

# *The Begonian*

DEVOTED TO THE SHELTERED GARDENS

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*Begonia Helen Lewis*

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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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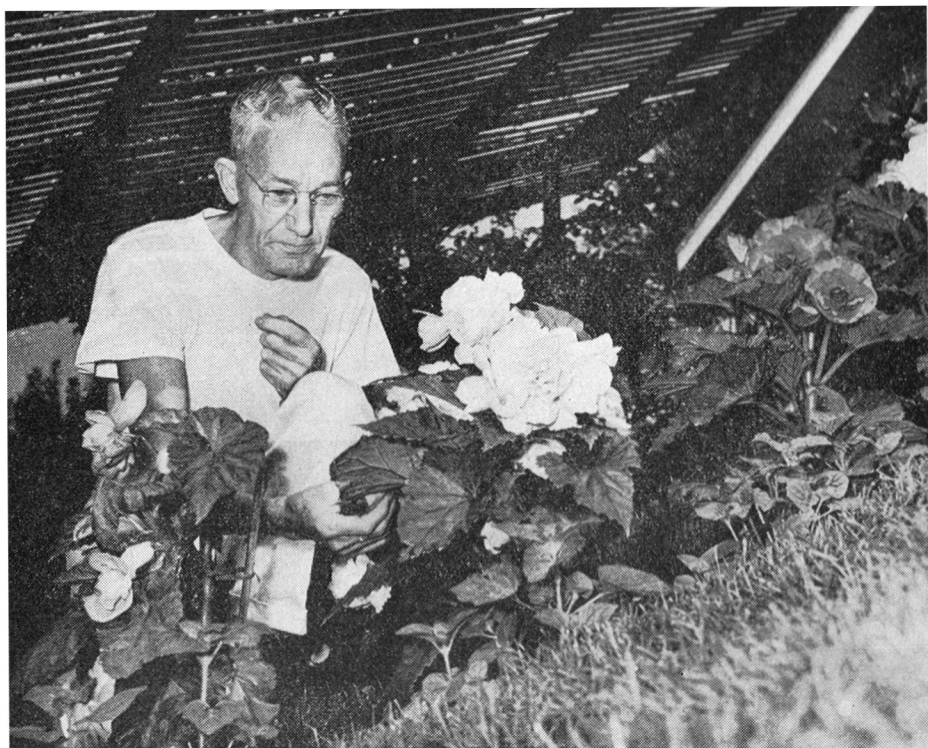
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*Bowman, with his tuberous begonias, exemplifies the joy and satisfaction obtained from a hobby established before retirement.*

## A Challenge and the Results

By J. H. BOWMAN, Ohio

A HOBBY is one of joy and satisfaction, especially if a lover of flowers chooses the growing of tuberous begonias as a part of his hobby.

Several years prior to my retirement from a large steel corporation, a discussion with two of my office associates resulted in a challenge between the three of us as to which one could succeed in growing tuberous begonias. These flowers were considered unusual in this territory. Each of us was a lover of flowers and had a flower garden each summer for leisure time and enjoyment.

Prior to this, I had established in my basement a wood working hobby shop in which I decided to start my first plants. Being an engineer by profession, I decided to obtain as much information as possible concerning the growing of tuberous begonias. I purchased a

book written by Worth Brown and read it through repeatedly. I also sent for a catalog and a pamphlet from a famous California tuberous begonia producer, and subscribed for a membership in the American Begonia Society. After perusing these carefully, I wrote up a plan to follow and began my adventure into this challenge.

Several first quality bulbs were purchased and when received shortly after March 1st, they were planted in shallow wood flats which I made in my hobby shop. A mixture of clean sand and peat moss was prepared in accordance with instructions and the bulbs placed with their tops exposed. This adventure was quite a failure mainly because, being employed, I could not give plants the care they should have.

Failure did not dampen my determination to

continue and I began to plan my second adventure for the coming spring. I purchased more bulbs which were also delivered early in March and my wood flats were cleaned and a mixture of 1 part clean sand and 1 part of peat moss was carefully mixed and passed through a screen made of  $\frac{1}{4}$ " hardware cloth. Care was taken to keep the mixture and plants at the proper moisture and about May 15th the plants were ready for transplanting.

In the meantime, I had prepared my flower garden to receive the plants and also built a slat roof over it. The size was such that the direct rays of the sun did not shine upon any of the plants. The slats were placed running North and South and spaced apart to permit the sun to shine through, making alternate sunshine and shadow.

This second adventure proved to be much better than the first and spurred me on with hopes that I could have a begonia garden of which I could be proud.

Having recently retired from my regular employment, I began to make my wood working hobby shop into a full-time project. It was then that I resolved to do everything within my power to produce the flower garden of which I could be proud. I purchased more bulbs and using some left over from the last year and following the same procedure as before, I planted these bulbs in the wood flats around March 15th.

With plenty of time, I was able to give these bulbs and plants almost perfect attention according to instructions. The plants responded to this care and by May 15th, they were far more advanced than before and were ready to be transplanted into the flower garden.

The soil in the flower garden had been removed to a depth of about 12" and a mixture prepared of 1 part clean sand, 1 part humus, 2 parts peat moss and 2 parts clean soil. This was thoroughly mixed and passed through the  $\frac{1}{4}$ " hardware cloth screen. The entire mixture was dampened using a light spray then transferred into the flower bed. As stated before, this bed was directly beneath the slat roof previously built.

Thirty-six plants were transplanted into this flower bed in predetermined locations, spacing them approximately 12" apart. A scoop of cottonseed meal was placed in the bottom of each hole and covered with some soil and the plants placed so that the bulbs would be about 2" below the surface. Extreme care was taken to remove the plants from the flats with as much soil on the bulbs as possible.

Each hole was partly filled, then gently wa-

tered so that the soil was thoroughly soaked, then completely filled and compressed gently. After all had been planted, the entire surface was water-sprayed gently including the leaves of the plants, care being taken not to water too heavily to damage the plants. A perforated rubber sprinkling hose was woven evenly among the plants so that all would be watered evenly but lightly each morning.

About June 1st, the buds began to make their appearances and most of the colors of the camellia type were present, having been planted to mingle the different colors to produce a pleasing arrangement. By June 30th, each plant was in bloom with one or more full size flowers. Many of them measured as much as  $6\frac{1}{2}$ " in diameter tip to tip of petals. The colors were indescribably rich and we gazed with awe at the richness that had been produced.

Few people in this district were familiar with this type of flower and many of the neighbors and friends came to see them. I, of course, invited my two friends to come and see my garden and although they had both given up long ago, we all enjoyed together fruits of our challenge of several years ago. The word was spread around and several of my friends came and took color pictures and a local newspaper sent a photographer to take photographs and write an article for his paper.

This flower garden was cared for with precision all through the summer and plants bloomed profusely until frost. Churches, also sick rooms of friends at home and in hospitals were supplied with bouquets which were the center of attraction to all who saw them.

So from "a challenge" came failures, discouragements and then perseverance with ultimate success and we all viewed with pride "the results."

ED.: In an interview with W. H. McWilliams, News-Register staff writer, Mr. Bowman says, "A few years prior to retirement a person should select a hobby so that when the day does come he will be able to carry on without a hitch—and enjoy life in the fullest. I am busier now than ever before—but I am happier now than I ever was in my life—a hobby is the answer to retirement—everyone should have a hobby."

—B—

## *Growing Tips*

Tuberous begonias are growing beautifully now and are ready for transplanting to pots or garden.



# Hydrangeas

By VICTOR H. RIES

Extension Floriculturist, Ohio State University

WHEN talking about hydrangeas, we must be careful to know what kind we are talking about as there are some thirty-five wild species found growing in North and South America and in Asia. One of these, *Hydrangea arborescens*, is native in Central and Southern Ohio. Incidentally, they belong to the Saxifrage family, which includes both shrubs and herbaceous plants. The hardy shrubs include deutzia, mock-orange (Philadelphus), currants and gooseberries. The hardy perennials in this family include the Coral Bell, Astilbe, our native alum root, and False Mitewort. The many saxifrages grown as rock plants are in this family. So is a common house plant usually called "strawberry geranium." This is a saxifrage, by the way, and is perfectly hardy here in Ohio.

The hydrangeas that are hardy include the summer blooming, or *Hydrangea* "Pee Gee." Equally hardy is *H.* "Oak Leaf," from our Southern mountains, which is so satisfactory in shady, as well as sunny, locations. It has gorgeous autumn color. There are two hardy climbing hydrangeas, the better of which is sold under the name of *H. schizophragma*. It is a vigorous vine clinging to wood, brick, stucco, or stone. It grows well in sun or shade. Unfortunately, it is a little difficult to get established.

The hydrangea we grow as a house plant is still different. It is *Hydrangea macrophylla*, a native of China and Japan. The flowers are white and blue or pink, depending on the soil reaction. The white varieties will always be white. If the soil is sufficiently acid, the flowers will be blue, whereas if it is only slightly acid or even neutral, the flowers will be pink. A little lime or superphosphate in the soil will give pink flowers. If, however, you wish blue flowers, you may have to add a half pound of alum or aluminum sulphate per square yard of soil surface. Either of these materials will give the color change the following season. This treatment works only for the so-called greenhouse hydrangeas. It will not affect the color of *H.* "Snow Hill," *H.* "Pee Gee," or white flowering varieties of *Hydrangea macrophylla*.

