

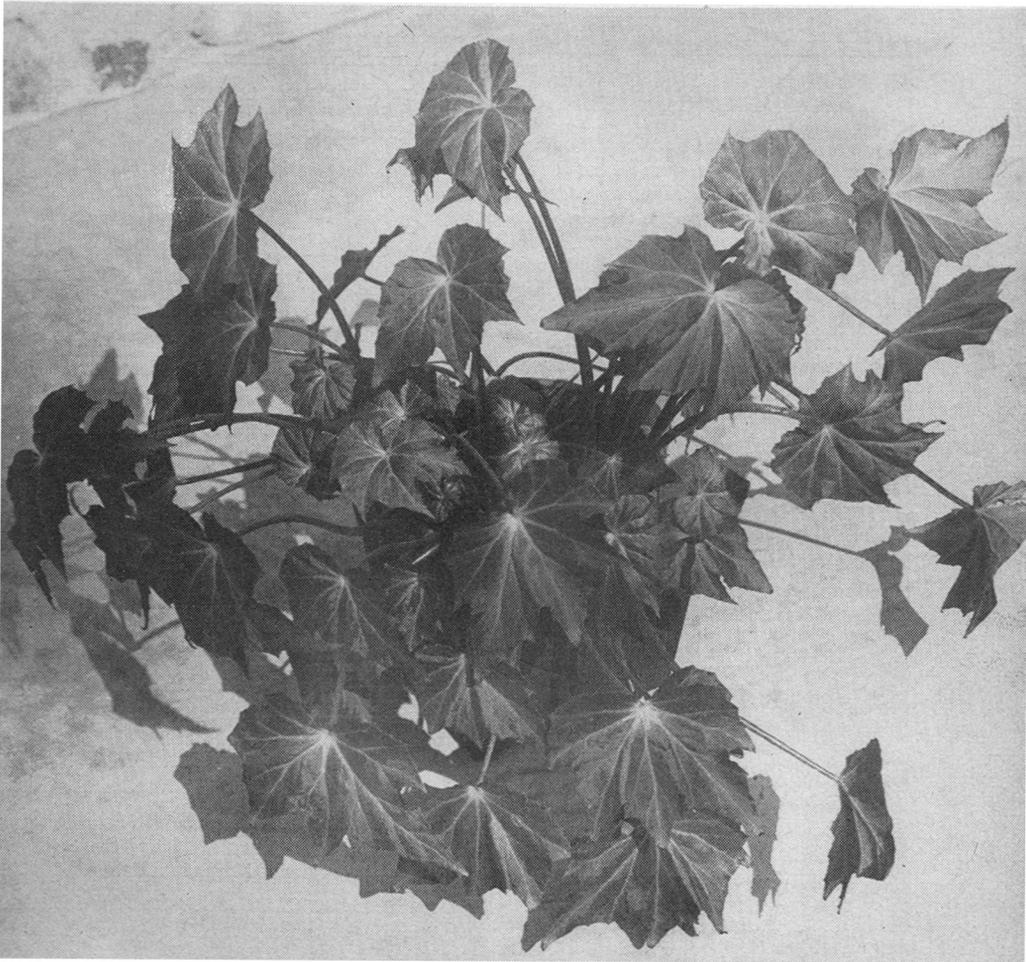
# *The Begonian*

DEVOTED TO THE SHELTERED GARDENS

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*B. 'Cool Waters'*---Page 133

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# Begonias

## *in the South African High Veld*

HERE in the High Veld of South Africa begonias grow almost to perfection. Yet, I am sorry to say they are not a well known plant, with the exception of semperflorens and tuberous hybrids in one or two private homes and public gardens. Many of you will know that several species grow wild in South Africa, yet unless you know the location you could hunt for weeks and not find one. When I have stated that begonias grow to perfection in the High Veld do not let me mislead you. To grow them you need the proper environment, that is to say, artificial heat and light. Heat because the temperature drops from 84° to 66° in summer and in winter 76° to 12° in a couple of hours. These figures are greenhouse temperatures, outside being more severe. We need artificial light because we have only an average of 12 hours light all the year around. I use 150 watt bulbs 4' above stages (benches). These burn all night, also giving an overhead heat which is beneficial to begonias. The houses I use are sunken or below ground level and are 75' long, 11' wide, and 7'8" high with all glass tops. During our summer months, October to April, the glass is sprayed white or pale green, and in winter cleaned off and covered with bamboo mats. Houses are covered with wire netting to protect against hail, which we have in the summer months. Practically all the begonia species and hybrids are grown in electrically heated and thermostatically controlled conditions to the flowering stage, then placed with plants of other genera in a large conservatory holding over 10,000 specimens and are then shown to the public. These semperflorens are used to good advantage as a bedding plant. Seeds are sown in boxes in a cool house during the spring and when large enough are transplanted outdoors. An effective way we use semperflorens is to plant them under a palm tree where fronds are at least 10' from the ground. Wire netting is placed around the tree trunk and packed with moss and soil. Semperflorens and lobelia are planted all around. By using this method we have color at least 7 months a year. B. "President Carnot" and cane type varieties grow well outdoors here, mainly on verandas, but are more satisfactorily grown under glass house conditions.

My favorite way to grow begonias is in the glass house where I can keep close watch on growing habits and diseases that would otherwise go unnoticed. Ventilation is one of the main factors in successful begonia growing. Our stages (benches) and floors are covered with 1/4" of chips, walls are pale blue and white with the water tanks at each end of the house. The pots do not stand on the chips, but on upturned 5" pots, thus providing added ventilation and easier spraying. We water once every five days and feed when plants are in final pots. Begonia plants are very scarce here and seed are rare with the exception of semperflorens and tuberous, so after a long time I decided to join the American Begonia Society and without the very kind assistance of Florence Gee, Seed Fund Administrator, I still would have about 18 different species and hybrids. As it is, I now have over 90. The seeds obtained from the seed fund have proved true to name and germination has been 100%. It is with a great deal of interest I read *The Begonian*, although it arrives a month behind date of issue. I marvel at the methods and ideas used in the States, especially those used in sowing seeds and soil mixtures. I was taught the old methods and still use them, but have tried some of your ideas with success. You may be interested to know about some of our formulas which have been successful with us.

*Seed*—One-half black peat, 1/2 part brown peat (Dutch), 3/4 part sand, 1/4 part charcoal, adding superphosphate and lime. Mix and let stand for a day under a damp sack, then sow seeds in the usual manner.

*For cuttings*—One-half part black peat, 1/2 part brown peat, adding superphosphate and lime. Mix and fill 2" pots. Water and let stand for a day. Place cuttings singly in pots and place in propagating case. Close cover for about 3 days. Open gradually until cuttings are rooted. Place pots on staging being careful that the foliage does not touch. Use the same mixture for leaf cuttings in trays instead of clay pots.

*Mixture for first potting*—One part soil, one part black peat, one part brown peat, one

*(Continued on Page 139)*

# Phyllitis --- a Fern

By Fred Kaye

PHYLLITIS is one of the smaller ferns, and also known by its old name, *scolopendrium*. Few ferns are as bold as *phyllitis*. I say bold in that they are so unlike the storied ferns. From the original forms of strap-like leaves have sprung hundreds of variations, ranging from ruffled curls to thin strips. Most of the really erratic shapes are of English origin and can be a collector's delight, in that minor differences can make practically each leaf a form of its own. There are straight straps, ruffled straps, crenulated straps, lacinated and variable width straps almost without end. Then the crests add in with hooked, ruffled, forked, spiked, clustered, spiraled, frilled and feathered features, while the base of the leaf breaks out in wild points, rolls out in curls, lobes or what not. Nothing, it seems, is too wild for this fern. Finally, it may be upright, like a Bird's Nest fern, or arch out almost flat, or, be a miniature or dwarf form only three inches high.

Where would a fern like this grow? Well, they are a remarkable plant in that they are found in moist, cool canyons in the Eastern states and in the laurential shield of Canada. Some are found in the cold, constant mist of waterfalls; on wet ledges so far down in the mouths of caverns that they were the only plant to survive in the dim light. It is, oddly, one of the few ferns that live and will grow on limestone. In England, it grows on old walls, along the water's edge on any lime rock or on cool, shady banks. It loves crevasses and well drained but constantly moist areas between rocks. In deeper cracks, seepings, or permanently moist exposures, this fern is even listed as growing in Asia Minor, in Mesopotamia and in the upper Nile regions in Egypt. Certainly, one reasons, they must get tremendous dry heat there. I am sure they do, but don't let these facts fool you. . . . Conditions like these have developed over millions of years and consequently, while they are the same plant, the spore from the desert areas would collapse and drown in England and vice versa, while spore from Egypt may be ideal for dry California interior regions.

I have not been able to trace down evidences of summer dormancies such as occurs with *Adiantums*, and which conditions are usually limited to slowly drying, rocky situations. It is best placed where other textures contrast its form. It is at its best with cyclamen, violets,



Drawing by Fred Kaye

begonias, Canada ginger, finely cut ferns, fuchsias and campanulas, but the effect will be lost among similar strap-leaved plants such as *clivia*, *ophiopogon*, *bletia*, *bromeliads* or *rhodesia japonica*.

If old brownish fronds are cut as they age, a continuous vivid green is attained. There is one variety that is sporeless and continually lettuce green. It is tolerant of almost any shade situation but too much sunlight burns the fronds into a brown-edged, yellowish color in which much of the fresh green charm is lost. This fern is important with its crisp, lush, woody look. In the border and shady, way-side nooks, it qualifies itself for these roles.

