

# *The Begonian*

DEVOTED TO THE SHELTERED GARDENS

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*Begonia Pebble Lane*

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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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## Seeds, Seedlings, and Hybrids

By DON HORTON

### *Streptocarpus*

STREPTOCARPUS are kin to saintpaulias (African violets) and sinningias (the florist's gloxinia), but do not require as high a temperature. Indeed, these are often grown under lath in California, something that never could be done with their more tropical cousins.

Like the sinningias the flowers are trumpet shaped and run from one to five inches in length depending on variety. The usual modern day hybrid has a flower from three to four inches. The flowers are held well above the foliage usually with two to a stem.

The foliage is completely basal with the leaves resembling those of an English primrose. This gives rise to the streptocarpus's common name, cape primrose. It is not a primrose, it is definitely a gesneriad.

Speaking of names: the streptocarpus has very long seed pods, often six inches in length, that are twisted. When the pod ripens, the seams separate and the pod untwists to release its seed. This accounts for its scientific name (from the Greek), *streptos* (twisted) and *karpus* (fruit) or literally—twisted seedpod.

The color range is similar to the sinningia's but the combinations of markings and flower

form give a much different effect. Blue predominates as do the dark purple stripes on the lower petals. There are varieties with cream or white throats and flower colors of white, pink, and crimson.

Streptocarpus are easily raised from seeds providing the seed is fresh. Probably the most common cause of failure is the purchase of old seed. Therefore, be very careful where you buy your seed. Good streptocarpus seed is expensive—costing about the same as good gloxinias seed. When it is fresh, it will germinate easily and 100%, but seed a year old will do nothing.

Our seed fund is offering fresh seed from good hybrids this month so if interested I suggest you turn to Florence Gee's page.

They are grown in the same manner as gloxinia seed—or begonia seed for that matter. However, you will find the way the seedlings grow very interesting. Begonia seedlings, like most other dicotyledons (having two seed leaves) germinates and throws up two seed leaves. The true leaves that follow originate from between these two seed leaves.

Streptocarpus start in the same manner but instead of growing more leaves in the center between the two seed leaves, one of the seed leaves elongates. This may be over two inches

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# Fuchsias

By THE DON WESTOVERS, Seattle, Wash.

## *Fuchsia Culture*

CARE of fuchsias is simple, but it must be constant. These plants cannot stand to be neglected.

They should be protected from direct sun during the hottest part of the day. Plant them in a loose, rich soil—that is, one containing leaf mold (or compost), peat moss and cow manure. Then keep them moist at all times. Fuchsias need lots of water to grow their best. Water the foliage as well as the roots, but remember leaves burn if the sun hits them while they're wet. Be sure your plants have good drainage.

Feed them with a good well-balanced liquid fertilizer at least once every two weeks. (We use RA-PID-GRO).

Treat the soil to destroy Strawberry Root Weevils. (We use Miller's SOILDUSTO).

Spray with a good insecticide from time to time to kill aphids. We use ISOTOX, often mixing it with RA-PID-GRO so we can spray and leaf-feed in one operation.

Tip cuttings taken in the spring will produce nice plants in a short time. Tips of new branches should be pinched back to make a bushier plant. Generally speaking, you can figure blooms will appear six to eight weeks after pinching.

At the end of the season, prune your plants back to about six inches in height. Trim your hanging fuchsias to about the edge of the basket. A good wintering-over method is to dig a trench—in the open—in a part of your yard which drains well, put your pruned plants in this trench and cover them with about six inches of sawdust. Plants so stored can be dug up around the middle of April and replanted outside to begin their growing season. This method, used in Seattle, of course, would not be satisfactory away from the coast where winter temperatures are too low.

If you take your fuchsias indoors for the winter, keep them in a cool place and water them lightly. Remember the roots must not dry out completely.

If you have a good light window in a cool room, you can start your plants growing again in March or April, giving them a little more water. Plants started indoors (and this includes new fuchsias you might buy) should not be set outside until early May. Even then

## *Making a Fuchsia Tree*

CHOOSE a basket-type fuchsia. Upright varieties are usually too stiff. Start with a small plant—a just-rooted cutting which has not been pinched is best. It will have only one stem and this is the most important thing for your tree: THE TIP OF THIS STEM MUST NOT BE PINCHED until it has reached the height you desire.

Allow this one stem to grow—keeping it tied to a stake as it gets taller. Don't remove any leaves until the crown has started to form. DO remove any side branches which start to grow out from the stem just above the leaves.

Keep your tree in a pot—graduating it to larger pots as the plant becomes pot-bound. NEVER let it get dry. Be sure it has good drainage. Feed every week with a good liquid fertilizer.

When the stem is as tall as you want your tree to be, allow side branches to grow for about three or four sets of leaves down from the top. These side branches at the top will help form the umbrella shape you are trying to achieve.

THEN—Pinch out the tip.

At this time, you should fasten to the top of the stake some sort of support for the crown to grow through. We use an inverted wire basket, 12 inches in diameter. Such a support gives your tree a better form and prevents its getting broken from weight of branches and blooms, or from strong winds.

As the branches grow from the center stem, pinch the tips to enforce bushier growth.

Extra care must be taken in storing a tree over winter. Prune back the branches forming the crown before putting it away. Then store as with your other fuchsias. If you bury it, take care in laying it down so the stem (or trunk) will not be broken.

If brought indoors for the winter, the tree MUST be kept in a COOL spot. If the air is too dry and hot, even watering the roots will not keep the crown alive. Water lightly, but be sure the plant is always moist.

With a good-growing fuchsia, you can have a showy tree in one year.

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it is a good idea to put them out in the daytime and bring them in at night for a week or so before leaving them outdoors permanently.

# Growing Begonias in Ohio

By MRS. J. DALE SHULER, Lexington, Ohio

I LIVE in a large old farmhouse with many windows that are full to overflowing with my large collection of begonias. There are at least one hundred and fifty different varieties in the collection. Most of them I have acquired through trading with other begonia lovers that I have met via the inky trail and through the American Begonia Society, however I was raising begonias long before I ever heard of the A.B.S. They were "just begonias" as I was not familiar with their names or history and they were either "Angel Wings," "Stars," "Grape Leaf" or "Everblooming," but I wanted every one that I ever heard of or saw and would go to almost any means to get it! Then one time I saw a book advertised in the *Better Homes and Gardens*. It was *Begonias for the American Home and Garden* by Helen Krauss. I wanted that book the worst kind of way but could not find it anywhere, so finally wrote to the editor of the magazine and asked where I could get it and also where I could get some begonias that I had never heard of which were described in that magazine. He sent me the address of the publishers of the book and you can believe I lost no time in sending for it. Through it I was able to identify a lot of the begonias that I had and it is still one of my most treasured books. The editor also sent me the address of two ladies who had begonia cuttings to sell. That was the beginning of my trading, and since then I have traded with people all over the U.S. and have collected many new friends as well as begonias.

I read about the A.B.S. in the Krauss book, but again there was no address other than that it was in Los Angeles so I took a chance and sent a letter just addressed to A.B.S., Los Angeles. Much to my surprise I received a reply and a sample copy of *The Begonian*. I subscribed right away.

I look forward to getting the magazine every month and the first thing I look for is the Seed Fund Department, as I find growing begonias from seed the most fascinating thing that I have ever done. I have hundreds of seedling plants that I not only have the fun of growing, but have lots for trading for other kinds and to give away. I get a real "lift" from sharing my plants with others. Have many pretty plants from crosses that Mrs. Spengler made. I have tried various kinds of

soil for growing my begonias but have found the very best kind, for me, is leaf mold from our woods. I look for a kind of hole or depression, scrape off the top leaves and the decayed leaves and soil underneath is excellent for growing them. I find it has to be sterilized or I will get earth worms in the pots. Earth worms are O.K. in the ground but not so good in a flower pot! I give a liquid fertilizer when I think of it.

Through the trial and error method, I have learned the likes and dislikes of a great many of the harder to grow begonias. It is a real satisfaction to me to be able to grow a begonia after having tried unsuccessfully to raise it for years. Tried for a long time to grow *B. "Templini"* with no luck at all, then I planted it in pure leafmold, kept damp at all times, but not wet and put it in a south window. Now it is a beautiful plant and is in bloom. Have also successfully rooted leaves of it. Another is *B. acida*, until I learned it likes to be wet and cool I couldn't grow it, and for me it drops its leaves in winter. I threw away my first plant because I thought it had died. A really tough one for me to get to growing was *B. "Ruth Ann,"* a plant Mrs. Schwerdtfeger sent me free with an order. It wouldn't grow a bit until I put it under the fluorescent lights in the basement where the temperature stays at 60° most of the time. It is very beautiful now. The leaves got much larger than I thought they would and they are a deep red underneath which shows through the silver on top and looks like a deep rose color.