Those who have seen the multitude of blue hydrangeas grown along the Atlantic coast have noticed that some varieties have the

flower heads made up entirely of showy or sterile flowers, while others have only the outer rows of flowers conspicuous, while the center of the head is made up of the small fertile flowers, which are capable of producing seed. Many of us have long envied the Easterners these showy shrubs and wished we could grow them here in Ohio, and yet cuttings of those same plants have seldom bloomed, even though the plants have usually lived over winter. The reason for this is that many of this type of hydrangea produces flower buds only on the past season's growth. Consequently, if they are killed to the ground, no flower buds are there. Sometimes they are grown in tubs and put in the cellar over winter, but this is a nuisance. So we must select those varieties which bloom on the new shoots produced from the roots. One such variety listed in the catalogs is *H.* "Nikko Blue." Unfortunately, many offered in catalogs as sure bloomers do not bloom in Ohio. If you look around your town, you may find a few that do bloom every year. You may be able to get a cutting or even a division of the plant from the owners. These will bloom regularly.

## HYDRANGEAS AS HOUSE PLANTS

Possibly you have received a hydrangea in bloom as an Easter present. Since the hydrangea requires an abnormally large amount of water, daily watering and sometimes twice a day is necessary to keep this plant from wilting. In case the plant has wilted badly, place the plant in a bucket of water and allow it to remain in this water for an hour, then place the plant in a cool room.

When the plant has ceased flowering, cut it down to one-third the original height or to three to five good eyes. Repot in a mixture of equal parts of soil and acid peat. Add 1 teaspoon of complete commercial fertilizer to each 2 quarts of soil mixture. Hydrangeas prefer partial shade; plant it outdoors on the north side of a building, or some place which has some shade after danger of frost is past in the spring.

During the summer, fertilize with a complete fertilizer every month. Keep the plant well watered at all times. If blue flowers are

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# Belgian Tuberous Rooted Begonias

By CARLOS MOERMAN, Belgium



*Hanging baskets of tuberous begonias pictured in the Conservatory at Banff Springs, Alberta, Canada. Note the dahlia and fuchsia-like flowers of the pendula and type Belgian grown hybrid tuberous begonias.*

THE BRIGHT color richness of a tuberous begonia field which changes the suburbs of Ghent into a flower carpet of great splendor during the summer and autumn is comparable to the flower fields of Holland which make that landscape a true flower paradise in the spring. Begonia growing is a typical Belgian culture in the suburbs of Ghent.

Begonias were first written about in 1690 by a monk, Charles Plumier, who learned to know them in the Antilles. The begonia owes her name to Michel Begon, the then Ambassador of France in Santo Domingo. Some species begonias came from Africa and Asia, especially *Begonia rex* from Asia. The most famous tuberous rooted begonias were discovered in Chile and Peru.

Through the importation of new species begonias, but mostly by cross pollination and by hybridizing, the horticulturist succeeded in growing an enormous quantity of different begonia varieties. During the 19th century, the tuberous rooted begonia has known a very rapid evolution, and was obtained by

hybridizing of five original species discovered in the Andes of Peru by Pearce, an English plant discoverer. In the beginning they were only grown in Belgium by Van Houtte and Linden, two world famous florists and botanists. The first years they grew them, they could only obtain single flowering varieties, but a few years later, double flowering begonias were developed in different shades and types as the ordinary double flowering begonia, *fimbriata*, *camellia flora*, *marmorata*, *rosebud* and *pendula* (hanging basket). For the moment, Belgian begonias have become of such great importance, that every year about forty million begonia corms are exported to foreign countries.

In Belgium the tuberous begonia corms are placed the first days of January into peat in warm greenhouses with a temperature of 68 degrees F. Four weeks later when the young plants have two leaves, they are transplanted into oak leaf mold and kept in a warm green-



*Note: The "Strawberry Begonia" is not a begonia; it is a Saxifraga sarmentosa.*

*Photos by A. E. Luckenbill*

house. Beginning in April, we transplant them a second time farther apart and still keep them in the greenhouse. A third time they are transplanted outdoors under a reed covering to acclimatize them. This was done in May.

# Calla Begonias

By VIRGINIA WITHEE, Coventry Center, R.I.

OF ALL the begonias the calla leaf is the "prima donna headache of all begonia lovers." But such need not be the case if we but follow a few simple rules. This type of flower is temperamental and demands certain requirements.

Oddly enough, here in southern New England the demands of this begonia are more than in Maine, because we have longer hot, humid spells of weather here. Begonias abhor too much humidity, although require some.

The history of this plant is interesting as it is believed to be New England's own. Because of our cool summers it is found in these states more than any other part of the country.

West and south of New Haven, Conn., it is said to be almost too difficult to raise.

The calla begonia is a sport of the very common heading begonia.

These begonias at no time want the direct sunshine, because such would burn the leaves. They require an east, northeast, northwest or north window, and when once set in place they should not be disturbed. They resent too much adjustment to temperatures, etc.

Here in my home my kitchen is northeast and east, and during the winter months I keep all of my calla leaf begonias in this room, even though my living room has about the same corresponding exposure.

In the kitchen there must be moderate humidity they like, and brightness without sun. There is plenty of window space. They demand another requisite, moisture. They do not require the ample amounts needed by other be-

gonias, nor must they be dry. Spot watering is most disastrous. Just moistening the top now and then is absolutely out for me, so I water the plants thoroughly, letting all of the excess water drain completely out.

I don't water them again until the soil is dry and crumbly. Then I repeat the watering process. As with other house plants, only tepid water should be used. I never set any of the plants into water so they will soak it up. I tried it once and the tender roots got too wet and decayed. I take care the heart of the plant is not set so as to have a water pocket. I never spray the plants.

The calla leaf begonias will not take to any kind of soil. Most plants have a preference. Thought must be given to the mixture of soil for the begonias. Never use soil that packs. Porous soil is best for quick drainage, but the soil must be nourishing to the tender roots. I use one-third leaf mold, one-third sand and one-third good garden soil.

When I repot or separate a calla leaf begonia, I press the soil easily around the roots. Hard pressure will break or damage them. I find a plastic spoon is good for this process. All begonias want plenty of root room. Small pots retard their growth. The roots have a tendency to go sideways, so a low and wide pot proves best. If different sized red clay pots are used it will be found some of the plants need water sooner than others.

After about a week, I wrap all flower pots in aluminum foil. Watering won't be as often now. The aluminum prevents the pot from drying out.

Last, but not least, fresh air is demanded. I open the west window every day, never miss, about one-third down four or five times a day, and let them stay open about ten to fifteen minutes each time. Opening windows at the top carries out hot air. No fresh air comes directly upon the plants. The plants appreciate this air. Fresh air, porous soil, moderate humidity, temperature not hot, no direct sunshine and watering thoroughly when needed, and proper drainage are all essential for success with the calla leaf begonias.

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In July they are transplanted a fourth time in the open field, where they will stay until October when we have the first night frost. After the first night frost, the bulbs are harvested, dried, graded and made ready for exportation.

# Prevention---Easier Than Cure

By LOUISE CRAMER

MILDEW has bloomed; roses are deformed by the sucking insects; leaves are turned yellow by mites; holes are chewed in the leaves of choice plants. We can not replace the damaged part, but we can prevent this destruction. How? By the simple means of preventive spraying before the damage notifies us that insects or fungi are at work.

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 clean-up 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—the ones designed by the manufacturer to go together—insecticide and fungicide or vitamin B-1 and liquid fertilizer. This 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.

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.

Get your neighbor into the spraying mood at the same time you spray and your gardens will be pest free for a longer period.

For effective spraying, the leaves and plant should be shrouded with a fine mist. Don't think bugs are so dumb as to stay on top of the leaves and get sunburned or washed off—

they seek the protection under a leaf. A sprayer built in Pasadena 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 or of sufficient food. Leading cities have authorized its use because the safety back-pressure valve prevents water contamination of a household water system. This safety device is required in Los Angeles.

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. Sprays are specific, so check the label to see if they control the pest present.

Anyone who uses any spray material 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—CHOOSE A BREEZE-FREE TIME TO SPRAY. With pest control material or foliar fed fertilizer, follow the dilution table *given on the bottle exactly*. When 1 teaspoon is advised per gallon, 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.

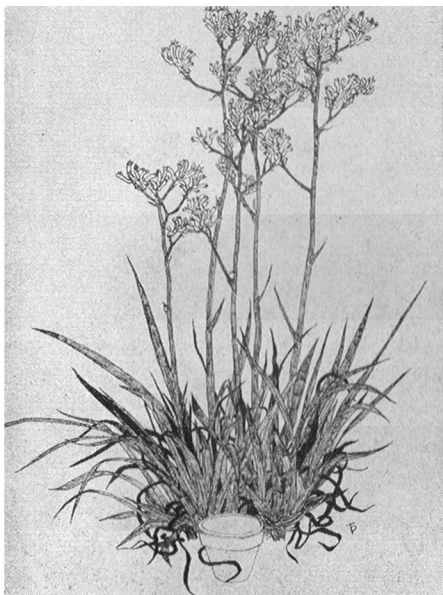
The home gardener should recap tightly the bottle of liquid spray so the solvent used to dissolve the crystalline active agent will not evaporate and leave an insoluble residue in the spray bottle. SPRAY SHOULD BE MIXED AS IT IS TO BE USED because it loses its potency 4 to 6 hours after mixing. Wettable powders

(Continued on Page 141)

# Seeds, Seedlings and Hybrids

By DON HORTON

## *Anigozanthus*



Drawing by Edward J. Pugh  
Courtesy Los Angeles County  
and State Arboretum

LAST month the seed fund offered seeds of four varieties or species of a very interesting genus, *Anigozanthus* or kangaroo paw. This genus, which is native to Australia, was originally classed in the *Amaryllidaceae*, but is now placed in the family *Haemodoraceae*, which is chiefly Australian, but with representatives found in the Americas, South Africa and temperate Asia.