If you shop for *phyllitis* in nursery circles, it often will be found bucket-planted in pure

peat. Do not be misled into accepting this as a planting guide. The old rule of too wet or too dry, always ascribed to peat, holds true here. A fern, too often wilting is weakened, or, too long wet, will collapse of root suffocation. I have found a heavy, slightly gritty, black loam to be best as it dries slowly and will not stay soggy. The crown, in all cases, should be raised about two inches above the feeding basin about the plant. It likes absorption upward or to send its roots down, but will not sit in water and live.

Where lime is absent in soil makeup, oyster shell may be incorporated, but it seems to get along well enough in neutral soils, disintegrating granite, sandstone, adobe and clays as well as leaf mold. All depends on condition of good drainage for the crown but continually moist roots.

It seems to be pest and snail free, but is subject to thrip, which eat the chlorophyll from the underside of the leaf causing a silvery look. A heavy, dense plant is best sprayed with a mild oil spray with a nicotine base, three times, ten days in succession. Be sure to spray the underside of all foliage. A light plant may be cleared by cutting and burning the infested fronds. I have not found thrip hard to control if the general area is kept consistently moist.

There is a time in the early spring when the new croziers begin to bunch in the center like a nest of eggs. This is the time to cut away all fronds and in a few weeks, a clean new crop of leaves ensue.

If you cannot find a ready source of plants, raise your own from spore. You may write for or collect fronds locally. Get well-ripened spore, let this dry slightly, put it in a paper sack and further dry for two weeks. Batter and knead the sack to dislodge the spore, and, having prepared the culture, shake the bulk of the foliage out of the sack and then fill the sack with clean water. This will float the spore out of the sack and into a container. For the medium of culture, use a heavy black soil, about half filling a five-inch clay pot. About an inch of crushed charcoal should be at the bottom of the pot as this prevents soil souring. Place this in a one inch depth of water and allow to saturate upward. When well wetted, add the rinsed water from the sack, which will drain out, depositing spore evenly. Cover with a pane of glass and keep constantly moist by refilling the saucer, bowl or tray in which the pot sits, but do not keep sopping wet.

In about three weeks a green scum will form and then small liverwort-like green pads will appear. These gradually will develop into

## Hybridizing Begonias in the Deep South

MY FIRST experience with hybridizing begonias was in Ohio, the seed did not germinate. When we moved to S.C. in 1951, it was a new experience of growing plants in a warmer climate and my hopes were high, but we find out the Deep South has its oddities in the weather as well as other parts of the country. All can be overcome with patience and time.

Spring is the best time to set seed for me. June, July and August are the poorest months, it being too hot and humid. I have had seed to set all this winter in our Mobile home. I have an unidentified cane blooming all winter and it has set seed. One time I picked up a male bloom that had fallen into another pot to show a friend how I set seed by lightly brushing the pollen bloom on to the yellow pistil of the winged bloom.

I find the male pollen lasts for several days when laid up to dry. The best time to pollinate is around noon, but any time will do, even at night. The peduncle of the winged bloom, when the seed is set, does not always drop. On some begonias the seed pod will drop in a few days.

The rhizomatous and rexes are the easiest for me to get seed from, although seed from *B. "Ella Keys"* and *B. "Speculata"* failed to germinate. There are some hybrids that do not set seed. When I find one of those, I use the male bloom on a begonia that does set seed and that way try to get the characteristics I want into the new crosses.

RUTH WALTZER, Sumter, S.C.

### To Prospective Members

Each new member will receive a packet of mixed seed containing mixed species, *semperflorens*, fibrous, rhizomatous and rex begonias. Cultural bulletins also will be sent.

ferns, varying from six months to a year for a one-inch plant. At this stage, they may be transplanted to small pots and carried further along. After transplanting, the small pots should be kept covered with glass until new growth starts, indicating satisfactory establishment and ready for gradually hardening off to full exposure.

# A Begonia Is Born

BEFORE we can develop a new hybrid begonia or reproduce the begonia species from seed, we must have a male bloom (the one perfectly flat back of the petals) and a female blossom (the one which has a winged ovary which becomes a seed pod). First, test for pollen on the stamens of the male bloom by rubbing the stamens over the finger nail. If pollen is available, a fine dust will be observed on the finger nail. Carry the pollen to the pistil of the female flower. Wrap loosely a colored sewing thread on the pollinated flower and write down the parentage of this cross and the thread color code. Sylvia has found that tags are too heavy and they snap off the seed pod before it ripens. When the stem dries before the seed pod ripens, it is best to remove the pod and place in a dry open container to ripen. This also saves the seed which may drop from a pod left to dry on the begonia. Rolling seeds is not a test of fertility for begonias. The sooner the seed is planted after ripening the better will be the germination.

A very excellent seed propagating medium Mrs. Leatherman uses is made by running Wilson's Will Gro (redwood leaf mold) through the meat chopper and mixing equal parts with sponge Rok which first has been rolled fine with a rolling pin. This medium of redwood leaf mold is sterile and one does not have to worry about fungus, worms or weed seed. Soak this medium thoroughly, and place it in a growing container. If too soggy wet, let dry for a day or two. It must be damp, neither dry nor soggy wet. The seed, if sown on this medium in a closed container, will not need to be watered until time to remove the seedlings. Do not cover the dust-like seed with any soil mixture, only the jar cover to the container. If peanut butter jars are used, cover with a piece of glass as the lids to these jars will rust on. Clear plastic ice box dishes with close fitting lids should be filled about 2" to 3" deep with the growing medium.

In these miniature greenhouses the begonias will grow until they have at least two true leaves. Take the tiny begonias out in colonies about 1/2" in diameter and place in a half flat containing the same growing medium used for growing the seed. Do not separate the tiny plants now as mortality is high, and it is much better for one's patience and begonia growing enjoyment not to become cross-eyed separating the tiny seedlings. Space these colonies about an inch apart in a half flat (9 x 18 x 1 1/2"). Water the flat from the

bottom by setting it in a vat of water. Cover this flat with a sheet of glass, which should be left on until new growth starts. Lift the edge of the glass about 1/2" and leave in this position for about a week after the new growth starts. Start sliding the glass back on the flat an inch at a time to harden off the seedlings. If the seedlings get too high, place an open bottom flat on top of the one in which the seedlings are growing and put the glass on this frame. The plants hardened off in this manner are ready to be separated when 1" to 2" tall depending on the varieties and time of year. Spring is the best time to transplant because this is when the normal cycle of growth begins. If seedlings are planted too late in the season, it is best not to transplant till spring. If the season is right, it is time for the second transplanting when the hardened-off seedlings are placed 100 to a flat. Water from the bottom for the first watering so the roots will take hold and the seedlings will not fall over. Then watering may be done by overhead sprinkling. Do not cover with glass in this second transplanting.

When these plants are 4" high and have four leaves, they are ready to be put into 2 1/4" to 2 1/2" pots using a potting mix of 1/2 cup sponge Rok to 1 gallon of leaf mold. Watch these seedlings as they develop through many interesting stages. Cull out the varieties too much like other plants, looking only for plants distinctly different. Use the culls in the shade garden. Carry those distinctly different seedlings on to see what they will be like in the second and third year. You may find you have a plant worthy of registering.

Sylvia recommends sponge Rok as a good rooting medium for cuttings as it develops a good root system. The sponge Rok which adheres to the roots at the time of transplanting from the propagating flat should be gently worked off before potting up the rooted cutting because the sponge Rok has no food value and holds too much water.

A new hybrid of Mrs. Leatherman's is a rex begonia that is distinctive in that it holds its leaves during the winter. It is an upright branching type, with branches from the base. The leaves are silver with a pinkish tinge and are quite pointed and mottled.

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*Interview of SYLVIA LEATHERMAN preceding talk given to San Gabriel Valley Branch.*

J. L. C.

# The Arboretum

THE ARBORETUM at Arcadia, California, is operated jointly by the California Arboretum Foundation, Los Angeles County and the State of California. In keeping with the description of an arboretum as a park where the emphasis is on education and research rather than recreation, limited courses are to be offered youth groups and adults on various aspects of horticulture, gardening, and plant appreciation. Believed to be the first, a home garden is designed so home owners can see how to use new plants and observe gardening techniques developed at the Arboretum. This garden will be opened at the dedication of the new Administration Building and Gatehouse, July 27.

Dr. William S. Stewart, Arboretum Director, believes the public will benefit from the practical research done there. Turf grasses—bermudas, zoyias and bluegrass are being tested. Many plants from other continents and climates sent to the Arboretum will be released to the public if they are found to be worthy of a place in a garden in this climate, or with cultural instructions if too tender for outdoor gardening or if found that they need a colder climate to grow successfully.

Color photo fans have been trekking to the Baldwin street entrance of the Arboretum. This street can take its place with other famous highway beauty spots. A riot of colors is presented by the fig marigolds (*Mesembryanthemums*), also known as Ice Plants, of which there are ten species along the curb. Visitors are reminded of a Persian carpet as they view the blend of color. The spiny Coral Tree, a native of Portugal, has a brilliant red luminescent flower. Flanking the vivid young Coral Tree are two interesting Puyas, members of the pineapple family from Chile. These Puyas have red or green flower spikes, headed by flowers of a metallic green, or red and green, with orange-yellow anthers.