I find my east window is the place to grow the best plants. The window is in our library and has book shelves under and around it. The window is five feet wide and four feet high and the shelf or window sill is eighteen inches wide. It holds quite a few plants. It is shaded in summer by a large maple tree and in winter, gets all the morning sun. The plants there grow and bloom beautifully. In a south window of the same size, that looks out on to a lovely view, I have the plants arranged to form a frame for the outside view with tall canes to each end and smaller kinds in the middle. I also have at one end a plant of *B. dichotoma* in bloom and the flowers look a lot like elderberry blossoms. A tall plant of *B. "Loma Alta"* is at the other end. The plants in this window sit on a gravel

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# The Versatile Philodendrons

By GLENN E. HIATT, La Canada

MODERN decor in most new homes throughout the United States sets the pattern for the use of form and texture found only in living plants. Almost as universal as food is the desire to have living plants not only in the landscaping outside the home or office but as definite parts of the interior, as an interior decorator might use a picture, furniture, or object d'art. An understanding of the ultimate size, texture, habit of growth, and tolerance of low light intensity is most important to get the most from the plants.

*Philodendron cordatum* is probably the most used of all the species. This plant is in the trailer class and is used extensively as a filler plant in small planters. The two or three inch, slightly heart shaped leaves of glossy texture, tolerating low light but flourishing in even quite strong light is probably the most fool-proof of all houseplants. They stand and even require rather severe pruning back when the foliage stretches out too far or becomes too bunchy.

*Philodendron pertusum*, the "split leaf philodendron" is the next most popular and possibly the least understood. Why, many homeowners ask, do the leaves lose their splits when the plant has only been in the living room for six months to a year? Why, if the plant is given sufficient water, do the leaves get brown spots and finally fall off? These and many other questions are deserving of a practical answer. Light is measured in Foot Candles and the average summer sunlight may measure from 8,000 to 12,000 FC. Plate glass windows, organdy curtains, drapes, Venetian blinds, etc., filter the light thirty to ninety per cent, depending on the degree of shading. Then, the amount of light finally getting into the room is decreased in proportion to the distance the plant is from the window. Thus, a plant placed about ten feet from a window may receive only fifty to one hundred FC, and that only if the sun is shining directly into the room. If the light is reflected, it is of very little value to the plant. Smaller leaves, non-splits, and spindly growth are all results of insufficient light.

*Philodendrum hastatum*, from Brazil, has large (up to twenty-four inches) arrow or heart shaped leaves and grows similarly to *P. pertusum* as a slow, heavy stemmed climber. It does not require as much light as *P. per-*

*tusum* and does not show the effects of decreasing size of leaves in low light.

*Philodendron panduriforme* is probably the most tolerant of all the philodendrons of low light intensity. It is sometimes called the fiddle leaf plant because of its three lobed foliage. It was discovered in Peru and Brazil and found to be very hardy, tough, retains leaves for a long time, and incidentally, is a very beautiful and unusual plant. Its slow climbing habit and leaves from eight to twenty inches long make it one of the most satisfactory house plants.

Many other philodendrons including *P. dubium*, *P. imbe*, *P. squamiferum*, *P. "Sodi-roi"*, *P. wendlandi*, *P. gutiferyum*, *P. friedrichstahl*, all are interesting in shape of leaf, growth characteristics, and adding variety to a collection, but the above described plants will probably be most satisfactory in all cases.

If the decor of a room requires a plant in a dark corner, a second or stand-in plant may be switched with the original so that it may be placed near a window in possibly another room to take on a new supply of sunlight. This switching should be done about every two to four weeks and will then allow the plant that is in the window to be fed with a balanced plant food. Plant should be fed only after the compost has been moistened first.

The most important factor, next to light, is watering. There is a very strong tendency to water too much and too frequently, which in turn will cut off the air supply to the roots and cause them to die. With no roots, the leaves turn brown, the plant is limp, and the stem withers. The compost should be watered very slowly by trickling the water on the surface of the soil until the soil has absorbed only what it can hold. Then let the compost almost dry out before repeating the process. With careful watering and ample light, truly the philodendrons are quite versatile.

—B—

The All-American selection for 1957 and the first Camellia to ever receive this award is the Japonica *Camellia* "Cinderella." It is a hardy bloomer and reminds one of a carnation with its fluted, serrated petals, edged in pale pink deepening to deep rosy pink. The opened flower shows clustered deep yellow stamens.

# "Grounded" Begonias

By MARIE TURNER

PLANTS are grown in many sections of the eastern and western hemispheres—in containers and in the earth under varying conditions. After many years of experimenting, particularly with begonia culture, I still maintain that there is no substitute for "grounding" begonias.

Species have yet to be found in their wild forms—when they are and when they have been, it has been in uninhabited areas without care of mankind. It is logical to believe that even the new cultivars will have better living conditions in the ground with fewer problems and less "fuss" than coddled in pots of any size or kind.

Yes, there are three cardinal rules for grounded shade plants: 1. Don't drown; place plant roots and stock *above* good sub-earth drainage; 2. Don't let slugs or snails dine sumptuously on your begonia foliage, use pest control methods; 3. Don't be a "too clean" gardener. Nature provides falling leaves as a mulch for shade loving plants—why don't you? Use a mulch. Today's nurseries and garden supply houses are eager to take your money in return for hundreds of good commercial products. Buy any of them or go to "common sense" methods and use material for mulch such as wood shaving, leaf molds and etc.

In landscaping with begonias, I mean to use them as the "key" planting. As a watering barometer, intersperse with ferns, for when they require additional moisture and say so by dropping the tips of their fronds, begonias in the area need water also. Use bromeliads or billbergias for adjacent planting also for a purpose. Their cylinder shape retains water in their "cones" and this provides humidity for the surrounding plants. Begonias like humidity. Fuchsias exude moisture in leaf breathing. They also add texture variety and companionate bloom color to the fairylike gracefulness of begonia blossoms.

Advice to the "first timer" in begonia landscaping should include the names of available begonias to be used in tall, medium and foreground zones of their planting area. For background planting try *Begonias*: "Corallina Lucerna," *haageana*, *angularis*, *compta*, "Prunifolia," or "Gigantea Rosea," all fibrous types. The large leaved rhizomatous are used to advantage in the middle of bed planting. Such varieties as *Begonias*: "Freddie," 1131, "Maximilian," *ricinifolia* and "Rickey Minter." Also in this mid-

dle of the area section use fibrous plants such as *Begonias*: "Nelly Bly," "Medora," "Pink Wave," "Hopi Star" and the tall growing semperflorens. Foreground planting should include small leaved types of both cane and rhizomatous and may include plants that creep along the ground that are mostly seen in hanging baskets, for example: *Begonias*: *scandens*, *glabra*, "Braemar," "Limminghei," "Maphil," "Sir Percy," "Mac-Alice" and the double flowered semps as "Westport Beauty," "Carmen Queen" and the dwarf white ball semps provide foliage contrast and may be noticed to advantage. I purposely left the rex varieties as a parting shot. With their color and brilliance, they should be used for accent among the many other varieties to choose from.

It is wise to use plants that have been grown in four inch pot size or larger to put in the ground for the first time. Be sure they are in the new growth stage, and protect them in the beginning with a mild solution of vitamin B-1 when they are planted. Prepare your loose soil prior to planting with emphasis on quick drainage. Be imaginative when you make your selection of begonias for there are hundreds of varieties that may be used. When your begonia section is completely planted, then is the time to top dress the ground with mulch to conserve water and to keep the roots cool in summer. Check your new planting often for the first few weeks. Spray and feed at regular intervals. Remember, fibrous begonias are classified as *shrubs*. Use them in that manner.

—B—

## These Things I Prize

These are the things I prize  
And hold of dearest worth;  
Light of the sapphire skies,  
Peace of the silent hills,  
Shelter of the forests, comfort of the grass,  
Music of birds, murmur of little rills,  
Shadow of little clouds that swiftly pass,  
And after showers  
The smell of flowers  
And of the good brown earth —  
And best of all, along the way,  
Friendship and mirth.

Henry Van Dyke

# Begonia Pebble Lane

By JEAN KERLIN

BEGONIA "Pebble Lane" (cover picture), one of my personal preferences, I have chosen to feature this month. The hybridizer is Susie Zug, who has such a magic touch with rhizomatous begonias such as *B.* "Sir Percy," *B.* "Verde Grande," *B.* "Silver Jewel" and *B.* "Gaytime."

*Begonia* "Pebble Lane" is so very different in color and texture that it could easily be confused with a rex begonia. Even the marbled coloring suggests a rex strain in its antecedents, but in truth it is a hybrid of *B.* "Sir Percy" and *B.* "Speculata."

