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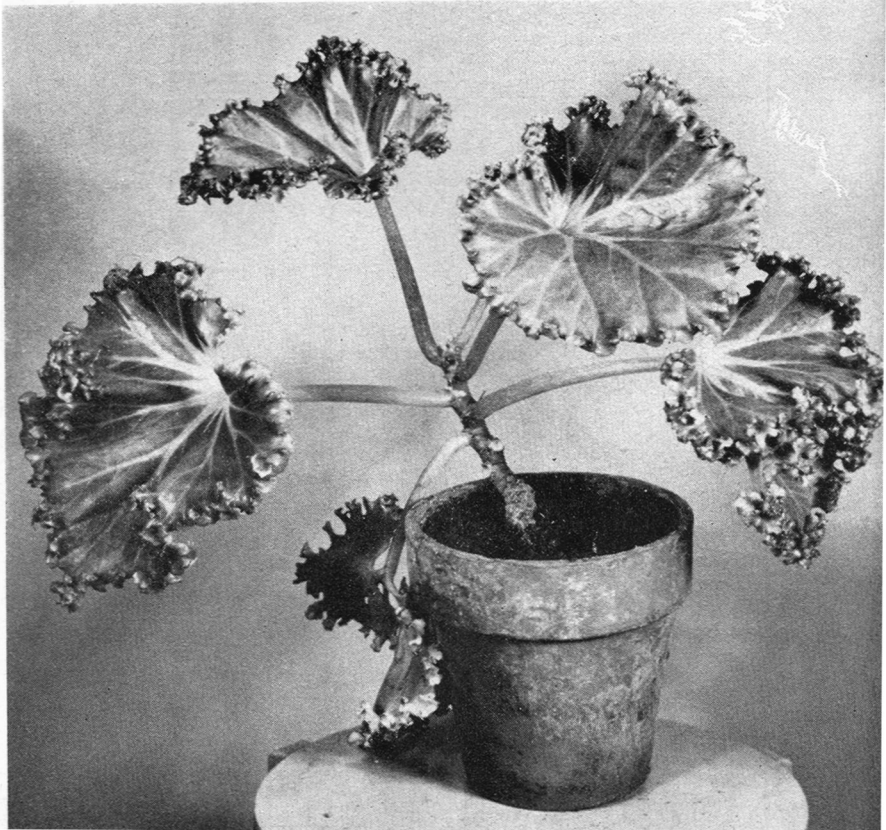
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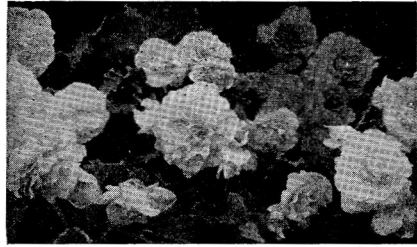
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The next meeting of the American Begonia Society Board will be held in the Los Angeles City Hall, Room 55, 7:30 p.m., Monday, Jan. 24, 1949. Park Lower Garage South Entrance on Main Street.

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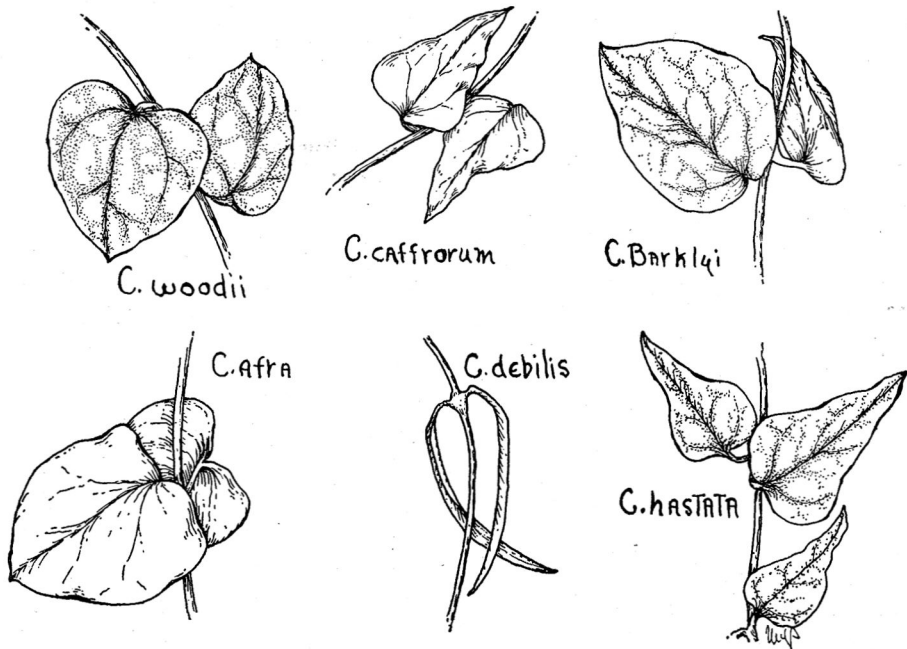
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HAVE YOU A CEROPEGIA?

by Gladys C. Nolan, Los Angeles, Calif.

I bet you wonder what it is — this little "drooper" which grows happily in the home window garden, in the lath house as a dainty living curtain, or even in the open ground in California (if it can have a little shade during the hottest part of the day) where it creeps rapidly, covering sparingly but always able to catch the eye of any true gardener.

You probably know this plant as Hearts Entangled, Rosary Vine, String of Hearts or even Fairy Pennies — all of which refer to only one variety, or I should say species, *Ceropegia Woodii*. Few lovers of succulents or shade and house plants would be without at least one small tuber of this plant. Many are not aware of the fact that it is one of a large genus of over one hundred species, of which only about a dozen are known in Old World collections. I believe many collectors in our part of this world have all of the dozen. Let me tell you about a few species and perhaps you too, will become an ardent collector of this little African native.

We find that they are native to Southern Asia, Africa, and some are found on the Canary Islands. Members of the (Asclepiadaceae) Milkweed family, the *Ceropegia* (Greek, ke-ros, wax and pege, fountain — the flowers having a waxy look) endure considerable drouth but like warmth though they can stand quite a drop in temperature when dor-

mant. They are close relatives to our Wax vine, *Hoya Carnosa*, and to the *Stephanotis* but are considerably less fussy as to culture and care. Any good soil which drains readily, preferably a mixture of good garden loam, leaf mold and sand will keep them happy and since many have tuberous roots it is to your advantage to give them a season of rest and dryness when the temperature drops. Those species having tuberous roots and forming tubers on the stems at the leaf axils when moisture conditions are favorable, may be propagated from stem cuttings. Some species which do not set stem tubers readily when pendant, will form tubers when layered on the ground in a warm, semi-shady spot. The climbing species seem the most diffident about forming stem tubers and therefore in my experience, have sparingly reproduced, but are worth the effort required to coax them to multiply. None ever seems to set seed, probably due to the fact that the insect bold enough to enter the deep corolla tube was not imported at the time the plants came into this country, so true species are the rule. The stems are fleshy, some small and threadlike (*C. debilis*), while others are full and succulent (*C. radicans*). The habit is mostly pendulous and twining though a few enjoy climbing. The leaves are opposite and a few have such minute leaves as to lead one to believe there are none at all. To quote from

Turn to page 6

Bailey, "flowers are medium sized, the corolla more or less inflated at the base — straight and curved — and the corona similar to our common milkweed, double." The corona consists of a single whorl of five or ten petals, opposite the stamens, and alternating with the segments of the corolla. Odd, unique and different! These blossoms, by the way, vary in size on different species and add greatly to the interest of the collector as you never know until you see your plants in bloom how varied they can be. Some are like tiny, darkflamed candles, others are like tiny parachutes — the corona lobes being distended like an open umbrella and in one species the tips of the petals are connate, forming a cage-like top to the flower. Most have pale green or lilac veined corolla tubes with dark red or wine corona which are often ciliate — some are striped or spotted and others have inconspicuous markings which are entrancing when viewed under a magnifying glass — tiny jewels, in reality, so modest that you never dream they exist until closely inspected.

Variety? — no, I mean species — Ah! they are like children — each with a different personality — *Ceropegia Woodii*, (Natal, So. Africa) that darling we all know with its heart shaped leaves veined in silver thought they sometimes seem like silver edged with dark green — and its little 'candle' flowers, is a most rampant grower when happy in its environment and develops tuber upon tuber until the pot or basket is so full of 'little roun potatoes' that you feel it will choke unless separated. Even then you find more tubers hanging on the pendant stems, waiting for a chance to touch the earth or some favorable spot where they may throw out roots and multiply again — truly little guinea pigs. I have one basket hanging by a window on the East side of the house which persists in growing thru the window screen and forming tubers on the inside which continue to grow and multiply, making it impossible to ease the growth back to the outside.

Ceropegia Barklyi — (So. Africa) has a fat tuberous root and covers the pot quickly with twining stems to one and one-half feet long with one and a half inch lanceolate leaves, fleshy, dark green and beautifully veined in white — the flowers two to three on axils are greenish veined with a purple brown corolla tube to two-thirds of an inch long. I have never had a blossom on this plant which is one of the loveliest of the species. See your June, 1944 Begonian for a sketch of this.

C. caffrorum — (So. Africa) with large tuberous root has long twining stems to eight feet or more (hang this one high) with ovate pointed yellow green leaves to one inch in length which are thick and smooth — flowers

green outside with purple lines — purplish black within, to one-half inch long with hairy lobes, and is definitely pendant in habit of growth. This multiplies profusely and soon makes quite a lovely curtain of an odd texture. Try at the top of a moss wall! Or even dripping from the top of a pergola.

C. afra — is similar in growth and habit

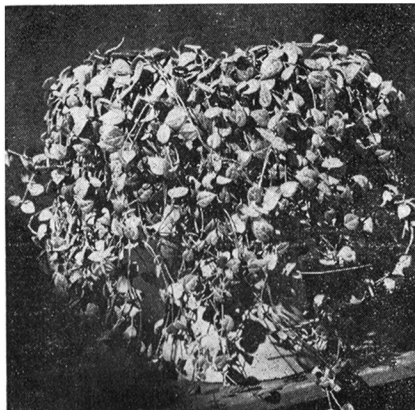


Photo by RIVERA

THE WRITER'S *C. BARKLYI*

to *caffrorum* but the leaves are fleshier, a deeper green and more rounded — this one can be trained to climb. I can find no botanical description of this species and would welcome some information as to its origin, etc. To my knowledge, *C. Afra* may be a trade name as there are no "varieties" of *Ceropegias*.