In a natural bowl shaded by ancient oaks, we find the shade loving plants. Redwood shavings have been used extensively to make the beds on the sides of the bowl. Here we find the begonias donated and planted by Marie Turner growing on the slopes. *B. macrocarpa*, growing in the ground has tripled its size in a year and has taken a deep red flush on the back of the leaves. *B. scharffi* has been in bloom all winter. *B. "Alto Scharff"* (*B. scharffiana* x *B. alto de serra*) has

taken on a very deep rich green. *B. "Braemar,"* a *B. scharffi* seedling, has doubled itself in size and has giant deep green leaves. *B. "Thurstoni"* (*B. metallica* x *B. sanguinea*) also has a richer color which shows that planting in the ground outdoors gives that "something" which pot grown specimens lack. A species of *B. angularis* stands, self-supporting, six feet tall. Nearer the top of the bowl has been planted *B. evansiana* (syn. *discolor* or *grandis*) so the tiny bulbils will fall down the hill, naturalizing the area. On one side of the bowl, in the shade, is a large planting of cymbidiums and cypripediums. Orchids and bromeliads are growing in the trees. Ferns, camellias, azaleas, fuchsias are naturalized in the scene with bright splashes of color from the coleus.

On the rim of the bowl we find A.B.S. registered No. 124, *Begonia* "d'Artagnon" (*B. epipsila* x *B. scharffiana*) with the rich green leaves formed into the musketeer's hat with the rolled back bright red, hairy back of the leaf forming the brim of the imaginary hat. In the sun is another sturdy semperfloren Turner hybrid. It is called *B. "Ebony Lady"* because of the ebony color of its shiny foliage. The flowers are deep rose shown off effectively by the dark leaves. In one year it has spread to two and one-half feet, growing in the ground. It likes dryness. The accompanying picture shows *B. "Ebony Lady"* grown by Edna Korts into a well rounded, basket specimen. Also, on the bowl rim, is a very

(Continued on Next Page)



*B. "Ebony Lady"*

# Photographing Begonias

MANY of us, I am sure, have grown plants which we think have reached perfection and perhaps may be in full bloom. If we could but make a picture of it to preserve and admire its beauty.

With an ordinary camera, focusing type preferable, that is one that may be adjusted to exact distance from lens to plant. This is important in order that sharpness and detail be secured in leaves and flowers. Most cameras have a scale which allows settings for distances. Holding the camera in the hand is not as advisable as if it is secured firmly on a tripod or solid surface.

Suppose we have our begonia selected. When considering our begonias for a picture let us always examine it from all angles to decide which side is best for our camera level. We should choose a plain background in order that there will be nothing to confuse our picture. A plain colored wall, a desk blotter, cardboard, or a piece of material would be suitable, used a foot or so back of our plant. We may select daylight, near a window, take our subject out of doors, or use photoflash bulbs or flood light indoors.

There are many factors which we must consider and all contribute to make a fine photograph—examine the plant to find its best angle, the focus (distance from lens to plant) is very important—compose your sub-

ject, either on ground glass, if camera is so equipped, or in the view finder. Be cautious that you do not cut part of the image off, possibly from being too close, but keep as close as you can. The exposure depends on the source of light; dark foliage absorbs more light than light colored subjects. Professionals use exposure meters to measure light and can set aperture of lens, shutter speed, and it is up to you to make setting for distance carefully.

There are times you may wish to make a picture of a group of your plants, taking care to arrange them, larger ones in background and smaller ones to the front.

Many films may be used in your camera, although I should recommend panchromatic films which will give proper values in black and white. Color slides are easily made and so lovely to project on a screen for our friends to enjoy.

There is a great satisfaction in making a fine photograph of your begonias, not only to keep and enjoy for years to come, but it can be helpful for study and identification purposes.

RALPH HOLTSIZER, Darby, Pennsylvania

ED.: Many fine begonia pictures taken by Mr. Holtsizer have appeared in *The Begonian*.

This article appeared in the Begonia Bulletin for Eastern Fans.

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(Continued From Preceding Page)

large *Philodendron selloum* given the Arboretum by Edna Korts.

In the frost free area of the Monrovia section of the Arboretum, Marie Turner is placing the begonia species and old-time Robinson cane type begonias, which were grown by Marie Minter. These will be placed as a memorial to Marie Minter. The works of Marie Minter, along with those of Helen Krauss, will be available in the Arboretum Library.

Acacias receiving particular attention at the Arboretum are those with a special tolerance for drought in water short areas, according to Arboretum Superintendent George Spalding.

"We are testing Acacias both for landscape uses and as container grown specimens for flower show and other decorative uses. Acacias provide the gardener a diversified choice, varying from two-foot shrubs to 60-foot trees.

"The Golden Fountains of Bailey's Acacia

are one of the most spectacular floral sights in Southern California in January and February. One of the introductions which is proving very useful for dry locations is *Acacia cardiophylla*. It should be a fine plant for the home owner who wants a good clean green hedge requiring no care once it is established."

Mr. Spalding defended what he called the "most maligned Black Acacia" tree which is used extensively as a street tree in this region. He said Black Acacais have damaged sidewalks and are easily blown over.

"If this tree had been properly used, the chances of its being in disrepute would be slight. Plant it away from sidewalks and buildings where its silhouette can be appreciated and you could not have a more beautiful landscape subject," he commented.

Visitors come from far and near to view the many plantings at the Arboretum. We are happy that visitors can become acquainted with and then become lovers of begonias as well as other plants.

## The Cultured Life of an Orchid Seed

By JULIUS O. LEUSCHNER

THE PURPOSE of this article is to make available to all flower growers, especially those interested in amateur orchid growing, a simplified planting technique using the kitchen as a laboratory so that this hobby can be enjoyed by more people. Under proper and exacting conditions the *Cattleya* orchid has been made to flower in two and a half years from seed, while many orchid species can be flowered in two to three years from seed (*Spathoglottis*, 18 months—*Phalaenopsis*, 2 years, etc.), which places them in the category of many perennials which flower the second year.

Orchid seed growing is a little different from the simple planting of other seeds. It requires a little knowledge of the sciences of bacteriology, botany, chemistry, and physics, as the seeds are planted under sterile conditions in the same way bacteria or molds are cultured on agar gel. The main problem is to plant the orchid seeds in flasks or bottles under aseptic conditions, to prevent mold spores from contaminating, growing and over-running the orchid seed which usually is dust-like in form. The orchid seed, even though it is so minute, must be disinfected with fungicidal and germicidal solutions (chlorine or peroxide) before planting in sterile flasks containing the sterile growing agar medium.

Books on Orchid Culture are available in most libraries and book stores and it is suggested that a little study of the subject be made before attempting to plant the seeds of these unusual flowers. "American Orchid Culture" by Edward White gives a complete planting technique.

After an orchid flower has been pollinated and has grown to term (3 to 12 months), the seed pod begins to turn yellow or brown, cracks and the seed starts to dust out. Some seed pods such as *Spathoglottis* and *Phaius* mature in three months. *Cypripediums* mature in six to 12 months, while *Cattleya* and *Cymbidiums* normally take 11 or 12 months to mature. At the end of this time, the seed will be completely formed. However, many hybrids produce sterile seed. The average *Cattleya* pod will produce around 500,000 seed. Orchid seeds may be stored for future planting as noted below.

Orchid seed varies in size and color. The seed of *Cattleya* and *Brassos* varies from nearly

white to cream or yellow. This also applies to *Cymbidium* seed although it is somewhat larger in size. In these species, the more yellow the seed, usually the more viable. *Vandas*, *Phalaenopsis* and *Cypripedium* seeds are usually dark brown and very fine. *Odontoglossum* seed is orange to brown. *Epidendrum* seed is white to greenish. Orchid seed must be fresh and viable, that is, it must have an embryo visible under high power magnifying glass or microscope and be uncontaminated by mold spores. This latter contamination may be eliminated by carefully watching the pod for ripening and when the first crack is noted, the pod is removed from the plant, carefully opened, and the seed folded into several papers (I like to put sufficient quantity of seed in each paper for a planting of six flasks). The folded papers, properly marked, can then be placed in a jar in the lower part of the refrigerator. I have grown seed (*Cymbidium*) so stored over a period of 3 years with satisfactory results.

There are many seed culture formulae, but they are all essentially the same: I will not delve into the details of weights and measures of the various formulas but will try to present observations as noted in the kitchen laboratory, in which most of us amateurs work.

Special favor is given to the improved Knudson Formula "C" for basically it gives us a good growing medium and will grow seeds successfully without special adjustment or special disinfecting. *Cypripedium* seeds are extremely hard to grow and many growing secrets are still unpublished. My best success has been with a formula by Dr. Burgeff of Germany.

The ultimate medium must be soft. The agar or vegetable gelatin must hold all the moisture it can contain yet maintain a solid state, yet soft enough for the seed to imbed itself, then by osmotic absorption, obtain the moisture and food elements—dextrose for the manufacture of cellulose and starch, iron and manganese for chlorophyll, nitrogen for growth, phosphorous for hardness and texture, and the many other elements necessary for this marvelous process of photosynthesis.

### ORCHID SEED PLANTING TECHNIQUE

Orchid seed planting, while a little tedious, is quite simple and easily mastered by the

amateur orchid grower. The fascination of seeing the orchid seeds develop from a fine powder to the little green globules, then leaf out and finally root, is certainly one of enjoyment for all horticulturists. The following process can be successfully completed in any kitchen equipped with a modern oven with temperature control, and is practical for amateur or professional. Inexperienced growers should start with inexpensive seed until a few plantings have established a more perfected technique.

#### FLASKS

Use clean flasks, and scrub thoroughly, then rinse with dilute acids, hydrochloric, sulfuric, phosphoric acid, or vinegar, and finally rinse with distilled water. 250cc or 500cc flasks are most convenient for planting and there is not a great loss if a flask is lost to mold. Also, even with an exact planting technique, some flasks will do better than others under apparently the same conditions. This may be due to variable causes as for instance, new flasks, glass with varying sodium content, changes in ph, improper washing, or overcooking of a flask in one area of the oven.