The name is derived from the paths of the veins in the leaves plus the tiny pin head raises, like small pebbles, covering the entire leaf surface. The background coloring in the leaf is a brownish-green, overlaid with large areas of silver. No two leaves have the markings in the same section. As the leaves are so abundant on even the small plants of this specimen, it is a braggart when setting among other varieties of more plain leaved begonias. The leaves are medium size as one grades a rex, thin, but crisp. The margin is waxy with the veins depressed. It attains bushy growths rapidly. It is not known to be a bit temperamental.

—B—

Prevention is easier than a cure for chewed up leaves and stunted growth. The insect pests of camellias are few although some caterpillars and Fuller's rose weevil will chew holes in the leaves, but these can be eradicated with diel-drin. Malathion in light oil will control scale which will kill twigs or branches if allowed to go unchecked thus affecting the vigor of the shrubs and its future blooms.

—B—

Dear Readers:

PLEASE NOTE THE LOCALE OF THE CULTURAL DIRECTIONS GIVEN. Due to climatic conditions of each area, it is impossible to use the same watering procedure, growing mix and location of plants. For successful growing, modify these methods to suit your own particular need. If you are successful with your own method, by all means to not change.

Why not share your problems and success in growing of begonias, shade plants and greenhouse companions with a letter or an article sent to me?

Sincerely,

LOUISE CRAMER, *Editor*

# Hunger Signs in the Garden

By JOHN THIEBEN

PLANTS are just like human beings. If they don't get the right things to eat, they get sick from malnutrition. And, of course, sick plants are not the most beautiful to look at. Sick plants are more susceptible to attack from insects and plant diseases.

Like sick human beings, sick plants exhibit to the trained eye of the plant doctor certain symptoms which are characteristic of specific nutritional deficiencies. With a little keen-eyed observation you can diagnose many hunger symptoms in the plants in your garden. Once you have done this, treatment of the condition is easy with the proper fertilizer.

## NITROGEN DEFICIENCY

Nitrogen is especially important for flowers of good quality since it is essential for the synthesis of natural proteins. Plenty of "N" gives a good normal deep-green color to foliage and stems. In general an "N Def" is characterized by slow growth, slender fibrous stems, and foliage and stems that fade to yellow in color.

*Treatment for "N Def"* Use any organic fertilizer high in nitrogen. A few of the best are bloodmeal, 15% N.; hoof and horn, 12.5% N.; and cottonseed meal, 7% N. These products could be mixed with compost or soil mix and applied to soil in fall or early spring. Always allow at least six weeks for complete decomposition of organic materials in the soil.

## PHOSPHORUS DEFICIENCY

In general plants which are deficient in "P" are slowed in growth. The underside of leaves assumes a reddish-purple color, and the plants are slow to mature.

*Treatment for "P Def."* Use either phosphate rock, 30% P., or bone meal, 21% P., applied either directly to the soil or mixed with your potting mix. The amount you apply depends on how much your soil needs. To determine correct amount a soil test would be helpful.

## POTASSIUM DEFICIENCY

General symptoms of Potassium Def. show up in plants that are reduced in vigor, have poor growth and poor yield and are more susceptible to disease. Ashen-gray leaves are observed instead of the good normal deep-green color. The leaves develop brown edges, and crinkle and curl. Later they become bronzed.

*Treatment for Potassium Def.* If soil is par-

# Streptomycin Comes Home

By D. PRAMER, New Jersey Agricultural Experimental Station

IT IS COMMON knowledge that the antibiotic streptomycin was discovered in 1943 as a result of research in the Department of Microbiology at the New Jersey Agricultural Experiment Station. The ability of streptomycin to destroy certain bacteria, notably the tuberculosis organism, led to its immediate use in medical science. The fact that the world was in the midst of a great war and badly in need of chemotherapeutic agents added to the rapid acceptance and utilization of streptomycin by medical authorities.

Although streptomycin was a boon to medicine, its agricultural application awaited exploitation. Now, some 14 years after its discovery at an agricultural experiment station, streptomycin is back home again. The delay was not due to lack of foresight on the part of agricultural scientists. The reason streptomycin was not immediately applied for the solution of agricultural problems was its high cost. Cost is seldom a deterrent in human medicine.

In recent years antibiotics have emerged as a potent weapon in the struggle to control plant disease. Virtually all chemicals employed for plant disease control, previous to the use of

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ticularly low in potassium add potash rock, granite dust, wood ashes; also heavy mulching seems to help maintain the potassium supply.

## CALCIUM DEFICIENCY

In general, plants exhibiting "Cal. Def." are retarded in growth and develop thick woody stems.

*Treatment "Cal. Def."* Use any good grade of ground natural limestone.

## MAGNESIUM DEFICIENCY

"M. Def." is widespread. Plants deficient in magnesium are, in general, late to mature, do not mature uniformly, are of poor quality, and lack green color with the lower leaves being affected first. The areas between the leaf veins turn yellow, then brown, while the veins remain green.

*Treatment for "Mag. Def."* Use Dolomite limestone since this contains quite a bit of magnesium.

Usually plenty of good old manure, or a good quality compost will correct all soil deficiencies, but if evidence of deficiency still exists, add the suggested minerals or organic materials.

antibiotics, were general poisons applied as sprays or dusts to the surface of plants as a protective coating. If excessive amounts were used the results were often harmful to the plant as well as the infecting microorganisms. Although these substances were relatively harmless when present as a surface coating, they caused serious damage when introduced into plant tissues.

Antibiotics are characterized by their selective action. With the discovery that antibiotics kill bacteria that cause diseases in plants came the realization that they were systemic in their action, that is, certain antibiotics are absorbed and move within the plant acting internally to prevent infection and to destroy disease-causing microorganisms already present. The specificity of antibiotics enables them to destroy pathogenic microorganisms without causing comparable damage to plant tissue.

Of the antibiotics that have been tested for use in the control of plant diseases streptomycin has proved to be the most effective. It acts primarily against bacterial diseases but is also effective in combating certain fungus infections. Among the plant diseases that have succumbed to the streptomycin treatment are fireblight, halo blight of beans, bacterial spot of tomatoes, angular leaf spot of cucumbers, seed piece decay and black leg of potatoes. The fungus diseases, downy mildew of lima beans, late blight of tomatoes, and blue mold of tobacco have also been controlled by streptomycin treatment.

It is not possible to report all of the work done, however, the use of streptomycin for plant disease control has produced results of fundamental significance. Plant pathologists located at experiment stations throughout the country and workers in various U.S.D.A. laboratories are actively engaged in research planned to exploit the inherent advantages of antibiotics in plant disease control. Industrial organizations have also realized the great potentialities involved and currently are marketing preparation of streptomycin for use in the treatment of plant diseases.

The prominence of antibiotics in medicine has tended to obscure facts concerning their use in agriculture. As a result of recent study, research, and development, streptomycin has returned to its place of origin, the Agricultural Experiment Station.

# Culture of Tuberous Begonias

By FRANK REINELT

## PLANTING DORMANT TUBERS

TIME and effort will be conserved if Pacific Strain tubers are planted in the starting flat after they show pink buds. The planting medium is preferably a coarse hardwood leaf mold, or an organic substitute, which will not pack and become soggy, thereby excluding air. Peat moss, holding 90 per cent of its weight in water when saturated, is not recommended as a starting medium for dormant tubers. Fill a nursery flat with coarse leaf mold, and space the tubers evenly, allowing sufficient space between tubers for heavy root development, which may be considered the most important factor in the ultimate growth of fancy begonias. Bury the spaced tubers, covering with one-half inch of leaf mold. This is a very essential step, one which we wish to emphasize strongly. Its omission will preclude the full development of roots from the tuber's base, sides, and top, as nature intended. The planted flat should be WATERED CAREFULLY, maintaining even moisture, but not soggy wetness. Place flat in strong light; shield from direct sun's rays. A warm 65° to 75° temperature will hasten growth. Every effort should be made for close, compact plant growth. Plants are potted, or planted in prepared beds, if the weather is favorable, when the first two leaves have reached equal development. At this stage the roots are heavy, and will adjust to transplanting.

## TRANSPLANTING MATURE PLANTS

First, to consider transplanting from flat to pots. Begonias do not root deeply, and the shallow eight or nine inch azalea pots are preferred to the deeper pots. Our standard potting mixture consists of two-thirds partly rotted oak leaf mold and one-third coarse sand. Remove plant from starting flat carefully. Mix one handful of fish meal with enough potting mixture to fill the bottom two-thirds of pot, place plant in pot, fill in around root mass. Firm, and finish by covering top of root mass lightly with a quarter inch of potting soil. WATER CAREFULLY.