*Anigozanthus* lacks the typical umbel inflorescence of the amaryllids. The two inch long flowers are in a dense one-sided raceme or spike which grows to a height of three feet. The flowers are covered with woolly hair of various colors depending on the species. Kangaroo paws do not form bulbs but make iris-like clumps with stout rhizomes. The evergreen foliage is about a foot tall. The plants

are hardy where they do not receive more than six to eight degrees of frost.

These plants are very easy to raise from seed and bloom the second season. The seed fund probably still has seed available. The four kinds on hand are:

### *Anigozanthus flavida*

—the hardiest and most widely grown variety. Flowers are variable being covered with yellow, yellowish-green, or red "wool."

### *A. flavida* var. *bicolor*

—sometimes listed as a separate species, *A. bicolor*. Wool is red at the base of the flower with the remainder green.

### *A. humilis*

—leaves and flower stem are about half the size of the others but the red and green flowers are still two inches long.

### *A. manglessii*

—this is considered the most desirable species. The flowers are larger being about three inches in length. The color is reddish-crimson at the base with the remainder of the inflorescence deep green.

The *anigozanthus* are just another example of the enjoyment to be had in raising interesting plants from seed. Everybody likes to have something a little different in his garden and more often than not raising plants from seed is the way to obtain unique plants. It is hardly necessary to say that when raising seeds of a hybrid that each plant is technically a new variety. Some of these are distinctive enough to merit naming and introducing.

Every year amateurs produce many new varieties that find their way to the market. Begonias, particularly, lend themselves to hybridization and creation of different varieties because of the great number of diverse characteristics in the genus.

The seed, be it one you buy or one you have produced, is the key to open the door of the greatest pleasure in gardening—that first flower on a plant you have raised from seed. What person is there with a soul so black that he would dare compare the beauty of your seedling with a flower on a plant purchased at the florist's?

# The Arborescent Philodendrons

By KENNETH TERRY

WHEN the trend to the tropical type of landscaping first began, the well known *Philodendron pertusum*, or split leaf type became a common sight in the tropical shade garden. It was somewhat tender, but it could live outside during the normal winters of our sub-tropical climates. This plant was primarily a vine, so had to have some support, or it grew out of proportion in a short time. It needed food all the way up the stem, and as totem poles of moss, that could be soaked with liquid fertilizers as in the greenhouse was impractical. The plant would lose the lower leaves when not fed in this manner, so became unsightly in a little while. The plant men must find a new variety that would overcome these disadvantages.

Plant men who were searching for practical plants for the house and landscape searched in the jungle, the hills surrounding the jungle, where conditions were not so perfect. Hardier plants were sought. Among the plants that showed promise was *Philodendron selloum*. This plant produced the huge leaves that were so much in demand, and seemed to take some frosting, as well as to be able to withstand some sunshine. *Philodendron selloum* became a popular plant in the short time it took to propagate it and introduce it to the landscape trade. It was good, but was found to have some weaknesses as time went on. It became yellow in the sun, and the leaf stems did not have the strength to hold the large leaves up after the foliage became heavy. But a start had been made. There was a plant to build with.

Soon the beautiful *Philodendron* "Sao Paulo" was developed. This was a plant that put the *Philodendron selloum* to shame. It has lovely huge leaves that are nicely frilled, the leaves are of a nicer shade of green, and the plant does not yellow when grown in full sun. It is as hardy as *Philodendron selloum*.

The introduction of *Philodendron* "Sao Paulo" and some other species gave the hybridizers something to work with. All would bloom in greenhouse conditions. *P. selloum* and *P. "Sao Paulo"* were crossed, with *P. "Sao Paulo"* for the mother plant. The result was

named *P. "Jungle Gardens."* This variety is much like *P. selloum*, except that the leaves are more beautiful, and are not given to cupping as *P. selloum*. This plant is becoming more and more popular with landscape designers.

*Philodendron bipinnatifidum* is another of the new species that shows promise. It has glossy leaves, and does not yellow in the sun. The leaf pattern is lovely. The leaf is deeply cut and is of a nice design. The plant itself grows into a pretty spherical canopy. It is particularly adapted to interior use.

A hybrid of *Philodendron selloum* and *P. bipinnatifidum* is called *P. "Barryi."* This plant is much more refined than *P. selloum*. The roughness and overlapping of leaves is missing. The leaf design is clearly defined, the leaves glossy, with a nice red under-leaf veining.

A hybrid of *Philodendron selloum* and *P. undulatum* is known as *P. "Andersoni,"* a plant which is a miniature of *P. selloum* in size. This plant has a nice leaf pattern, and is especially adapted for interior use.

*Philodendron eichleri* is another type that is showing promise. The huge leaves are arrow shaped. It is resistant to sun and below freezing cold. It is also resistant to modern insecticides, such as Malathion. *P. eichleri* is being crossed with all of the other types. Several of these new hybrids are interesting because of their promise, but have not as yet been tested to know what they will do. With such parents, we are sure that the field of arborescent philodendrons will increase in size and beauty in the next few years.

—B—

## Historian Requests

A picture from every Branch of the A.B.S., branch notices and clippings of activities.

With all the flower shows, barbecues, and gardens tours scheduled, there should be some very interesting material for the A.B.S. Historian's Book. I must have these pictures and clippings by August 1, 1957.

MRS. PEARL BAUER





## Rex Begonias

By PER. AGR. GIAN LUIGI SANI, Italy

THIS photograph of a wilted rex begonia (left) was made in August. The plant, in spite of being in the shade had been exposed to very much heat. It was allowed to dry out and it wilted.

The photograph at right was made two hours after the plant was watered. Look at the same plant, watered and again full of vigor. These two photos were made to show that a wilted plant will not die, but will come up promptly, if promptly watered in about two hours' interval from the time the first photograph was snapped. The photos and these notes are from "Giardina Fiorito," the translation by Mrs. Terry Olmstead.

Professor Sani's two photos and notes on the revival of a wilted rex begonia will show begonias can take a certain amount of neglect, not advisable, but in our busy every day lives times do arise that are unpredicted and our begonias must wait.

My own experience with rex begonias that have become wilted may be of benefit to some of you. When this condition arises, I have found it is not advisable to spray the foliage with water. Watering the foliage on the wilted plant has, for me, resulted in water spot or burn and results in brown, almost tissue-like spots. The edges of the leaves also burn and brown in the same manner.

Occasionally a rex begonia will become wilted during a hot summer day. Some varieties are more apt to wilt than others, and I have found, by setting the pot in a pan of water in a cool place on damp ground the plant, if not too far gone, will revive without any foliage damage. I usually leave the plant sitting in the pan over night. It is surprising how fast the water is used up and how much more water must be added until the soil on top of the pot is good and moist.

So many times, when a begonia has been allowed to dry out, one does not penetrate

all the soil by watering from the top of the pot. The soil being dry, the begonia insists on wilting again and again. The very soft leaved rexes wilt down faster than the heavy textured leaved varieties.

SYLVIA B. LEATHERMAN  
Research Director

—B—

## Arboretum Open Weekends

THE ARBORETUM will receive visitors, without prior reservations, each Saturday afternoon, and on Sundays from 10:30 A.M. to 4:00 P.M. Bird study tours at 8:00 A.M. are conducted on the first and third Sundays of each month. Reservations will continue to be required for tours on Saturday mornings, and for Tuesdays through Fridays. There must be at least ten persons in each reserved group. All Arboretum conducted tours will start by jeep-train at 301 N. Baldwin Avenue, Arcadia, and require about one hour and fifteen minutes to cover the numerous horticultural and historical points of interest within the 127-acre former "Lucky" Baldwin estate.

## Your Convention Invitation

THE SILVER anniversary of the American Begonia Society will be celebrated at our 1957 National Convention. August 31 and September 1 have been set by the National Board as the convening dates. As the president of this organization, may I extend to you a personal invitation to attend, particularly those of you outside of this immediate area, as the dates should suit you just right. Plans are in progress to have another of our outstanding competitive shows and a fine program for our evening meeting.

This year we will again meet in historical Plummer Park. The Los Angeles Parks and Recreation Department has again offered us these fine facilities. Those of you who attended our last Convention will remember the ample space for parking and all the other facilities that make this park an ideal place for us to meet.

We will have our usual good competitive plant show along with the other attractions to the Convention, our educational exhibits and of course the Seed Fund Booth where your favorite begonias may be purchased. Our

convention this year will be staged similarly to last year's with one exception.

