for a special type of soil preparation for the shade HOLDING garden is to hold moisture—evenly. I cannot stress too much the fact that the shade garden does not need necessarily more water—but it needs to hold the water longer and more evenly. Our shade plants cannot run the range from dry to wet, back and forth over and over again. Do that on a Begonia and what do we have? Leaves drop, blooms drop, results—sick plants. In watering this shade garden, the right shade soil will let water penetrate deeper and hold it longer. This deeper watering will make roots go deeper which will come to a good use if the plants get any neglect. Roots down deep will not be effected so much by temperature changes above.

In the natural condition of most of our shade plants the soils were rententive of moisture and were always damp. Not swampy, but damp like a wrung out dishrag. Since we don't have that type of soil in most of our gardens, we must build it.

This type of soil will also tend to surround the air with moisture, giving the right amount of humidity we need in many of our shade gardens.

AIR INTO Back in our lessons we went into detail a bit about needed air in the root area. The plants of the shade garden especially need this. Take air out of the roots of a pot of Begonias and they soon become sick. This is true in the soil itself. These plants have roots that must have air circulating 6 to 8 inches deep every 3 or 4 hours. Only a loose soil can do this.

PH FACTOR This type of highly organic soil will help to give the shade plants the acid condition they like, or rather, shall we say, will keep them away from touches of alkalinity that they abhor. In some of our areas even this special soil will not be enough to keep them in the 5.5 to 6.0 Ph, but it will help.

THE SHADE GARDEN IS NOT BUILT OVERNIGHT You can do the work quickly and get it over with—that may be easy. But the ingredients are not going to be joined together and function at once. Even the use of the best peat for moisture and for humus qualities, and the best compost,

and your best soil, will all take time to unite and begin functioning as "old soil." Bacteria begin work shortly, and physical aspects seem to work at once, but be patient. Its like an old mellowed pot mixture. No comparison at all to a freshly mixed one. The shade areas of the woods and habitats of our plants are not over-night functions, but have been there for hundreds of years and centuries of time have given them their physical condition.

I have found it most practical to build my shade area, let it set, keeping evenly wet for at least a month. Planting it then makes all the difference in the world.

Next time: "SOILS FOR POTS AND CONTAINERS"

AUGUST, 1955

# Glass House Gardening for A YEAR-ROUND WORK PROGRAM . . .

# JANUARY

- SOW SEED: Fibrous and tuberous Begonias. Also Cinerarias, Coleus, Schizanthus, Streptocarpus.
- START TUBERS: Root tuberous Begonias in peat moss or half sand and one-half peat. Start Gloxinia and yellow Callas.
- START CUTTINGS: Start cuttings of any house plants such as Philodendrons, Peperomias, etc.
- OTHER WORK: Watch temperature and still maintain good air. Water in morning to prevent fungus diseases that come with warm house and cool soil.

# FEBRUARY

- SOW SEED: Cyclamen, Gloxinia.
- TRANSPLANTING: "prick out" the seedlings sown last month. Move them into separate pots, small thumb pots, or into flats about 2 inches apart when they have first two true leaves. (this is the third and fourth leaf to appear). Transplant with one of the shock removing vitamin solutions.
- TUBERS TO START: Caladium, Tuberous Begonia.
- START CUTTINGS: Use half sand and half peat or straight coarse sand for cuttings of Bouvardia, Ficus, Stephanotis.
- OTHER WORK: Any plants that are beginning to grow from cuttings or from previous plantings should have a starter solution which is a very weak solution of a complete plant food. Put on every two weeks in liquid form. Most dry complete foods can be dissolved and should be used the same way.

## MARCH

SOW SEED: Lobelia, Campanulas.

- TRANSPLANT: Any January sown seedlings that have been moved to flat or small thumb pots may now be ready to be moved on into larger pots for either bloom in the glass house or to be planted outside when danger of frost is past.
- TUBER CARE: Check how tubers have sprouted. Begonia tubers can go into 4 inch pots when sprouted with leaves two inches high. Plant tuber with sprouts at

surface level. Begin feeding when established with liquid food twice monthly to once monthly. Do same for Gloximia and other tubers ready to move into pots.

- START CUTTINGS: Make cuttings of Fuchsias, Hydrangeas. Cuttings will start easier by a slight dip into one of the popular hormone powders. Cuttings of Fuchsias and Hydrangeas are best made from tip wood.
- OTHER WORK: All pots that are growing well can be fed regularly as schedule suggests until buds show color. Long bloomers can be fed monthly during bloom if soution is very weak. If weather begins to get hot or warm and glary fix cover for glass house. This can be special paint, lath cover or use of new reed fencing in the 50 percent type. Bugs begin to arrive during warm weather and land on new tips first. Have controls handy for all types of insects using one of the popular all purpose sprays or dusts. Home gardeners should keep away from any poisonous sprays until well proven. Pest control that begins at first sign of insects or diseases will never have to be radical or dangerous in use.

# APRIL

- SOW SEED: Impatiens, shade vines, Ageratum.
- TRANSPLANTING: Pot up rooted cuttings. Watch them for pinching so that they form bushy plants. Transplant any seeds sown last month. Tuberous Begonias and several other started shade plants can be moved into the garden in many areas. Also begin work on transplanting into hanging baskets and other containers for lath house or porches.
- START CUTTINGS: Fibrous Begonias can be started nearly any time under good glass conditions, but normally now is the best time. Any lanky Begonias cut back for cuttings. Make cuttings of tip growth of Coleus.
- OTHER WORK: As warm weather comes begin to check methods of ventilation and humidification. Be sure your guide for humidity is in good shape. Install Aqua-save for proper humidity. Check all present humidifiers if house is already equipped. Check drying out of pots, seed

flats and cutting bed. Begin staking some of the taller plants. Stakes put in early save damage later and early staking gives a better shaped plant for it can grow around stake.

## MAY

- SOW SEED: Sowing seed now of Cyclamen and Gloxinia will give you bloom from them in December and January. Sow seed also of Campanulas, Calceolaria, Columbine and Foxglove.
- START CUTTINGS: Azalea, Camellia, Begonias.Tip cuttings are made of all of these. Leave enough leaves in cutting to help in faster rooting. Leaves that touch the mix should be removed. Do not cut any of the leaves in half. Azaleas and Camellias will root in 6 to 8 weeks in the glass house normally.
- OTHER WORK: Many of the tropical plants you have in the glass house that may be taking up too much room due to extra work with seeds and cuttings can be moved to the shady patio, lath house, porch, etc. Be sure the area into which they are moved is sheltered from wind. Some areas might still have a frost so check before moving out.

## JUNE

- SOW SEED: Anemones, Cineraria for late bloom, Primroses for winter bloom. Torenia for edging and hanging baskets.
- START CUTTINGS: Tip cuttings of the tender wood of Daphne, Aucuba, Gardenia, Rhododendron, Skimmia.
- OTHER WORK: Keep on with regular feeding. Nearly all the plants that are in the way can be moved out this month. Watch glass house for poor ventiliation. Better ventiliation can be gotten through door areas, under benches and cross ventiliation in roof. From now on throughout the hot weather keep walks damp. Try using pea gravel or lava from Hawaii for walks. Syringe leaves of plants daily and check regularly for watering needs of potted materials.