C. debilis (Tropical Africa) has a small tuberous root with threadlike twining stems four to five feet long with slender almost cylindrical leaves which have a curious habit of crossing each other on the stems — like folded arms. The leaves seem grey green, probably due to the lovely silver midrib — one to three flowers, greenish marked purple to three quarters of an inch long. This species produces tubers along the stems as freely as *C. Woodii*. A well grown pot will make a fine lacy curtain in one season of growth and it is advantageous to place the container in a high spot.

C. bastata (South Africa) — develops a flat tuberous root which produces a twining stem with climbing tendencies — leaves, a golden-green veined with silver, are halberd shaped up to one and one-half inches long — flowers, purple with darker veins and the corona may be whitish. This does not multiply as rapidly as some species but I have found that if layered in time, it will form tubers at the leaf axil. It can be trained to grow pendant if you desire, but needs a little coaxing to climb. It is probably my favorite be-

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BEGONIAS IN THE HOME

by Lloyd E. Marble, Waltham, Mass.

The psychologist speaks of trial and error. However, this is too lofty an expression for the newly enthused begonia fan. *Pick and choose* is much more simple.

It works this way. Begoniama-niacs get that way through contagion. Exposure to this contagion comes through contact with the results achieved by a friend or acquaintance. Fired by an enthusiasm to go and do likewise, we search out and find a greenhouse that we may lay a foundation for our own wonderful collection. When we find it we discover an even more enviable display. We feast our eyes on begonias arrayed in lush abundance of foliage, draped with hanging clusters of wonderfully colored blooms, or surmounted by waving sprays of pretty blooms.

In our ignorance we do not know that this is the result of years of study and experience. We know nothing of soil, fertilizer, watering, humidity or the difference between sun and light. At home, the thermometer gets a good share of attention but the humidity indicator has been largely neglected. We have abhorred draughts and adored the sun, but we have never considered either, in relation to growing begonias. Nor do we expect to do so now. We are quite certain that we can do just as well as this greenhouse man has done.

Our immediate and apparently only difficulty is as to which of these plants we shall pick out to start with. The appeal of one is eclipsed by the demanding beckon of another in the far corner. We pick this one and that one and then another until heaven only knows where we would stop, if it were not borne in upon us rather insistently that after all the car payment is due next week, and the young hopeful really must have those new shoes, to say nothing of the grocer who will put up an awful howl if he is not paid by the 15th.

Then when we get our new possessions loaded into the car, they certainly do look great. Those long graceful canes furnished with foliage from base to tip. Those low branching types spreading with beautiful symmetry. Of course some of these blossoms may be brushed off in transit, but under our tender care more will come to take their place.

Little do we realize in how short a time those graceful canes will become bare poles; beautiful symmetry will debauch into scrawny, scraggly, hodge-podge; bleak emptiness is all that will succeed the drooped and fallen flow-ers.

In how short a time our glowing hopes turn to despair and we ask ourselves, what can be done about it? Must we confine our horticultural ambitions to ivies, sanseverias



Photo by R. ZIESENHENNE

B. HELENA

and rubber plants? Perhaps it would be best to forget it all and divert our energies to fixing the kitchen chair, or putting gravel on the front walk, provided we get around to exterminating the weeds.

But probably none of these satisfy. The begonia infection is not easily put to flight. It is for people in such frame of mind as this, that this article is written. And of course it is only one of which has been written in somewhat similar vein.

We have a sort of kinship with the fellow who writes such things as this. When he writes of numerous dirt encrusted flower pots now empty, we know that he and we live in the same alley. When he tells about plant labels that bear mute testimony to his picking days, we know that he and we have fought and lost together.

Then it is that we enter upon the second and more hopeful stage of our mania—the choosing stage. Remember? It was pick and choose.

In presenting any list of begonias with the suggestion that this is a good list, it must be emphasized that no list is complete, much less perfect. All that any writer can do is to give the results of his own experience. And it must be borne in mind that plants which perform valiantly for one person, may just as readily laugh with glee at the next man as they silently waft themselves into a world which is reserved for begonias who have departed this life.

The list which follows comes out of several years of experience. It is a list for the house where growing conditions are not less than average. Also in the colder part of the coun-

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AZALEA CULTURE AND SOME OF THE PROBLEMS

H. M. Butterfield*

The growing of azaleas in the arid parts of California presents many complex problems. It is impossible to give any very simple discussion and yet readers will want to have suggestions just as simple as possible, even if this leaves out many of the authorities for statements made.

Botany.—Botanically speaking, all azaleas are species of the genus, *Rhododendron*. For convenience we may group azaleas into several classes: (1) Indian azaleas, (2) Ghent azaleas, (3) Arnoldiana, Kurume, and Kaempferi, and the (4) deciduous kinds represented by *R. molle*. As a matter of fact we cannot group some of the hybrids under these general headings, although we can say that the species and varieties are either evergreen or deciduous.

Indian Azaleas.—This group includes varieties of *Rhododendron indicum* and various other evergreen species. *R. macranthum*, *R. mucronatum*, *R. pulchrum*, and *R. scabrum* have been used in producing many varieties of this group. Popular varieties are represented by Albert and Elizabeth, Paul Schame, Professor Walters, and Vervaeneana. All seem to like a mild temperature with considerable humidity, but can be grown outside in many parts of California.

Ghent Azaleas.—This group originated as crosses between *R. luteum* and such American species as *R. calendulaceum* and *R. nudiflorum*. They are deciduous, but not at all like some of the other deciduous kinds. The stamens are exserted and the plants come into bloom after the other deciduous azaleas have finished.

Arnoldiana, Kurume, and Kaempferi Azaleas.—These are related to *R. obtusum*, and varieties *kaempferi* and *amoenum*. The Kurume azaleas involve the var. *amoenum* Kaempferi azaleas are often deciduous while kurumes are evergreen. It will be readily understood why we cannot closely segregate deciduous kinds within such species as mentioned. Kaempferi azaleas are often known as "torch azaleas".

The Rutherfordiana Azaleas have been popular in California and represent a patented group of hybrid between *Rhododendron indicum*, var. Omuraski and Pink Pearl. The flowers come in a good range of color and range through single, semi-double and double. The flowers come early in California, starting in February so the weather must not be too cold at that time. A semishady situation is desirable. The plants are evergreen like the Indicas.

Beginners will want to think about the more important kinds of deciduous azaleas as con-

trasted with the evergreen kinds. Indicas, kurumes, and Rutherfordianas are typical evergreen kinds while perhaps a dozen deciduous kinds could be named. The more important deciduous species may be listed as *R. altaclarensis* (Sunbeam azalea), *R. calendulaceum* (Flame azalea of eastern states), *R. molle*, *R. nudiflorum* var. *roseum* (Rosy pinxter-flower), *R. obtusum* var. *kaempferi* (Torch azalea), *R. occidentale* of the Pacific Coast, *R. reticulatum*, *R. schlippenbachii* (Royal azalea), *R. vaseyi* (Pinkshell azalea), *R. viscosum* (Swamp honeysuckle of the Atlantic Coast) and *R. yedoense* var. *poukhanense*. A selection from these deciduous kinds may be made on the basis of color, height, season of bloom, or shape of shrub. *Altaclarensis* is a hybrid between *R. catawbiense* and *R. arboreum* and is valued for its bright orange-colored flower. *R. calendulaceum* has flowers that range from yellow through orange to scarlet and plants may grow to 10 feet. *R. molle* has been very popular because of its masses of flowers to yellow or salmon flowers. Kaempferi or Torch azalea has orange red flowers. *R. schlippenbachii* has pink funnellform flowers and the plants may grow to 15 feet with age. Fine masses of these deciduous kinds are sometimes planted on a north shady slope and as a rule will produce late flowers to extend the season of the Indicas, kurumes, and Rutherfordianas. The flame colors and hardiness make this group highly prized.

PROPAGATION.—Most azaleas are now propagated by means of small lateral growths taken in the early part of the year at about the time the flowers fade and dry. Such short evergreen cuttings of from 2½ to 3 inches in length may root in 3 weeks in a mixture of sand and peat moss and can then be potted separately and grown until large enough to stand outside conditions. Hardwood cuttings take so long to root that they are not used very much any more.

LOCATION.—Since there has been so much trouble about keeping azaleas healthy in California, it is important to understand essential growing conditions. Good water, good soil fertility, a suitable acid reaction in the root zone, protection against too much sun in summer and cold in winter (for tender kinds of azaleas), and freedom from serious pests and diseases may be listed among the most important factors. The location should be selected with these in mind. Too often growers think only about one factor, such as soil reaction, forgetting that it is the combination of all

factors that regulate the health of the azalea plant.

WATER.—A good supply of good water, not too alkaline, is one of the first essentials. Much of the water near large cities is too alkaline for the best health of azaleas and may need acidifying in some way. Water districts have had specialists to tell growers how to treat the water to make it more acceptable for acid-loving plants, such as azaleas and orchids. But the soil must also be considered along with water and climate. The pH reaction means little by itself.

SOIL.—A fertile, well-drained soil, is a second essential. Many soils in California need more organic matter and more nitrogen. Peat moss has practically no available plant food and when added to the soil simply dilutes the soil and makes it less fertile than before. Leaf mold has a little more available plant food. In either case the material is added primarily as a soil conditioner so fertilizer should also be added to maintain adequate soil fertility.

An acid soil reaction is a third essential and often ranks third in importance, if other factors are favorable. The azalea plant will respond differently to the same pH soil reaction under different climatic conditions and under different conditions of exposure so it is not sound to try to segregate this factor from the other correlated factors that account for healthy growth. Plant food may be more readily available to azalea roots when the soil is slightly acid. But it is the reaction of the soil about the roots over a long period of time that counts most rather than the reaction of materials before they are added to the soil. Some soils have a high buffer action so we must consider the final soil condition after all chemical treatments have been completed. Plant food becomes available when the soil moisture is at a favorable level; chemical reactions in the soil may then change fertilizer materials into an available form. The final soil solution about the soil particles must be relatively free from alkali salts or other harmful chemicals. This includes both the natural soil and the way the soil has been irrigated over a period of time.