This year we will FEATURE SEMPERFLOREN BEGONIAS. Mrs. Sylvia Leatherman has obtained from Germany some very fine semperfloren begonia seed. Some of us locally are going to grow them for a real display of color at the Convention. If you have some outstanding semps, bring them to the show; let's make this one our most colorful.

President-elect Frank Coe will be Convention Manager, along with the help of members of the National Board.

WE ARE ASKING YOU TO BRING YOUR PRIZE SPECIMENS TO THE SHOW FOR COMPETITION. There will not be any cash awards this year, but the usual American Begonia Society Awards will be made.

All contributions from the Branches to help defer expenses of the Convention this year should be made to The American Begonia Society and sent to our Convention treasurer, Mr. Charles Lovejoy, 827 Woodward Blvd., Pasadena 10, Calif.

*The Begonian* for July will carry more information on the Convention. Watch for it.

CAL TROWBRIDGE

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## New Jersey Begonias

By MARION P. BUCK

WE PLAN a month or more in advance what plant (or plants) will be discussed at the next study period, in order that research can be made. A good specimen of the plant is brought to the meeting. In addition to the leader, each member has a chance to work on the specimen under consideration. All outstanding characteristics are entered on our outline forms, together with cultural details supplied by members.

We grow begonias under difficulties here in New Jersey, for only from May to September are we able to have them outdoors. They must be indoors from the time, toward the end of September, when the evenings become too cool, until the end of May. Because of dry air this means care in watering, a problem we get around by growing many of our plants in terrariums. By trial and loss we have proved that some varieties are just not for us. *Begonia*

*luxurians*, *B. imperialis*, and many rex types are examples.

One of our biggest headaches is nomenclature, for with the numerous hybrids, so very similar in appearance, we have no one who is sure which is which, and our greenhouses are not able to help.

As companion plants indoors we use African violets, ferns, gloxinias, selaginella, grape ivy, etc. Outdoors we use verbenas, lobelia, allsium, ageratum and ground covers.

Each spring and fall there are shows partly or entirely devoted to begonias. Some of these are sponsored by the five branches in this section of the country. We feel that, due to the efforts of these branches there is a growing interest in begonias. Our greenhouses are carrying more and more varieties, and we are having more opportunities to exhibit our plants.

# Gibberellic Acid

## New Plant Growth Stimulant

By JULIUS O. LEUSCHNER

Prescription Chemist, Los Angeles

GIBBERELIC acid, the latest in miracle chemicals, may not give us the "Jack and the Bean Stalk" just like that, but research shows that it produces a growth speedup of from 3 to 5 times the normal and noticeable within a few days.

Gibberellic acid is new, but the Japanese Kurosawa, in 1926, showed that filtrate of a fungus, *Gibberella fijiikuori*, produced a growth increase in rice seedlings. Thus, a potentially useful factor was found in a disease producing organism, very much like many antibiotics, penicillin, achromycin and the Vitamin B Complex formed by the yeast fungus.

It was not until recently the Eli Lilly, Merck, the U.S. Department of Agriculture and others began intensive research on the compound. Apparently all types of plants respond to treatment. Grains, grasses, vegetables, trees, ornamental shrubs, orchids and other flowering plants in the younger stages appear to be most affected. The chemical has been most successfully used in a liquid concentrate diluted with water to 10 parts per million (check the various labels for proper dilution recommended as many commercial products are being presented in different concentrations). The diluted water solution is then sprayed on the plant or seedling. AN IMPORTANT FACTOR IS THAT WATER DILUTIONS MUST BE MADE FRESH BEFORE USING AS IN FIVE DAYS THE SOLUTION LOSES HALF ITS POTENCY. Many plants may need only one treatment per season.

Besides accelerating and regulating plant growth, Gibberellic acid can break dormancy, induce flowering, stimulate germination, reverse dwarfism and eliminate the cold period necessary for the germination of some seeds and bulbs.

Although this rare chemical has high promise it should be used with caution. Many new effects and activities may develop as research and practical application proceed. It does, however, suggest reasons why the *Rhizoctonia* fungus was effective in orchid seed stimulation and it may be the answer to the cypripedium seed growing problem. It may also enhance the blooming habits of cymbidiums—*quien sabe?*

# Camellia Culture

## in San Francisco Area

By WILLIAM G. DAMEROW

THE STORY of Cliff Lattin's experiences in trying to grow one camellia in 1939, to his present collection of hundreds of varieties and thousands of plants was fascinating. His recent winning of sweepstakes at three prominent shows, including that at Descanso Gardens, establishes him as a top-notch grower. As proof of how good his blooms really are, the speaker's table was literally covered with perfect blooms of japonica and reticulata varieties. His garden is ideally located in the Santa Cruz mountains overlooking Monterey Bay, and all of the camellias are grown in containers and are under lath.

If at all possible buy plants when in bloom and from a reliable nursery in your vicinity. Plants brought in from a distance or from an area differing in climate may not perform well for you.

The potting mixture he used consists of 1 part sandy loam; 1 part redwood sawdust; 1 part redwood leafmold; 1 part German peat (not Canadian) and 1/2 part alfalfa meal. Some of these ingredients are used because they are readily available locally. These are mixed from 4 to 6 months prior to intended use. The size of the container should be approximately a six inch cube (1 gal.) for each foot of plant height.

Watering is done by spraying the foliage daily, and in hot weather twice each day. This scheduled spraying is credited with keeping the camellias free of aphids and scale, and it has not been necessary to use any fungicides.

Feeding should be done on the theory that plants like to have breakfast, lunch and dinner, with possibly two coffee breaks. The first feeding, after blooming period, should be a dry type fertilizer, preferably organic. This breaks down slowly and plants derive a maximum of benefit from it. About four weeks later a feeding of liquid fertilizer is due and this should be repeated in another four weeks. About August 15, the last feeding should again be a dry type fertilizer, but this should be of the 0-10-10 type, that is, no nitrogen should be included. This frequent feeding applies to the japonica type, but the reticulata type should be fed only once during the season. A good rule to follow is to use fertilizers at half recom-

(Continued on Page 140)

## B. Helen Lewis Wins Sweepstakes Award

A HIGHLIGHT of the Riverside Festival of Flowers, the largest amateur flower show in Southern California, April 27 and 28, was the awarding of the Horticultural Sweepstakes Trophy for the best specimen in the entire show to rex *Begonia* "Helen Lewis," an entry by Mrs. E. P. Boucher, a member of the Riverside Branch of the A.B.S.

There were about 100 fine begonias, a full schedule of 24 classes, entered in the Begonia Division of the show. They were judged by Dorothy Behrends and Dorris Motchman, A.B.S. accredited judges.

The winning plant was grown by Mrs.

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### *Shopping Around*

Is YOUR greenhouse or lathhouse bursting at the seams? Mine is. Still I want to grow new begonias from seed offered by the Clayton Kelly Seed Fund of the A.B.S.

In shopping around I found these efficient square plastic pots which save space, do not tip over, conserve moisture yet drain well. They are ideal for seedlings. A flat of these filled pots is light weight, and easy to move and carry.

The newest, most economical, space-saving 2 1/4" pot is now available. Designed and developed to meet the requirements of the grower, by the growers themselves, this is the first practical square pot on the market. The new square design allows the grower to gain the most production possible from his limited growing area. In the Southern California area, 64 Racon square plastic pots fit into the 18" by 18" California flat—an increase of 50% over the clay pot. The dimensions of this square plastic pot are 2 1/4" from side to side, 2 1/2" from corner to corner, 2 3/8" deep; with a radius on all corners inside and out to allow uniform and easy root formation.

With the acceptance of plastic by the nursery industry, as a practical material for containers, we have been able to develop the square design, and can offer the grower this attractive material in any color he desires, on special order, at no increase in price. To receive samples of the square plastic pot in five suggested colors, and for further information, kindly write Louise Cramer.

Boucher from a leaf started just two years ago when she first joined the A.B.S. At the time of joining the Society she had but a few mediocre begonias, but since then she has been an enthusiastic begonia hobbyist and has increased the number of her begonias to over 200, most of which she has grown from leaves of cuttings in a tube glasshouse which was built to house them. From these she chose 17, all in different classes, to enter in the show, and took home a ribbon for each entry (8 firsts, 5 seconds, 3 thirds and an Honorable Mention).

After the judging of the different classes, the *Begonia* "Helen Lewis" was chosen from among the 24 blue ribbon winners in the Begonia Division of the show. Then the top winners of all five of the Horticultural divisions of the show were in competition for the Sweepstakes Award, and again the B. "Helen Lewis" won over all as the best specimen in the show.

In addition to the display of specimen plants in the Begonia Division by individuals, the Riverside Branch of the American Begonia Society entered a garden setting and a workshop where Rowland Maddox showed how begonias could be propagated from leaves and cuttings and how to mix soil for potting. The garden setting presented a beautiful begonia garden surrounding a desert oasis with a spring flowing from among the rocks into a pool overshadowed by a tree fern. In front of the pool, in a glade carpeted with dichondra, an old cowpoke and his tired steed had come to rest and quench their thirst. The cowpoke had turned from the water and was intently admiring the begonia setting.

All in all, begonias contributed a great deal toward making the 1957 Riverside Festival of Flowers, the best amateur flower show in Southern California. The show is staged by the Riverside Community Flower Show Association, Inc., sponsored this year by 16 organizations, including Garden Clubs, Chamber of Commerce, Women's Clubs, Art Association and others. The Riverside Branch of the A.B.S. has been a sponsor of the show since its inception in 1949 and finds the show a good place to make begonia contacts and recruit new members for the American Begonia Society.