## JULY

SOW SEED: Anchusa, Cineraria, Cyclamen, Pansy and all the Primroses. OTHER WORK: Container plants dry out

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quickly as weather begins to warm. Some may need to be watered twice daily. Slugs and snails begin their work. Try the new snail tape to put around bench legs. Apply snail bait throughout ground area. In your feeding program, even with liquid food, have potted materials damp before feeding. This will avoid any burn in roots for sure. If house begins to get too hot, experiment with forced draft with fan through mist. Better still get a special fan and humidifier combination. They are worth it for the glass house grower. Check your temperature daily and don't let the house get above 80. A slightly cool house will grow better plants.

# AUGUST

OTHER WORK: Mildew, during hot and humid August, runs rampant. Spray with best control available at first signs. Continue watering in the morning to fight mildew. Watch your flat of seedlings to see that they don't dry out. Twice or three times a day watering may be needed.

## SEPTEMBER

SOW SEED: Calceolaria, gloxinia.

- CUTTINGS TO MAKE: African violets, various foliage plants.
- OTHER WORK: Any rooted summer cuttings want to be potted now. Before the rains start in some areas, get potting soils together for winter work. Any tropicals you have outside in the patio should be cleaned up of the dead leaves, repotted if needed and brought inside to strong light. Most areas will need the glass house reduced in humidity. If rains in the East do not take off paint on glass, it had better be washed off. Remove glass covers as sun begins to lose its force.

## OCTOBER

OTHER WORK: This is the time that in colder areas, Begonias, Fuchsias, must come inside. Any plants brought in should be checked for pests. This is a good time to go over before winter gets started in force, the entire glass house with a spray to kill eggs and any final insects. In the cutting bed part of the —Continued on Page 178

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# Begonia Growers Ask . . .

-Continued from Page 169

ers of the globe and their native state may have the exact reverse of seasons to the seasons into which they have been transported. Consequently a little research into the origin of your plant will pay dividends.

#### Q-Is there any particular type of tuberous Begonia (not semi-tuberous) easier to grow than another type?

A—No. I do not think so. All tubers require certain conditions. Immediately the tuber shows indications of new growth, they should be so placed that top growth is discouraged while root growth is encouraged. This is achieved by placing the tubers in a growing medium and away from strong light and in a cool temperature.

## Q-Is tobacco dust harmful to Begonias when mixed with the soil for potting?

A—No. Unless used in excessive quantities. Remember a little less is always better than a little too much. Plants when in pots must be treated with more consideration to the effects of accumulated salts after each watering especially after re-potting when the pot is not filled with plant roots. Tobacco dust is a good disinfectant and pest repellant, it also contains some nitrogen and potash.

# Q—What is the proper name for a Begonia known here as "Indian Spotted"?

A—Records show Begonia *deliciosa* as the true name for this species. It was introduced from Borneo in 1880. It is classed as rhizomatous, as the rhizome hides just beneath the soil surface. Flowers are pale pink and it blooms in summer and autumn

Q-I have a B. Reichenheimi that sheds most of its leaves and the stem curls around the inside rim of the pot. It is a young plant, can you tell me what the trouble is and the correction?

A—It is the habit of this hybrid to drop some foliage prior to blooming. Keep in a shallow pot and withold water until plant is almost completely dry before rewatering. The curl of the large rhizome is also a natural tendency of the plant and is considered one of the identifying marks of this beautiful Begonia.

Q-What is the culture of Begonia Venosa?

A—This Begonia was found on an island near the Brazilian coast and is unusual in its structure. Due to the dry, persistent large stipules and the heavy tomentum covering the leaves, it requires less moisture than most Begonias. When grown in the shade, this plant has greyish green leaves; given morning and late afternoon sun the leaves appear almost white. Refrain from overwatering this Begonia during the winter season, and keep only slightly moist in summer. Use a medium light soil and allow for excellent drainage. One way to assure good growing conditions and drainage is to place pot on small blocks.

# Year-Around Program . . .

-Continued from Page 177

house, put in cable for bottom heat to do a better job of rooting cuttings in cooler weather. Any last minute transplanting into pots should be done before bringing them in for the winter.

# NOVEMBER

OTHER WORK: Watch for ants as they come into a warm greenhouse. Any plants not in active growth should no longer be fed. Get flat mixes ready for sowing. The longer the mix can settle. keeping barely damp, the better the mix will be come time to use.

# DECEMBER

OTHER WORK: Watch for damp humid stagant air. In hot greenhouses with area damp this may happen. This condition brings on the dreaded damping off when both seeds and seedlings are killed. Aphis may be coming on new growth of plants, along with mealybugs. Pinch out any house plants, or other plants that have become leggy. Get ready to plant tuberous Begonias and seeds next month. Place orders now for tubers you want. Get labels ready. Look over mistakes and records of year to improve times of sowing, soil mixes, watering and other greenhouse habits. Resolve to get more members for the ABS!

# A Study In Hybridizing .

# -By LOUISE SCHWERDTFEGER, Santa Barbara, Calif.

With Bessie Buxton's book "Begonias and those that are being discovered each year, How to Grow Them" as my encyclopedia, THE BEGONIAN as my text books, and the acquaintance of a few Begonia Hybridists, I have been making a study of hybridizing and will endeavor to give you a summary of the facts that I have gathered. It is for the Begonia grower who has never ventured into this interesting phase of working with Begonias that I write this, in hopes that he will become enthused and devote some of his time to the fascinating work of hybridizing Begonias.

To cross-pollinate, develop and prove new plants takes time and patience not to mention the work connected with it. The nurserymen of today, being successful business men serving the public have little time to develop new hybrids and they rely on the individual grower and the amateur to spend the time and take the patience to produce new and outstanding plants with which to enlarge their stock. Of course there is the exception and we have a few Begonia-nurserymen who have worked hard to give us some of our beautiful hybrids, and their untiring labor is to be commended. Yet even they express the need for more enthusiasts who will do the work of hybridizing. It is true that the beginner has the same chance as the expert to find a worthy plant among his hybrids. It then stands as a challenge to each Begonia grower and especially to those in California, where it is not difficult to ripen the seed, to take up the work of hybridizing.

Hybridists have worked with tuberous Begonias until many new wonders have been developed and each year seems to bring some new type that fairly takes our breath away. I can imagine the day is not far off where all tuberous Begonias will not only give us beauty of form and riot of color, but they will also fill our gardens with delightful fragrance.

In comparison with the work that has been accomplished with the tuberous group we find only too few new hybrids among our fibrous and rhizomatous Begonias, with the rex as the exception. Of the numerous species that we have within our reach and

there are only a few that have been used to any extent in hybridizing. What then about the others? Surely among them lies dormant the power of creating new and wondrous hybrids. The field of hybridization lies open and with so much work to be done, it beckons enticingly to each individual Begonia grower. To produce and develop a new Begonia hybrid seems a goal well worth the striving.

If you have a natural urge to hybridize and cross-pollinate, or whether you do the work with premeditated plans, there are a few certain rules that nature has laid down for your consideration when you choose the parents for your new Begonia child. The plant chosen to be the mother must be productive and able to retain the seed-pod until the seed has matured. To find the productive mother plant you may choose one which has already been proven or you may find it by experimenting. The paternal plant from which you are to obtain the pollen must also be considered, for there are among Begonias, plants which are sterile. It is somewhat easier to find the productive male blossom for they are judged by the amount of pollen that they release.