Many gardeners dig a hole for planting and mix leaf mold or peat moss with the soil to insure good drainage and hope these materials will also provide a slightly acid growing medium for the roots. In many cases azaleas will grow well for a time with such treatment but the roots may ultimately grow through the surrounding acid layer and reach untreated soil beyond, soil that is far too alkaline or salty for the best growth of the plants. When and if that time comes, we can expect azaleas to decline, even when other factors are favorable. By acidifying the soil and water it may be possible to avoid this danger. Agriculture sulfur

may be used effectively to keep the soil acid. Neither leaf mold nor peat moss are sufficiently acid to help much. Aluminium sulfate may be slightly more rapid in its chemical action than sulfur but is less effective in the end for acidifying a soil and usually costs much more than sulfur.

SHADE, TEMPERATURE, AND LIGHT.—Most azaleas thrive best when they get a filtered light or are planted where they are not exposed to a hot afternoon sun. Azaleas need a reasonable amount of light but not too strong light. The plants need a good growing temperature but not an excessively high summer temperature. The tender evergreen Indicas, like Paul Schame, must be protected against low winter temperatures as well as against too intense a sun in summer. By planting on an east or north exposure or under lath, or where the plants get filtered light through trees or shrubs, the extremes may be avoided to some extent. Not much can be done to change the normal climate in case it is too cool or too hot and dry.

FERTILIZER.—An acid type fertilizer is normally suggested for maintaining soil fertility about azalea plants. It is the final reaction in the soil after all fertilizer has been added that counts and not the reaction before adding. Manure has been used very successfully around rhododendrons along with other materials so that the final soil reaction is on the acid side. The value of a fertilizer must not be estimated on the basis of a single ingredient. Even the same fertilizer may give a different response under different soil and climatic conditions. In all cases the plant itself is the best indicator of whether a particular soil treatment is good. Cottonseed meal, nitrogen in the ammonia form, and acid phosphate have been used in some of the acid type fertilizers.

WATERING.—If the soil about feeding roots is to furnish both moisture and plant food it must be watered often enough and deep enough to insure the desired results. Watering twice a week in the early part of the growing season may be enough and maybe three times a week in hot dry weather. Once a week is rarely enough in the drier parts of California. Watering daily will probably be too often. The water should soak down to the full depth of the roots at each irrigation and no more water should be added until the roots have had time to use up most of the available moisture. Basin irrigation is usually very satisfactory but the soil must be well drained in the root zone.

PEST CONTROL.—Thrips and red spider mites may attack the growing tips in summer and require spraying. A combination spray of DDT and sulfur may serve the purpose where

Turn to page 10

these two pests are involved. DDT will not control spider mites. Pyrethrum sprays more effectively control thrips than do summer oils and nicotine sulfate. In no case allow DDT sprays to reach camellia plants nearby.

DISEASES.—Leaf curl and azalea flower blight are two common causes of trouble. Leaf curl is caused by *Exobasidium vaccinii*. It can be well controlled with summer strength bordeaux mixture where the disease is serious enough to justify any treatment. A spray consisting of 6 lbs. bluestone, 2 lbs. lime and 100 gallons of water has been effective for controlling this disease on azaleas in a south Atlantic state.

Azalea flower blight, caused by *Ovulina azalea* can be serious because it has the ability to spread during the flowering season. Prompt removal and destruction of all diseased flowers may help check the spread if practiced over a period of three years or more. Where top soil is suspected of carrying the fungus at the time of purchase, it may be removed before transplanting or repotting with the hope that most of the fungus will be removed with the top three inches of soil.

Sunburn and dieback are not diseases in themselves but rather indicate an unfavorable condition about the crown or roots. A careful examination of the crown below the surface of the ground might show damage by grubs of the black vine weevil. Rotted feeding roots may indicate that the soil has been kept too wet. Irregular watering, and injurious chemicals in the water or in the soil might be another cause of trouble. Too hot an exposure can cause injury. If the roots can be kept functioning normally by starting with good soil and then watering and fertilizing properly, such troubles will rarely appear. If they do, look at the crown and roots for a hint as to the cause.

* Agriculturist, U. of C. Agriculture Extension Service

A good resolution for the New Year is to bring in a new member to the A. B. S.

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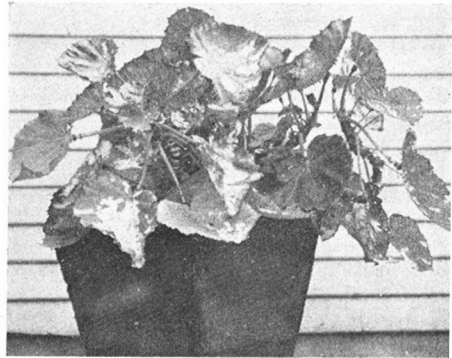
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BEGONIA MANICATA AUREO-MACULATA

by Sylvia B. Leatherman, El Monte, Calif.

A begonia that is believed to have been originally introduced in Italy is *manicata aureo-maculata*. An old phase "Sunny skies of Italy" fits this begonia very well. It is cheerful and colorful and being easy to grow one could say it has a cheerful disposition. The leaves blotched yellow and white, if you have a good imagination, are like drifting clouds in the sky. For good color considerable sun is essential. At times pink flushes also appear.



B. MANICATA AUREO-MANCULATA

The leaves are ovate and fleshy. A fully developed leaf averages seven inches by eight inches. The edges are slightly toothed and very finely haired and there is a fine red margin. On the veins on the underside of the leaf there are tufts of stiff red hairs at spaced intervals. On the stem at the leaf junction there are from two to four collars of stiff fleshy red hairs, tipped white. The stem has raised red spots on it. The rhizomes are of medium size. As it is a plant that spreads out quite rapidly and it is heavily covered with leaves it makes a lovely basket begonia. I have also grown them upright with a little staking and training. Many beginners not acquainted with the rhizomatous begonias make the mistake of covering the rhizomes with soil. Keep the rhizomes on top of the soil. A good rule to follow is to never pot it deeper than the previous potting. Good drainage is essential. A soil mixture as described in previous articles is also a good soil for this begonia.

Propagation is from rhizome divisions and by rooting leaves. Small plants form on the rhizomes on the soil and these off shoots may be removed.

In late winter and early spring there are erect, tall stems with airy clusters of pale pink flowers. People growing this in their collection of house plants have found that it is a begonia that blooms readily.

See next page

We find a hanging clay pot or a redwood tub are the best containers in which to grow these plants. The wire baskets have not been satisfactory for us. It seems the moss one must use, to line these baskets, holds a little too much moisture for this plant.

Begonia manicata aureo-maculata should be in all begonia collections. Beginner collectors need not shy away from this plant, as it is one easily grown. The exotic appearance and the unusual coloring always draws attention to this begonia.

Sheltered Garden Book Review . . .

EPIPHYLLUM HANDBOOK by Scott E. Haselton

Published by Abbey Garden Press, Pasadena
This book, the first one to be published on Epiphyllums, admirably fulfills the promise set forth in the Foreword " . . . to help those who have a newly acquired interest in Epiphyllums to know their fascinating history, their culture and propagation, their differences and similarities, their names and their possibilities . . . "

While the plants themselves, their branches, roots, flowers and other parts and their functions are exceptionally well described with a completeness that leaves nothing to be desired, the practical aspects of their culture have been given equal consideration and the epiphyllum fancier will find many pages devoted to potting, soil mixtures, pest control, hybridizing, propagation by seed, cuttings and grafts, etc.

One point stressed by the author and one that should be taken note of by other plant authorities is his plea for a more standardized system of naming hybrids and colors.

Clear, legible printing, good paper and generous use of one hundred and seventy photographs, approximately a dozen of which are in color, contribute to the excellence of this volume.

Frank H. Overton

"TUFFY"—New Hybrid Begonia

by Mrs. Thelma Sommerfield

Manda's Wooley Bear X scharffi seedling.
Hirsute leaves. White flowers. Bushy. Margine leaves, red backed. Silver hairs on stems, leaves and flower petals. Hardy.

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MRS. EMMA M. CARLETON'S "MUST HAVES"

Have any of you ever looked at a group of splendid children and attempted to pick out seven which you would consider perfect in every respect? Now if you were a parent and were asked to choose from your own children, you would find it even more difficult.

My begonia plants are like children to me. Sure, some of them have faults, but others more than make up for their short comings.

I have no heat in winter in my cello-glass house, so I must choose perhaps, with a little more care. It is surprising however, that by keeping plants a little on the 'dry side', they stand the cold much better.

The following are easily grown, require the least care and vary in size, both in leaf, blossom and size of growth. *B. incarnata grandiflora*, with long light green wavy leaves, has clusters of soft pink blossoms not unlike apple blossoms, is a continuous bloomer. *B. perfectiflora*, with slightly ruffled light green leaves, much smaller than *B. incarnata grandiflora*, bushy type with dainty white blossoms, the very essence of purity. *B. Nelly Bly*, has beautiful dark green rather long leaves, red beneath. In bud, the blooms are like plush, red hairy opening to a soft pink. I still have my original plant, nine years old! *B. Viaude x Mrs. Wallow*, a creation of Mrs. Rodenberg, (and which I think should bear her name, as she did not name the plant), has long leaves heavier in texture than *B. Viaude*, a beautiful shade of dark green quite red beneath, stems red and a bit hairy, blossoms quite red hairy, opening to a very light pink, the ovaries pink with quite red hairs; a very sturdy plant. Now give the next three room; they grow large and deserve all the space you can give them. *B. Mrs. Fred Scripps* with large green leaves, rough on top, has two or three extra leaflets at the basal sinus, the large leaves are cleft or lobed, blossoms form at the end of long stems, are small and pink. The plant grows to be four or five feet tall. *B. Freddie* for a strong grower, for immense big leaves, fifteen or more inches across, almost round. The leaf stems are long and quite hairy, coming from a thick rhizome. The flowers are not unlike *B. riciniifolia*. *B. braemar* can be trained upright or used in a suspended hanger. The leaves, dark green, almost round, deep red beneath, are almost smooth of hair. The blossoms are white with pink beards and are in great clusters almost two feet long. A magnificent sight.

Berkeley, California

The Fibrous, Rex and Tuberous Begonia Bulletins are of help to Beginners and Amateur alike, at fifteen cents each. Write to Roy K. Dere in El Monte.

EPIPHYLLUMS, AN ADDITION TO OUR SHADE GARDENS

by G. R. Cadwallader, Glendale, Calif.