R. H. TERRELL, Riverside, Calif.

# Miami Show

"SPRINGTIME IN MIAMI," a Miami Branch flower show featuring begonias, was held in Miami at Simpson Garden Center on April 24 and 25, 1957.

The Tricolor ribbon was won by Mrs. Theron Ames for *Begonia* "Pink Rubra." Mrs. Ames also won the Sweepstakes award with four blue ribbons in the Begonia Competitive Division.

*The Certificate of Award* from the A.B.S. for the best rex begonia was awarded to Mrs. D. Monroe Jordan for her plant, *B. "Fairy."* She is a new member of the society.

## MEMORIAL AWARDS

*Helene Coffee Award* for best plant in show, non-competitive, was won by Mrs. Ray Rosengren for *B. epipsila*.

*Mrs. George F. Webb Award* for best rhizomatous begonia in competition was given to Mrs. Florence Grimshawe for her *B. "Crestabruchi."*

*Mae Watkins Award* for the best corsage was won by Mrs. W. T. Wheeler with a for-

*Now is the time to come to the aid of your begonias. Prepare your potting mixture, re-pot plants that are showing new growth, spray for aphids, bugs, scale and general pests. Use only the menu plainly printed on the bottle—never stronger. Make some beauty spots in your garden of "special" begonias, ferns, fuchsias and other shade plants. Be your own landscape artist and discover your hidden talents.*

JEAN KERLIN

mal corsage using Sweetheart roses and pink begonia blooms.


These three awards were all given with a year's subscription to *The Begonian*.

Mrs. Elsie Picot won the Special award given for the best seedling begonia in the show. This was *B. longibarbata* and was in full bloom. She was given the book, "*Begonias and How to Grow Them*," by Bessie Buxton.

## MIAMI BRANCH MEMBERS TAKE AWARDS

In the Metropolitan Miami Flower Show in Miami, April 4-7, 1957, Mrs. Theron Ames won the A.B.S. Certificate of Award with a *Begonia* "Lucerna." It was the most outstanding fibrous begonia in the show and scored 96. The Certificate of Award was given to Mrs. H. H. Epstein of Hialeah for the best rhizomatous begonia, her *B. "Joe Hayden"* scoring 94. The award for the most outstanding rex was not given because there was not one worthy of it. Permission was granted by Mrs. Arbuckle to give it in our Begonia Show.

MRS. JESSE O. HYDEN, Miami



### ATLAS FISH EMULSION

**FOR A BETTER GARDEN!**

For vigorous growth. Use with GRO-GUN or other hose applicator or sprinkling can. 1 tsp. to gallon of water. Inexpensive to use, inside and outside.

- De-odorized
- Non-burning
- 100% organic

**\$1.00** per pint

**ATLAS FISH FERTILIZER CO.,**  
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**BALANCED ORGANIC FISH FERTILIZER**

**in rose form and ruffled novelty**

**New  
for 1957  
Striking  
Advances**



## TUBEROUS BEGONIAS

Exacting quality in color and form, from the prize-winning Pacific strain originated by Frank Reinelt. The very finest obtainable!

Choice tubers now being shipped

**1957 COLOR CATALOG NOW AVAILABLE—WRITE FOR IT TODAY!**

**VETTERLE & REINELT**

Dept. B Capitola, California

# Clayton M. Kelly Seed Fund Flight

**Begonia froebeli** A. DC. (Gard. Chron. 1874 p. 552;—Gartenfl. t.864;—Ill. Hort. 1875, pl. col. p 170;—The Garden XII, pg. 376, pl. col.)—Introduced from the Andes of Ecuador 2800m (9300') in 1872 by Roezl at Froebel's in Zurich. Plant stemless; tuber average, semi-spherical. Leaves on a red petiole 5-8 cm. (2-3") wide, bright green, with numerous white hairs, especially on the reverse; young leaves entirely downy, purple red. Flower stalks erect, above the foliage, 25-30 cm. (10-12") tall, reddish, crowned by a bouquet of 4 to 6 bright scarlet red flowers 3-4 cm. (1½") in diameter. Male flowers of four petals; stamens yellow, linear; female flowers of five petals. Ovary greenish, glabrous. Blooms late summer.

Although tuberous this species does not cease growing in winter; if, at this time, it should be given a relative rest, watering however should not cease entirely for its bulb is not as fleshy as that of other tuberous types. Grow it preferably in a cool house, for it is too delicate to be placed outside in summer. Return to active growth in spring.—From *Les Begonias* by Charles Chevalier.

Reports from a very few that have grown this species here in the U.S.A. and Canada state in districts with powdery mildew it must be watched and sprayed at intervals as it is susceptible to the mildew. However it is worth the effort and time. 50 cents per small packet.

The following African species begonias are now available: **No. 1. B. No. 15065** Gillett, Kew Gardens, England. Mr. Gillett writes as follows: "My No. 15065 was quite past flowering and showed fruit only at the time of collection. I was therefore unable to make notes of flower color, etc., and we have not been able to determine the species. Should the plant flower with any of your members we would be grateful if a dried specimen could be prepared, showing flowers and leaves, and sent to Kew Gardens so that we could identify the species. Southern Ethiopia is little known botanically and several new species already have been detected among the specimens which I was able to bring from there." Seeds were collected on east slope of Mt. Delo beside a mountain stream in the open. Fruits were large, three winged capsules. **No. 2. B. African species.** Wild white begonia from Africa. Transkai, Cape Province, South Africa. Free flowering from November to May. Branching plant 18" high. **No. 3. B. caffra.** Small plant with pink or white flowers. A letter from the collector states that he has gone back to N.E. Transvaal, where he first discovered this plant and no trace of it can be found. It seems to have disappeared entirely. Therefore seed will have to be produced by A.B.S. members who are growing it.

We have had favorable reports on *B. caffra*, especially as a bedding plant or for a low border. We hope to have a story from the collector in regard to growing habits, etc. Above-mentioned are 3 packets for \$1.00 or 35 cents per single packet.

The German semperflorens that have been offered recently have been so popular we have secured these variety from Germany. **No. 1. B. Organdy.** Heterosis strain—mixture of many colors. **No. 2. B. Sleeping Beauty.** Heterosis — free flowering. Lustrous, carmine flowers. **No. 3. B. Tausendschoen red** and **No. 4. B. Tausendschoen pink.** Both of these received high awards from the Royal Horticultural Society. We have *B. Tausendschoen* (red) growing in our own garden and it certainly is a wonderful performer, always covered with blooms. Grows neat and compact and never grows out of bounds. Truly a satisfactory plant. We suggest you read the story in April, *The Begonian* for information. Heterosis Begonias, four small packets for \$1.00.

Miscellaneous Begonia seed: **No. 1. B. Duchartrei (B. echinosepala x B. scharffiana).** Medium tall, erect, bushy. Large, white hairy ovate-pointed leaves. Leaves green above and green with red veins beneath. Flowers are large, white,



pink bearded. **No. 2. B. Ingrami (B. nitida x B. fuchsoides).** Tall, bushy, leaves small, long ovate-pointed, glossy bronze-green, sparsely hairy. Flowers deep pink. Ornamental. **No. 3. B. vitifolia**—Handsome begonia. **No. 4. B. epipsila**—See description on page 88 in April, The Begonian. **No. 5. B. mazaе**—Mexico. Small, rhizomatous. Considerable variations in the leaf coloring. Some are light green with dark veins, some a deep rich green, and one of the best forms has tawny brown markings. Leaves are small heart shaped above. 25 cents per packet.

Green house plants: **No. 1. Trichosporum-Blushwart.** Also known as *Aeschynanthus pulchrum*. Gesneriaceae family. Natives of tropical Asia. Trailing plant. Leaves broadly ovalish, margins slightly toothed. Flowers scarlet with yellow throat. Corolla three times as long as the green calyx. Requires warm greenhouse. **No. 2. Blue Stroxinia.** Interesting greenhouse plants of Gesneriaceae family (*streptocarpus x gloxinia*). **No. 3. Bertolonia**—Lady Clare Amerlay. Showy foliage plant belonging to Melastromaceae family. Flowers rose colored or purple. Plants require a warm greenhouse, plenty of moisture and partial shade. **No. 4. Columnea aurea nitens.** Gesneriad suitable for hanging baskets. Needs well drained porous soil. Prefers partial shade and much water while in active growth but less water in winter. The last two mentioned were sent to seed fund by a friend in France. Above 25 cents per packet. All above are choice greenhouse plants and seed are not readily available.

Fern spores from New Zealand. **No. 1. Adiantum affine.** Very hardy, nine inches high, thrives on dry banks. **No. 2. Dryopteris glabella.** Tufted fronds with a reddish brown midrib. Very hardy. 12" high. **No. 3. Nephrolepis cordifolia.** Hardy—ideal for hanging baskets. About 3 feet. **No. 4. Leptopteris superba**—Prince of Wales feather fern. Very beautiful, hardy fern—3 feet. **No. 5. Trichomanes reniforme**—Kidney fern—creeps over logs and rocks. Very hardy. About 6 inches high. **No. 6. Cyathea dealbata**—Ponga, silver tree fern. Graceful, distinctive tree fern. Half-hardy. 6 packets \$2.00 or 35 cents per packet.