The main objectives in cross-pollinating your Begonias may be listed as follows: 1. To improve the formation of the plant as was accomplished when B. evansiana was crossed with a *Rex*, giving a more upright plant and one which branched freely. 2. For the shape or the color of the leaves as in the cross of B. caroliniafolia and B. liebmanni in producing the Silver Star. 3. To aid and prolong the flowering ability as *B. socotrana* and *B. Rex*, ably shown in the hybrid "It." 4. For sturdiness in plant growth as when the numerous crosses of B. dicroa were developed. 5. For difference in the size or shape of the leaf as in the development of the miniature rexes by using B. Dregei, or in obtaining the various spiral rexes by using a spiral for one parent or both. 6. To produce a hanging Be-gonia as Marjorie Daw, when B. coccinea was used with B. Limminghei (B. glaucophylla); or the hybrid B. Elsie M. Frey, a result of B. Baumanni, and Limminghei. 7.

To intensify the fragrance as in Wild Rose, a tuberous cross of 1041 (a species) and B. Baumanni, or in the delightfully fragrant Orange Sweety, a tuberous hybrid hanging type.

Since 1856 when the first rex was sent to Europe from Assam, India, rexes have been used as parents to such an extent by hybridists that our modern rex has very little true rex "blood" left. Species from Begonia haunts of far distant lands have been used in crossing the rexes and in the past few years to such an extent that we now have rex hybrids so beautiful that we sometimes wonder what the early hybridizer could find so interesting in his new crosses as to introduce them to the world as outstanding plants. Although we find a few such plants as the helix or spiral type introduced in France in 1884, to become the foundation of our modern curly rex; and the B. Arthur Mallet, a hybrid of B. subpeltata and B. rex, also produced in France in 1885, that has withstood the years and is still one of the most colorful plants in existence.

To give you an idea of the various species that have been used in rex hybridizing we have: *B. Dregei* from South Africa, *B. Diadema* from Borneo, *B. evansiana* from China, *B. Cathayana* also from China, *B. Picta* from India, "India Spotted" and other species from India, *B. imperialis* and *B. Sunderbruchi* from Mexico, and perhaps others. I contend that if just a few of the Begonia species have done so much for the rex Begonia—then the field of hybridizing that lies before us must be vast indeed.

Working with the fibrous and rhizomatous types, we find the twentieth century hybridist has used *B. lucerna*, *B. scharffiana*, *B. metallica*, *B. strigillosa*, *B. Limminghei*, *B. Dregei*, *B. Sutherlandi*, *B. Imperialis*, *B. dicroa*, *B. heracleifolia*, *B. fuchsioides*, *B. manicata*, *B. caroliniaefolia* and only a few others to produce so many of our fine outstanding varieties of today. So with the wealth of species and hybrids that we have at hand, choose two to be the parents of your new hybrids and give the world new plants to enjoy.

Having decided on the parents you may proceed to pollinate. The best time to do this is in the late morning or early afternoon. It is at this time that the pollen is usually freed of the anthers of the male blossom and the stigma of the female flower is ready to receive the pollen. Begonias, being plants with imperfect flowers,

bear two sorts of blossoms, the staminate, those having stamens only and the other, the pistillate, having pistils, which ripen seed only when fertilized by pollen from the staminate or male flower. It is not hard to distinguish the male from the female blossom as it is the female that holds the ovary or seed-pod back of its petals. There are various ways of transferring the pollen to the stigma of the female flower, one of the easiest is to pick the male flower, fold back the petals and using it as nature's brush, gently draw it over the stigma of the female blossom. It is extremely important that you mark the flower holding the fertilized seed-pod. A whisp of colored thread tied to its stem and a marker stick placed beside the plant can be used. For a permenent record also make a note of the cross in a record book. It is customary to name the mother plant that holds the seed-pod before the name of the plant that has supplied the pollen, thus, with pollen from B. scharffiana and B. metallica to hold the seed-pod, you would mark your hybrid B. metallica x B. scharffiana.

Sometimes if you wish to use a certain male flower whose pollen refuses to release you may lay the flower in a dry place and in a matter of a few days if it is not a sterile blossom the pollen will be available. Always place the pollen on a freshly opened female flower as the styles leading from the pistils to the ovary or seed-pod are sure to be open.

After the flower has been pollinated and become impregnated the petals will fall within the first few days and then it is a matter of watchful waiting until the seed-pod has ripened. There seems to be considerable variation in the length of time until the pod is ready to pick. The seed-pod generally ripens on the plant yet seed has been known to germinate from pods that were not completely dry when they fell from the plant or were picked. It is best to leave the pod on the plant as long as possible. The seed in the pod has reached maturity when the stem holding the pod has dried and may be picked and laid in a dry place until the seed too has become completely dry.

Keep the seed-pods dry when watering your plant as water sometimes starts the pod to deteriorate and the seed is then lost. Keep your seed-pod well recorded. Never lose its identity for who knows but it may contain the minute seed that will —Continued on Page 190

# Let's Spray Right . . .

# - By LOUISE CRAMER, San Diego Branch

Anyone who uses any spray should follow exactly the directions on the bottle. Some sprays are injurious to human beings when used improperly by allowing the spray to remain on the skin or by breathing the vapors in an enclosed area. Never spray into the wind. With spray follow the dilution table, because when 1 teaspoon is advised, don't take it for granted that a tablespoonful is better, and then blame the spray manufacturer if the leaves of your plants curl and burn.

Sprays have been tested under government supervision for many years before they are put on the market and the entomologists know what effect they will have on garden pests. Now it is up to the gardener to apply the spray properly and at the right time. One application may kill the pest visible at the time of spraying, but don't forget there are thousands of eggs ready to hatch and many tiny babies in various stages of development. To control this cycle of insect life, the spraying must be repeated two or three times at frequent intervals. Control may then be maintained at monthly spraying intervals.

Spot spraying is really a waste of time and money as the pests from unsprayed areas will move in to their succulent favorites. When spraying, spray on top and underneath the leaf, drenching the whole plant and the soil around it. The soil is the harboring area of many pests. Don't stop spraying now, continue the operation until every plant and shrub on the premises has been drenched. I can personally recommend the Hayes spray gun as being an easy, quick and effective applicator of insecticides, fungicides and leaf feeding solutions. It shrouds the leaves and plant with a fine mist. The nozzle of this sprayer can be adjusted to throw the mist upwards to get under the leaves or at an angle to reach the hard to get at places. With the deflector removed, the spray comes out in a powerful jet so it is not necessary to get a ladder to reach the high vines and trees. This sprayer has a balanced jet which will give the same solution concentration without variance independent of the change in water pressure. This is of great importance when using on valuable plants because super concentration would cause leaf burn and under concentration would cheat the plant of proper pest control and of sufficient food. I use leaf feeding extensively because I can save time by putting two operations into one. The Hayes spray gun has the approval of leading manufacturers of insecticides as being an efficient applicator of their products. Leading cities have authorized its use because the safety back pressure valve prevents water contamination of a household water system.