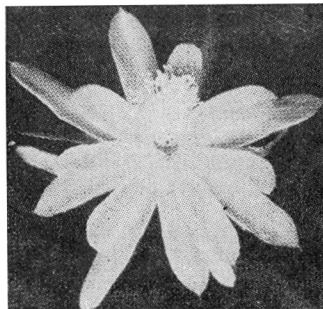
In order to give a general view of the history of the Epiphyllum we will have to go back a few hundred or even a few thousand years. It is believed the epiphyllum is a descendant of the true-leaved Pereskia (mother of all cactus). The epiphyllum was a swamp plant at one time and as time moved on they moved into the crotches of trees living off the sustenance of decayed leaf mold and any matter lodging in the crevices in which their roots had taken hold. It was during this stage they developed air roots to aid in securing moisture. to carry them through long dry spells.

In about 1753, when travelers first discovered the epiphyllum, their first record was noted. They were found in the jungles of Mexico, Central America and the northern part of South America.

The epiphyllum was introduced in Europe in 1753 and as they were all white there was a great deal of pollinizing done with the *Heliocereus* (sun-cereus), a species of the true cacti, a sun loving plant. The *Heliocereus* has a gorgeous scarlet color and trumpet-shaped flower. The crossing of the two gave us the many variations of beautiful, large, trumpet-shaped flowers ranging in size from two to ten inches in diameter. Our finest hybrids are from crossing the best of the hybrids. Hybridizing these plants is a slow process, as it takes from five to seven years to produce another and possibly a better hybrid. The epiphyllum is sometimes called the Orchid Cactus and is classed among the shade loving plants. They should have a place in every shade garden and have about the same care as the begonias. Perhaps not quite as much care, however. They like the filtered sunlight the shade garden affords.

The best way for the average gardener to propagate them is by branch cuttings. This is a simple procedure if handled properly. Do not use the tender young branches, use the old ones. Dip the cut end in powdered sulphur or bordeaux powder and then plant in your regular potting mixture. DO NOT WATER for several days. Then start watering gradually. (The old way was to let the cutting dry one week and then place cuttings in clean sand.) The new way saves a lot of time and transplanting. Caution, if watered too soon or too often, decay will be encouraged at the cut end of the cutting.

There are many ways to handle the growing epiphyllum. They are good subjects for grafting. By grafting them on heavier growing cacti one may accomplish very surprising results, not only in the shape of the plant, but also in the size of bloom. They may be grown in the ground but it is more advisable to grow



A WHITE EPIPHYLLUM

them as potted specimens, either as an espalier or basket.

The writer advises each grower to use the potting mixture most successful to their own use. I shall list the formula given in the *Epiphyllum Handbook*, by Haselton. One part good garden soil; two parts leaf mold; one part well rotted manure; one part coarse gravel. I plant my epiphyllms in a mixture of one half organic compost and one half light garden loam.

Do not expect too much from your plants in respect to bloom the first three years. Ordinarily they bloom very little the second year and the blooms increase in number each year thereafter. It is possible to have a few bloom all summer but the heavy blooming period is April, May and June. Some of the most popular varieties are Vive Rouge (scarlet), Padre (pink), Gloria (orange), Callender's Pfau (cerise), Conway's Giant (red), Londenii (white), Hermosissimus (purple and orange striped), Marseillaise (purple with white stripes), Rosetta (rose pink) and there are many other fine ones too numerous to mention.

When buying a new plant, or a friend gives you a plant or cutting, try to obtain the name with each plant. This will make your collection more interesting to you and your friends. It will also help to keep you from getting duplicates as there is often quite a long wait before the plant blooms.

The next thing you will want to know, is the type (basket or espalier). Regardless of name and color of bloom they are *all* basket type. By espaliering them (training them to grow on a trellis, fastened in the container or pot) they will occupy less room. Baskets should be hung seven or eight feet high.

They will do well in a crowded place but prefer more room and a high humidity.

Generally speaking, the epiphyllum does not have many boarders. You may find the oc-

See next page

casional aphid or some scale. These are easily controlled by brushing the scale with a soft brush dipped in alcohol or spraying the plants for aphids.

Water your plants in the summer by using a fine spray at least once a day.

Know your plants by name.

RING SPOTS ON SAINTPAULIA

by Peggy Sullivan, Los Angeles, Calif.

Most plant diseases can hardly be considered fascinating, but Saintpaulia Ring Spot is an exception. All growers of this charming pot plant must at some time have seen the amazing leaf symptoms—pale yellow rings spots with normal green tissue inside ring or roundish and sodden appearing blotches of same color. These symptoms are striking and have caused speculation as to their cause. Suggested factors include a virus disease, improper soil, high nitrates from soil fertilizers, and overhead watering during high sunlight intensity.

Watering overhead is the correct clue. Should cold water be sprinkled on the foliage early in the morning before sunlight has heated the leaves, the yellow ring spots will not appear. But sprinkle with cold water in warm midday and in a few days ring spots will appear and remain for the life of the leaves.

Cold water (about 40° F) produces severe symptoms since the drops forming on the leaves will suddenly cool the surface palisade cell layer to a much lower temperature than the surrounding cells, resulting in a rupturing of the cell walls. It must be remembered that water expands as it cools and a ruptured cell wall spells death to the cell.

It is logical that the narrow ring bands on the leaves will result from a smaller temperature difference between the water applied to the leaf and the leaf temperature. The solid blotch occurs with a greater difference between these two temperatures.

One is left with two alternatives if sub-irrigation is impossible—use warm water on the warm foliage of midday or cold water on the cold leaves of early morning. Naturally, sub-irrigation through the pot's drainage hole relieves any concern over water or leaf temperatures. Spotting may develop from sulfur dusting or spraying, but the usual ring spotting results from a wide variation (greater than 10° F) between the house temperature and that of the water used for overhead sprinkling.

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ATTENTION SEED FUND MEMBERS

Key to 1949 Begonia Seed

1. B. peltata
2. Mexican rhizomatous
3. B. Sunderbrucki
4. B. nelumbifolia
5. B. immense
6. B. acutangula
7. B. Vitifolia
8. B. laciniata
9. B. rubro-venia
10. Mexican dwarf species
11. B. gracilis var. diversifolia
12. Mexico hydrocotylifolia
13. B. venosa
14. B. heracleifolia var. nigricans
15. Colombia sp. E2 (ulmifolia)
16. Colombia sp. E4
17. Colombia sp. E5
18. Colombia sp. E6
19. Colombia sp. E7
20. Colombia sp. E8
21. Columbia sp. E9
22. Columbia sp. E11
23. Columbia sp. E15
24. Columbia sp. E16
25. B. dichroa hybrid
26. B. Schmidtii
27. B. macBethii
28. B. Richardsiana
29. B. tomentosa


Lilies

RARE . . .

INTERESTING

★

Donald W. Stryker
Langlois, Ore.



GROWING TUBEROUS IN DULUTH AND SUPERIOR

by Sidney Sampson, Duluth, Minnesota

If you attended the Duluth Flower Show at the Spalding Hotel in August, you no doubt were attracted to the table of beautiful tuberous begonia blossoms. Many questions were asked about the growing conditions and the storing of tubers. I shall endeavor to answer some of the questions and give you my experience in growing tuberous begonias in Duluth.

Bulbs and plants can be purchased at local greenhouses and florists, also through flower catalogs. I shall, with some detail go into their needs, but to grow *tuberous begonias* successfully, you need only two important conditions which any gardener and garden can supply. First, a good quality of soil that will not pack and harden. Second, no direct sunlight. Most growers recommend some sun, early morning and late afternoon. I have recommended the same, but have come to the conclusion that tuberous begonias grown without sun are far superior. If you give them direct sun, two things will happen; your plants will be dwarfed and your foliage will be curled and discolored. Do not hide your plants in the deep shade. Give them the maximum amount of light and the minimum amount of sun and your plants will be taller, your foliage smooth, clean and a good color.

Do not wait until spring to prepare your planting space. In the *fall*, dig in plenty of barnyard fertilizer, peat or leaf mold and sand to make a good quality rich soil that will not pack. Keep them out of the direct sun at all times and you will have strong blooming plants.

To avoid the first early frosts, cover your tuberous begonia plants with wood or card board boxes. Do not use metal or clay flower pots to cover the plants. Plants freeze easily under them as they attract the cold. You will have many nice blooming days after the first frost. Even after the frost destroys your foliage, leave the tubers in the ground as long as possible, with safety. Most tubers and bulbs dug for storage will benefit greatly in size and storage quality if left in the ground after the foliage is damaged by frost. Most of the advice on digging and storing begonia tubers is to dig with a lump of soil, dry and clean. Let me tell you what I do and *why* I do it. I am speaking of Duluth, Superior and surrounding communities' climate. I dig with a lump of soil attached. I do not clean the tuber, if any stem is attached. I leave it on, then I pack them side by side (with stem on) in a flat. They should not be packed on top of each other. The flat is then stored in a dark, dry, cool place in the basement and I forget about

them until time to start them in the spring. The flat should not be covered. I do not clean by tubers, *because* when dug in our climate, they are not ripe and anytime we attempt to clean an unripened tuber, we are apt to do considerable damage. The stem will dry up in storage and fall off, leaving a nice dry, clean scar on the tuber. I do not have any rot because of leaving stem on stored tubers. I cannot agree with the storing of begonia tubers in peat moss as recommended by some. I believe peat is a moisture thief and will steal the natural life moisture from the tuber and in the spring it will not be in prime condition for starting.

Now a few important points on starting and growing in the spring. Please read carefully. If you have a greenhouse or a cold frame, start your tubers about March 1st. If you do not have either, start before April 1st. Although starting periods are one month apart the method of starting is the same. Use a flat, fill with about three inches of loose, well moistened soil composed of peat and sand or leaf mold and sand. No rich plant food. Press your tuber down into the moist soil until top of tuber is slightly below the soil, do not cover it. Place them about three inches apart, flat (or concave) side up. With a clothes sprinkler, wet down with warm water. Cover the flat with a glass, leaving ventilation. Repeat sprinkling if necessary with warm water, but do not over water. Place flat in a shaded, warm window. Keep the glass over the flat as long as possible. Nail end pieces on the ends of the flat so the glass may be raised. When the plants are about two inches high, move them to a cooler, lighted window. If a cold frame is available, move them into it, but not before you can protect them from frost. Keep the foliage dry in the cold frame. If it gets wet, with low temperatures, the plants are apt to rot. BE CAREFUL.

Plants are better grown cool in the house. Do not force them. Plant outside after June 15th, in Duluth and Superior.

When planting outside use a good rich soil composed of peat, sand, barnyard fertilizer or compost, and keep them out of *direct sun at all times*.