In addition to the New Zealand ferns we have several varieties of the useful and easy to grow pteris ferns. Some have been listed recently but they are all worthwhile and not easily available in nurseries. Germination is practically perfect, so why not grow some of these hardy ferns for your garden? **No. 1. Pteris ensiformis (Arguta).** **No. 2. Pteris cretica mayi.** **No. 3. Pteris umbrosa (cretica major).** **No. 4. Pteris cretica cristata.** Also fresh spores of **No. 5. Asplenium nidus avis,** bird's nest fern. **No. 6. Crytomium falcatum.** Dark green holly fern. **No. 7. Platycerium grande** (broad horn) East Indies. Sterile and fertile fronds are different, the sterile fronds forming a heavy shield—like backing for the fertile fronds. They are entirely covered with a stellate pubescence, giving the fern a woolly appearance. Germination is slow. Spores just taken from plant. Above 25c per packet.

Recently we received a letter from a collector in South Africa who purchased seed of **B. Frosty (semperflorens)** formerly known as **B. Karin.** He writes the following bit of interesting information. "From the seed of **B. Frosty** I have a beautiful double pink and white flower with yellow stamens—with copper leaves. Also have many white and white edged with pink." Would like to hear if anyone else has this happy experience. We will offer seed of **B. Frosty** later if we receive enough requests for them. They have to be purchased in another country, therefore will not reorder unless requests justify doing so.

Other genera. Choice plants that should be growing in your garden or greenhouse: **No. 1. Protea mellifera**—pale yellow. **No. 2. Protea lanceolata.** **No. 3. Protea Susanne.** **No. 4. Cussonia paniculata**—also called "cabbage tree." South Africa. **No. 5. Sutura grandiflora.** South Africa. **No. 6. Selago serrata.** South Africa. **No. 7. Leucospermum nutans.** South Africa. **No. 8. Aristea thyrsoiflora.** A hardy plant of the iris family. South Africa. Above 8 packets for \$1.00.

Mrs. Florence Gee  
Seed Fund Administrator  
4316 Berryman Avenue  
Los Angeles 66, Calif.

(Please note above address. That given for Mrs. Gee in the April, The Begonian, was in error.—Ed.)

# Leaves From Our Begonia Branches

Regional Meeting in Ventura, 1:30 P.M., June 23, 1957, at Foster Park Bowl. Pot luck dinner with a charge of 75 cents. Hot dishes furnished by Ventura Branch. Bring plants for plant sale. Proceeds to the National A.B.S.

To reach the Bowl take Highway 101 to Ventura, highway 399 to Foster Park; turn left approximately 1 mile.

## EL MONTE

Annual Birthday Party will be held at 2:30, June 30, in the garden of Bill and Carolyn Edwards, 1886 San Pasqual, Pasadena. You and your friends are invited. Hamburger fry with all the trimmings (complete meal). The price is \$1 and reservations must be in by June 17. Proceeds for National Convention Fund. For reservations, call or write Virginia Brandon, 3012 W. Norwood Pl., Alhambra, ATlantic 4-5788, or Daisy Morrow, 2821 No. Musgrove, El Monte, GIlbert 8-4624.

—B—

## GLENDALE

We had everything good to offer you and your friends. We showed you how to catch a prize butterfly, right off a tree. For the calorie dodgers we furnished temptation with home-made candy, pies and cookies, plus cake. For the new spring outlook, we found an outcast "airloom" that someone else has tired of dusting off (this is the department usually termed the "white elephant sale.")

For the serious minded gardener, we offered medicine for tired plants, bug eradicators, sure-shot fertilizers and green lawn tonics. Those collectors of unusual plants had a wide choice of hard-to-find plants.

Those who were curious had the rare opportunity of visiting the booth of Zara, renowned crystal gazer. She gave short (very private) readings for a slight fee.

William Meyn, horticulturist and traveler, showed colored slides of "Begonia Gardens in Europe."

—B—

## EVA KENWORTHY GRAY

New officers elected are: Pres., Ingabord Jamison; V. Pres., Peggy Sweet; Sec., Lillian Marshall; Treas., Dr. Marie Walsh; and Rec. Sec., Ethel Calloway.

## MARGARET C. GRUENBAUM

Met at the home of Mrs. E. S. Williams, Cheltenham, Pa. The program was given by Mrs. Selina Jones, who reviewed *Begonia* "Alleryii," *B.* "Prunifolia," and *B.* "Medora." Several members told of their successes and failures in starting begonias from leaves.

—B—

## NEW ENGLAND

The latest style in hats adorned the head of our president, Mrs. Alvord—a beautiful ruffled *Begonia* "Crestabruchi" leaf, which had a matching narrow green ribbon at its sinus.

Plans were discussed in regard to the house grown begonias to be in competition for the silver cups to be awarded in the fall. Four strictly house-grown begonias are to be entered by members, a semperflorens, rhizomatous, cane and a rex.

Mrs. P. I. Merry gave a talk on elementary botany as applied to begonias. She said begonias are described as being a sappy or succulent herb-like shrubs, a few being annual. The leaves are alternate on the stem, and are asymmetrical. *B.* "Medora" and the angel wing type illustrate this very well. Flowers are monoecious, sometimes blooming together and sometimes the staminate before the pistulate. She explained the terms used to describe the shapes and forms of the leaves, using the blackboard to illustrate each. The leaf texture may be thin and succulent, as is *B. malabarica*; quite shiny, as are the semperflorens; heavy and hairy like *B.* "Sunderbruchi"; hairy underneath, and quite furry or tomentose as in *B. venosa*, *B. incana*, etc.

Begonia inflorescence are arranged in panicles or a compound raceme. The stem of the flowers is the peduncle.

The plant brought to discuss was *Begonia luxurians*, which is fibrous rooted. The stalk and leaves are hairy. The leaves are palmately compound, having from 7 to 17 leaflets, which are lanceolate and serrate 3" to 6" long and about 1" broad. These leaves are green on top and reddish underneath, the sinus is red. The small cream colored flowers hang in long, pendant clusters.

—B—

## ORANGE COUNTY

This branch, working efficiently, providing excellent speakers, and not neglecting the

social side, still takes time out to study begonias. In this study growing information is dispensed to all interested, and soils, water, climatic conditions, etc., are discussed.

—B—

## SACRAMENTO

Mr. John Thornley of Best Fertilizer spoke on fertilizers, emphasizing fertilizers for shade plants.

—B—

## SAN FRANCISCO

Roy Hudson, superintendent of maintenance of Golden Gate Park and the man who is responsible for the vast rhododendron planting east of the California Academy of Sciences in Golden Gate Park, spoke on "Rhododendrons." The San Francisco Branch of the American Fuchsia Society joined with us in this outstanding meeting.

Jean Thomas spoke on begonias. Her good recipe for a potting mixture, worth repeating: "In an apple box filled with leafmold, mix one tablespoon each of bone meal, blood meal and superphosphate." This is probably the foundation for those nice plants that Jean never fails to bring to our nomenclature table, but she pointed out that they are grown in a glasshouse which heats up pretty well on sunny days, no doubt a contributing factor to her success.

As you walk through the grounds of Forest Lodge, please observe the new landscaping, which represents the work of Dan and Mrs. Buckley, Jim Miller and Hyacinth Smith, who donated their time and some other things, aided by a contribution from the manager of the Lodge as well as by our own society. The stocks that you see had been grown by Carl and Ann Meyer. Dan says he will take care of the plants while they are getting started.

—B—

## SAN GABRIEL VALLEY

"Gardens Under the Southern Cross," "Gardens of New Zealand" and "Time Lapse Pictures of Flowers of Hawaii" were the featured sound-color films presented by Mr. Kenneth Kay, public relations representative of the Hayes Spray Gun Co., and narrated by Norvell Gillespie, well-known garden authority.

Kenneth Kay, ornamental horticulturist who has worked with the Arboretum and the Turf Association of U.C.L.A., answered problems on pest control and foliar feeding, which are very real in our area as the true information comes from the experimental test garden in Arcadia. In this test garden experimental work

is being done on roses (listed by number only), the All American camellias, dwarf citrus, grasses and other plants. A balanced method of proper care of these plants with regard to watering, fertilizing, pest control and reaction to new chemicals and soil conditioners is being evaluated. One particular problem involving dwarf citrus is drainage in the sandy soil here which is a silicate which tends to layer, preventing good drainage. Here a new soil conditioner which acts by water penetration is being tested. This conditioner is so effective that water could be made to penetrate caleche, a soil which is so hard and rock-like that it actually has to be cut out as it can't be picked out and it is impenetrable by water.

Foliar feeding is highly recommended, but Kay suggested that it be carried on as a separate process, because when mixed in the sprayer the nitrogen products of the fertilizer do not mix with some spray chemicals. The foliar feed should be applied with a fine spray, not a droplet type.

Extensive work is being done in the development of an all-purpose spray to be used in one operation with the spray gun. One problem involved is that of the wetting agents—fungicides use a wetting agent for complete coverage of the plant surface—insecticides are designed to hit, kill and roll off.