#### MEDIA

The dry medium is complete with nutrients, sugar and agar. It requires only the addition of distilled water in an ordinary saucepan. The dry contents for 1 liter mix is dissolved in 1 liter (1 quart) of distilled water. DO NOT USE FRACTIONAL AMOUNTS OF THE DRY MEDIUM. IT IS NOT DEHYDRATED BUT AN INDIVIDUALLY WEIGHED MIXTURE. The nutrients are unevenly distributed throughout.

The medium is dissolved by simmering or slow boiling in order not to burn, evaporate too much water or boil over. The dissolving process requires only 20 minutes to half an hour and the solution should be stirred frequently to avoid sticking to the bottom and sides of the pan and to hasten the solution of the agar. The water content should be kept at approximately 1,000 cc (1 quart). Any loss that may occur before the agar is dissolved will result in a varying consistence of the medium which may not stand up over a period of time or may interfere with seed growth by becoming too dry. When completely dissolved, the solution is poured carefully and evenly into the required number of flasks. This is sufficient for 12-250cc or 6-500cc flasks.

There are numerous methods of closing the flasks but rolled cotton pledgets are the most convenient and practical for the average planter. Strips of cotton 1-1/2 or 2 inches wide are cut from across the roll, and experience will

teach the amount of cotton required for the various size flask openings. This cotton plug must be tightly rolled, covered with a piece of gauze 4 by 5 inches, and then forced into the neck of the flask. The ends of gauze are left well above the top of the flask for easier removal of the stopper for the planting. When flasks are filled with agar solution (approximately to 3/4 inch from bottom of flask) and properly stoppered, they are ready for sterilizing in the oven. Place in the oven and set the temperature control at 225 or 250 degrees and heat for half an hour. At the end of that time, place the flasks on a second oven rack on sink to cool. (DO NOT SET HOT FLASKS ON A COLD SINK). After 12 hours, the flasks are again placed in the oven and the temperature set for 250 degrees. (The congealed agar takes a little more heat to redissolve) and the flasks are left in for half an hour, then removed and replaced on the sink rack to cool and congeal. This second process just assures more perfect sterility as some mold spores can weather a single sterilizing process in spore form and then grow later. When solution has completely jelled, the flasks are ready for planting.

#### SEED DISINFECTATION

Orchid seed must be thoroughly disinfected before planting or mold contamination will result and the flask will be completely spoiled. Because of the danger of contamination, smaller flasks should be used where a limited amount of choice seed is to be planted. If 12-250cc flasks are used instead of 6-500cc, there is not so great a loss if a few flasks do contaminate. However, the 500cc flasks are a better size if enough seed is available.

According to my experience, chlorine solution gives best results for orchid seed disinfection. Chlorine tablets are available and require only simple dissolving in distilled water (1 tablet to 1 ounce of water), and are prepared fresh for each planting. No filtration or wetting agents are required and the chlorine content is the same in each solution prepared. About half a teaspoonful of chlorine solution is placed in a seed vial (use one vial per flask), and add about 1/4 inch of seed on the tip of a knife. Replace vial cap and disinfect seed for fifteen minutes, shaking occasionally. Chlorine seems to stimulate the seed growth (etiolation or enlarging) either by the release of oxygen from the water by the action of the chlorine or the softening of the seed coating for easier penetration of the nutrients.

A new, different and apparently safe seed disinfecting technique may be used as follows:

Use half to one teaspoonful of fresh Hydrogen 3% and 3 or 4 drops of ST-37 to each seed vial. The ST-37 acts as a wetting agent. After the seed has been disinfected for the proper time (chlorine solution, 15 minutes or peroxide, 1 hour), the prepared sterile flask and seed vial are placed in the cool oven and working through the oven door, the contents of the seed vial are carefully poured into the flask. The flask stopper is replaced (in the oven) before mold spores can drop into the flask, and the flask is then removed from the oven and rotated to distribute the seed evenly. The flask is then returned to the oven, the excess fluid poured off back into the open seed vial and the cotton stopper replaced permanently. The flask may be carefully tipped and the excess fluid absorbed on the cotton stopper without again opening the flask. Aseptic precautions must be maintained constantly in order to prevent mold contamination. Do not open the flask for seed planting longer than necessary, and never expose open sterile flask to the room as mold spores may settle into the medium in a fraction of a second. Working in the oven, the process is fairly safe to insure sterility. The oven should be heated and cooled before the planting is started.

#### TOP DRESSING OF THE FLASKS

After the flasks are planted, to prevent mold spores from growing and penetrating the cotton stopper, it must be prepared with a fungicidal solution. The top of the cotton stopper is trimmed evenly and treated with a copper solution. The special copper solution is put on the top of the cotton stopper with a medicine dropper, completely covering the stopper. This special copper solution penetrates better and does not completely dry out and crystalize as much as a saturated solution of copper sulfate. Do not allow copper solution to penetrate through the stopper, for if dropped on the agar medium, seeds will be retarded in their growth or killed. The top of the flask may then be covered with several thicknesses of wax paper or plastic and tied with a string or wire. A tumbler may then be placed over the top of the flask to avoid drippings from greenhouse or spray. This copper treatment allows the flasks to be kept in the humid atmosphere of the greenhouse without contamination.

Place the newly planted flasks in a dark place or cover with a newspaper for about a week, then remove to light gradually as seeds green up. A night temperature of 70 degrees should be maintained (warm end of

## 1956 Convention Site

THE NATIONAL BOARD of the American Begonia Society has chosen historical Plummer Park in Los Angeles for its 1956 Convention. The weekend of August 25 and 26 will see delegates convening at this mecca for early distant travelers. Steeped in tradition of early California, Plummer Park as it did in 1951 will furnish ample facilities for our Annual Convention this year. With its three auditoriums and ample parking area, we feel this site is the most practical for our needs.

The Convention this year will be sponsored by the National Society, with several of its local branches participating in its staging. It is our intention to have as many branches as possible working together to make this event as outstanding as those staged in the past.

The July issue of *The Begonian* will carry all pertinent information on the Convention as to hotel or motel reservations, banquet reservations, etc.

May we suggest that you mark your calendar now for this important date, August 25 and 26 at Plummer Park in Los Angeles.

CAL TROWBRIDGE  
*1956 Convention Manager*

the greenhouse). Daytime temperature may rise to that of the greenhouse.

Epidendrum and other Botanical orchid seeds green up almost over night, while Cattleya seeds take about a week or two and Cymbidium a month or two.

The preceding planting technique is based on experience and observations in more than 450 planting batches of from 6 to 24 flasks each and carried out over a period of several years. It provides the amateur orchid grower with a simple and fascinating experience in the realm of horticulture and the process can be elaborated upon by the professional.

The growing of orchid seeds can be a hobby of great enjoyment, and when good seed is planted the success of the enterprise can be a source of pleasure and financial return for years. It is an educational project in the study of Patience, Science, and Adventure.

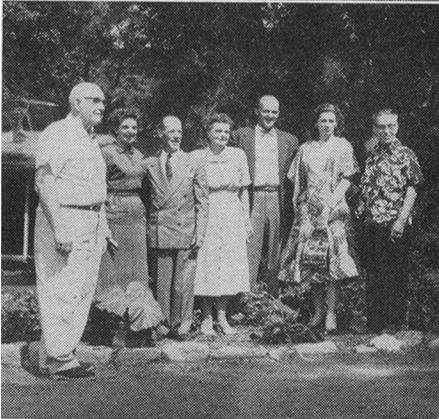
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# Begonia Planting Ceremony at Descanso Gardens

BEGONIAS were glorified in a special planting ceremony, April 29, at Los Angeles County's Descanso Gardens, La Canada, California. Under the venerable "Old Verdugo Oak," probably the oldest tree in the county and said to be more than 400 years old, were planted many new hybrids and species begonias. These begonias, which were grown or originated by members of the branches in this area, have been given to the gardens so all visitors may enjoy their beauty and see that these plants are not "touch-me-nots," but are hardy enough to be grown outdoors.



Before the ceremony, members and guests who came from as far away as San Diego, enjoyed a picnic lunch. A conducted tour through this horticultural wonderland with thousands of camellias, azaleas and fuchsias, a huge collection of iris, the Historical Rose Garden, and magnificent, ancient trees and flowering shrubs, provided the setting for the begonia planting.



Joe Taylor (Redondo Beach), president of the A.B.S., and Calvin Trowbridge (Inglewood), president elect, conducted the planting ceremonies assisted by Vice President Fred Browne (San Gabriel Valley) and Mark J. Anthony, assistant superintendent of the gardens. Branches of the Society whose members participated by giving the begonias were: Riverside, El Monte, Whittier, Foothill, Orange County, San Gabriel Valley, Pasadena, Glendale, Ventura, Redondo Beach, Long Beach, Santa Barbara, Inglewood, Hollywood and Los Angeles. A begonia growing and propagating demonstration was given, followed by an open forum on begonia culture. If branches wish to send more begonias for the floral-minded public to enjoy, the garden would be happy to add them to the collection.



Probably everyone who grows shade loving plants has a sunny section in his garden where he grows roses. Many roses gained their names, and often fame, as a result of armed conflicts of former years. In the Historical Rose Garden of Descanso Gardens planted by the noted rosarian, Dr. Walter Lammerts, are roses which have a history dating back to the time of Christ. Among the 7,500 rose bushes in the Historical Section is the York

TOP: A.B.S. President Taylor and President-Elect Trowbridge plant B. "Verschaffeltii."