Would you like to try to grow your own plants from seed? It is not difficult. Buy your seed from a begonia specialist. Start in early December. Prepare the seed flat by mixing about two inches of loose soil, not too fine. Use one third peat, one third sand and one third leaf mold. No rich fertilizer. Do not pack soil. Sterilize it by pouring boiling water

See next page

over it when partly dry, loosen it up thoroughly. Do Not pack. Now mix your seed with dry, fine, sterilized sand. Place in a pepper shaker and sprinkle the fine seed over the loose soil preparation. Water it with warm water, using clothes sprinkler. That will send the seed into the soil.

Cover the flat with glass, allowing ventilation. Place in warm, lighted window. Do not place in darkness or cover with paper. The seed will germinate about the tenth day. Grow in about 65 degrees F. If temperature is too high, the plants will be tall and weedy. Transplant when true leaves appear, using a tooth pick and a slightly better quality soil.

SHADE PLANTS FOR THE GARDEN

by Martha Phillips, Petaluma, Calif.

If we are Begoniaites, then the raising of begonias is our greatest joy. We work the soil, give it a tilth, a looseness, a richness and a moisture content which we know begonias must have to develop.

I grow my seedlings in a seed pan until I can transplant them with a small, slotted, wooden marker into four inch pots, then into larger pots, later. I know it is more work but I have better success this way. I keep the four inch pots in flats and shift the flats around to take advantage of the weather conditions, filtered sun or shade. When the plants are strong and vigorous, I tap them out and plant in larger pots, which have an inch of crushed gravel and the proper soil mixture. (Unscreened oak leaf mold, old manure, sand and peat). Every two weeks I give them a cup of weak fish emulsion. They are watered daily and given an all over bath.

I keep my rexes in a cloth house, the fibrous in a cool moist, unheated greenhouse, but have the tuberous any place where they show best. Of course they all need filtered shade and companion plants. It is quite true many Begoniaites would like to raise nothing but BEGONIAS, but it is not good to eat cake all of the time, so companion plants are needed in the garden.

It seems to me there is always a bit of sentiment and beauty in a shade garden. It is so cool and serene where more of Mother Nature's green is used. If one has not enough shade, it can always be arranged. Even a tiny garden needs one dominating tree, pruned to give the proper shade. A shade garden should be planned in advance.

For shade loving shrubs, the broad leaved Aralia is first. There are several Aralias but *A. Sieboldi*, with its shiny leaves and *A. papyrifera*, with its soft, fuzzy leaves, are the easiest to obtain. Clerodendron *fragrans* is a deciduous shrub, and *C. Thomsonae* is a more twin- ing, evergreen shrub. The former very frag-

rant. Rhododendrons and azaleas are "must haves" and are like all shrubs, needing some sunshine. Fuchsias come next and are a glory in a lathhouse or sheltered garden. In fact it is a bit cruel trying to grow fuchsias without a shelter. Try placing tuberous begonias near fuchsias, of the same color. The combination is very striking!

Thalictrum diptocarpum, with its soft, plummy blossoms; the heavyheaded foxglove; the *Eupatorium coelestinum*, a soft blue mist flower; *Polygoatum commutatum* or Salomon's seal; all these are fine tall shade plants, but all disappear through the winter. That means the soil in a shaded garden should be of such tilth it never need be spaded or disturbed. *Anchusa myosotidiflora* is fine for shade borders and especially during the summer when pots of tuberous begonias can be placed among the big heart shaped leaves.

One hardy perennial that is never shabby or dormant is the Helleborus. It blooms from January till Easter and needs no pruning, only the removal of dead leaves. There are so many fine perennials for the shade garden. Some of the low growing ones are; for-get-me-nots, campanulas, primroses and corydalis. It is not possible to list them all. Of the blubs, the scilla is a prime favorite for spring. Last and very important, are the ferns. Ferns should be used in every corner or nook of the shaded garden. A shaded garden without ferns is . . . well . . . just a place to work.

One article is not enough to list or describe all the shade-garden plants or tell of their fragrance, their coolness or of the joy they bring to a gardener.

"Poking 'round midst ferns and mosses

Like a hoptoad or a snail,

Which somehow seems to lighten crosses

Where one's heart would otherwise fail".

To browse around in the shaded garden with a watering pot after a hot or windy day, is one of the rewards of a tired gardener. Better still, to have a bench in your garden and let it whisper it's secrets to you.

IMPORTANT ANNOUNCEMENT

Prize begonias will be among the exhibits at the California International Flower Show, to be held in the spacious, modern club building at Hollywood Park, Inglewood, California, next March 26 through April 3.

The show, to be an annual affair, is planned to rival in size, scope and beauty the famous shows of New York, Philadelphia, Boston, Cleveland, and London. It is sponsored by the Southern California Horticultural Institute, in cooperation with the Southern California Floral Association.

General manager is William A. Rodman, for years connected with the New York show. Roy Wilcox is chairman of the show committee.

CEROPEGIAS (cont. from page 6)

cause the leaves seem to grow closer together and it has such a golden look at the height of its blooming period, plus the fact that its leaves are outstanding in form from other species.

C. radicans (S. Africa) has a fleshy root—is not a tuber—possesses fat fleshy stems and thick ovate leaves to one and three quarters of an inch long. Flowers are greenish and pale, spotted with purple — two together — the lobes purple brown and the corolla tube to two inches long. The leaf petioles are so short and fat that they give the impression of a tight sleeve on the fat stems.

C. stapeliaeformis (Cape of Good Hope) is interesting in form as is indicated by the name. The stems are fleshy to woody — decumbent or trailing with tiny rudimentary leaves one twelfth of an inch long which drop off when the flowers appear, giving a very nude impression of the plant. Flowers white marked with purple with the corolla tube growing up to one and three quarters of an inch long, flowering in a cluster of one to several blossoms. Not a beautiful plant but generous with blossoms and interesting in itself.

Ceropegia fusca and *C. dichotoma* (Canary Islands) are succulent subshrubs but hardly adaptable for a shade garden, in fact, they are definitely sun lovers but are a "must" for the collector of succulents and cacti. Interesting is the fact that they have a fibrous root, white, woody stems when mature, early deciduous leaves, opposite, dark green and brown, almost two inches long with delicate nerve lines. The blossoms of *C. fusca* are a reddish brown with a light yellow crown and on *C. dichotoma* are a pale yellow, inconspicuous, in clusters of three to six in axils of the fallen leaves. These species set seed rarely with pods shaped like horns and take a long time to ripen so reproduction is more readily effected by cuttings which are kept rather dry. Seedlings are unique in that the stems are black, turning to light gray as they age and finally to white in the mature plant.

C. Meyeri (Cape Province, Natal) has a flat tuber with four foot twining stems — leaves are slightly hairy, ovate to lanceolate with a cordate base and are often toothed or lobed on the margin — the leaf is longer than the species already mentioned and the flowers are a greenish violet, up to two inches long.

C. barbertonensis (Transvaal) is closely related to *C. Meyeri* but the corolla lobes do not form a canopy, being merely connate at the apex — The stems do not produce tubers and the leaves are either green or become reddish with age.

C. Sandersonii (Natal-Zululand) has fleshy,

thick twining stems. The flowers are interesting since this species is one of a group of four characterized by the corolla lobes being united into an umbrella-like canopy supported by five short stalks. I have never seen the plant in bloom but a color plate in an African book on botany gave me an impression it was similar in outline to a small balloon with a flat top, which was just about to ascend.

C. tristis (Cape Province, Natal) is definitely a climber with a smooth fleshy stem and short petioled oblong leaves. The flower is similar to *C. Sandersonii* but I am unable to find a description of its color.

C. rendalli (Transvaal) has a flattened tuber with a slender glabrous stem, with apiculate leaves which sometimes have slight hairs on the margins. The flowers are similar to *C. Sandersonii*.

C. Haygarthii (Natal, Cape Province) is unique in the genus because of the peculiar formation of the corolla lobes, although closely related to *C. tristis*, but the corolla lobes are produced into a much longer cylindrical portion, sometimes curved and the calyx lobes are longer.

C. ampliata (Natal, Cape Province) belongs to the same group as *C. Meyeri* which is characterized by the tip of the flower petals being connate and forming a cagelike top to the flowers. This is one of five South African species collected by Dreyge, all of which are described by E. Meyer. The plant is a scrambler, devoid of leaves at the flowering period. The flowers are a pale green with a purple band within the corolla tube which is visible thru the wall of the tube. Not a striking plant but the purple band on the flowers gives a pleasing effect.

C. Thornecroftii, (So. Africa) has a twining stem, long fleshy leaves with a wavy margin while the flowers are white with small purplish-red blotches, the tube being about one inch long, topped with lobes to one-half inch long, arched with the tips almost fused together. Since the margins are strongly reflexed they also look like small balloons.

C. bulbosa (West India) has tuberous roots, twining stems and the long eight inch leaves are very variable, from narrow linear to orbicular. The flowers are erect with a greenish tube and a purple limb, having the segments united at the apex — with three to five flowers to each axil.

I make no apology for the descriptions of the last nine specie, having had no personal experience with them since I have been unable to obtain the plants—Nurserymen please note!

I can see no reason why any or all of them would not respond to our climatic conditions and culture as well as the known species in

See next page

our gardens, since they are so closely allied. Try one or two of any species you are able to obtain and I predict, ere long, you will be seeking others and eagerly awaiting their first inflorescence while enjoying their varied dispositions and odd habits of growth.

BEGONIAS IN (cont. from page 7)

try. Some of them are grown almost wholly for foliage while others bloom more or less freely.

The list: *Begonias lucerna*, *macBethi*, *Viaudi*, *compta*, *weltoniensis*, *peltata*, *speculata*, Costa Rica varieties, *manicata* var. *aurea maculata*, Haageana (*Scharffi*), *subvillosa*, Manda's unknown seedling, *Margaritacea*, *olbia*, *Helena*, *rubra*, *metallica* and believe it or not—*cathayana*.

Editorial note. It is probable the shock of being taken from a place of warmth and high humidity (in the greenhouse) was the reason for the begonias losing their leaves so suddenly.