The prime soil consideration for outdoor beds of Pacific Strain tuberous begonias is perfect drainage. One-third leaf mold, one-third sand, one-third sandy loam is good. The addition of one-half sand to existing garden soil will generally drain well. If rotted cow, or steer manure is added to the bed, it should be

mixed thoroughly a month in advance, and watered several times. In planting, place a handful of fish meal under the root mass, and barely cover the root mass with soil. Soil should not be pulled in contact with plant's stalk. The points of all leaves should face the front of the bed, presenting a uniform appearance to finished planting. Location of planting area in relation to the sun is important, and can spell success or failure. They will not perform satisfactorily in complete shade, nor in a bright, sunny spot. If too shaded, there will be little or no bloom, but lush plant growth. Excess sun will stunt and burn. The correct degree of light and shade will produce strong, compact plants, and profuse bloom. Suggested locations include the north side of buildings, light tree shade, lath houses. After transplanting, the most important consideration is CAREFUL WATERING until new roots form and growth is evident.

## FEEDING

For pots or beds a definite feeding program will reward the grower with stronger growth, and increased bloom. After transplanting, when active growth is observed, commence the following routine: Feed one tablespoon of California Liquid's 8-8-4, mixed in one gallon of water once a week until plants begin to flower. After plants begin to flower switch to this combination: one tablespoon of Atlas Fish Emulsion, combined with one tablespoon of California Liquid's 2-10-10 in one gallon of water once a week. Cease to fertilize by the end of September. The use of the first combination is intended to induce strong plant growth; the latter combination will harden cell structure, strengthen flower stems, provide an abundance of firm, highly colored blossoms, and store energy for the tubers' resting period. The individual must judge when plants are under fed, well fed, or over fed.

Maintain a deep green color, and a meaty thickness of leaf. A slightly turning under of the leaves is no cause for alarm, a definite "roll" indicates over feeding. Beware of a sickly yellow green, the sign of starvation. The current season's care and feeding will be reflected in the following season's flowering.

## CULTURE OF HANGING BASKET BEGONIAS

Pacific Strain basket begonias have the same cultural requirements as already outlined, with

minor exceptions. For the best results the larger tubers, having many flowering branches, will stage a more lavish show. Basket tubers are more sensitive to excess moisture than the standards. For this reason do not over pot and use shallow containers for planting. Baskets should be hung in a still, wind free location. Basket tubers, which do not show more than two branches at the beginning of the season, should have the tips pinched off when the first flower bud appears. This will form a fuller basket. WATER CAREFULLY until the plant is well rooted, and then never allow plant to become dry, or in need of fertilizer.

#### CARE, INSECT, AND DISEASE

Begonias are comparatively free of diseases. Powdery mildew is the No. 1 enemy that appeared a few years ago, and should be regularly controlled by spraying with "Mildont" or dusting with sulphur when first signs of it appear. If not controlled it will spread rapidly and destroy the planting for the season.

Contrary to the practice of propagating named varieties of tuberous begonias, we offer selected seedling tubers instead. Propagation of individual varieties is costly and slow, so that by the time a sufficient amount has been reproduced for introduction they are already obsolete as compared with seedlings. Breeding is advancing so rapidly that today's choice is the discard of tomorrow. During flowering season we select and mark all the choicest new seedlings which are above average in size, form and color.

Forms of tuberous begonias being developed by Frank Reinelt are:

#### ROSE

The ultimate classical form in tuberous begonias is that resembling the roses for which we have been striving, selecting and breeding for years. The transition from Double Camellia Form from which the Rose Form was developed is not fully complete.

#### RUFFLED CAMELLIA

This spectacular new form was developed by interbreeding the old fimbriata plena with the best forms of the double camellia type. Each year new advances in size, form and quality seem to supercede the achievement of the past. They were designed primarily for cut flower purposes, but the beautiful variations of frilling, ruffling and scalloping that appear amongst these new forms made them one of the most popular group of begonias today.

They are enormously vigorous and in some colors 8" and 9" flowers are quite common. In this group also are some of the most mildew resistant plants.

#### ROSE FORM PICOTEE

The most spectacular advance in tuberous begonias is the transformation of the little old marmorata into the large Rose Form Picotee of today, a process of twenty years' breeding. Of all types, this group brings the highest proportion of uniformly fine form when grown from seed. The demand has risen in proportion to the advances in quality and has made them the most popular of all types.

#### DOUBLE HANGING BEGONIAS

Its hanging habit, with great masses of blooms, makes them favored for the decoration of greenhouses, open verandas or sun porches, where they can be protected against strong winds and light. We have been improving this type by interbreeding them for a number of years with the double Camellia type for the size of flower and variety of color.

ED.: Frank Reinelt, Capitola, California, received the Alfred D. Robinson Memorial Medal for his outstanding tuberous Begonia "Goldenwest." He also received the Thomas Roland Medal from the Massachusetts Horticultural Society for improving by selection and hybridizing delphiniums, tuberous begonias and primulas, thus making it possible for outstanding new varieties of these plants to be in gardens all over the world.

—B—

## Bessie Buxton Bookshelf

HONORING Bessie Raymond Buxton, Mr. Daniel Foley, editor of *Horticulture*, spoke at the dedication ceremony at the Peabody Institute Library.

A supply of horticultural books, including those written by Mrs. Buxton, were placed on the newly dedicated "Bessie Raymond Buxton" bookshelf at the Peabody Library.

Mr. Foley, who had known Mrs. Buxton  
(Continued on Page 112)

B. LESLIE LYNN  
"Begonia Hybrid of Distinction"  
Mrs. Doris Motschman, Originator  
(See *Begonian*, Feb. 1957)

\$1.50 EACH F.O.B.

LEATHERMAN'S GARDENS  
2637 N. Lee Ave. El Monte, Calif.

# Begonia Plantifolia

By PER. AGR. GIAN LUIGI SANI



BEGONIA PLATANIFOLIA is cultivated in Italy solely by amateurs, of which none are found in the commercial nurseries. This species is mostly ornamental because of the foliage, which is very regal, with huge leaves, the form similar to the plantane (the plane-tree—Bailey's), five lobed. The color is somber green with silver overlay.

It is of large development. The stems grow to 150 cm. (5') tall, is large, vigorous, glabrous, and has annual rings. The leaves grow

to 20-30 cm. (8" to 12") and are lobate, hairy above and below, the lobes acute dentate and ciliated. The flowers are white, tinted with pink, large enough, grow in tall racemes. This begonia originated in Brazil, where it was discovered growing wild in 1834.

We grow it in a mixture of compost made of leaves of the beach tree, enriched with black soil out of the bank of a pond and blood meal. It is a voracious plant in its food requirements. For example, we grow it in soil much enriched with nutrients. The soil must be light, fibrous and easily penetrated. (Keep pots and trimming tools clean, because otherwise there will grow spiders from the pond loam.) They multiply easily from the shoots cut from the plant. We are experimenting with propagation of leaves, but as yet we haven't data on this type of propagation.

It is not possible to know all the begonia species and hybrids grown in Italy. Only the species cultivated in the Botanic Garden of University are known. The tradersmen cultivate only a few species. Only the private admirers have collections but these are not known to the public. The begonia hybrids of Italian origin are nearly all facing the rex begonia, but the greater part are not named because obtained by amateurs.

I am teaching at the Agricultural Technical Institute of Florence (Istituto Tecnico Agrario), old and unique school in Italy of flowers and gardening. In this institute are cultivated some species of begonias, but not too many, because as a school we must cultivate all the ornamental plants.

## Research Department

BEGONIAS are grown throughout the world, perhaps in limited numbers in some parts and in abundance in other places. I became interested in finding out what begonias were being grown in other countries and also in the culture in various locales. Our begonia nomenclature is very mixed up and confusing. We may grow a begonia under one name and in another locale it is grown under another name. To even make an attempt to straighten out some of the begonia names would be a tremendous task and it would take a world wide knowledge of begonias.

Upon receiving lists of begonias from several countries I have found names unknown to the majority, species, varieties and cultivars. From time to time we will use photos and articles about some of these begonias.

We appreciate the interest and cooperation of Per. Agr. Gian Luigi Sani. The San Miguel Branch, A.B.S., has adopted him as a member and he will receive *The Begonian*.

SYLVIA B. LEATHERMAN, *Research Director*

Note: Credit on photo and article to be given to "Giardino Fiorito." Translation of article by Mrs. Terry Olmstead.

# Garden Therapy

By MRS. FRANK L. COE, *Garden Therapy Chairman*  
District A, California Garden Clubs, Inc.

GARDEN THERAPY is a nebulous thing and very hard to define, but we know it is conducive to health and well being. Therapy through the medium of gardening has in the past few years made great strides toward the rehabilitation of our wounded and mentally ill men and women of war service.

Our gardens have provided us with the deep down satisfaction of growing plants. With the command which gardening exerts over mental and physical powers, it is difficult to understand why an organized program of gardening as a therapy is necessary.