There is a time in each season and there is a time in each day when spray is most effective. Water the plants thoroughly the day before the cleanup spraying or feeding. The next morning when the sun is out, but the temperature has not gone soaring. thoroughly drench each plant and surrounding soil with the desired spray material. I personally like the combination sprays-insecticide and fungicide or vitamin B-1 and liquid fertilizer-saves time and work. When we consider seasonal time as in the case of scale, spray must be applied while the insect armor is soft and the insect is moving. Aphids come chiefly in the spring to suck on the succulent new growth. They must be brought under control immediately with frequent spraying if the new growth is to reach unstunted maturity. The chewing pests leave holes in the leaf or chew at the edges of the leaves or on the stem. The mites, thrips, and red spider which are almost invisible to the naked eye come in hot weather and their damage is evident by leaf and bud drop, leaf yellowing or distortion of the green leaves. Here prevention by timely spray would have been better than too late a cure after the damage is done.

The home gardener should recap tightly the bottle of liquid spray so the solvent, used to dissolve the crystalline active agent, will not evaporate and leave an insoluble residue in the spray bottle. Spray should be mixed as it is to be used because it loses its potency 4 to 6 hours after mixing. Wetable powders and dusts become shelfworn if they remain on your garage shelf too long—that is the active agent may vola-

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Propagating Case

Many Round Robin members mention difficulty with starting plants from seeds as well as with seedlings and I too, have experienced the same difficulty and have made numerous experiments both with various soil mixtures, and with the environment in the way of housing the seed trays and seedlings, with mediocre success, generally speaking.

Recently, Robin members have mentioned "propagating case" and "Wardian case," and after corresponding with some of the members, learned they referred to a specially constructed case with controlled heat and heavy humidity, both of which are vital to sprouting seeds and for seedlings. We built a composite case, as it were, using ideas gleaned from this one and from that one, adding some innovations that appeared feasible, and I am more than amazed with the results, especially with the seedlings, which seemed to absolutely stop all growth with the advent of cooler weather, until they were placed in this case. They make more progress in one week than in any three or four weeks that I have experienced. Some seedlings have actually grown a quarter inch in a week and look exceptionally healthy, have better roots and actually seem to have better color.

I found that small plants which have been shipped, recover from shock exceedingly rapidly when placed in the case. There are over seven hundred seedlings and small plants in my case, and they amaze me with their progress, and all at a very nominal cost.

Of course we were fortunate in having materials at hand with which to construct it, having only to purchase two electric light bulbs, and the thermostat (which cost only a couple of dollars). A thermostat can be purchased from most any poultry or seed supply house. My case is a little larger than some would want, but they can be built to suit the requirements of the individual. It is 32 inches long and 24 inches wide, has a gable roof, and as some one remarked, "looks like a small greenhouse." The apex differs from the conventional greenhouse in that, on the top, I placed a three-inch board 32 inches long

## -By Elsie Wallis

(laid flat), and have four  $1\frac{1}{2}$  inch holes near the center for ventilation and covered with a pad. The doors are hinged to this three inch board and form the roof and rest on the side walls. (Both the doors and the side walls are 13 inches wide and 32 inches long. They are doors from book cases usually found in law libraries, attorney's offices, etc.) The ends I boarded up solid to retain warmth. A heavy pad cut from a piece of carpet is thrown over the entire structure, covering all the glass during the night. This helps to conserve the heat also.

The base is a five inch board rectangle on which the case itself rests. An electric light is fixed in each end of the base with large pieces of tin over them to diffuse and scatter the heat. Four small cross pieces  $(1 \times 2)$  are securely fastened to the base to support the weight of the trays, pots, etc., and a piece of half-inch hardware cloth (small mesh chicken wire will serve the purpose) is laid on the cross pieces. Trays of seedlings are set on the hardware cloth, then a couple of racks are placed over the trays to support more trays, then more racks supporting still more trays, pots, etc. The thermostat is near the top of the case, fastened to the boarded up end, and entirely surrounded with a guard of hardware cloth, letting the sharp points stick out and jab the incautious, for the thermostat is rather delicate and would receive many jolts if not protected.

A large tray is placed on the floor under the hardware cloth and kept full of water —a couple of large sponges in the water creates a greater evaporating surface, thus intensifying the humidity. The inside walls and glass are always sweating. Every crack is made as air tight as possible with odds and ends. Of course a small cheap thermometer is kept in the case to check on the temperature. I am toying with the idea of installing a hygrometer to check on the humidity.

This case is still in the experimental stage, and expect to improve on it from time to time. It may not be necessary to have glass in the sides at all, as glass

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The American Begonia Society

# 49 BRANCHES STRONG

# The A.B.S. is the "Life Line of Shade Gardening in Your Community"

# Aims and Purposes of the American Begonia Society, Inc.

This Society shall be conducted on a non-profit basis, and its purpose shall be to stimulate interest in begonias and shade-loving plants; to encourage the introduction and development of new types of begonias and related plants; to gather and publish information in regard to the kinds, propagation and culture of begonias and other shade-loving plants; and to issue a bulletin which shall be mailed to all members in good standing.

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#### REDONDO AREA

July's pot luck was held in the garden of the Eippers in Lomita. Cal Trowbridge, our ABS Show chairman, gave a fine talk on use of earthworms in their garden. Joe Taylor, President-elect and member of this branch is bragging about their new granddaughter.

#### EL MONTE BRANCH

Pot luck dinner on Sunday, August 21st at 4:00 p.m. in the garden of Mr. and Mrs. William Edwards, 815 W. Roses Rd., San Gabriel. Bring your favorite dish of food and your own place setting, table and chairs if possible. Mr. W. Meyn of Whittier will be the speaker.

#### TEXAS STATE BRANCH

This branch held a Begonia show April 15, 16, 17, with more than 350 Begonias and shade plants on display. Entries came from Houston, Hamshire, Dallas and Baton Rouge, La. Mrs. R. J. Wilson took the sweepstakes award with 27 blue, 13 red and 2 white and 6 green ribbons. Hat's off to the many winners listed in this branch's report!

#### HAMSHIRE, TEXAS BRANCH

Regular meetings are being held on the 3rd Tuesday of each month. Hats off also to this new growing branch!

#### GRAY'S HARBOR BEGONIA SOCIETY

5th Annual Begonia Show on August 18th and 19th in the Star Room of the Marck Hotel in Aberdeen, Washington. Hours are 2 to 9 p.m. on the 18th and 9 to 9 p.m. on the 19th. Show chairman is Mabel Wold, of Aberdeen.

#### WESTERN PENN. BRANCH

This branch has a perfect cross section of our wonderful country for in it are women from every walk of life—professional, women from the farm, homemakers and all the rest—and are authorities on all types of things. Every group devoted to gardening finds that interests overlap. Even when Mrs. Leslie Perry talks to the group on hybridizing—they are surprised at the great amount of information they learned

## - L. H. WALKER, Sub-editor

—and about things every one takes for granted. This member travels a good 400 miles—carrying her carefully guarded basket and boxes with materials good for ribbons at any show. This unusual group has women members that feature stories could be written about in any magazine and the great thing about it is they like gardening and Begonias! We are going to have more to say about her in another issue.