MIDDLE: A.B.S. officers Frank Moore, public relations dir.; Sylvia Leatherman, research dir.; Joe Taylor, pres.; Louise Cramer, editor; Cal Trowbridge, pres. elect; Marie Trowbridge, treas.; and Fred Browne, 2nd vice pres.

BOTTOM: Representing participating Branches were Presidents Lee, San Miguel; Leatherman, El Monte; Maddox, Riverside; Coe, Glendale; Lovejoy, San Gabriel Valley; Grabam, Pasadena; Trowbridge and Taylor.

In front of each group is B. "Freddie."

## B. 'Cool Waters'

BEGONIA "Cool Waters," A.B.S. registered number 126, is a hybrid created by Mrs. Mary Gillingwaters in 1953. The parents of B. "Cool Waters" were two species—the seed carrier being *B. boweri* and the male parent, *B. heracleifolia pyramidalis*. The dark green, ovate-pointed leaves have lobes which extend into the leaf about one-fourth of the leaf diameter. The apple-green veins end in an apple-green sinus. Rosy-red pigment shows through on the back of the heavy textured leaf. The apple-green color, of the prominent veins on the back of the leaf, extends to the mid-areas. Stipules are pale green. The green petioles have the ridges of *B. heracleifolia pyramidalis*. Their red markings make the petioles look red until one makes a close examination. The rhizome is also green with the same close red markings.

This plant is a very hardy type which, when mature, attains a spread of about two feet. It grows in regular begonia mix and like other rhizomatous begonias does not take too much water.

---

and Lancaster, which was named from the War of the Roses in England. The Damask rose became known during the Crusades in England in 1500-1600. The Austrian Copper Rose also spread as a result of the Crusades. The Rose of Castille was brought from Spain by the Padres and found its way up to Monterey during the war with Mexico. During the Napoleonic Wars, his Empress Josephine expressed her love of roses by collecting many of them from conquered lands. One of such roses now at Descanso is the Pink Crested Moss. The rose, Old Blush, about which "The Last Rose of Summer" was written, and Harrison's Yellow, known to families of the mid-west states about the turn of the century, are also here.

John Van Barneveld, one of the largest growers of old fashioned roses in the nation, praised this collection at Descanso as being one of the best. Not only does the garden have the old roses, but also all the modern ones.

The California National Fuchsia Society has donated many fuchsias and a large personal collection of 600 cymbidiums has been planted near the Hospitality House, in which there is a special display of floral portraits.

The American Begonia Society is proud to have a part in the development of this Horticultural Wonderland.

## Registration

### 1. What Is Registration?

- A. Basically, it is the maintenance of a record of the names given to cultivars.
- B. To meet general needs, it requires that an organization—
  - a. compile, maintain, and publish a list of names of cultivars, and to keep such a list reasonably up-to-date by publications of supplements and new additions;
  - b. accept names for registration, and to register them, only in conformance with the rules and recommendations of the International Code for the Nomenclature of Cultivated Plants, and
  - c. publicize for its membership's cognizance, and originator's compliance, those provisions of the International Code pertinent to the group of plants in question, and endeavor to get all concerned with the plants to use only names that conform to the Code.

Prepared by GEORGE H. M. LAWRENCE  
Representative of the American Horticultural Council on the International Committee for Horticultural Nomenclature and Registration

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# African Violets (Saintpaulias)

By H. M. BUTTERFIELD

THE AFRICAN VIOLET (*Saintpaulia ionantha*) originally comes from tropical Africa. At least 100 varieties are now offered for sale by specialists in the United States. However, the range in color and leaf form is limited, and many of the new varieties do not differ greatly from the older ones. The choice of varieties is almost entirely a matter of taste or personal preference. Occasionally a variety will tolerate considerable light, such as Blue Treasure. Some varieties are slow growers like Amazon Blue and Dainty Maid, while others are known as good growers, such as Blue Girl, Marine, Orchid Girl, Red Princess, Snow Prince, and Topaz. The better varieties are free flowering, such as Blue Treasure, Carmen, El Diablo, and Ionantha. Occasionally a variety is a poor bloomer, such as Blue Boy Supreme, although failure to bloom may be the result of insufficient light or poor care.

*Flower Color.* African violets range in color from light blue through dark blue, violet or purple, and various shades of pink to white. The so-called red colors are more nearly claret or reddish purple than true red. The color names applied are sometimes very misleading. Most fanciers like the light blues of the Ionantha type, the deep blues of varieties such as Blue Boy and Blue Treasure, pink forms such as Geneva Pink, Pink Beauty, and Pink Girl, white varieties such as Snow Prince, White Lady, and Moonbeam, purple forms such as Admiral and Purple Prince, and other varieties that approach red such as Plum Glory, Red Beauty, and Red Head.

*Flowering Habit.* The flat flower form of Ionantha prevails in most varieties, but occasionally there is a variation, as in Amazon Pink, which has cupped petals. The double-flowered varieties, such as Double Blue Boy (Duchess) and Regal Wine, leave much to be desired, since there is a tendency for the flowers to be borne on short stems down among the leaves. With many double seedlings now being tested, however, we may expect the color range to be greatly extended, perhaps with the development of longer flower stems, as well as better size. (See Alma Wright, Apollo, Dreamy Blue Double, Purity, Queen Neptune, and Royal Girl for newer doubles.)

Most fanciers like long flower stems, as found in Amazon Pink, Blue Boy, Blue Eyes, California Periwinkle, duPont Blue, and Ionantha. The number of flowers in a cluster

is also important. For example, Amethyst may have up to 14 flowers on a stem, Blue Eyes 3 to 7 flowers, and Sky Blue 5 to 8 flowers.

*Foliage.* Variations in leaf form also attract fanciers. The Ionantha leaf form, where the leaves are heavily quilted, often slightly cupped, and pointed, represents one of the original leaf forms. The rounded, scalloped leaves of Blue Eyes, Blue Girl, Orchid Girl, Pink Girl, and Red Headed Girl are quite distinct in shape and have a white eye where the petiole joins the blade of the leaf. The leaves of Ruffles are narrow and pointed with a toothed margin giving a ruffled appearance. Occasionally the leaves stand upright rather than lie flat, as in Medium Blue. Some varieties have leaves that are green above and red or pink beneath, as in the case of Blue Warrior, El Diablo, Gorgeous, Neptune, Pink Delight, Red Land, and Ruffles.

The position of the leaves and the cupping of the leaves are matters of personal preference. Ionantha usually has cupped leaves. The leaves of Blue Boy and Pink Beauty tend to curl if conditions are not right. A few varieties have variegated leaves. Some varieties have frilled or lacy leaves. All such differences are minor points as compared with good flowers and healthy foliage, but they do add interest to a collection.

*Size of Plant.* Excellent miniatures are now available, such as Annabelle, Bronze Cherub, Dolly Dimple, and Jade Girl. Fanciers also may contrast miniatures with very large plants, such as those of Plum Glory. Creeping plants such as Grotei and Grotei hybrids are valued in collections for hanging pots or baskets or for use in strawberry jars.

## PROPAGATION OF AFRICAN VIOLETS

Propagation of the African violet is usually by means of leaf cuttings, although division of a large mother plant may furnish all the plants wanted. Plants may set seed, but the seedlings will be highly variable in color of the flowers and in habit of growth.

*Seed.* Plant the seed with a very shallow covering of sand. Keep the surface shaded until the seedlings begin to appear, and then give more light and air. When the seedlings are up well, prick them off and plant in individual pots.

*Cuttings.* For leaf cuttings the upper half

of the stem with leaf blade attached is inserted into coarse sand so that most of the stem, but not the blade of the leaf, is covered. The leaf cuttings are kept in a moist greenhouse or propagating frame where adequate moisture and shade can be provided during the rooting period. Small plants should form at the base of the leaf stem within a few weeks. When these are large enough, they should be separated and planted in individual pots.

Home gardeners who do not have facilities such as those mentioned for rooting leaf cuttings sometimes insert the stem about an inch in water in some small glass container. If this container is placed in an east window, rooting usually will be completed in a few weeks. This method is not ideal because the plants must be transplanted to a good potting soil before the small plants start to form, and that may set the rooted cuttings back a little. There is less danger of depressing the growth of the young plants formed at the base of the leaf cuttings when the rooting medium is sand or a suitable potting soil.

#### GENERAL CARE

*Location.* African violet leaves sunburn very easily, so the plants should be placed out of the direct rays of the sun. An east or north exposure is very satisfactory. The plants should be grown in a shady greenhouse or in a window of a cool room where the temperature ranges from a minimum of 60-65° F. to a maximum of 70-75° F.

Too much shade should be avoided, however, since failure of good varieties to bloom is often traced to insufficient light. African violet specialists report that the optimum light intensity for good flowers is about 1,000 foot candlepower. Plants grown in areas with considerable cloudy or overcast weather may be set just out of the sun's rays near an uncurtained south or west window to insure better flowering. In sunny inland areas, however, a north or east window should provide all the light required for flowering.

*Potting.* African violets do well in any good potting soil, such as a mixture of 2 parts fertile soil, 1 part coarse sand, and 1 part peat moss or well-rotted leaf mold. Since the root system is rather limited, the plant does not require very much room in the pot. Division and repotting should not be necessary oftener than about once every other year, unless many of the roots reach the outside of the pot and indicate a need for repotting. Single-crown plants may be maintained by removing offsets promptly. The mother plant should be divided after it has formed several offsets and the roots begin to crowd the pot. Separate the offsets

from the mother plant by means of a sharp knife and plant them in individual pots. Any serious check in the growth of these plants probably will bring about a forced rest, and it may take several weeks or even months to get them back into good flowering condition. Most African violets have flushes of growth followed by a period of bloom. Plants in the best condition may bloom at intervals all through the year.