It must be remembered that there are those who have not known this rich and wholesome experience called gardening and who desire to know it—who need to know it desperately. For the despondent, bedridden patient, the interest demanded by a rapid growing bedside plant may spark a low flickering will to live. The broken mind of the psychotic and shattered self-respect of the cripple may be helped along the road to recovery by the sense of personal accomplishment gained from growing a prize flower. These people know nothing of gardening and so must be taught it. Therefore, it is our duty to bring horticulture to these victims of misfortune. Garden Therapy is not regarded as a new therapy but rather as a tool to supplement existing therapies.

Europe for many years has recognized the value of garden therapy and has practiced it with great success in penal and mental institutions. We, also, are very proud of our achievements in garden therapy here in our penal, mental institutions, convalescent homes and foundations for the blind.

At the Brentwood Veterans Hospital here in Los Angeles, some miraculous accomplishments in garden therapy have taken place. It must be remembered that in this hospital the patients are in all stages of mental depression.

When you visit the hospital gardens, you will find a little plot that was built and planted by some of their most disturbed patients. This particular ward was given a landscape sketch to study, hoping that the patients would become interested. The doctors were thrilled with the response and understanding shown by the patients. The plot is outstanding and has a place of prominence in the garden. To get these patients to show a little spark of interest was very

encouraging and was accomplished by those two little words, "Garden Therapy."

What unseen power and hope lies waiting in the garden? All we need to do is see and know what we are receiving. We have taken gardening for granted for so many years and just consider it as something that has to be done. Now we are recognizing that gardening is good—good for us spiritually, physically and mentally. Truly it is "God's own medicine."

From a report given by Mr. Christian J. Moerman, OTR, Occupational Therapy Garden, Physical Medicine Rehabilitation, Neuropsychiatric Hospital, Brentwood Veteran Hospital, Los Angeles, Calif.:

"Although these gains in the physical progress of the project are satisfying to the patients and personnel, it is important to keep in mind that our main interest is the therapy achieved. As the project progresses, we have found more and more interest forthcoming on the part of the patients. We find that our improved facility lends itself to grading of activities, variety, and real life situations on an ever increasing scale. The number of patients participating in the program has almost tripled. Whereas garden therapy was being prescribed for patients from only two wards, today we have patients from all the wards in the hospital. Some of our progress can be measured in the greater turn-over of patients. Although this turnover does not always result in discharge from the hospital, many patients are helped on the road to recovery through their participation in the garden program. Some go on to more complex work in industrial therapy and some to part time jobs in the community. Through the help of an increased number of occupational therapists, volunteers, and nursing assistants we have been able to meet the needs of our increased patient load and more extensive coverage of the hospital population."

ED.: Several Branches of the A.B.S. have contributed to this worthy Gardening Therapy project in the past. Their continued support will give them a feeling of pleasure in extending gardening to those whose future depends on this new outlook.

—B—

Are you allergic to garden sprays in the greenhouse? Try fumigation with a plant bomb.

# Northern Virginia Begonias

By W. S. FLORY

The Blandy Experimental Farm, University of Virginia

THE NICE collection of begonias was received here in late April and in early June of 1956. It has been enjoyable to make observations on these and we are most appreciative of the collection. This was the writer's first intimate experience with begonias, and the present report on a first year's test is certainly that of a beginner with this attractive group.

Rex, rhizomatous and fibrous types were included. All types were handled in much the same manner in 1956. When received all were potted in our standard soil mix: one-third each of fertile loam, sand and peat moss. Three and four inch pots were used, and plants were later shifted to five inch pots. All plants were grown in a shaded greenhouse of moderate to high humidity during the summer months. The summer of 1956 was unusually wet and humid for northern Virginia. On a few of our hottest days the temperature reached 90° F. here, but daytime greenhouse temperatures usually fluctuated between about 80° and 90° F.

In the fall of 1956 a rating chart was worked out and each variety was rated by it. Points considered were (1) color of foliage, (2) contrasts of color in foliage—whether pleasing or not, etc., (3) growth—both amount and type, and (4) leaf spotting—whether resulting from water or perhaps other causes. For a rating of "excellent" 1 point was given for each of the four characters. Thus a total score of 4 would mean the plant rated "excellent" with respect to all four characters. Ratings for each character ran to 9 for a "very poor" rating. Thus theoretically a plant which showed up as very poor with respect to each of the four characters considered would have a rating of 36.

A chart has been prepared and appended which rates each of the 53 varieties or species that were received and grown. *Begonia* "Smog," *B.* "Pearli," *B.* "Peter Pan" and *B.* "Crimson Beauty" were rated best of the rex begonias, under present condition and culture. *B.* "Maphil," *B.* "Green Star," *B.* "Pearli" (a rex type), and *B.* "Bow Nigra" were the most attractive and desirable rhizomatous taxa—with *B.* "Bow Joe," *B.* *Erythrophylla* *Helix* and *B.* "Silver Star" being others with low, or very good, ratings. *B.* "Nelly

bly," *B.* "Green Medora," *B.* *laetevirides*, *B.* *scharffi* and *B.* *deliciosa* were among the best of the fibrous types as grown here.

Foot notes have been added to the chart which points out, in several cases, the good or the poor points of certain forms. Several of these remark on the long or "leggy" growth found with some forms. Mrs. Sylvia Leatherman has pointed out to us that this type of growth was probably caused by too little light and too high a humidity.

The inadequacies and faults of the chart, and especially of its method of rating all varieties on the same basis, are recognized. It has resulted in assigning each species or variety a definite total score which gives a good comparative picture of values under our conditions. A rating chart similar to this, modified and corrected by various workers, could become a useful tool to use in comparing the begonias within the several classes. If such a rating system already exists for begonias, it has not come to the writer's attention.

During 1957 we hope to add other species and varieties and to do a better job in varying soil, cultural and training conditions to suit the several types of begonias being dealt with.

## Rating Chart for 1956

at the Orland E. White Arboretum  
Blandy Experimental Farm, Boyce, Va.

### RHIZOMATOUS REGONIAS

| <i>Begonia</i> species or variety | Color contrasts | Color | Growth | Spot damage | Total score |
|-----------------------------------|-----------------|-------|--------|-------------|-------------|
| Maphil                            | 1-2             | 1     | 1      | 1           | 4-5         |
| Green Star <sup>4</sup>           | 1               | 1     | 2      | 1           | 5           |
| Bow Nigra                         | 2               | 1-2   | 2      | 1           | 6-7         |
| Bow Joe                           | 2               | 2     | 2      | 1           | 7           |
| <i>Erythrophylla</i>              |                 |       |        |             |             |
| <i>Helix</i>                      | 2               | 2     | 1      | 2           | 7           |
| Silver Star                       | 1               | 1     | 3      | 2           | 7           |
| <i>acida</i> <sup>5</sup>         | 1               | 3     | 3      | 2           | 9           |
| <i>boweri major</i>               | 2               | 2-3   | 2-3    | 2           | 9           |
| Joe Hayden                        | 3               | 1-2   | 2      | 2-3         | 9           |
| Bow Arriola                       | 3               | 2     | 3      | 2           | 10          |
| <i>manicata</i>                   |                 |       |        |             |             |
| <i>aureo-maculata</i>             | 1               | 1     | 5      | 3           | 10          |
| Bunchi                            | 4               | 2     | 2      | 3           | 11          |

# Miniature Greenhouses

By LOUISE CRAMER

| Begonia species or variety      | Color contrasts | Color | Gro'th | Spot damage | Total score |
|---------------------------------|-----------------|-------|--------|-------------|-------------|
| Erythrophylla                   | 2               | 1     | 5      | 5           | 13          |
| Heracleicortyle                 | 3               | 4     | 3      | 3           | 13          |
| <i>nelumbiiifolia</i> Fischer's | 1               | 5     | 1      | 7           | 14          |
| Ricinifolia <sup>6</sup>        | 2-3             | 2-3   | 3      | 7           | 15          |
| Bow Chancee                     | 7               | 7     | 3      | 5           | 22          |

## REX BEGONIAS

|                              |   |   |   |     |       |
|------------------------------|---|---|---|-----|-------|
| Smog                         | 1 | 1 | 1 | 2   | 5     |
| Pearli                       | 1 | 1 | 1 | 2-3 | 5-6   |
| Peter Pan                    | 1 | 1 | 3 | 4   | 9     |
| Crimson Beauty               | 1 | 1 | 6 | 2   | 10    |
| Lavender Glow <sup>1</sup>   | 1 | 1 | 7 | 1-2 | 10-11 |
| Edward Platnico <sup>2</sup> | 1 | 1 | 8 | 7   | 17    |
| Louise Lackey <sup>3</sup>   | 1 | 1 | 9 | 8   | 19    |
| Maiden Blush                 | 3 | 3 | 7 | 7   | 20    |
| Bob Smith (dead)             |   |   |   |     |       |