#### SMOKEY VALLEY BRANCH

This is the branch organized by Capt. and Mrs. Kososky of the Riverside California branch. I will quote the letter sent to us by Mrs. Fury, secretary. "When they were transferred to our local air base they moved in their car, many small Begonias, 2 Kerrie Blue Terriers and their Begonia enthusiasm. They personally called on local townspeople with greenhouses and also through publicity in our local paper were able to draw a small nucleous of ten people to the first meeting, Dec. 14, 1954. By March when Capt. Kosowsky was transferred to another station we had grown to 22 members. We were so very sorry to have them leave, but their love for Begonias had taken root in Salina and our society has grown to 33 members."

It's been a long time since we have had such a glowing letter of one person's activities in getting a branch started. If only members all over the country could go into nearby hamlets and do this! The branch also reports a show they entered. The tri-color award for the best horticultural exhibit was won by their branch president, Mrs. John Irving.

#### SAN FRANCISCO BRANCH

Mr. Damerow always sends his reports in on time . . . and here is the report from his June letter:

"The June meeting was on an informal plane, without the usual guest speaker. The program was arranged to permit new members more time to talk about their Begonia problems and in free-for-all discussions to become better acquainted.

One of our newer members, Mrs. May Mikelson brought part of her rare and interesting collection of Haworthias. Her collection is the second largest in this area, and her talk about collecting and growing these plants was thoroughly enjoyed.

Art Boissier, Irwin Kramer and Carl Meyer, three past presidents of this branch, and all expert Begonia growers then answered numerous problems about Begonia culture. The proper method of pinching hanging basket Begonias was demonstrated on several plants. In order to grow a good hanger, it is necessary to pinch off the tips of the new growth when the shoots are four to six inches high. The experts agreed that a good specimen hanger could usually not be grown from a tuber less than three years old, and that young tubers should not be pinched, but that plant growth should be encouraged in order to develop the tuber for future years. The danger of overwatering was clearly evident on several plants, as the roots which had developed before the tuber was potted were beginning to rot off. After potting, the plant should be watered only when the soil is quite dry, and many tubers are lost because the soil is kept too wet. It is also a good plan to place a stake in the pot with the tuber when potting, as staking at a later date will destroy some of the root system. A simple method of removing extra shoots for cuttings was also demonstrated. This consisted of bending the shoot back and fourth several times and then pulling it from the tuber. This left only a small pock mark on the tuber, and this will heal in a short time. The cutting was then inserted in a maxture of leaf mold and sharp sand for rooting.

Carl Meyer, Chairman of the Begonia section of the San Francisco flower show then passed out the show schedules and explained a number of the entries. Members were urged to start grooming their plants for this show which will be held on August 25 and 26.

#### MIAMI BRANCH

They report on a show they just put on that certainly went over big seeing all the publicity they got! Mrs. Jessie Hyden who reported to us, told us she took the Judges course last year and as a result each chairman knew just what they were to do. The ABS judging scale was used—and not a dissatisfied exhibitor has been reported. At their last meeting the branch voted to start a study class in Begonias—and this will all help to make for better growers of Begonias!

## NEW ENGLAND BEGONIA SOCIETY

They announce a house plant show featuring our Begonias on September 10 from 1 to 8 p.m. at Natick Federal Savings Bank Auditorium, 49 Main St., Natick, Mass. Admission is 50 cents and includes eats and plant sale. In talking to our BEGONIAN Editor he tells me that this idea of holding a show in a bank is great and has been done in many areas with great success. Why not other branches giving this a try?

#### WILLIAM PENN BRÄNCH

Mary T. Drew, Rep. Director writes that their June meeting was given over to members identifying the hostess's Begonias "not without discussion and differing opinions." I would like to have been there! They are planning for a Begonia Party in September, the 13th to be exact.

#### INGLEWOOD BRANCH

They had an unusual program which may interest other branches. They saw a new film, called "World in a Week in California" by United Air Lines. Bert Slatter, one of our hard workers in the Begonia Society and other garden clubs over the many years, is chairman of the Inglewood exhibit at the coming ABS convention. We know it will be good with Bert on the job!

#### MISSOURI BRANCH

Mrs. Wise who does such a faithful job in reporting the news of her visits, tells us that the branch was asked to participate in some of the local garden shows; also a space to plant Begonias with the Kansas City Garden Club around the general hospital; this month, as well as the past two months they have been meeting in private homes. Begonia cuttings and seedlings have been given by Mrs. Calmese to 4th grade pupils at 7 Oak schools. The Society also had a display at the Art Gallery. This news covers three months reports-but it sure shows activity! There are two more ideas for local branches—school children to carry cuttings home to the folks, and art gallery displays. Hats off again Mrs. Wise to all your group!

#### FOOTHILL BRANCH

Last month this fine branch had a picnic at the home of Mr. and Mrs. H. A. Bennett in Ontario. These summer get-togethers in members homes are wonderful ideas. How nice to be able to study gardening right in the open.

# Small Begonias for the Home Window...

-By CLARA E. (POLLY) COOPER, Houston, Texas

Today's interest in Begonias includes the desire for small types that can be used in the window garden.

Happily there are many varieties that are perfect for combining with other house plants. Did you know there are many that could be waving their pink blossoms among the violets in the window?

The many new introductions will thrill you with their varied leaf forms and colors, the light showing through them gives high interest in Begonia growing. Some have mahogany markings, some are flappled with chocolate, and some seem almost black against the green of the leaves. On many, the markings will be irregular and others will appear in perfect pattern on the tiny leaves.

Among these small Begonias, which are mostly rhizomatous, (small procumbent root stalks) is the B. hydrocotylifolia or pennywort Begonia with leaves the size of an English penny. This is a species which has been known and grown for years but is still very scarce. B. Cavum, and B. Bowerii are also species; B. Cavum is not listed by commercial growers because of the difficulty of supplying it's growing needs. B. Bowerii is a good house subject, its dark edged leaves are bordered with very noticeable eye-lashes, although it is a species, it was named to honor one of the California hybridists, Connie Bower. B. Schmidtiana also a species from Brazil has a very endearing habit of blooming almost constantly; as a hanging basket it is a real charmer. The leaves are ribbed green with an under-facing of red that leaves a narrow border of light green. This, added to the small white flowers makes this a favorite. B. Schmidtiana loves to be missed occasionally when the watering pots goes by-IF it does not happen too often-just a bit on the dry side.

The B. Calla Lily also likes the drier soil, but must always be damp down in the pot. It could not grow or bloom otherwise, for no plant can feed or obtain moisture from dry soil.—On the DRY SIDE means ONLY—not too wet. B. Callas have white and green varigated foliage—when the bloom time nears the leaves will be all white, like little calla-lillies, to hold the pink, red or white bloom.

The baby tiny leaved Begonias are almost fern like, yet they can become fine large specimens. B. Foliosa, the tiniest leaved of all, has leaves from one-fourth to one inch long—B. Fuchsoides has leaves a little longer that resemble rose leaves in shape, the flowers hanging like Fuchsias. The leaves of B. Holly are much the same form but are a shining dark green, with red stems and petioles. It is very colorful and attractive at all times.