*Watering.* Only a moderate amount of moisture is required when a good potting soil is used. African violets require more frequent watering in a very light soil mixture, and yet too frequent watering may lead to root rot. Examine the soil at least once a week to make sure that enough moisture is present. Apply sufficient water at a time so that some will run off through the bottom of the pot occasionally. This helps prevent alkali salts from accumulating at the surface of the soil. When the soil moisture is depleted, the leaves will begin to wilt and the flowers will definitely show the need of water. Watering twice a week under normal room temperature and once a week in the greenhouse should be adequate. Avoid wetting the leaves as far as possible, because sunscald may result if the sun reaches the wet leaves. Good drainage should be maintained at all times.

*Fertilizing.* A limited amount of fertilizing with liquid manure or a teaspoonful of a mixed commercial fertilizer to a 5-inch pot will insure continued vigorous growth.

*Insect Pests.* The cyclamen mite is a serious pest of African violets and may disfigure the leaves if not avoided or controlled. Other host plants, such as English ivy, azaleas, fuchsias, gloxinias, and other greenhouse plants, may be partly responsible for the spread of this pest to the African violet. Just at present the spray materials available to the home gardener are not very effective in controlling this mite. Commercial growers are able to buy materials in large amounts that effectively control it. Try to purchase plants that are entirely free from the cyclamen mite, and keep the plants away from other host plants that may be infested.

Aphids also may infest the African violet. Any good 40 per cent nicotine-sulfate spray used at the rate of about 1 teaspoonful per gallon of water will normally control aphids.

*Failure to Bloom.* Attention already has been called to the importance of placing African violet plants where they are just out of the direct rays of the sun. Such a position insures adequate light even near the coast, but

*(Continued on Next Page)*



Riverside Branch exhibit at the April Riverside Flower Show in the Riverside Public Auditorium. TOP: Nigger Tree. SECOND ROW: Dorothy Grant, Riverside Benny, Ken Ann in bloom, Riverside Benny, Alta Maiden. THIRD ROW: Sue Zug, Gillingwaters Seedling, Whittier, Joel Gillingwaters, Larry Halverson, Vigorosa. BOTTOM ROW: Charlotte Hoak, American Beauty, Gray Satin, Fireflus, German Seedling, Calico, Anette Sue, Helen Lewis.

(Continued From Preceding Page)

a north or east window may be better where the sun is more intense. Experiments have shown that by using fluorescent lights above potted African violets to insure adequate light, the number of flowers can be greatly increased where the location is too dark. A 4-foot or longer 40-watt tube may be used for this purpose. If the plants have been watered adequately and fertilized occasionally, then a failure to bloom is nearly always caused by insufficient light. By moving the plants to a better-lighted position, the flower buds should start to form within about two weeks. Do not repot too often and do not overfertilize. Try to select varieties known to bloom well when there is much trouble about failure to bloom.

*Exhibition.* Fanciers prefer single-crown plants for exhibition. After a plant begins to form side plants, it is less satisfactory for show purposes, although some flower shows have a section for multiple-crown plants. In no case should several plants be included in the container for exhibition. Leaf pattern still counts the most in judging.

—B—

### Copy Deadline

Material submitted for inclusion in *The Begonian* must be in the editor's hands by the first of the month preceding publication date. Seasonal material especially must be written with regard to printing and postal delay.

### Calendar

- June 15—Alfred D. Robinson Branch—"Plants in a Year-Old Garden," Mrs. G. A. Bullock, 3567 Carlton, San Diego, Calif.
- June 20—Hollywood Branch—"Begonias," Mrs. J. W. Jensen.
- June 21—Foothill Branch—"Succulents," Hal Johnson of Johnson Cactus Gardens.
- June 22—Redondo Beach Area Branch—"Little Flower Show," 8:00 P.M.
- June 22—1-10 P.M., June 23, 10 A.M.-10 P.M., June 24, 10 A.M.-8 P.M.—National Fuchsia Society, Pomona Valley Br., Tenth Annual Shade Loving Plant and Garden Show, Padua Hills, Claremont, Calif. Admission free.
- June 27—San Gabriel Valley—"Begonias," Jean Kerlin.
- June 29, 30 and July 1—California National Fuchsia Society Midsummer Shade Plant Show, Long Beach Municipal Auditorium, Long Beach, Calif.
- July 12—Orange County Branch, Begonia Show, Garden Grove Grange, Garden Grove, Calif.

## PATRONIZE

## Our Advertisers

# Eva Kenworthy Gray Award



Photo by Pasadena Independent-Star-News

MISS CHARLOTTE HOAK was presented May 20 at the Regional Meeting of the A.B.S., Santa Barbara Bowl, Santa Barbara, California, the Eva Kenworthy Gray plaque awarded in recognition of her outstanding contribution of original material which aided members of the American Begonia Society in their study and enjoyment of begonias. Miss Hoak (the second recipient of this award given by the A.B.S., the first being Mrs. Bessie Buxton of Peabody, Mass.) was runner-up for the horticultural woman of the year award. Around the world she has traveled, meeting, knowing and carrying on a vast correspondence with the great horticulturists of many lands. She is a writer for the garden section of the Pasadena Independent-Star-News and many other garden magazines.

Miss Hoak, a native daughter, born Oct. 24, 1874, in Mendocino Co., Calif., in what her father called "The Land of Promise," inherited from her parents who were ardent lovers of flowers and trees, a great love for the beauty of nature. From a ranch home, built by her father and as modern in style as seen today, she walked an Indian trail to school. Returning recently to the old homestead nestled in a beautiful valley flanked by the redwoods, she saw the first eucalyptus tree planted in the county by her father; an old pear tree which she planted 54 years ago still producing fruit;

her seven birthday redwoods planted by the 13th spring on the homestead; and the magnificent specimen madrona tree. From the University of California at Berkeley, in 1900, she received her A.B. and M.A. degrees in English, but she says she had almost as much science and botany as English. She recalls that the University, then, was so small that everyone was known by his given name and there were not the elegant buildings which are there now.

When she came to South Pasadena in 1909, she planted many tropicals. The porch railings were full of magnificent begonias, namely *B. scharffi*, the true *B. "Sunderbruchi"* with a pink tomentum and flowers which were very rosy pink, a huge *B. "Ricinifolia,"* and an almost complete collection of rhizomatous begonias known then. *B. "Marjorie Daw"* grew to her ceiling. Truly she lived in a "begonia paradise" because all her neighbors up and down the street grew begonias under the eaves of their homes or in sheltered places. The sudden freeze of 1913 which lasted only a short time, wiped out most of the begonias, yet a few still remain today in this planting. The same freeze destroyed many begonias grown by her under lath which she used in the Los Angeles schools, where she taught horticulture for 25 years. She also taught horticulture in San Diego. She recollects the nursery of Mrs. Shepherd of Ventura, the first in the West to specialize in begonias and geraniums, and cherishes the early catalogue from that nursery.

Miss Hoak, who is still very actively interested in horticulture and begonias in particular, warns the gardeners of this area against planting too many tropicals in our semi-arid land which has temperature ranges greater than the

(Continued on Page 141)

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Hi-Way 101

# Clayton M. Kelly Seed Fund Flight

NO. 1. B. SEMPERFLORENS KARIN—Denmark. Indian Bride. After many months we can now offer seed of this unusual semperflorens. The only white flowering begonia with dark foliage. Here we have a magnificent contrast; pure white flowers, prominent yellow stamens, dark glossy leaves. Certainly something worthwhile and different for your semperflorens collection. 50 cents per packet. No. 2 B. VELLOZOANA-BRADE. New species. Herbaceous, medium growth; stems short, oblique up to two feet long; leaves oblique, broadly ovate—suborbicular, cordate, with a closed basal sinus. Leaves large with small fimbriate scales beneath, green above, with a whitish zone on veins, paler below and occasionally reddish. Flowers whitish, with a whitish zone on veins, paler below and occasionally reddish. Flowers whitish, sometimes outer edge rosy. Habitat: Brazil. Found growing on rocks in the shade of bushes. Something new and different to try. Above description furnished by Dr. Mildred Mathias, University of California, Los Angeles. 50 cents per packet. Other begonias from Brazil consist of the following new and unnamed varieties: B. 38. Brazil species. B. 39. Brazil species. B. 40. Brazil species. B. MAGBALENENSIS — Low, uneven egg-shaped leaf running to a long point, with stiff hairs on surface. Flowers white. Above collection \$1.50. Semperflorens collection as follows: No. 1. B. SEMPERFLORENS SAGA. Extra

dwarf and dense growth. Flowers numerous and bright red. Popular pot plant. No. 2. B. SEMPERFLORENS CARMEN. Dwarf, compact, with rich bronze foliage and light pink flowers. No. 3. B. SEMPERFLORENS PRIMA DONNA. F1 strain. Intermediate growth, pink flowers, foliage green. Winter blooming. No. 4. B. SEMPERFLORENS ALBERT MARTIN. Medium to tall. Large bright carmine flowers. Above 4 packets for \$1.25.

Other genera: IMPATIENS SULTANI NANA HYBRIDS. New strain. Extra dwarf, easily grown and perfect companions for begonias and other shade loving plants. Can be grown in pots or used as bedding plants. Use same method as in planting begonia seedlings. Plants will bloom in three months from seed. No. 2. DWARF ORNAMENTAL PEPPER. Popular greenhouse plant grown for its colorful fruits. No. 3. NICANDRA PHY-SALOIDES—APPLE OF PERU. Also known as "shoo fly plant." Annual herb with tubular, blue flowers on curving stalks. Interesting. No. 4. IPOMEA TUBEROSA. Wood-rose. Handsome greenhouse vine. Bloom is brown and woody and roseline in appearance and will last indefinitely. Popular in flower arrangements. Seeds are large, hard, and should be soaked in warm water several hours before planting. Can be grown in a warm sunny window. Very desirable. Above 4 packets for \$1.00.