SEED FUND NEWS FOR JANUARY

Your 1949 Begonia seed is being mailed this month, packed in cotton and hand stamped, none will be crushed. There is no need to hurry about planting the seed. If you do not have a heated glasshouse, then wait for warmer weather. Handle these seeds with great care, they are a very choice assortment of precious rare Begonia seeds. All packets are numbered and you will find the key to the numbers printed elsewhere in this issue. Included with your seeds is a mimeographed list of all seeds available thru your Seed Fund at this time. We are sorry some of this seed is so expensive but this cannot be helped. Members of the A.B.S. who do not belong to the Seed Fund may obtain a copy of the seed price list by sending a stamped envelope to your Skipper. The list includes the very small lots of rare Begonia seeds from Brazil and Bolivia, *Gesnerias*, fern spores, etc. Some of our members have contributed choice seeds and they are very much appreciated. The lily seed (hand pollinized) listed below was donated by Sidney Sampson, Duluth, Minn. It should be of interest to many of you.

The reports of last year's seed germination giving the number of plants you were able to grow to maturity, details of hybridizing, descriptions of experiments you are conducting in soils, etc., should be mailed to the Regional Chairmen as listed by Elmer Lorenz in last month's *Begonian*.

Mrs. Marie Minter, director of our Armchair Explorer's Correspondence Club (address Route 1, Box 180, Encinitas, California) writes

as follows: "I do hope those who raised plants of *B. Andersonii* found out they were a tuberous species and saved the bulbs for next year. My plants were quite small when they went dormant. They had very dark leaves in the small stage. Some of the India seeds were very slow growing and an occasional plant of another species crept into the plantings. I believe we have straightened out most of these difficulties for the members of the Correspondence Club. I would like to offer to try to identify any plants the members of the '48 Seed Fund either lost the labels of or are undecided about the name. There were only two species plants which will have to go without a name for the time being. I have sent these particular plants in for identification, but we must wait until the plants bloom before identification can be positive. During the coming year I have decided to group the members of the Correspondence Club into territories where growing conditions are similar. There will be a Northern route, a Middle west and Southern and an all California group. I have room for more members in the Middle West and I will also start other clubs on this subject as the need arises. All anyone has to do is send me their name if they wish to join. Of course this applies to the members of the Seed Fund only. I have enjoyed working with the various members and finding out how they overcome their difficulties. I believe that given time to experiment with different methods, each of the members will become "expert seed sowers" and may we never lack for friends to give our excess seedlings."

Please remember to send a stamped envelope if your letter requires a reply.

Seed special:

10 packets rare tuberous Begonia species	\$5.00
Hemerocallis, mixed colors, Concolor—red star lily, Cernum, pink lilac hardy lily	
—3 pkts.	50c
Colombia mixed fern spores	25c
Mixed begonia seeds—large packet	25c

Cheerio, your skipper
Florence Carrell

Research Department

To the list of Regional Chairmen appearing in the December issue of the *BEGONIAN*, the name of Miss Lena Higgins, 2224 Orange Avenue, Long Beach, California, should be added as Chairman of the Western Section. Miss Higgins has offered to assist A. B. S. members of the western states in the culture, housing and propagation of begonias. Be sure to enclose a stamped, self-addressed envelope for a reply to your inquiry.

ORANGE COUNTY BRANCH: Elected Officers at their November meeting and report the following; President, Mrs. J. L. Green, Vice President, Mrs. Bernice Moore, Secy. Treas., Mrs. Ann Peterson. Mrs. Green and Mrs. Moore were assisted by several members in arranging their booth at the Orange County Fair, in which they won the Blue Ribbon and a large cash award. Mrs. Perry V. Grout gave a fine talk on ferns and after deciding on a gift exchange at their Christmas Party, refreshments were served.

Mrs. Perry V. Grout, *Publicity Chairmaan*

BEGONIA PRONUNCIATIONS

In pronouncing these names keep in mind the following rule:

à	as in lane	í	as in bin
á	as in fan	ò	as in tone
è	as in eve	ó	as in mom
é	as in get	ù	as in cute
ì	as in line	ú	as in cut

Schmidtiana—schmid-tee-ày-nah
 semperflòrens—semp-flòr-ens
 smaragdína—smar-ág-dine-ah
 socotràna—so-co-tràin-ah
 speculàta—spec-you-lày-tah
 Súnderbruchii—sún-der.bruk-ee-eye
 Sútherlandii—súther-lan-dee-eye
 Témplinii—tém-plin-ee-eye
 Thúrstonii—thúrs-tonee-eye
 tuberhýbrida—tuber-hí-brid-ah
 ulmifòlia—ulm-ih-fòh-lee-ah
 undulàta—un-dew-lày-tah
 Veitchii—vee-èye-chee-eye
 venòsa—ven-òh-sah
 Verschaffeltiana—ver-shaf-ehl-tee-ày-nah
 Warscewiczii—var-sív-ick-skee-eye
 weltoniènsis—wel-toni-én-sis
 xánthina—sán-thine-ah
 zehrína—zee-brine-ah

Occasionally a single "i" is used in the spelling of begonia names, (One "i" being omitted). The pronouncing would be in the same order. Drop the "ee" (the first "i") in pronouncing the name as témplini, pronounced —tém-plin-eye.

For additional pronunciations of begonia names, see the September, October, November and December issues of the BEGONIAN.

COVER PICTURE . . . *B. manicata crispa*, originated later than var. *aureo-maculata*, probably in 1903. The crested leaf margins on this begonia put it in a class with *B. crestabruchi* as for beauty. It is more easily obtained and as the rhizomes often twist around in the pot, it makes a full, branching pot specimen. (Read about *B. m. var. aureo-maculata* elsewhere in this issue.)

The Season's Greetings are extended to Members of the National Board, the Committee Chairmen, the Branch Officers, Branch Members and Members at large. Best Wishes for success in the coming year!

Col. Carroll M. Gale
 National President of the A.B.S.

GLENDALE BRANCH: Reports the following Officers elected at their regular November meeting: President, Mrs. Edna L. Korts, 3628 Revere St., L. A. 26, Vice Pres., Chas A. Richardson, 1441 Fairfield, Glendale, Treas., David Winans, 215 Winchester, Glendale, Rec. Sec., Mrs. John F. Nolan, 2840 Herkimer St., L. A. 26, Corr. Sec., Mrs. F. M. Brown, 3633 Revere St., L. A. 26, Mbbsp. Dir., Mrs. Frank Moore, 425 No. Ave. 56, L. A. 42, Nat'l Repr., Mrs. Anna Marek, 604 A. No. Orange St., Glendale. Installation will take place at the December meeting and a gala Christmas Party is planned.

Gladys C. Nolan, *Rec. Secretary*

PETALUMA BRANCH: Had a large attendance of members and guests at their November meeting, six from the San Francisco Branch. Mr. Ralph Chacon of Southgate, Calif., told of the devastation made by pests on various crops and of the progress made in the last hundred years on insecticides. He told in detail of the days of Lincoln's time when lime and wood ashes were the only known methods of trying to control insects to the present day use of the modern methods, most of which have been developed through the war years. He spoke of chemists and entomologists now working on new formulas which will outmode the present day methods and can be used by the amateur gardener with safety and with more effective results. Moving pictures were shown of the life of the aphids from the egg stage on through the year, how they multiply, the damage they do and how they live through the winter. The pictures were highly magnified and were very enlightening.

Mr. Chacon told of sprays to use for camelias, fuchsias and begonias without harm to the plant. This was a very educational program and was very well received.

Mrs. Cuma Wakefield, *Secretary*

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See our large collection of Hardy Mexican
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MARGARET C. GRUENBAUM
BRANCH: Had as their guests at their November meeting, members of the Philobegonia Branch. The meeting was held at the home of Mrs. Alfred C. Boysen in Glenside, Penn. After a box lunch and short business meeting, colored slides of begonias from California, were shown. These were supplemented with slides of some of Mrs. Boysen's begonias, photographed by Mr. Boysen. After a trip through the Boysen's greenhouse viewing the very nice collection of rex begonias and many nice seedling semperflorens, the following officers were elected; President, Mrs. Alfred C. Boysen, 25 Tyson Ave., Glenside, Pa., Vice Pres., Mrs. Henry Schaffer, Horsham, Pa., Secy. Treas., Mrs. W. Ernest Jones, R.F.D. Willow Grove, Pa., Corr. Secy., Mrs. Frank H. Mather, 515 Windover Road, Hatboro, Pa. The Dec. meeting was held at the home of Mrs. W. E. Jones and was a "Begonia Christmas Party". All our programs are devoted to Begonias.

Anna L. Mather, *Corr. Secretary*

INGLEWOOD BRANCH: Reported a good turn-out for their December meeting to hear J. J. Littlefield, the KXLA garden consultant talk on azaleas. The new officers installed by talkon-elect Walton are as follows: President, Calvin Trowbridge, 8001 Zamora Ave., L. A. 10, Vice Pres. Bert Slatter, 4600 - 6th Ave., L. A. 43, Secy. Leo D. McBride, 3665 Mountain View Ave., L. A. 34, Treas. Mary Choate, 3870 Grandview Blvd., Cluver City, Director, Alma Walton, 1415 Acacia Ave., Torrance, Nat'l Rep. Dee Brodl, 2205 Phelan Lane, Redondo Beach, Host & Hostess, Mr. & Mrs. Leroy Frost, 1307 West 78th St., L. A. 44, Show Ch., Leroy Frost and Plant Chairman, Bill Walton.

L. D. McBride, *Secretary*

The A. B. S. Librarian has the Krauss, Buxton and Brown begonia books for sale. They are invaluable as reference books.

Palos Verdes

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All types of
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Begonia tubers now available
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NEW — Garden Supply — OPEN

1½ Miles East of Redondo Beach, Hi-way 101

EL MONTE COMMUNITY BRANCH: Reports the following officers elected, President, Mrs. Floyd Adams, 313 E. Elliott St., Vice Pres., Paul Benzino, 3019 Baldwin St., L. A., Corr. Sec., Mrs. Mary Bradley, 701 Asher St., Rec. Sec., Mrs. M. J. Lund, 925 Persimmon St., Treas., Isobel Allen, 537 Belcrop St., Nat'l Rep., Mrs. Carle Slocum, 2521 Gidley St., Director, Albert Davis, 1224 Seaman Ave., all of El Monte unless otherwise noted.

Mary Bradley, *Corr. Secretary*

NEW YORK SUBURBAN BRANCH: Report the following officers elected in November; President, Louis J. Kuester, Vice Pres., Russell L. Schwing, Sec. Treas., Dorothy F. Michaelson, Nat'l. Repr. Director, Mrs. Fiffi Kline. Our program committee-man, Mr. Russell Schwing, is forming plans for a very active year ahead. Speakers on soil, propagation, seed sowing, types of begonias, new and old. All will tend to whet our appetites for learning and we hope, entice the more timid beginner to join our splendid organization. Because of the un-predictable winter weather in the east and in consideration for the members who travel many miles to our meetings, we think it advisable to hold our first 1949 meeting in March (weather permitting).