## FIBROUS BEGONIAS

|                                    |     |     |     |     |       |
|------------------------------------|-----|-----|-----|-----|-------|
| Nelly Bly                          | 1   | 1   | 3   | 1   | 6     |
| Green Medora <sup>7</sup>          | 1   | 1   | 3-4 | 1   | 6-7   |
| laetevirides                       | 2   | 1   | 2   | 2-3 | 7-8   |
| <i>scharffi</i> <sup>8</sup>       | 2   | 2   | 1-2 | 2   | 7-8   |
| <i>deliciosa</i>                   | 1   | 1   | 3-5 | 2   | 7-9   |
| Lady Clare                         | 1   | 1   | 3   | 3   | 8     |
| Stitched Leaf                      | 3   | 2   | 2   | 2   | 9     |
| <i>dichotoma</i>                   | 1   | 7-8 | 1   | 1   | 10-11 |
| Druryi                             | 4   | 3   | 2-3 | 1   | 10-11 |
| Luwalter                           | 4   | 3   | 3   | 1   | 11    |
| Mrs. Fred Scripps                  | 1   | 1   | 5-7 | 3-5 | 12    |
| Loma Alta                          | 1   | 1   | 4   | 7   | 13    |
| <i>mazae</i>                       | 5   | 3   | 3   | 2   | 13    |
| Thurstoni                          | 2   | 2   | 1   | 8   | 13    |
| <i>schmidiana</i>                  | 5   | 5   | 2   | 2   | 14    |
| <i>metallica</i>                   | 1   | 2   | 4   | 8   | 15    |
| Templini                           | 1   | 2   | 7   | 5   | 15    |
| Corbeille de Feu <sup>9</sup>      | 1   | 5   | 9   | 1   | 16    |
| Preussen                           | 3   | 3   | 7   | 3   | 16    |
| Dark Mazae <sup>9</sup>            | 2   | 2   | 7   | 6   | 17    |
| Margaritae                         | 1-3 | 3   | 7   | 5   | 17    |
| Catalina <sup>9 10</sup>           | 3   | 3   | 7   | 5   | 18    |
| Richmondensis <sup>11</sup>        | 3   | 3   | 7   | 5   | 18    |
| Geneva, dbl. wh. <sup>12</sup>     | 5   | 5   | 5   | 7   | 22    |
| Pink Camellia <sup>13</sup> (dead) |     |     |     |     |       |

## CHEIMANTHA TYPE—CHRISTMAS BEGONIA

|                             |   |   |   |     |    |
|-----------------------------|---|---|---|-----|----|
| Marjorie Gibbs <sup>9</sup> | 3 | 5 | 8 | 3-5 | 20 |
|-----------------------------|---|---|---|-----|----|

<sup>1</sup>Growth on this plant was too high and long—probably due to improper care. Better attention to growth habit would likely give this variety a much higher rating.

<sup>2</sup>Color excellent, growth poor under our conditions.

<sup>3</sup>Color and contrasts excellent, but the three

(Continued on Page 113)

MINIATURE "greenhouses" are in the reach of every plant lover who has ingenuity and a desire to cope with the challenge of growing difficult plants from seeds, ferns from spores or propagating cuttings.

In the kitchen may be found the clear plastic containers or glass baking dishes with lids, to be borrowed for a project. Old chipped glasses inverted over pots make ideal humidity houses. From the closet or garage come the discarded fish bowl or larger fish aquarium which may be converted into greenhouses, fine enough for the living room, by just fitting a piece of glass on top.

The wide-mouthed fruit jar, for individual plantings or rooting of a few leaves, can be salvaged from the trash box. This jar may be laid on its side and an inch layer of moist vermiculite or Sponge Rok put in it. Into this medium leaves may be inserted for rooting or propagation of tiny plantlets. The lid is then screwed on and then there is no more care to the plants until ready for transplanting. If the fruit jar is used as a seed bed, the medium may be moist vermiculite, peat or sphagnum moss. The seed is sown thinly and the lid screwed on till ready to harden off the seedlings for transplanting. A peanut butter jar, sitting on its base, is ideal, but cover it with a piece of glass as the lids have a tendency to rust on and light is needed from the top.

A larger "greenhouse" is the commercial mayonnaise jar prepared in the above manner, but it will house six small pots which have their own planting medium. The pots are settled in the moist vermiculite or Sponge Rok which provides humidity for the plants growing in the pots.

Another method is the converting of a standard seed flat into a propagator or seed pot holder, or as a whole flat for seed. Four ½" x ½" x 12" pieces of wood, redwood preferably, are nailed, one to each corner of the flat. A small round lid is attached to the top of each vertical piece. This is done to prevent the uprights from poking a hole in the polyethylene. A yard of light weight polyethylene is then draped over the supports and thumb-tacked to the flat's sides, making a square tent. Of course the cuttings or seeds have been placed in the desired propagating medium or pots have been placed in the flat before closure. I leave one side untacked, but I tack this loose edge to a small piece of wood the length of

the flat. This weight holds the polyethylene down, yet I can easily roll it up to see what is going on in the flat.

Another version of the "flat greenhouse" is accomplished by using three coathangers with the hooks removed, the wires untwisted and opened to near right angles at the bend. The opened ends of the hangers are stapled to the sides of the flat—placing a hanger at each end of the flat and one in the middle. This rib frame is covered with polyethylene which is tacked to the sides of the flat making a tent.

Maybe it's the scavenger instinct or Scotch influence, but I find it hard to throw away the clear plastic bags that food comes in. These make ideal "window sill greenhouses" for starting African violet leaves or cuttings of other plants. Probably the square bottomed bags work more effectively as they don't tip, but any shape is efficient. Just place the leaf in damp rooting medium or sphagnum moss placed in the bottom of the sack. Fold over the top and put on a paper clip. Moisture is conserved and you can watch "your darlings" root and new plantlets develop while you wash dishes during the several weeks. Keep a chart on the plant's progress and dishwashing becomes more interesting. Just a caution—when propagating in the window sill, protect from outside cold. Marie Turner of Turner Shade Gardens, Temple City, Calif., uses the turkey size bags to put the seed pans in and finds germination takes place more rapidly and evenly.

Greenhouse cleanliness and good growing practice apply to the miniature greenhouse. This also must include temperature control and light factors. The small "greenhouse" may be rotated in the same direction, a quarter of a turn a week, to prevent the plants leaning to the light source.

One advantage of the polyethylene house over the closed jars, is that the plants can breathe through the plastic and there is not the hardening off period required before the plants are ready for normal air conditions.

—B—

The unsightly leaves of spring flowering bulbs may be folded over without breaking and held in a "pony tail" with a rubber band until the bulb has gained its food from them.

CHOICEST REX HYBRID

BEGONIA SEED

*New Crop*

PRICE \$1.00 PFR PACKET

**RUDOLF ZIESENHENNE**

1130 N. Milpas St., Santa Barbara, Calif.

## Living Gift

THE CAMELLIA, a natural shade loving plant, is an ideal gift. It may be purchased in small pot blooming size, gallon to five containers or large specimen plants may be found growing in tubs. This is a gift with a future of long lasting beauty. The evergreen shrub with glossy dark green leaves makes an ideal background for the shade garden. It blooms, depending on the variety, from late fall through spring, giving cheery color during the dreary days when other garden plants are resting. The blossoms vary in color from pure white to deep red or variegations of these colors; in form from single, semi-double to full peony type.

Camellias are easy to grow if you plant them properly in a well drained soil which has lots of humus and is slightly on the acid side. More camellias are killed by overwatering and overfertilizing. The plant should be kept moist, NOT SOGGY WET. When watering, soak well and then give only enough water to keep the soil moist. Fertilizing lightly and often is far better than giving a large dose once in a while. Begin a feeding program in March, following the fertilizer directions carefully.

—B—

### *Buxton . . .*

*(Continued From Page 107)*

since he was a young boy, spoke of how she sought to encourage and pass on her enthusiasm in growing, to all young people who showed interest in horticulture.

Mrs. Buxton began her lecturing career in 1908. Besides begonia growing, her interests were many, and she spoke before women's clubs and civic groups throughout the country.

Several of her books of history and genealogy of Peabody and Salem are in the Essex Institute Historical Collections.

She was an accomplished musician and Mr. Foley said she collected sea chanties. He told of her interviews with old sea captains in the early 1900's to get authoritative accounts.

Several members of the New England Branch attended the ceremony and each was given one of the book plates, used in the books on this shelf.

CATHERINE M. SHEEHAN

ED.: Mrs. Buxton received the first Eva Kenworthy Gray Award from the American Begonia Society (see *The Begonian*, Dec. 1955). She also compiled *The Begonia Glossary*.

(Continued From Page 99)

long before another leaf appears at the base of it and some species never develop more than one leaf, this being two feet long or so. A notable example of this is *Streptocarpus wendlandi*. However, the hybrids we raise have a half dozen or so leaves each about eight inches in length.