When sporelings are ready to be transplanted the following suggestions are by our foremost grower of ferns, Sylvia Leatherman. To a six inch pot of well decomposed leaf mold, add one-half cup of oyster shell and mix thoroughly. Place crockery in generous amounts in 3" pots, filled half full with sphagnum moss. Place mixture as stated above on top of moss, plant sporelings and place a layer of sphagnum around each plant. Keep moist and out of drafts. To keep pots from drying out place in containers of moist sphagnum moss. For suggestions in planting fern spores, see April issue *The Begonian*.

We have just received fresh fern spores of the following: No. 1. PLATYCERIUM BIFURCATUM (STAG - HORN FERN). Beautiful and useful for its effectiveness when mounted on slabs of fernwood, tree trunks or driftwood. Greenhouse culture in cold climates. However, in Southern California it is popularly grown under lath or in patios. Germination is slow on this one. No. 2. PTERIS WILSONI. Short, bushy, shapely crested fronds. No. 3. PTERIS ALBO-LINEATA. Leathery leaf with broad cream center stripe. No. 4. PTERIS LONGIFOLIA. Palm fern. Beautiful tall growing fern used for background effects. No. 5. PTERIS OU-

VARDI. No. 6. MICROLEPIA SPELUNCIA. Bright green, feathery fronds. A good hardy fern. No. 7. RUMOHRA ADAINTIFORMIS. Leather fern leaf. Very satisfactory hardy fern that can be used in flower arrangements as the fronds will keep for several days. No. 8. PITYROGRAMMA TRIANGULARIS. "California gold back fern." This fern is beautiful when grown elevated, as in a basket as the light picks up the glistening gold. 8 packets for \$2.00, 4 for \$1.00.

We have just received seeds of the lovely VANDA SANDERIANA orchid. These are hardy strap leaf plants with beautiful blooms that last for weeks. (For orchid seed culture,

## In Memoriam

MRS. LEORA CALMESE, president of the Missouri Branch and the last charter member of this Branch passed away at the home of her daughter, Mrs. Ruth Ahring, March 31, after eight months of illness.

She was a true and faithful worker helping organize the Missouri Branch in January 1947. She was very proud of her Branch and was its best authority on begonias. She was never too busy to help others. Her greatest ambition was helping the shut-ins. For several years she furnished potted plants and donated time to several institutions, and assisted in their various projects pertaining to flowers.

The American Begonia Society and the Missouri Branch have suffered a great loss in her passing. Our deepest sympathy goes to her husband, daughter, two sons and four grandchildren.

—B—

## Begonias in South Africa

(Continued From Page 123)

part dry oak leaves, 1½ part sand, add a little superphosphate and lime, also a pinch of blood meal. Use in 3" to 5" pots.

*Final potting mix*—One part black peat, one part brown peat, one part dry leaves, one part soil, 2 parts sand, small amount of charcoal, chicken manure and cow manure, broken brick, superphosphate and lime, blood meal and hoof and horn meal. No other fertilizer necessary through flowering period. These mixtures can be used in most types of potted plants. All fertilizers should be well decomposed or broken down.