The Hybridizers have created many new small rhizomatous plants with the thought ever foremost to make stronger and sturdier plants. Now we find so many beautiful introductions that just a Begonia is not enough, so we choose B. Star-Shadow, a plant that remains small, and has leaves almost black, only the small pale green sinus mars the midnight shadow; it is a little dear, a real miniature. B. Edith M. -B. Bow Arrola,-B. Bow Nigra,-B. Bow Chancee, - B. Chatoyancy, are all tiny rhizomatous, that will fit a window nicely. Being rhizomatous, they will not grow tall, but one should not neglect to re-pot as needed to keep the rhizome well within the pot. The form will be best, if the plant is turned as the other plants are turned. The small Begonia HOBBY is now started. And, you will add many more.

Let us consider their immediate needsgood potting mixture; this means properly sterilized soil, good leaf mold, well rotted manure, humus, and coarse sand to insure good drainage. We would all like to say we do not have nematodes in the soil but saying this will not make it so, unless we have really banished them by sterilization. Some of the very best authorities have warned against ignoring this factor in the growing of many susceptible plants, particularly Begonias. The loss of the plants is often attributed to other causes, when knowledge of the raiding parties is ignored. The tiny round worm is almost invisible, and to some entirely so. It is necessary to know where to look. No, not in the soil, not only on the root where we are so often told we will find them, but in the stem of the plant, just at or below the soil level where they are busy taking all the nourishment the roots of the plant are bringing up from the soil. The tips of the plants will often show this first, but cuttings can be taken four or five inches from the soil and a new plant started. It is too late to save the soil, so the incinerator is

the place for it. So, it is best to start right. Use sterilized potting medium.

There are many ways to do this. Make a study of this problem; it will help with African Violets and other pot plants also.

Then watering rhizomatous, keep the tip end where the new growth is, always DRY. In the summer be especially careful not to put water at the tip, always at the root end.

# Tuberous Begonia Culture . . .

-Continued from Page 173

been a real headache since its appearance three years ago. Every suggested remedy has been tried. Whatever remedy is used, it should be used regularly and as often as possible, and whenever mildrew spores are observed. In greenhouses, dusting sulphur is the best remedy as it kills spores on contact. The use of the Flika Dusta is recommended for ease of application. Spot dust only where mildew appears. Outdoors use dusting sulphur as a preventative. Many sprays have been tried, but the best and most effective to date are Mil Dont or Mil Dex. These will not burn the flowers and have been used extensively in the East. CALSUL is very good for most plants but it contains oil, and Begonias are allergic to this as it tends to close the pores in the leaves.

Stem rot which may be caused by heavy wet soil or by decaying leaves or flower petals remaining in contact with the plant, can be cured by dusting with Zerlate. Larvae of night-flying moths, damaging the foliage and flowers by eating holes in the new growth, can be controlled with Isotox. Strawberry weavil or the larvae of the brachyrhinus beetle can be controlled by using an apple bait containing three percent calcium arsenate. This should be placed among the plants during May and June when the beetles feed and before the egg laying period begins.

The tubers make their greatest growth after September, and so the plant should be kept growing through November. Begin withholding water after October and they will normally reach the dormant stage by the middle of December. The tubers should then be cleaned of earth and cured in a hot sun for four or five day, being careful not to get them wet during this period. When put away they should have a hard flinty appearance. Storage should be in open flats in a cool place until the middle of February, when the cycle begins again.

# Let's Spray Right . . .

-Continued from Page 181 tilize or deteriorate. Buy in quantities which can be used up in a season.

If you are bothered with grease ants, Mr. Hayes, manufacturer of the Hayes spray gun, suggests spraying all shrubs, ivy and the base of the house with a proper solution of chlordane. To have a near fly-free barbecue, he recommends painting the edge of the garbage can with straight malathion. After the lawn area around the barbecue is cleaned up, sprinkle Cal-Spray fly pellets in the grass about 4 to 5 hours before dinner. About one hour before guests arrive, spray the shrubs, vines, grass and fence with malathion and lindane to have as near a fly and mosquito free evening as possible.

Don't think of a sprayer as only a distributer of insectide or fungicide. It is an excellent applicator of liquid fertilizer which should be the balanced type with trace elements. Strong nitrogen fertilizers green up a plant readily and put on rank growth at the expense of weakening the plant. For leaf feeding. I use half-strength fertilizer solution often instead of a heavy dose occasionally.

## REMEMBER

- . . . Follow the directions on the spray bottle and measure accurately.
- . . . Replace the cap of the spray bottle tightly
- . . . Thoroughly clean the spray jar and all operating parts so the jets will spray or the next time the sprayer is used, after weed killer has been in it, the remains of the weed killer will not be sprayed on a desireable plant.

# Propagating Case . . .

---Continued from Page 182

dissipates so much heat. Some may find that the glass in the roof is sufficient, and different climatic conditions may require different construction, but one may get the basic idea from this description. Medium sized bulbs seem to be ample at present, and they are lighted only a small portion of the time.

The case affords me endless pleasure in watching the cute little seedlings grow and progress, and I pass my findings on that others may benefit also, and extend my hearty thanks to those that helped make it possible.

# BOARD MEETING REPORT .

Meeting of National Board of American Begonia Society called to order at 7:35 p.m. June 24, 1955, in Los Angeles City Hall, by President Koebig. Pledge of Allegiance to the Flag led by Moore, Aims and Purposes of Society read by Taylor.

Minutes of previous meeting read and approved as corrected. Correction: Mr. Trowbridge stated that SOME of the Judges were not members who have taken the A.B.S. Judging Course.

Treasurer's report read and approved. Balance in General Fund \$66.02.

Communications: From New York Convention Bureau inviting Convention there in 1956. From Los Angeles Branch asking approval of Board in setting up a President's Expense Fund to be maintained by contribution from the Branches of the Society and enclosing check for \$5.00 to start the Fund. Letter from Redondo Branch asking loan of \$300.00 from Convention Fund.

President-elect Taylor reported on Party Nite, Rummage Sale and Signs and remitted \$27.06 to Treasurer.

Membership Secretary MacLanahan's report read by Cal. Trowbridge. Remitted to Treasurer \$313.15. Renewing members 71, New members 51.

Seed Fund Administrator Gee report read by Secretary. Income \$67.00, Expense \$13.00, remitted to Treasurer \$54.00. Balance \$100.00.

Librarian Sault reported books loaned 6, books sold 11, Begonians sold 9. Remitted to Treasurer \$7.62.

Slide Librarian Anderson reported new slides available, as follows: Shade Plants other than Begonias; Orchids and other Glass House Plants; Begonias, Mixed types. New speakers list will be sent to branches in short time.

Flower Show Chairman Trowbridge asked Directors to urge branches to send money to Redondo Branch for Convention expense.

Advertising Manager Stoddard reported Balance May 23, 1955: \$108.68. Advertising for May, \$85.75, leaving a balance of \$194.43. Received and paid to Treasurer June 15th \$102.56 plus Agency discount \$2.44—Total \$105.00. Balance due \$89.43.

#### OLD BUSINESS

Eva Kenworthy Gray Award brought up for discussion. Moved by Motschman, seconded by Schwerdtfeger that the first award be made to Bessie Raymond Buxton as suggested by the Awards Committee. Carried. Trowbridge reported that the Committee on Files met and the File will be turned over to the Awards Committee as soon as the letters are typed. Taylor gave a report on the progress of Convention plans.