*Streptocarpus* is a plant full of interesting developments for when blooming time approaches, some six months after the seed were planted, you will notice that the bloom stalks arise, several to a leaf, directly from the midrib of the leaf, near its base.

Although *streptocarpus* are perennials it is better to raise them from seed every year. Older plants tend to get a little straggly. Especially good varieties may be propagated from leaf cuttings in the same manner and with almost the same ease as African violets.

In the interests of continually improving *streptocarpus* varieties I would like anyone having a pure white or any unusual variety of *streptocarpus* to contact me.

DON HORTON  
683 Congress St., Costa Mesa, Calif.

—B—

### Test Garden Report

(Continued From Page 111)

leaves were each present on very long petioles growing upright from the soil; this constituted the plant.

<sup>4</sup>Leaf petioles slightly too long.

<sup>5</sup>Large, attractive light green leaves.

<sup>6</sup>Leaf stems attractive.

<sup>7</sup>Petioles too long and high, giving the plant a "stemmy" appearance.

<sup>8</sup>The large peppermint colored flowers add to the attractiveness of this variety.

<sup>9</sup>As with a number of varieties scored poorly for growth, the petioles are too long, lifting the leaves too high; doubtless a result of light and growth conditions here, in part, at least.

<sup>10</sup>Stem and leaf color contrasts are good.

<sup>11</sup>Large, single pink flowers are good.

<sup>12</sup>The tiny double flowers are very attractive in themselves, but are not conspicuous enough (on our young plant) to compensate for the plainness of the foliage.

<sup>13</sup>Earlier, this was considered as one of our most outstanding begonias, with its large, attractive, double flowers. It was not properly pinched back and trained, and its main branch was broken off at the soil in moving, resulting in loss of the plant.

(Continued From Page 101)

filled tray that I keep filled with water to just below the top of the gravel. The tray sits on top of the convector and the heat and water make lots of humidity which they love. In an upstairs window (bay) which originally was a window seat, I have a tray covered with sand, kept damp, which makes a good nursery for smaller plants. It is a south window shaded by an overhanging roof. There are glass shelves on each side. On one side I have *B. glabra*, which I have allowed to grow long and it climbs (with my help) to the top of the window and clear across the top. The longest stalk must be eight feet long and it has many small branches.

I grow my seeds in finely sifted sterilized leaf mold with a thin layer of milled sphagnum moss on top, and sprinkle the seeds as thinly as possible. I use plastic refrigerator dishes and keep them tightly closed until they germinate. Then I bring it to light and raise the cover a little more each day until I can leave it off entirely. I keep the dishes in a warm place, about 70°, until they germinate. By planting the seed in leaf mold, they can be allowed a little more growth before transplanting, as the leaf mold has nourishment for them. I use a toothpick to prick them out and transplant into small flats which I keep covered with glass for several days until they recover from the shock of being moved. I am very happy to say I have never lost any from damping off and consequently I usually have more little plants that I know what to do with. In my basement, I have a bench about twelve feet long by eighteen inches wide with fluorescent lights over it and that is where I grow my small flats of begonias to potting size.

I also raise a great many begonias from cuttings and leaves. My propagating case is a frame built on to an old piano bench and is covered with polyethelene. One of my friends said, "Anything for God's child to grow her begonias." In the summer, I use an old cement watering trough covered with glass or screen according to the temperature. My rooting medium is a 50-50 mixture of very old rotten sawdust and sand wet down with Hyponex in the water. They grow a wonderful root system. I always enjoy hearing how other people grow their begonias so I hope someone will enjoy hearing how I grow them here in Ohio.

# Clayton M. Kelly Seed Fund Flight

In checking over our files we find available good fresh seed of begonias and other genera that we would like to offer in order to make room for extra special seed we expect in the coming months.

We all admired the picture of Begonia "Pink Rubra" on the cover of March issue, "The Begonian." We have plenty of fresh seed of this beautiful plant available so why not start them now for summer and fall shows.

**No. 1. B. rubra pink. No. 2. B. rubra rose. No. 3. B. sceptrum**—Brazil. Leaves deeply lobed; green with silver streaks and spots, lighter green beneath and rose-tinged. Flowers large white and tinged with pink. **No. 4. B. nelumbifolia**—Mexico. Sometimes called water-lily begonia. Leaves not unlike a water-lily pad; flowers in tall, erect cymes, white or pink tinged. **No. 5. B. heracleifolia pyramidalis**—rhizomatous—Mexico. Leaves large and hairy, blooms pink in tall panicles. **No. 6. B. maculata x B. maculata wightii**—a cross by John Cole, South Africa. Above 25c per packet. **No. 7. B. Joe Hayden**—rhizomatous. Black-brown lightly lobed leaves which glisten like satin. Flowers are dark pink on tall stems—profuse bloomer. 25c per packet. Seed freshly collected.

Semperflorens begonias: Several requests have come in for semperflorens with salmon colored flowers. We have two of the best from England. **No. 1. B. Lucifer**. Flowers are very large, often two inches across, bright salmon. **No. 2. B. Salmon Queen**. Salmon red flowers and dark foliage, a gorgeous combination. **No. 3. B. Saga**. Extra dwarf and dense growth. Small, bright red flowers. Very desirable. **No. 4. B. semperflorens single and double**—mixed. We are offering the above just as they were received from the grower who has a large collection of begonias. We do not know the percentage of doubles and singles but packets will be generous. Should be interesting to see what develops. Above 25c per packet.

Greenhouse plants: **No. 1. Streptocarpus hybrids**. These are crosses by Don Horton. We suggest you read his story regarding them on page xxx. 25c per packet. **No. 2. Saintpaulias**. African violets, mixed. Gesneriaceae family. To grow plants of this fascinating family is indeed an adventure into beauty. The seed comes from a large group of plants in all colors, including singles and dou-

bles, and with a good variation of leaf pattern. They were produced by a member of the Gesneria society who has a large collection. Price 50c per packet. **No. 3. Gloxinia**—spotted hybrids mixed—These are from a friend in South Africa. 25c per packet. Have a great variety of gloxinia seed available at all times. If you don't see them in the list each month, ask for them.

A friend in South Africa sent the seed listed below. Mr. Don Horton has graciously offered to supply information on them. We do not know if the information will appear in the current issue of The Begonian. If not look in the June issue. **No. 1. Anigozanthus manglesi. No. 2. Anigozanthus flavida bicolor; No. 3. Anigozanthus flavida; No. 4. Anigozanthus humilis**. All above are commonly known as kangaroo paw and are native to Australia. 25c per packet.

Fern spores: **No. 1. Dryopteris dentata** (syn. nephrodium mollis, commonly "molle") A grand greenhouse fern for cultivation in 5 inch pots. Ordinary fern compost suits this plant well. The cutting and fringing of the fronds is so elegant, there is no hint of heaviness in the formation. 25c per packet. **No. 2. Microlepia stringosa** (formerly microlepia speluncae) A good hardy fern with very bright green feathery fronds. 25c per packet. **No. 3. Microlepia platyphylla** (syn. davallia lonchitidea) Next to a tree fern this one of tallest growing ferns known. A very good specimen plant, in a 7 inch pot can easily reach 4 feet or more in height with an even greater spread. The fronds are very big with long pinnae, tapering and notched, but not crested. 25c per packet. **No. 4. Thelypteris setigera** (greenhouse only!) This genera are native to Malaya, along with about one-twentieth of all the fern species of the world, so naturally it demands hot humid atmosphere to be happy. 50c per packet. **No. 5.**

**Adiantum tenerum, var. scutum roseum** (formerly *A. tenerum farleyense*) **Choice!** A noble fern, making an excellent specimen plant. It is found wild in many places between Jamaica and Cuba. The fronds are beautifully waved in a delicate shade of pale green. Young fronds have a lovely rosy tint. This fern requires a fairly high temperature for full development, and is well worth special care. 50c per packet. Not readily available.

Pteris ferns available. **No. 1. Pteris parkeri; No. 2. Pteris riveri; No. 3. Pteris roweri; No. 4. Pteris gautheri; No. 5. Pteris argyreae.** These are beautiful, easy to grow ferns for greenhouse or outdoors where climate permits. 25c per packet.

**Special seed: Fatsia japonica.** Glossy dark green leaves palmately cut. Good greenhouse foliage plant but highly prized as a landscape subject in mild climates. 25c per packet. **Clivia**—Bel-

gian hybrids. Aristocrats of the amaryllis family. Has wide dark green strap leaves and large clusters of deep orange red blooms held on heavy stiff stems. Requires deep shade and makes an ideal greenhouse or house plant. Seeds are fairly large and should be sprouted in warm, damp soil. Easy to grow from seed and although it takes a little time to bloom them, the plant is ornamental and well worth a little extra care. 2 seed for 25c.