I wish all the A.B.S. members good growing, learn to grow, grow to learn, learn in growing.

~~~~~  
including vandas, see "The Cultured Life of an Orchid Seed," page 129.—Ed.) This is a very rare opportunity to try your hand in growing something lovely. 50 cents per packet.

MRS. FLORENCE GEE  
*Seed Fund Administrator*  
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Los Angeles 66, California

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2637 N. Lee Ave. El Monte, Calif.

## From 'Pop' Dyckman

DEAR FRIENDS:

I have no other way to thank all you wonderful folks who so graciously remembered me with beautiful birthday cards. I was deeply touched, and also happy to know my Begonia friends have not forgotten me. I miss them all, but as my health comes first, I must be resigned to it, and live with the wonderful memories of the past.

I have improved some since coming here four months ago. Guess this will have to be home, especially for the winter months.

Yours truly,

"POP" or HERBERT P. DYCKMAN  
Twenty-Nine Palms, Calif.

—B—

## Shade Plant Show

AGAIN this year the annual Midsummer Shade Plant Show, sponsored by the California National Fuchsia Society, will be held in the Exhibit Hall of the Long Beach Municipal Auditorium, Long Beach. Long Beach Municipal Auditorium is located at the foot of American Avenue, overlooking the blue Pacific. It will be open to the public from 6:00 to 11:00 P.M. June 29, noon to 11:00 P.M. June 30, and 12:00 noon to 6:00 P.M. July 1.

Through the combined efforts of its many branches, located as far north as San Luis Obispo and as far south as Costa Mesa, the California National Fuchsia Society is making every effort to produce for the public the largest and most attractive flower show of its kind in the West. Fuchsias and related shade plants will be displayed in landscaped gardens and patios, as well as in natural settings and amusing novel situations. Visitors are sure to carry away many useful ideas which they can adopt for their own gardens.

Classifications for individual entries, which are open to the general public as well as to society members, include displays of fuchsia blossoms and fuchsia plants, as well as potted begonias, ferns, African violets, gloxinias, and bromeliads. There will be a special Novice Trophy to be awarded to a first-time exhibitor, as well as many ribbons and trophies for juniors and experienced amateurs. Professionals and amateurs alike may compete in exhibiting blossoms from new seedlings. All exhibits must be in place by noon on Friday, June 29.

ALBERTA LOGUE

# Leaves From Our Begonia Branches

## EVA KENWORTHY GRAY

The new officers are: Marie J. Walsh, Pres.; Peggy Sweet, V. Pres.; Lillian Marshall, Rec. Secy.; Mrs. Ethel H. Calloway, Cor. Secy.; and Robert Holsizer, Treas.

—B—

## MARGARET GRUENBAUM

Met at the home of Mrs. Marion Belser. An invitation was accepted from the Ambler Colony Club to stage an exhibit of begonias at its Fall Flower Show.

The program was presented by Mrs. George E. DeCoursey. A map of the world was exhibited and Mrs. DeCoursey had prepared a list of the various countries showing the date and origin of many begonias, also giving the name of the discoverer.

Attending as guests were members of the Philobegonia and William Penn Branches.

—B—

## HOLLYWOOD

The new officers are: Pres., Mrs. Maude A. Cooper; Nat. Rep., Mrs. Jean Kerlin; Treas., Dr. W. C. Drummond; Rec. Secy., Mrs. Helen Ebert Murphy; and Cor. Secy., Mrs. Mary Hazel Drummond.

—B—

## LONG BEACH PARENT CHAPTER

A pot luck dinner preceded our meeting. Mrs. Mary Gillingwaters, from Upland, was our speaker. She furnished the plants for the plant table and told about them, several being her own crosses.

Our faithful members, Mr. and Mrs. Hugh Hixon, were surprised with a tiered cake and a gift of a white Cattelya orchid plant on the occasion of their 55th wedding anniversary.

All members remembered Mr. Herbert Dyckman (A.B.S. founder) with cards on his birthday. Write him, General Delivery, Twenty-Nine Palms, Calif.

—B—

## MIAMI, FLORIDA

"Sheltered Beauty," the annual flower show of this branch, was put on by members in April at Simpson Garden Center in Miami. Nineteen blue ribbons were awarded in the Horticultural class and six in the Artistic division. Mrs. Theron Ames, who won the Tri-color Award for the best begonia in the show (a coccinea hybrid commonly called pink rubra in this section), also won the special award in the Metropolitan Miami Flower

Show given for the most blue ribbons in the Begonia Section. *Begonia* "Speculata" won the best rhizomatous begonia award. Mrs. Elsie Picot, an accredited begonia judge and writer of "Let's Grow Begonias," which appeared in FLORIDA HOMEMAKER AND GARDENER, received a special award for a very fine educational exhibit, "Begonias From Seed to Bloom." She used all sizes of plants from those still just coming up to those in bloom. She used the seeds which she had obtained from THE CLAYTON KELLY SEED FUND. The special award in the children's division was given to *B. poponoi* (syn. Florida species).

—B—

## ORANGE COUNTY

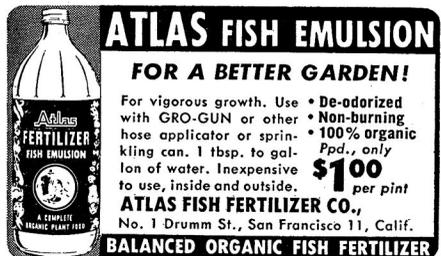
Our Begonia Show is to be July 12 at the Garden Grove Grange. It grows bigger and better each year, since Mary Gillingwaters persuaded us to start a small show October 1, 1953. To reward us for trying, she gave us some of her prize begonias. The show schedule has been sent early so you will be able to plan which plants you are going to bring. Mrs. Dorris Motschman, an accredited begonia judge, told us "How to Groom Our Plants for the Coming Shows."

For the plant forum (plants you take back home again) bring your nice looking plants as well as the others. We like to look at them and learn the names, when possible.

—B—

## REDONDO BEACH AREA

Invites you to its annual "Little Flower Show," June 22, 8:00 P.M. Bring your future show plants to be judged by Cal Trowbridge, A.B.S. president-elect and Mrs. Jean Kerlin, chairman of School of Judges. They will tell you how to groom the plants to be winners in the National Show and give on the spot real begonia culture and advice. Ribbons will be awarded as prizes. Jean and Cal have a "mysterious surprise" arranged.



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## SACRAMENTO

"Shade Plants and New Hybrids" was discussed by Mrs. Jean Kerlin, Chairman of the School of Judges. The School is designed to train and accredit judges for flower shows with emphasis on begonias. This meeting was highly instructive and informative. Everyone enjoyed the Annual Garden Trip through the lovely gardens and greenhouses of members.

—B—

## TREASURE ISLAND

The 19 members of this newly formed Branch are showing much interest in raising begonias from seeds as well as caring for the plants. Meetings are held in the homes for study and fellowship.

An added attraction which won the Ribbon of Merit at the Galveston Flower Show, held in March, was our display of 31 begonias and seedlings designed in a rock garden. We have been invited to exhibit again in April.

—B—

## Library Department

THE ATTENTION of all those who have borrowed books from this Library is again directed to the due date on your books. There are a great many important books which have been loaned to Members, and many of them are months over due.

For every book that is out, we have a waiting list of Members who wish to borrow it. All we can do is advise them that the book they want is being held over the 30-day loan period. Some of these people are getting impatient, and we can not blame them.

It is a well known fact that the loan period is 30 days. There is just no excuse for any Member to hold a book out longer than that period, and it is considered that such a person is very selfish.

Annual inventory is taken during the coming month. Your Librarian has to report to the Board the books which are out over the loan period, and the names and addresses of those who are holding them. To avoid any unpleasant situations it is suggested that all borrowers immediately check the due date in your book, and if it has been out over the 30-day period, you should at once ship the book back to the Library. Your prompt action will be greatly appreciated.

LUCY A. SAULT, *Librarian*  
26938 Dapplegray Lane  
Rolling Hills, Calif.

## Minutes, National Board, Apr. 23

The meeting of the National Board was called to order at 7:45 P.M. by President Taylor in the Los Angeles City Hall and opened with the Pledge of Allegiance to the Flag and reading of Aims and Purposes of Society.

Secretary's and Treasurer's reports read and approved.

Communications: From Dorothy Behrends resigning from Begonia Society and requesting refund of balance of Life Membership. This matter tabled until report received from Parliamentarian.

Business Manager Stoddard stated he thought advertising might be increased by lower advertising rates. Moved, seconded and carried that this matter be studied by the Finance Committee and a report be made at the next meeting.

Research Director Leatherman stated her work was hindered by several obsolete motions. Moved, seconded and carried that the motions of past years in regard to research be rescinded.

President-elect Trowbridge stated that Plummer Park would be available for Convention on August 25th and 26th. Moved, seconded and carried that we accept that date and go ahead with plans for the 1956 Convention at Plummer Park.

President-elect Trowbridge was appointed as Convention Manager.

Mr. MacLanahan stated that Mrs. Korts had paid one dollar for magazines containing by-laws last November. As by-laws have never been printed it was moved, seconded and carried that Mrs. Korts' dollar be returned.

Moved, seconded and carried that Mr. MacLanahan be authorized to purchase 10,000 large envelopes.

Editor Cramer asked how long she should keep the original copy of *The Begonian*. Moved, seconded and carried that the Editor keep the original manuscript for two months, after which it may be discarded.

Mr. Trowbridge announced Regional Meeting at Santa Barbara May 20th, when the Eva Kenworthy Gray Award would be presented to Miss Hoak.

President Taylor appointed R. W. Maddox as third member of nominating committee.

There being no further business the meeting adjourned to meet again May 28.

Respectfully submitted,

Arline Stoddard, Nat. Sec.

—B—

## EVA KENWORTHY GRAY AWARD

(Continued From Page 137)

"two zero points of plant tolerance—127 degrees and 15 degrees Fahrenheit." She points out that the decrease of protein content of our plants gives an increase in carbohydrates on which pests thrive. To overcome this we must feed more organic nitrogen. She likes an August planting of *semperflorens* begonias to give a sturdier, well-rounded plant for winter pot culture.

## C L A S S I F I E D

BEGONIAS, African Violets, Ferns, general line of plants. Seeds, Sodium Selenate, Sprays, supplies, books. Free list. Yoars House Plant Nursery, Bunker Hill, Indiana. A.B.S. PINS, stationery, signs. Write to Fred Browne, 817 Novelda Rd., Alhambra, Calif.

# 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

Last 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  
Mr. Stuart C. Smith, Secy.  
3147 Stanley Blvd., Lafayette, Calif.

### EL MONTE COMMUNITY BRANCH

2nd Thrsday  
Lions Clubhouse, 225 W. Garvey Blvd.  
Monterey Park, Calif.  
William Edwards, Cor. Secy.  
1886 San Pasqual, Pasadena, Calif.

### FOOTHILL BRANCH

3rd Thursday, 8:00 p.m.  
LaVerne Recreational Building,  
College Park, 2nd and D Streets,  
LaVerne, California  
Mrs. C. W. Hall, Cor. Secy.  
358 E. Arrow Hwy., Upland, Calif.

### FORT, ELSA BRANCH

1st Saturday, 2:30 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  
Mr. and Mrs. Frank Coe, Cor. Secy.  
28904 Cliffside Dr., Malibu, 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. W. Ernest Jones, Secy.  
Welsh & Dresher Rds. Willow Grove, Pa.

### HAMSHIRE, TEXAS BRANCH

3rd Tuesday of each month  
Mrs. Peter DeYoung, Hamshire, Texas

### 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. Mary Hazel Drummond, Cor. Secy.  
1246 N. Kings Rd., Los Angeles 46, Calif.

### HOUSTON, TEXAS BRANCH

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

### HUB CITY BRANCH

3rd Wednesday, 7:30 p.m.  
Mrs. L. R. Kellogg, Secy.  
1120 E. 71st St., Long Beach 5, Calif.

### 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

2nd Tuesday, 7:30 p.m.  
2255 Elm Ave.  
Mrs. Alice Waldow, Secy.  
2175 Cedar Ave., Long Beach 6, Calif.

### LOS ANGELES BRANCH

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

### LOUISIANA CAPITAL BRANCH

2nd Friday  
Mrs. H. E. Dorris  
3213 Eaton 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. Tena Kistrup, Secy.  
R.D. 2, Box 583-J, 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

2nd Wednesday, 8:00 p.m.  
Homes of Members  
Mrs. Alva Graham, Secy.  
515 El Centro St., South Pasadena, Calif.

### PHILOBEGONIA BRANCH

2nd Friday, Members' Homes  
Mrs. Robert York, Secy.  
3311 Fremont St., Camden, New Jersey

**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. Olive Thaller, Secy.  
 7195 Orchard St., Riverside, Calif.

**ROBINSON, ALFRED D. BRANCH**  
 3rd Friday, 10:30 a.m.  
 Homes of Members  
 Mrs. Merrel H. Taylor, Secy.  
 4285 Sierra Vista, San Diego 3, Calif.

**SACRAMENTO BRANCH**  
 3rd Tuesday, 7:00 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. Marilyn Jewett, Secy.  
 461 E. Mariposa St., Altadena, Calif.

**SAN MIGUEL BRANCH**  
 2nd Monday  
 V.F.W. Hall at Imperial and Lincoln,  
 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,  
 1833 San Andres St.  
 Mrs. Maria Sanchez, Secy.  
 1753 Glen Oaks Dr., Santa Barbara, Calif.

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

**SHEPHERD, THEODOSIA BURR BR.**  
 1st Tuesday, 7:30 p.m.  
 Alice Bartlett C.H., 902 E. Main,  
 Ventura, Calif.  
 Mrs. Don Claypool  
 104 Fobes Lane, Ventura, Calif.

**SMOKEY VALLEY BRANCH**  
 3rd Thursday of each month  
 Mrs. A. L. Romeiser, Secy.  
 1104 South Ninth St., Salina, Kansas

**SOUTHERN ALAMEDA COUNTY BR.**  
 3rd Thursday, 8:00 p.m.  
 Cafeteria, High School, Hayward, Calif.  
 Theodore Vierra  
 341 Redbud Lane, Hayward, Calif.

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

**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  
 Miss Isabelle Sievert, Secy.  
 3912 Ave. "S," Galveston, Texas

**WESTERN PENNSYLVANIA BRANCH**  
 2nd Wednesday, 11:00 a.m.  
 Homes of Members  
 Mrs. Joseph Rock, Cor. Secy.  
 Maplewood Ave., Wilkinsburg, Pa.

**WHITTIER BRANCH**  
 1st Thursday, 7:30 p.m.  
 Palm Park Community Center,  
 1643 Floral Drive  
 Mrs. Edna M. Hill, Secy.  
 8408 S. Madison Ave., Whittier, Calif.

**WILLIAM PENN BRANCH**  
 3rd Tuesday, 2:00 p.m.  
 Homes of Members, Wallingford, Pa.  
 Mrs. Ernest C. Drew, Secy.-Treas.  
 635 Moreno Rd., Narbeth, Pa.

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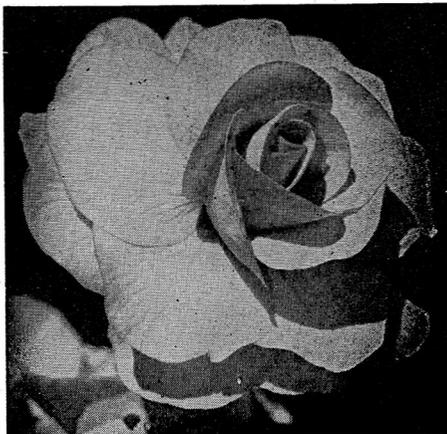


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