—B—

## SMOKEY VALLEY

Mrs. W. H. Vaupel, one of our green thumb artists, gave a very interesting talk on "Grooming Your Plants for Show." She very vividly spelled out the amazing correlation between the life cycle of a human being and that of a plant. A few examples are: plants, like babies, need care and constant attention; they must be fed, watered, changed, and disciplined. Babies are on a feeding schedule, plants should also be fed periodically. Babies must be given a drink of water at least once daily, the same is true with plants. Babies must be changed, plants, too, outgrow their pots and must be given more room to grow. Babies grow and become gangley or stringy, plants too get rank and stalky, so we must discipline them by pinching (not spanking) them back so they grow into beautiful, well groomed specimens.

We are now planning our summer flower show which will be held the 21st of June. This show will be open to the public and we anticipate quite a crowd as we are beginning to get considerable recognition in our city of Salina.

## Leaves Contd.

### TARRANT COUNTY

Our branch director showed slides he had taken of the lovely begonias in Canada, at our Easter Bunny luncheon. We are particularly proud of our two men members.

At the presentation of our charter and installation of officers in May by the Lone Star Branch of Dallas, we had a Texas pot luck luncheon at the Garden Center. We are very proud of our charter and had it framed. We have just made our year books.

—B—

I joined your numbers last October. While reading over the issue for this month, I found where one member who joined and planted her seed a month before I did has twelve good seedlings from it. So I am wondering if perhaps I had "beginner's luck" as I have over 150 good sized seedlings and almost 100 tiny ones too. No one could have been more surprised than I was. I have recently simply *had* to transplant them. They were in a pot 3' across and about 5' tall. Sure was a job, but they still look fine.

MRS. LLOYD GILHAM, Oregon

—B—

## Camellias

(Continued From Page 133)

mended strength, but to feed twice as often.

The two diseases to watch are die-back and petal blight. When die-back occurs, it is necessary to cut back the growth until the wood is free of brown spots. Petal blight is controlled by picking up all petals and blooms that fall on the ground.

### MEDIA FOR ORCHID SEED GROWING GIBBERELIC ACID

Obtainable at

LEUSCHNER PRESCRIPTION CHEMISTS  
1050 W. 6th St. Los Angeles 17, Calif.  
MICHIGAN 7666

JULY 26, 1957

8:00 P.M.

### REDONDO AREA BRANCH WHOOPEE PARTY

Proceeds to National Convention Fund  
25338 Pennsylvania Ave. Lomita, Calif.

## Calendar

- June 5—San Francisco Branch—Begonia  
June 13—Orange Co. Branch—Mrs. Cecil Houdyshe, La Verne, "African Violets." Forum (selected growers).  
June 15—10:00 A.M. and 2:00 P.M., "Plant Identification Workshop," Los Angeles County and State Arboretum.  
June 20 — Foothill — Don Horton, "Begonias."  
June 21—Smokey Valley Branch—Flower Show.  
June 26—Glendale—Mr. Frank Simerely, L.A. County and State Arboretum, will show slides of the Arboretum and explain its work. He will bring some rare plants to display.  
June 26—San Gabriel Valley—"Culture of African Violets," Mrs. Winona Jensen.  
June 28—Redondo Area Branch—Dorothy Jonson (Dorothy Digs), "General Gardening."  
June 30—El Monte Community Branch—Annual Birthday Party, 1886 San Pasqual, Pasadena. Proceeds to National Convention Fund.

## Arboretum Glasshouse for Begonias

WHAT is your branch doing to add to the glasshouse fund for begonias at the Arboretum?

Several branches and a number of individuals have donated already. Several branches tell me that they are raising funds to make the donation.

We are only one-tenth of the way to obtaining the GREENHOUSE FOR BEGONIAS.

If each member or friend who loves begonias would contribute at least one dollar or more, this greenhouse could be erected this year for YOUR benefit and for the benefit of the WORLD. As you know, visitors come to this Arboretum from all over the world. *All donations are tax deductible.*

This is a very worthwhile project—one in which all begonia lovers, individuals as well as Branches, can and should participate. When completed, the glasshouse will be a place where specimen plants will be grown and studied. There will be no expense to the Begonia Society after the house is complete as the care and upkeep will be borne by the Arboretum.

Let us hear from YOU and YOUR Branch.

HOWARD A. SMALL, *Chairman*  
Arboretum Begonia Glasshouse Fund  
3310 E. California St.,  
Pasadena 10, Calif.

# Hydrangeas

(Continued From Page 125)

desired, apply a teaspoon of aluminum sulfate or alum every two weeks during the growing season. With all chemicals, it is necessary to remember never to let the soil get too dry.

Keep the hydrangea outdoors until late October, protecting it from early frosts by covering it with cloth or heavy paper. In late October, bring it indoors and place the plant near a window in a cool cellar. All the leaves should drop before the first of the year. During this stage do not water the plant very much, just enough to keep the soil slightly moist. It is advisable to syringe or spray the canes every other day with water so that they do not shrivel.

About the first of February, bring the plant into a sun porch or sunny window and growth will start. If your home is very hot and dry, very poor results can be expected, and, if you have such conditions, it is better to let the plant stay out of doors to give you its mass of lovely dark green foliage each year.

Red spider is one of the most serious pests. Spraying with Malathion is the best control. Chlorosis or yellow foliage develops when the plant is lacking iron, or has been over watered. Using acid peat moss in the soil and planting in well drained soil should prevent chlorosis. Additions of  $\frac{1}{4}$  teaspoon of copperas (iron sulfate) per plant or using chelated iron as directed on the container will also help correct this trouble.

## Prevention

(Continued From Page 128)

and dusts become shelf-worn if they remain on your garage shelf too long—that is, the active agent may volatilize or deteriorate. Buy in quantities which can be used up in one season.

Don't think of a sprayer as only a distributor of insecticide 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, succulent growth at the expense of weakening the plant. For leaf

## Minutes, National Board April 22

Meeting of National Board of American Begonia Society called to order by President Trowbridge. Opened with Pledge of Allegiance to Flag and reading of Aims and Purposes of Society.

Secretary and Treasurer's reports read and approved.

Membership Secretary reported 66 new members, 67 renewing members. Asked permission to purchase Contact Envelopes. Moved by Mr. Moore, seconded by Mrs. Korts, Mr. Walton's request for permission to use \$55.00 for Contact Envelopes be granted. Carried.

Seed Fund Administrator Gee reported income \$114.39, expense \$14.39. \$100.00 remitted to treasurer.

Librarian Sault reported 2 books sold, 45 Begonians sold, 6 books loaned. Balance on hand \$141.37. Moved by Mr. Coe, seconded by Mr. Browne, Librarian transfer \$50.00 from her fund to General Fund. Carried.

Mrs. Korts presented bill for \$14.00 for printing Certificates of Award. Moved by Fred Browne, seconded by Mr. Coe bill be paid. Carried.

Question asked as to which begonia names should be recognized, those published in *The Begonian* or those registered with Nomenclature Department. Moved by Frank Coe, seconded by Pearl Bauer, that we go on record as requiring that NEW CULTIVARS must be registered with the Nomenclature Dept. before being published in the magazine. Carried.

Branch reports were given.

There being no further business the meeting closed at 10:05 P.M. to meet again May 27th.

Respectfully submitted,  
Arline Stoddard, Secretary

—B—

## COPY DEADLINE

All copy for *The Begonian* must be received by the editor not later than the first of the month preceding date of publication.

feeding, I use half-strength fertilizer often instead of a heavy dose occasionally.

USE COMMON SENSE WHEN SPRAYING; don't think you are the "Untouchable Iron Man."

REMEMBER—Follow the directions on the spray material and measure accurately.

—Replace the cap of the spray bottle tightly.

—Thoroughly clean the spray jar and all operating parts of the sprayer so the jets will be clean and useable for the next operation.

—If a weed killer is used in the sprayer, be sure the sprayer is completely cleaned, so that the next time the sprayer is used, there will be no remains of weed-killer applied to desirable plants.

# Branch Meeting Dates . . .

VISITORS ALWAYS WELCOME AT THESE MEETINGS

## AMERICAN BEGONIA

### HYBRIDIZERS 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

### CENTRAL FLORIDA BRANCH

4th Thursday, 8:00 p.m.  
Homes of Members  
Mrs. Leo Spengler, Cor. Secy.  
15 West Preston Ave., Orlando, Fla.

### DALLAS COUNTY BRANCH, TEXAS

1st Thursday, 7:00 p.m.  
Members' Residences  
Mrs. Ruth Cook  
923 S. Edgefield, Dallas 8, Texas

### EAST BAY BRANCH

2nd Thursday, 7:45 p.m.  
Willard School, Telegraph at Ward,  
Berkeley, California  
Mrs. E. H. Ellerbusch, Secy.  
1051 Ordway, Berkeley 6, Calif.

### EL MONTE COMMUNITY BRANCH

3rd Friday, Members' Homes  
Daisy Morrow, Cor. Secy.  
2821 N. Musgrove Ave., El Monte, Calif.

### FOOTHILL BRANCH

3rd Thursday, 8:00 p.m.  
La Verne Community Bldg.  
2039 Third St., La Verne  
Mrs. C. W. Hall, Cor. Secy.  
358 E. Arrow Hwy., Upland, Calif.

### FORT, ELSA BRANCH

1st Saturday, 1:30 p.m.  
Miss Lola Price, Secy.  
628 Beech Ave., Laurel Springs, N.J.