Dorothy F. Michaelson, *Secy. Treasurer*

SAN FRANCISCO BRANCH: Had nomination of officers at their October meeting and Alfred Stettler talked on the culture of camellias. The members of the branch who attended the Annual Convention in Glendale gave short talks on the different aspects of their trip. All of them expressed deep thanks for the hospitality shown them by the Glendale Branch. The garden visitations were unanimously considered as the most interesting feature; the graciousness of the hosts and hostesses and excellent refreshments served, were greatly appreciated. Mrs. Sydney Stein Rich gave a brief, but highly instructive talk on the care of begonia tubers during the dormant season, at the November meeting. Mrs. Emma Carleton of the East Bay Branch, told of her experiences in raising fibrous begonias. The following officers were elected for 1949. Ira Allyn, 1742 - 23rd Avenue, President; Arthur Mann, 1818 - 33rd Avenue, Vice-President; Mrs. Walter Morrison, 2655 Grenwich Street, Secretary; George Kramer, 130 Florentine Avenue, Treasurer; Arthur Boissier, 2027 - 31st Avenue, Nat'l Representative; Lillian Ashe, 1855 - 33rd Avenue, Director (2 year term); Hyacinth Smith, 2479 - 29th Avenue, all of San Francisco, will serve the second year of her term as Director.

Lillian Ashe, *Secretary*

NORTH LONG BEACH: Report the following officers elected: President, Larry Rink, 187 Norton Ave., Vice Pres., Don Eggleston, 6207 Prospect St., Bell, Secy., Mrs. Merle Penrose, 4142 Walnut Ave., Treas., Harry Swimley, 310 Morningside Ave., Nat'l Rep. Herbert P. Dyckman, 141 West 53rd St., all of Long Beach unless otherwise noted. The officers were installed at the December meeting by Mrs. J. Jensen of the Bellflower Branch. With the baked ham furnished, a potluck, buffet dinner was held and a jolly time was had by everyone.

Evelyn Peterson, *Secretary*

All material submitted for publication must be in the Editor's hands prior to the tenth of the month preceeding publication.

ORANGE COUNTY BRANCH: Report the following new officers; President, Mary Green, 447 Lemon St., Vice Pres., Bernice Moore, 1049 E. Palmyra, Sec. Treas., Ann Peterson, 414 E. Palmyra, all of Orange, Calif. and Nat'l Representative, Mrs. Muriel Hylton, Rte 3, Box 355, Santa Ana, Calif.

Ethelyn Morgan, *Secretary*

SOUTHERN ALAMEDA COUNTY BRANCH: Report the election of the following Officers: President, Ray A. Alberts, Vice Pres., Leland DeQuadros, Rec. Secy., Merle Williams, Corr. Secy., Dorothy Bayliss, Treas., Deloss Welch, Nat'l Repre., Peter Borree. Note the change of meeting place.

Dorothy Bayliss, *Corr. Secretary*

For a list of colored slide groups available through the Colored Slide Library, see your December BEGONIAN.

THE BEGINNER'S CORNER

In choosing begonias for the protected spot in your garden, keep in mind what it is you admire most, the foliage or the blossoms.

Some begonias are exquisite for their flowers, as the tuberous begonias. Others for their varicolored foliage, as the rex begonias. The rhizomatous and fibrous rooted types are particularly beautiful for their manner and shape of growth and the unusual hairy leaves, often with intense color.

It is impossible for any one person to list preferred begonias for some one else. Each person has an individual taste and as the place in which it is to be grown varies, with each person's surroundings, the choice is really up to the person intending to care for these plants.

The hairy (hirsute) varieties are able to stand colder weather, than varieties with smooth leaves.

All begonias do not take the same amount of water.

Planting begonias in pots and sinking the pots from one half to three quarters (the depth of the pot) in the loose soil of your protected garden, is very satisfactory. It is very important to lift the pots occasionally, to see if slugs or sowbugs are thriving under and around the pots. A light dusting of Sowbug Control Powder will remedy this quickly.

The pots may be left out all year, in mild climates, but should be lifted and taken indoors in severe climates.

Lath protection (as lathhouses or shelters) serves two purposes; it lends filtered sunshine, which is essential for the shade garden, and helps retain moisture in the air (humidity) by decreasing the air movement.

DEFINITIONS OF WORDS OCCASIONALLY USED IN THE BEGONIAN

pistil—the central organ of a flower. Because they contain the cells which when fertilized become seeds, are often called the female organ.

pollen—the fertilizing powder on the stamen of a flower. The stamens are arranged around the pistil and are often called the male organ.

hybridizing—the applying of pollen from one plant to another. Often times two distinct varieties are used.

hybrids—the seedling plants resulting from seeds grown from the process of hybridizing.

humidity—moisture in the air, whether man-made or natural, as fog, dew, etc.

rhizomatous—(ry-zóhm-a-tus) a root-like stem either growing underground or on the surface. When grown on the surface, roots grow from the joints and form new plants, which can be cut from the parent and treated separately.

fibrous—more often meaning fibrous-rooted, as most plants are of this nature, unless otherwise noted.

tuberous—this is one type of begonia which forms tubers underground, after the first year as a seedling. This is nature's storehouse for food.

spores—the brown substance on the undersides of the fern fronds, which germinate as seeds, when properly planted.

transpiration—a process in which plants give off water through the pores of their leaves.

well-drained—a position in which a plant does not stand in wet soil. Well-drained soil is kept moist but excess water is able to drain off.

OVER THE EDITOR'S DESK

"Many of our members have built or are planning on building lathhouses out of burned-out fluorescent globes. Enclosed find a warning taken from the current Life Office Management Bulletin. I might add, that beryllium was used by the Japanese as a weapon of war during W.W. II," writes Ed. Yeckley, Glendale, Calif.

"This subject was discussed at a clinic at Massachusetts General Hospital in Boston, during the recent national meeting of the American Association of Industrial Physicians and Surgeons. Experience is showing that beryllium is much more toxic than was first thought, and that its effects are appearing in many ways. Most of our present day fluorescent bulbs contain from one to four percent beryllium powder. If this powder comes in contact with any open lesions of the skin, it enters the tissues and begins to cause tumor-like growth and degeneration. At the clinic, pictures of tissues were exhibited and several patients were shown who have been cut by glass from fluorescent tubes. This glass is very fine and penetrating and often flies with a great deal of force when a tube is broken. Pieces of glass which enter tissues have been known to cause long-standing draining tumor masses, which necessitate the removal of large areas of skin, muscle and bone.

It is recommended that all maintenance men, janitors and salvage employees, be made aware of the hazards of breaking fluorescent tubes. Anyone who should happen to break a fluorescent tube should receive medical attention immediately to make sure that he was received no cuts with this beryllium-contaminated glass".

Building Owners' and Managers' Assn. of Philadelphia.

Mrs. C. B. J. of Santa Barbara writes ". . . our newer members and some of the older members say they cannot get anything out of the BEGONIAN to help them. Everything seems to be for the professional gardener and nothing for the amateur". *The Editor asks, "Have you been reading your BEGONIAN lately?"*

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CONDENSED MINUTES meeting National Board held in Room 55, City Hall, Los Angeles, Nov. 22nd, 1948.

Meeting called to order at 8 p.m. with President Gale in the Chair; President stated Aims and Purposes of the Society and led in Salute to the Flag.

Present for the meeting—President, Treasurer, President-Elect, Membership Chairman, Past President, Editor, Secretary, Board members Bailey, Hixon, Representative Directors from Whittier, Foothill, Inglewood, Hub City, Southgate, San Francisco, San Fernando Valley, San Gabriel Valley, Glendale, Hollywood, Santa Ana, El Monte and Pasadena. Editorial Staff members Sullivan and Drummond.

President Elect Walton reported he was still working with Capt. Dere toward getting the magazine out on time and asked that anyone not regularly receiving the BEGONIAN to please advise them at once that the records may be checked for error.

Business Mgr. reported "we have lost some advertising during November and other accounts were temporarily discontinued; several new advertising accounts available around January 1st.

Miss Hoak for Nomenclature stated she was working along the lines she was most interested in and still seeking older species of fibrous begonias and making corrections in nomenclature.

Grace Bayer for Kodachrome Slide Library and Speakers Bureau: Will soon send out additional list of speakers and suggestions for programs to be added to the booklets already in the hands of the program chairmen. "We have now completed the fifth group of slides and they have traveled to many states. Asked that branches desiring the use of slides, contact her and allow ample time for packing and mailing". Mrs. Bayer is keeping complete records of loans made and time allowed for packing and mailing. Mrs. Schwerdtfeger stated she had been offered a complete set of slides of tuberous begonias and would soon mail them direct to Mrs. Bayer with donor's name and other information.

Public Relations Director—working on four new branches and will report later. Director instructed to ask Mrs. Buxton to act as Nat'l Representative for New England Branch.

Mr. Allen reported for San Francisco Branch—225 members; outgrowing their present quarters; are looking forward to a convention hall where flower shows can be held and ample space for meetings.

Mrs. Hixon as Historian reported her books were now ready to be proof-read and typed; working on a third article and Mrs. Carrell and Miss Kelly are collaborating on an article about the Seed Fund and How It Started.

List of Honorary Vice Presidents and Honorary Directors came up for settlement and on motion by Jack Bailey, seconded by Mrs. Drummond, the President was asked to appoint a committee to "study this question and make recommendations for names to be carried under these titles and whether this would be a yearly appointment or until such time as changes were necessary". President appointed George Lawrence (Chairman) and Harold Hart and they are to select a third member for the committee.

President suggested Representative Directors bring guests and Branch officers and members to the Board meeting "in order that we all may become better acquainted".

Letter from Mrs. Downing, Director Round Robins, in part . . . Directors 55; members 988; average membership to each Director 20; Directors from 21 states. Public Relations Director asked that "rules for the Round-Robins be mimeographed so members could have them to read". No action.

Reports of Representative Directors were most encouraging and showed the Branches were quite active and enthusiasm good. President asked the Branches to send in lists of newly elected officers as promptly as possible so the records will be accurate.