Bromeliads: Some of the bromeliads offered last month are still available and in addition we offer the following: **No. 1. Dyckia sulfurea.** Small plant with yellow flowers. **No. 2. Dyckia rariflora.** Yellow flowers. **No. 3. Puya bertumiana.** Also known as *D. Alpestris*. Brilliant blue flowers. **No. 4. Billbergia elegans**—Brazil—The collector supplied no information on this one. Above 25c per packet. See March "The Begonian" for cultural directions.

Occasionally the seed fund work becomes very discouraging, especially when someone fails to grow plants from the seed offered each month. Although the majority of the seed is tested before being offered for sale, many factors are involved after they reach their destination. Growing conditions vary in each case, therefore we cannot arrive at a satisfactory conclusion as to why certain seed do not germinate. We are always happy to receive a report such as the following—"Last night at our local begonia meeting we had an exchange table where there were many plants grown from seed from the seed fund. It is an inspiration to new members to see such lovely plants from seed. I appreciate this service."—From State of Washington.

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

in rose form and ruffled novelty

New  
for 1957  
Striking  
Advances



## TUBEROUS BEGONIAS

Exact 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

# Leaves From Our Begonia Branches

## ELSA FORT

Seeds were distributed to members, hoping by June the plants will be brought to the club and exchanged. A trip to Sheares Greenhouse was planned. Three hirsute begonias were studied. The program for the year, in a booklet form, was given out to the members.

—B—

## GLENDALE

Merrill Thompson, agriculture teacher with the Alhambra school system, and an associate of the Corona Garden Tool Company, initiated us into the fine art of spring pruning of shrubs, trees and plants. Mrs. Edna Korts discussed a handsome begonia and answered questions about problem shade plants.

—B—

## MARGARET C. GRUENBAUM

Met at the home of Mrs. Odes Steele. Mrs. Elsa Fort gave an educational and interesting program on the subject of "Hybridizing, Nomenclature and Research." Our hostess has a green thumb and her greenhouse was bursting with begonias of all kinds and sizes, and we all went home with our hands full.

—B—

## NEW ENGLAND

Following a pot luck luncheon, Mr. James Hurley, retired after forty years as gardener of the Paine Estate, told of his methods of growing prize tuberous begonias.

Mr. Hurley was awarded the Massachusetts Horticultural Society Gold Medal, and was given a testimonial dinner for being the best gardener in the United States. Previous awards were Gold Medal for Camellias, a Chrysanthemum Garden at the Boston Show, and one for Cymbidiums—the largest flowers and most floriferous plants in the show. He won the Gold Medal and Cultural Certificate for his English type begonias—one hundred fifty foot exhibit in full bloom at the Fall Show in Boston.

In growing his tuberous begonias from seed, Mr. Hurley stressed good drainage. In a flat, he used compost, over which he poured hot water and let stand until just moist enough for planting seed. He mixes the seed with sand for more even distribution. The flat is covered with glass, which is removed each morning, to

wipe off excess moisture, and replaced. Plants bloomed in August from seeds planted in January.

First potting mix consisted of equal parts of compost, leaf mold, sand and phosphate—later watered with one teaspoonful of XL60 to one gallon of water.

For tubers, his mixture consisted of equal parts of compost, rotted manure, leaf mold, loam and sand. He added a four-inch pot of phosphate, and a three-inch pot of Electra, to a wheelbarrow full of the above mixture.

When large enough to transplant, he used a six-inch pan then to an eight-inch pan, feeding every two weeks. One week egg shell water and the next Electra, 1 tablespoon to an eight-inch pot; scratched in.

If planted in a bed, the soil should be well prepared beforehand.

From these begonias, the variety "Exquisite" sported "Orange Exquisite" and "White Exquisite"; "Pink Pearl" sported "White Pearl"; and "Emily Cliban" sported "White Emily Cliban."

—B—

## ORANGE COUNTY

Officers for 1957 are: Pres., Lou Scalley; Vice-Pres., Don Horton; Sec., Maybelle Woods; Treas., Darrell Bath; and Nat. Rep., Velda Scalley.

—B—

## SAN MIGUEL

The following officers were installed in April: Pres., Ray Purtee; Vice Pres., Mrs. Edna Lowry; Sec., Mrs. Ida M. Barker; Treas., Mrs. Emma Stark; Director, Mrs. Pearl Hegel; and Nat'l Rep., Mrs. Margaret M. Lee.

—B—

## TARRANT COUNTY

We received our charter and we are so proud of it. We are having a presentation in May with members of the Lone Star Branch presiding. Our very thriving group of fourteen members in this new branch are all real workers.

At the luncheon meeting with the Lone Star branch, we learned many things which would enable us to become better members. Each visitor at this meeting was presented with a potted begonia seedling.

Officers for 1957 are: Pres., Mrs. V. E. Hall; Vice Pres., Mrs. H. O. Dickerson; Sec., Mrs. Joe Shad; Treas., Miss Leoti Black; Director, John Wilson; and Consultant Adviser, Lawrence McLean.

—B—

### THEODOSIA BURR SHEPHERD

New officers for 1957 are: Pres., Larry Wright; Vice Pres., Mrs. Ruth Whalen; Sec., Mrs. Oakley Murphy; and Treas., Mrs. George Harlock.

—B—

### WHITTIER

Mr. O. A. Batcheller, head of California State Polytechnic College of Pomona, discussed the horticultural program of the college, bringing with him plants that had been grown by the students in the lath house; and showed slides of various phases of the work at the college.

### Calendar

- May 9—Orange Co. Branch—Rudolf Ziesenhenné, Santa Barbara, "Begonias." He will bring begonias for the plant table. Potluck dinner at 6:30 p.m.
- May 16—Foothill Branch—Mrs. Louise Cramer, national editor, travelogue in colored slides, "Flowers of Europe, Mexico and Canada."
- May 22—Glendale—"Antique and Modern Begonias" by Jean Kerlin.
- May 22—San Gabriel—"Down to Earth Growing of Begonias," Rowland Maddox, Riverside.
- May 24—Redondo Beach—The Story of the Los Angeles State and County Arboretum will be told with colored slides.
- May 26—Regional Meeting—1:00 P.M., Florence Burnham Hall, 1231 Upas St., San Diego, Calif.

JULY 26, 1957

8:00 P.M.

### REDONDO AREA BRANCH WHOOPEE PARTY

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

### Minutes, National Board Mar. 25

Meeting of National Board of American Begonia Society was called to order by President Cal Trowbridge. Meeting opened with Pledge of Allegiance to the Flag and reading of Aims and Purposes of Society. Secretary and Treasurer's reports read and approved.

Moved by Edna Korts, seconded by Bill Walton, that we pay dues of \$8.50 in the American Horticultural Society. Carried.

Moved by Alva Graham, seconded by Pearl Bauer, that the two copies of Condollea, needed to complete the set, be placed in the Arboretum. Carried.

Research Director Leatherman stated that in order to clear up a misunderstanding she wanted it to go on record that John Thieben does NOT sell plants. She read several interesting letters on research and test gardens.

Membership Secretary Walton reported new members 45, renewing members 104. Income \$378.00.

Seed Fund Administrator Gee reported \$87.25 remitted to Treasurer. Balance on hand \$100.00.

Librarian Sault reported 1 book sold, 24 Begonians sold, books on loan 2, 100 Begonians sent to Riverside for use at Flower Show. She stated that Golden Gardens Magazine would like to exchange magazines. Moved by Pearl Bauer, seconded by Lucy Sault, that we exchange magazines with Golden Gardens. Carried.

Fred Browne remitted \$9.65 to the treasurer from sale of stationery.

Edna Korts, chairman of School of Judges, reported the lecture by Mr. Butterfield very successful. Will soon have test ready for judges and clerks.

Historian Bauer asked all Branches to please send clippings and pictures so she can have a big History Book for the year.

The President reported that the next Regional meeting would be in San Diego, May 26th, at 1:00 P.M., Florence Burnham Hall, 1231 Upas St.

The president read a letter from the Manager of Pomona Fair, urging Begonia Society to make an entry in the Garden Section of the Fair this year.

Frank Coe was appointed Chairman of the coming National Convention.

Branch reports were given and the president stressed the importance of the Directors taking an accurate account of the Board meeting back to the Branches.

There being no further business the meeting closed at 9:30 P.M. to meet again April 22nd.

Respectfully submitted,

Arline Stoddard, National Secretary

### 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.



## ATLAS FISH EMULSION

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BALANCED ORGANIC FISH FERTILIZER

# 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 Belsler, 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  
Mrs. W. C. Gorman, Secy.  
2296 Coral Way, Miami, 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.  
Masonic 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  
Mrs. A. L. Romelser, Secy.  
1104 South Ninth St., Salina, Kansas

**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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