### GLENDALE BRANCH

4th Wednesday, 8:00 p.m.  
Tuesday Afternoon Club, 400 N. Central  
Mrs. Cleo Price, Cor. Sec.  
377 Myrtle, Glendale 3, Calif.

### GRAY, EVA KENWORTHY BRANCH

3rd Monday, 7:30 p.m.  
Community House, La Jolla  
Mrs. Charles Calloway  
1311 Torrey Pines Rd., La Jolla, Calif.

### GRAY'S HARBOR BRANCH

2nd Monday, 8:00 p.m.  
Hoquiam Public Library, or  
Messingale and Rosenear Music Store  
Aberdeen, Washington  
Mrs. Jessie B. Hoyt, Secy.  
1013 Harding Road, Aberdeen, Wash.

### GRUENBAUM, MARGARET BRANCH

4th Tuesday, 10:30 a.m.  
Homes of Members  
Mrs. Adolph Belser, Cor. Secy.  
Welsh and Veree Rd., Philadelphia, Pa.

### HAWKEYE STATE BRANCH

3rd Friday, Members' Homes  
Ruth Anderson, Secy.  
Underwood, Iowa

### HOLLYWOOD BRANCH

3rd Wednesday, 7:30 p.m.  
Plummer Park, 7377 Santa Monica Blvd.  
Mrs. Antoinnett Dawson, Secy.  
6243 Acacia, L.A. 56, Calif.

## HOUSTON, TEXAS BRANCH

2nd Friday, 10:00 a.m.  
Garden Center, Herman Park  
Mrs. Grant Herzog, Secy.  
12601 Broken Bough, Houston 24, Texas

## HUMBOLDT COUNTY BRANCH

2nd Monday, 8:00 p.m.  
Los Amigos Club, Loleta, Calif.  
Miss Margaret Smith, Secy.  
P.O. Box 635, Ferndale, Calif.

## INGLEWOOD BRANCH

2nd Thursday, 7:45 p.m.  
Inglewood Women's Club  
325 North Hillcrest, Inglewood, Calif.  
Mrs. Hattie Bradford, Secy.  
1825 W. 73rd St., Los Angeles 47, Calif.

## LONE STAR BRANCH

3rd Monday, members' homes  
Mrs. Chester Terry, Secy.  
5511 Richmond Ave., Dallas, Texas

## LONG BEACH PARENT CHAPTER

1st Thursday, 7:30 p.m.  
1925 Maine Ave., Long Beach 6, Calif.  
Mrs. Rosa Cox, Sec.  
3592 Lewis Ave., Long Beach 7, Calif.

## LOS ANGELES BRANCH

4th Wednesday, Homes of Members  
Mrs. Glenn Morrow, Secy.  
2821 N. Musgrove Ave., El Monte, Calif.

## LOUISIANA CAPITAL BRANCH

First Friday, Homes of Members  
Mrs. Thos. O. Day, Secy.  
4065 Hollywood St., Baton Rouge, La.

## MIAMI, FLORIDA BRANCH

4th Tuesday, 8:00 p.m.  
Simpson Memorial Garden Center  
Lena Hyden (Mrs. Jesse O.)  
5710 N. Miami Ave., Miami 37, Fla.

## MISSOURI BRANCH

3rd Tuesday, 7:00 p.m.  
Mrs. Hattie Taylor, Secy.  
P.O. Box 25, Raytown, Mo.

## NEW ENGLAND BRANCH

3rd Saturday, Homes of Members  
Mrs. Lester H. Fox, Secy.  
170 Marsh Hill Road, Dracut, Mass.

## OCEAN COUNTY, NEW JERSEY BRANCH

1st Tuesday, 12:30 p.m., members' homes  
Mrs. Anna Peck, Secy.  
23 So. Gateway, Toms River, N.J.

## ORANGE COUNTY BRANCH

2nd Thursday, 7:30 p.m.  
Garden Grove Grange Hall  
Century and Taft Streets  
Garden Grove, Calif.  
Mrs. Maybelle Woods, Secy.  
604 South Helena St., Anaheim, Calif.

## PASADENA BRANCH

Meetings on call.  
Homes of Members  
Col. C. M. Gale, Secy.  
40 N. San Rafael, Pasadena 2, Calif.

## PHILOBEGONIA BRANCH

2nd Friday, Members' Homes  
Mrs. Charles J. Allen, Sec.  
Woodside Lane, Riverton, N.J.

## PORTLAND, OREGON BRANCH

4th Friday, 8:00 p.m.  
Members' Homes  
Mrs. Helen Parrott, Secy.  
3955 S.E. Kelly, Portland 2, Oregon



**RAYTOWN, MISSOURI BRANCH**

4th Tuesday, 7:30 p.m.  
Homes of Members  
Mrs. Mildred Schorr, Secy.-Treas.

**REDONDO BEACH AREA BRANCH**

4th Friday each month  
2308 Rockefeller, Redondo Beach, Calif.  
Opal Murray Ahern, Secy.  
1304 Poinsettia Ave.  
Manhattan Beach, Calif.

**RIVERSIDE BRANCH**

2nd Wednesday, 7:30 p.m.  
Shamel Park, 3650 Arlington,  
Riverside, California  
Mrs. Ethel Prior, Sec.  
4345 5th St., Riverside, Calif.

**ROBINSON, ALFRED D. BRANCH**

3rd Friday, 10:30 a.m.  
Homes of Members  
Mrs. Harlie Brown  
3233 Tennyson, San Diego 6, Calif.

**SACRAMENTO BRANCH**

3rd Tuesday, 8:00 p.m.  
Mrs. Gordon Long, Secy.  
5416 Dana Way, Sacramento, Calif.

**SAN DIEGO BRANCH**

4th Monday  
Hard of Hearing Hall,  
Herbert & University  
Mrs. Maurice P. Mitchell, Secy.  
2329 Bancroft St., San Diego 4, Calif.

**SAN FRANCISCO BRANCH**

1st Wednesday, 8:00 p.m.  
Forest Lodge, 266 Laguna Honda Blvd.  
Mrs. Louise Allmacher  
1963 45th Ave., San Francisco, Calif.

**SAN GABRIEL VALLEY BRANCH**

4th Wednesday, 8:00 p.m.  
Monic Temple, 506 S. Santa Anita Ave.  
Arcadia, California  
Mrs. E. F. Slavik, Sec.  
300 Hacienda Dr., Arcadia, Calif.

**SAN MIGUEL BRANCH**

1st Wednesday  
Youth Center, Lemon Grove, Calif.  
Ida M. Barker, Secy.  
7591 Central Ave., Lemon Grove, Calif.

**SANTA BARBARA BRANCH**

2nd Thursday, 7:30 p.m.  
Girl Scout Clubhouse,  
1838 San Andres St.  
Mrs. Maria Sanchez, Secy.  
1753 Glen Oaks Dr., Santa Barbara, Calif.

**SEATTLE BRANCH**

3rd Tuesday, 7:45 p.m.  
Green Lake Field House  
7201 Green Lake Way  
Mrs. Carl Starks, Secy.  
6116 Greenwood, Seattle 3, Wash.

**SHEPHERD, THEODOSIA BURR BR.**

1st Tuesday, 7:30 p.m.  
Alice Bartlett C.H., 902 E. Main,  
Ventura, Calif.  
Mrs. Oakley Murphy, Secy.  
119 E. Simpson, Ventura, Calif.

**SMOKEY VALLEY BRANCH**

3rd Thursday of each month  
John C. Irving, Cor. Secy.  
1940 Simmons, Salina, Kan.

**SOUTHERN ALAMEDA COUNTY BR.**

3rd Thursday, 8:00 p.m.  
Strowbridge School Multi-Purpose Rm.  
21400 Bedford Dr., Hayward, Calif.  
Mae Bolyard, Cor. Secy.  
2425 Thornton Ave., Newark, Calif.

**TALL CORN STATE BRANCH**

Mrs. Edna Monson, Secy.  
South Taylor, Mason City, Iowa

**TARRANT COUNTY BRANCH**

2nd Monday, 10:00 a.m.  
Garden Center, 3220 Botanic Dr.,  
Fort Worth, Texas  
Mrs. Joe X. Schad, Sec.  
3766 W. 4th St., Fort Worth, Texas

**TEXAS STATE BRANCH**

1st Tuesday night in members' homes  
Mrs. William Demland, Secy.  
2400 19th St., Port Arthur, Texas

**TREASURE ISLAND BRANCH**

4th Monday, 7:30 p.m.  
Homes of Members  
Mrs. Harold Renshaw, Secy.  
2521 37th St., Galveston, Texas

**WESTERN PENNSYLVANIA BRANCH**

2nd Wednesday, 11:00 a.m.  
Homes of Members  
Mrs. Albert S. Lash, Cor. Secy.  
1228 Oklahoma Ave., Pittsburgh 16, Pa.

**WHITTIER BRANCH**

1st Thursday, 7:30 p.m.  
Palm Park Community Center,  
1643 Floral Drive  
Mrs. Rebecca Olson  
714 N. Palm Ave., Whittier, Calif.

**WILLIAM PENN BRANCH**

3rd Tuesday, 2:00 p.m.  
Homes of Members  
Mrs. Ernest C. Drew, Sec.  
Box 331, Narberth, Pa.

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