#### NEW BUSINESS

Moved by Moore seconded by Schwerdtfeger that the request for \$300.00 be granted to Redondo Area Branch. Carried.

Moved by Motschman, seconded by Schwerdtfeger that we accept the offer made by Los Angeles Branch to set up President's Expense Fund. To start with first month of new year. Carried.

C. Trowbridge reported that 2700 Begonians are now being printed each month, such a large amount not needed at present time.

Moved by Schwerdtfeger, seconded by C. Trowbridge that amount of magazines be cut from 2700 to 2200 until such time as we need more. Carried.

Mrs. Bauer of Ventura reported on the picnic to be held at Ventura July 24th.

Due to the small amount in the General Fund the Treasurer asked the Board to decide which bills will be paid this month.

Moved by Motschman, seconded by C. Trowbridge, that we leave it to the discretion of the Treasurer to pay as she sees fit, depending on the money in the Treasury at that time. Carried.

There being no further business the meeting adjourned at 10:00 p.m. to meet July 25th at 7:30 p.m.

Respectfully, Arline Stoddard, National Secretary

# ALL COPY FOR THE BEGONIAN MUST BE IN THE HANDS OF THE EDITOR BY THE 10th OF MONTH PRECEDING PUBLICATION

THE BEGONIAN

# BRANCH MEETING DATES

(Visitors always welcome at these meetings)

AMERICAN BEGONIA HYBRIDIZER'S BRANCH Called Meetings Quarterly Mrs. Daisy L. Walker, Secy.-Treas. 2425-A Silver Lake Blvd., Los Angeles 39, Calif. BRITISH BRANCH F. J. Bedson, Secy. Kent, England Kenr, England CENTRAL FLORIDA BRANCH Ist Friday, Aug. 5, Sept. 2. 10:00 a.m. Lounge, Florida Power Co. Winter Park, Florida Power Co. Winter Park, Florida Mrs. Lou Mankamyer 20 Pershing Place, Orlando, Florida DALLAS COUNTY BRANCH, TEXAS Ist Thursday, Aug. 4, Sept. I. 7:00 p.m. Member's Residences Mrs. Hal M. Mosekey, Cor. Secy. 5544 Hillis Ave., Dallas 6, Texas EAST BAY BRANCH 2nd Thursday, Aug. II. Sent. 8, 7:45 p.m. 21 DAT DRANNI 2nd Thursday, Aug. 11, Sept. 8. 7:45 p.m. Willard School, Telegraph at Ward, Berkeley Mr. Stuart C. Smith, Secy. 3147 Standley Blvd., Lafayette, California EL MONTE COMMUNITY BRANCH Mr. and Mrs. J. Brummal's Garden, 6023 North Putney, South San Gabriel Mrs. Virginia Brandon, Secy. 3012 W. Norwood Pl., Alhambra, Calif. FOOTHILL BRANCH Ar Thursday, Aug. 18, Sept. 15. 8:00 p.m. La Verne Recreational Building, College Park, 2nd and D Streets, La Verne, Calif. Mrs. C. W. Hall, Cor. Secy. 358 E. Arrow Hwy., Upland, California Mrs. C. W. Hall, Cor. Secy. 358 E. Arrow Hwy., Upland, California FORT ELSA BRANCH 1st Saturday, Aug. 6, Sept. 3. 2:30 p.m. Miss Lole Price, Secy. 628 Beech Ave., Laurel Springs, New Jersey GLENDALE BRANCH 4th Wednesday, Aug. 24, Sept. 28, 8:00 p.m. Tuesday Afternoon Club, 400 North Central Mr. and Mrs. Frank Coe. Cor. Secy. 1420 El Rito, Glendale 8, California GRAY EVA KENWORTHY BRANCH 3rd Monday, Aug. 15, Sept. 19, 7:30 p.m. Community House, La Jolla Tillie Genter, Cor. Sscy. 7356 Eads Ave., La Jolla, California GRAYS HARBOR BRANCH 2nd Monday, Aug. 8, Sept. 12, 8:00 p.m. Hoquiam Public Library, or Messingale and Rosenear Music Store, Aberdeen, Washington Mrs. Jessie B. Hoyt, Secy. 103 Harding Road, Aberdeen, Washington GRUENBAUM, MARGARET BRANCH 4th Tuesday, Aug. 23, 10:30 a.m. Home of Members Box Lunch 12:30, Program following Mrs. W. Ernest Jones: Secv. Home of Members Box Lunch 12:30, Program following Mrs. W. Ernest Jones, Secy. Welsh & Dresher Rds., Willow Grove, Penn. HAMSHIRE, TEXAS BRANCH 3rd Tuesday of each month Mrs. Peter De Young, Hamshire, Texas HAWKEYE STATE BRANCH 2rd Eriday Aug 19 Sect 16, Members, box 3rd Friday, Aug. 19, Sept. 16. Members homes Ruth Anderson, Secy. Ruth Anderson, Secy. Underwood, Iowa HOLLYWOOD BRANCH 3rd Wednesclay, Aug. 17, Sept. 21. 7:30 p.m. Plummer Park, 7377 Santa Monica Blvd. Mrs. Helen Ehret Murphy, Secy. 715 N. Genesee St., Los Angeles 46 HOUSTON, TEXAS BRANCH 2nd Friday, Aug. 12, Sept. 9, 10:00 a.m. Garden Center, Herman Park Mrs. Grant Herzog, Secy. 12600 Broken Bough, Houston 24, Texas HUB CITY BRANCH Ruth Anderson, HUB CITY BRANCH 3rd Wednesday, Aug. 17, Sept. 21, 7:30 p.m. August and Sept. Meetings in Members homes Mrs. L. R. Kellogg, Secy. 1120 E. 71st St., Long Beach, Calif.