President suggested branches continue to discuss the matter of the raise in the price of the BEGONIAN but stated "We will not attempt to act in this matter for several months but it is well to be thinking about it so we will be ready to act when the time comes".

Following the usual procedure, the December meeting is dispensed with so the fourth Monday in January we will meet—same time, same place.

Respectfully submitted,

Gonda Hartwell, Sec.

Branch Meeting Dates and Places

BARTON, DOROTHY PIERSON BRANCH

Regular meetings, Quarterly, 1st Fridays
Flint, Michigan, Feb. 4
Mrs. S. V. Clark, Sec.,
1919 Zimmerman St., Flint 3, Mich.

BELLFLOWER BRANCH

1st Monday, Jan. 3, 7:30 p. m.
I.O.O.F. Hall, Ardmore and Palm Sts.
P. Knapp, Secretary
6144 Blackthorne Ave., Bellflower, Calif.

EAST BAY BRANCH

3rd Thursday, Jan. 20, 7:30 p. m.
Willard School, Ward Street
Mrs. E. Carlson, Sec.-Treas.
2130 McGee Ave., Berkeley 3, Calif.

EL MONTE COMMUNITY BRANCH

3rd Thursday, Jan. 20, 8:00 p. m.
Columbia Grammar School, Rm. 64
Mrs. Mary Bradley, Cor. Sec.
701 Asher St., El Monte, Calif.

FOOTHILL BRANCH

1st Friday, Jan. 7, 8:00 p. m.
Woman's Club House, 1003 Azusa Ave., Azusa.
Mrs. Phyllis Heth, Secretary
228 Bonita Ave., Azusa, Calif.

GLENDALE BRANCH

4th Tuesday, Jan. 25, 8 p. m.
206 West Cypress
Mrs. F. M. Brown, Sec.
3633 Revere, Los Angeles 26, Calif.

GRAY, EVA KENWORTHY BRANCH

3rd Monday, Jan. 17
Community House, LaJolla
Tillie Center, Sec.-Treas.
7356 Eads St., LaJolla, Calif.

GRUENBAUM, MARGARET BRANCH

4th Tuesday, Jan. 25,
Member's Residence
Mrs. Frank H. Mather, Corr. Sec.
515 Windover Rd., Hatboro, Pa.

HOLLYWOOD BRANCH

2nd Thursday, Jan. 13, 7:30 p. m.
Plummer Park, 7377 Santa Monica Blvd.
Miss Marjory Robinson, Sec.
1137 No. Orange Dr., L. A. 46.

HUB CITY BRANCH

3rd Monday, Jan. 17
Roosevelt High School Cafe
1200 E. Olive, Compton, Calif.
Mrs. Eloise Scheller, Sec.-Treas.
3556 Imperial, Lynwood, Calif.

HUMBOLDT COUNTY BRANCH

2nd Monday, Jan. 10, 8 p. m.
Lanes Memorial Hall, 1st Christian Church
Miss Margaret Smith,
P. O. Box 635, Ferndale, Calif.

INGLEWOOD BRANCH

2nd Thursday, Jan. 13, 8 p. m.
325 No. Hillcrest, Inglewood, Calif.
Leo McBride, Secretary
3665 Mountain View Ave., Los Angeles 34, Calif.

LA MESA BRANCH

2nd Monday, Jan. 10, 8 p. m.
La Mesa Grammar School, La Mesa, Calif.
Mrs. Edna F. Barker
89 Central, Lemon Grove, Calif.

LONG BEACH PARENT CHAPTER

3rd Tuesday, Jan. 18, 7:30 p. m.
Robert Louis Stevenson School, 5th & Atlantic
Cafeteria, Lime St. Entrance, Long Beach, Calif.
Mrs. Rose C. Hixon, Sec.-Treas.
Box 572, San Fernando, Calif.

MIAMI FLORIDA BRANCH

4th Tuesday, Jan. 25, 8 p. m.
Simpson Memorial Garden Center
Mrs. Elizabeth S. Hall, Sec.
2572 Trapp Ave., Miami 35, Fla.

MISSOURI BRANCH

4th Tuesday, Jan. 25, 2 p. m.
Mrs. Bruce Dill, Secretary
3715 Harrison, Kansas City, Mo.

NEW ENGLAND BRANCH

Mrs. H. H. Buxton, Sec.
114 Central St., Peabody, Mass.

NEW YORK SUBURBAN BRANCH

Sec.-Treas.: Mrs. Dorothy F. Michaelson
P. O. Box 718, Denville, N. J.

NORTH LONG BEACH BRANCH

2nd Monday, Jan. 10, 7:30 p. m.
Houghton Park Club House
Harding & Atlantic, No. Long Beach
Mrs. Merle Penrose, Sec.
4142 Walnut Ave., Long Beach, Calif.

ORANGE COUNTY BRANCH

1st Thursday, Jan. 6, 7:30 p. m.
Farm Bureau Hall, 353 So. Main St., Orange.
Sec.-Treas., Ann Peterson, 414 E. Palmyra,
Orange, Calif.

PASADENA BRANCH

1st Tuesday, Jan. 4, 7:30 p. m.
2031 E. Villa Street
Mrs. Fred E. Distel
1320 Elizabeth St., Pasadena, Calif.

PETALUMA BRANCH

3rd Friday, Jan. 21, 7:30 p. m.
Danish Hall, 19 Main St.
Mrs. Cuma Wakefield, Secy.
47 Fifth St., Petaluma, Calif.

PHILOBEGONIA CLUB BRANCH

Mrs. Lillian Watts, Sec., 405 Cotswald Lane
Wynwood, Pa.

RIVERSIDE BRANCH

2nd Wednesday, Jan. 12, 8 p. m.
Mrs. Wm. Allen, Sec.-Treas.
7904 Magnolia Ave., Riverside, Calif.

ROBINSON, ALFRED D. BRANCH

4th Tuesday, Jan. 25, 8 p. m.
Ocean Beach Community Center
4726 Santa Monica Ave., Ocean Beach, Calif.
Mrs. Louise Gardner, Secretary
3212 James Street, San Diego 6, Calif.

SACRAMENTO BRANCH

3rd Tuesday, Jan. 18, 8 p. m.
Garden Center, McKinley Park
Mrs. A. Boyd Collier, Secy.
2777 Harkness Way, Sacramento, Calif.

SAN DIEGO BRANCH

4th Monday, Jan. 24
Hard of Hearing Hall, 3843 Herbert Ave.
Mrs. L. J. Elliott, Sec.-Treas.
3794 Grim Ave., San Diego 4, Calif.

SAN FERNANDO VALLEY BRANCH

2nd Monday, Jan. 10, 7:30 p. m.
Pierce Jr. College, 6201 Winnetka Ave.
Canoga Park. Mrs. Frank Ecker, Secretary
21003 Devonshire St., Chatsworth, Calif.

SAN FRANCISCO BRANCH

1st Wednesday, Jan. 5, 7:30 p. m.
American Legion Hall, 1641 Taraval St.
Sec.: Mrs. Walter Ashe, 1855 33rd Ave.
San Francisco, Calif.

SAN GABRIEL VALLEY BRANCH

4th Wednesday, Jan. 26, 8 p. m.
Masonic Temple, 506 S. Santa Anita Ave.
Mrs. Myrtle Jones, Secretary
132 May Ave., Monrovia, Calif.

SANTA BARBARA BRANCH

2nd Thursday, Jan. 13, 7:30 p. m.
Rm. 5, Com. Center, 914 Santa Barbara St.
Santa Barbara, California
Mrs. Bertha Ayersman, Secy.
1120 Olive Street, Santa Barbara, Calif.

SANTA MARIA BRANCH

Sec.-Treas.: Mrs. Peter Mehlschau

SANTA MONICA BAY BRANCH

2nd Wednesday, Jan. 12, 7:30 p. m.
University High School, Room 232
11800 Texas Ave., West Los Angeles
Mrs. Denman Bemus, Sec.-Treas.
345 So. Anita Ave., Los Angeles 24, Calif.

SANTA PAULA BRANCH

4th Thursday, Jan. 27, 6:30 p. m.
Steckel Park
Margaret Richardson, Rt. 2, Box 242A
Santa Paula, California

SEATTLE BRANCH

3rd Tuesday, Jan. 18
Mrs. W. C. Whipple, Secy.
Avalon Park, Mercer Island, Wash.

SHEPHERD, THEODOSIA BURR BRANCH

1st Tuesday, Jan. 4, 7:30 p. m.
Alice Bartlett C. H., 902 E. Main, Ventura, Calif.
Miss Carolyn Peyton, Secretary
335A So. Evergreen Dr., Ventura, Calif.

See page 23

SO. ALAMEDA CO. BRANCH
 3rd Thursday, Jan. 20, 8 p. m.
 Faculty Cafeteria, High School, Hayward, Calif.
 Mrs. Dorothy Bayliss, Corr.-Sec.
 26706 Monte Vista Dr., Hayward, Calif.

SOUTHGATE BRANCH
 4th Tuesday, Jan. 25, 8 p. m.
 Girls Scout Clubhouse, Southgate Park,
 Mrs. Mary Casey, Sec'y-Treas.
 4085 Tweedy Blvd., Southgate, Calif.

WESTERN RESERVE BRANCH, CLEVELAND, O.
 4th Wednesday, Bimonthly, Jan. 26, 8 p. m.
 Garden Center, 10013 Detroit St., Cleveland, O.
 Mrs. Fred McCune, Secy., 1470 Waterbury Rd.
 Lakewood, Ohio

WHITTIER BRANCH
 4th Tuesday, Jan. 25, 8 p. m.
 Union High School, Room 19
 Lindley Ave. Entrance, Whittier, Calif.
 Mrs. Haidee Hackler, Secy.
 219 S. Mcness St., Whittier, Calif.

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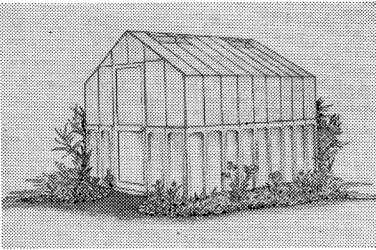
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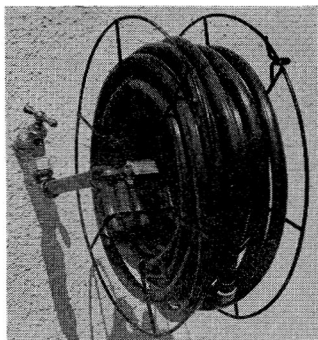
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