HUMBOLDT COUNTY BRANCH 2nd Monday, Aug. 8, Sept. 12. 8:00 p.m. Los Amigos Club, Loleta, California Miss Margaret Smith, Secy. P.O. Box 635, Ferndale, California INGLEWOOD BRANCH 2nd Thursday, Aug. II, Sept. 8. 7:45 p.m. 325 North Hillcrest, Inglewood, California Mrs. Pearl Parker, Secy. 726 West 81st St., Los Angeles 44, Calif. LA MESA BRANCH 2nd Monday, Aug. 8, Sept. 12, 7:30 p.m. V.F.W. Hall at Imperial & Lincoln, Lemon Grove s. Ida Barker, Secy. 7591 Central Ave., Lemon Grove, Calif. Mrs. LONG BEACH PARENT BRANCH 2nd Tuesday, Aug. 9, Sept. 13. 7:30 p.m. Fox Home at 2255 Elm Ave. Mrs. Alice Waldow, Secy. 2175 Cedar Ave., Long Beach 5, California LOS ANGELES BRANCH Ath Wednesday, Aug. 24, Homes of Members Mrs. Mildred Dunham, Secy. 914 Howard St., Venice, Calif. LOUISIANA CAPITAL BRANCH 2nd Thursday, Aug. II, Sept. 8. 7:00 p.m. Homes of Members Mrs. R. L. Wilkenson, Secy. 5764 Robertson Ave., Baton Rouge, La. MIAMI, FLORIDA BRANCH 4th Tuesday, Aug. 23, Sept. 27. 8:00 p.m. Simpson Memorial Garden Center Mrs, Vivian J. Ennemoser, Secy. 1295 N. W. 54th St., Miami 42, Florida MISSOURI BRANCH SOURT BRANCH 3rd Tuesday, Aug. 16, Sept. 20. 7:00 p.m. In Members' Homes (Summer Months) Mrs. Lucille Taylor, Secy. 6130 Chestnut, Kansas City, Missouri NEW ENGLAND BRANCH 3rd Saturday, Aug. 20. Homes of Members Mrs. Lester H. Fox, Secy. 170 Marsh Hill Road, Dracut, Mass. OCEAN COUNTY, New JERSEY BRANCH Ist Tuesday, Aug. 2, Sept. 6. 12:30 p.m. Members Homes Mrs. Selma Braun, Secy. 37 Broad St., Apt. 4-D, Toms River, New Jersey ORANGE COUNTY BRANCH 2nd Thursday, Aug. 11, Sept. 8. 7:30 p.m. Grange Hall I block South Center of Garden Grove, Calif. Mrs. Maybelle Woods, Secy. 604 South Helena St., Anaheim, Calif. PASADENA BRANCH 2nd Wednesday, Aug. 10, Sept. 14. 8:00 p.m. Homes of Members Mrs. Alva Graham, Secy. 515 E. Centro St., South Pasadena, California PHILOBEGONIA BRANCH 2nd Friday, Aug. 12, Sept. 9. Members homes. Mrs. Robert York, Secy. 3311 Fremont St., Camden, New Jersey PORTLAND, OREGON BRANCH 4th Friday, Aug. 26. 8:00 p.m. Journal Building Auditorium, Front & Yamhill Sts. Mrs. Alternati, Secy. 1104 S. E. 148th, Portland, Oregon RAYTOWN, MISSOURI BRANCH 4th Tuesday, Aug. 23, 7:30 p.m. Homes of Members Mrs. Mildred Schorr, Secy.-Treas. REDONDO BEACH AREA BRANCH 4th Friday each month 2308 Rockefeller, Redondo Beach, California Mrs. Ella Cunningham, Secy. 2208 Vanderbilt Lane, Redondo Beach, Calif. RIVERSIDE BRANCH 2nd Wednesday, Aug. 10, Sept. 14. 7:30 p.m. Shamel Park, 3650 Arlington, Riverside, Calif.

Irene Springer, Secy. 3608 Rossmuir, Riverside, Calif.

ROBINSON, ALFRED D. BRANCH 3rd Friday, Aug. 19, Sept. 16, 10:30 a.m. Hornes, of Members, Mrs. Merrel H. Taylor, Secy. 4802 Sierra Visla, San Diego 3, Calif.
SACRAMENTO BRANCH 3rd Luesday, Aug. 16, Sept. 20 7:00 p.m. Mrs. C. F. Crouch, Secy. 2209 Muricla Way, Saramento, California SAN DIEGO BRANCH 4th Monday, Aug. 72 Hard of Hearing Hall, Herbert & University Mrs. Ellian Lausted, Secy. 1504 Blaine Ave., San Diego 3, Calif.
SAN FRANCISCO BRANCH 1st Wednesday, Aug. 3, Sept. 7, 8:00 p.m. Forest Lodge, 266 Laguna Honda Blvd. Mrs. Edward O'Brien, Secy. 234 Gates St., San Francisco 10, California SAN GABRIEL VALLEY BRANCH 4th Wednesday, Aug. 24, Sept. 28, 8:00 p.m. 4th Wednesday, Aug. 24, Sept

4th Weitnesday, Aug. 24, Sept. 28, 8:00 p.m. Masonic Temple, 506 S. Santa Anita Ave. Arcadia, California Mrs. Dorothy Deflart, Sery, 5329 N. Rosemend Blyd., San Cabriel, Calif. SANTA BARBARA BRANCH 2nd Thursday, Aug. 21, Sant. 9, 7:30 p.m.

SANTA BARBARA BRANCH 2nd Thursday, Aug. 11, Sept. 8, 7:30 p.m. Girl Scout Clubhouxe, 1838 San Andres St. Seth C. Langdon, Secy. 1419 Quintentos, Santa Barbara, California

SEATTLE BRANCH 3rd Tuesday, Aug. 16, Sapt. 20, 7:45 p.m. Trinity Parish House, 609 Eighth Avenue, Seattle Mrs. Wm. Stankman, Secy. 4116 15th Ave., Seattle, Wash.

SHEPHERD, THEODOSIA BURR BRANCH Ist Tuesday, Aug. 2, Sept. 6, 7:30 p.m. Alice Bartlett C.H., 902 E. Main, Ventura, Calif. Mrs. Wilma Renshaw, Secy. 560 So. Coronado St., Ventura, California

SMOKEY VALLEY BRANCH 3rd Tuesday of each month Mrs. Tex E. Fury, Secy. 425 Putman Avenue, Salina, Kansas

SOUTHERN ALAMEDA COUNTY BRANCH 3rd Thursday, Aug. 18, Sept. 15. 8:00 p.m. Cafeteria, High School, Hayward, Calif. Bob Diver, Corr. Secy. 333 Redbud Lane, Hayward, California

TALL CORN STATE BRANCH Mrs. Edna Monson, Secy. South Taylor, Mason City, Iowa TEXAS STATE REANCH

TEXAS STATE BRANCH Ist Tuesay night of month in members homes. Mrs. Leoma Gaudle, Secy. 2822 8th St., Port Arthur, Texas

WESTERN PENNSYLVANIA BRANCH 2nd Wednesday, Aug. 10, Sept. 14. 11:00 a.m. Homes of Members Mrs. Joseph Rock, Corr. Secy. Mapelwood Ave., Wilkinsburg, Pa.

WHITTIER BRANCH Ist Thursday, Aug. 4, Sept. I. 7:30 p.m. Palm Park Community Center, 1643 W. Floral Dr. Mrs, Alice E. Rose, Secy. 13926 E. Close St., Whittier, Calif.

WILLIAM PENN BRANCH, PA. 3rd Tuesday, Aug. I6, Sept. 20. 2:00 p.m. Homes of Members, Wallingford, Pa. Mrs. Joseph B. Townsend, Jr., Secy. Baltimore Pike, Wawa, Pa.

All copy for the Begonian must be in the hands of the Editor by the 10th of month preceding publication.

# THE BEGONIA



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# A Study in Hybridizing . . .

-Continued from Page 179

produce an outstanding plant that will enrich the ever-growing collection of the Begonia grower.

The late A. D. Robinson, in an early BEGONIAN, speaking of his seedlings said: "I never saw a batch of seedlings that did not have some variations, and in those variations lie the forward strides of the family." Perhaps he was referring to his batch of *B. Macbethi* seedlings when out of a thousand seedlings only the one he named *B. Richard Robinson* proved to be a truly outstanding variation.

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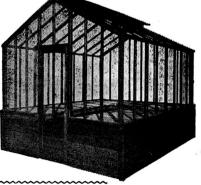


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THE BEGONIAN