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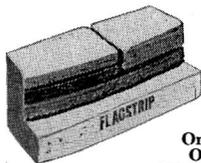


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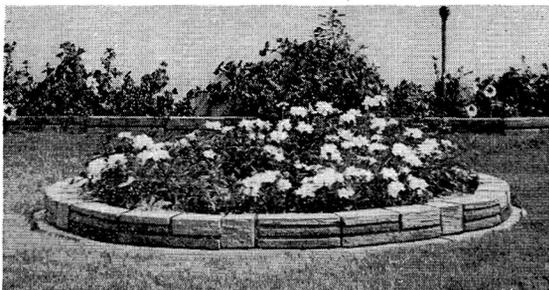


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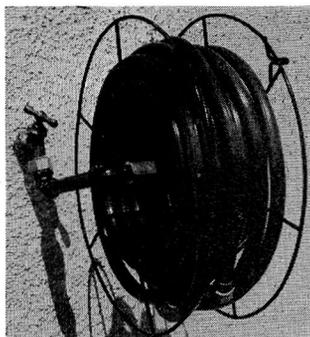
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The next meeting of the American Begonia Society Board will be held in the Los Angeles City Hall, Room 55, 7:30 p.m., Monday Oct. 25, 1948. Park Lower Garage South Entrance on Main.

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ARE THERE ANY "RHIPS" IN YOUR PLANTS?

Elmer Lorenz, Eagle Rock, Calif.

When we grow our begonias in a lath garden or glasshouse we soon realize there are a number of other interesting plants that grow in the same environment. Before long we are adding and growing these plants with our begonias, not because we are tiring of begonias, but for the simple reason that they add interest and additional beauty to our shade gardens. Any collection of begonias is greatly enhanced by the inclusion of other flowering and foliage plants possessing conspicuous beauty. Among these we include ferns, hardy orchids and bromeliads. However, there seems to be one group of plants we have ignored to some extent and which needs to be brought to the attention of those who want to add an interesting plant to their begonia gardens.

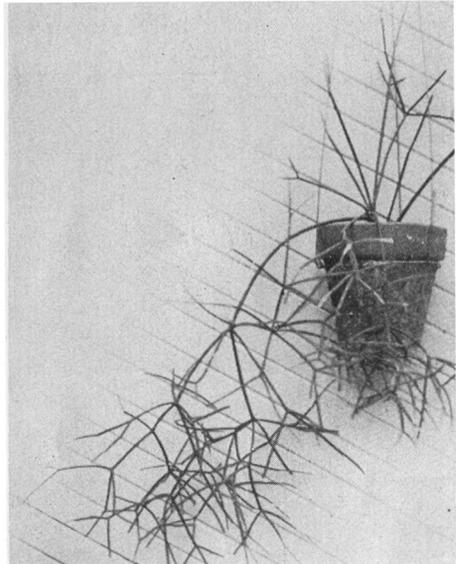
There is a small group of plants that belong to the cactus clan that should prove of great interest to you shade gardeners. With the mention of the word cactus in a begonia magazine I can see the raising of eyebrows and the whispering of the word "traitor." However, if we stop and think a moment we will realize that many of us have been raising cacti which are members of the subtribe Epiphyllanae with our begonias for a long time. So, to that popular group of cacti which includes the Epiphyllums, Zygocactus and Schlumbergera, we should add the genus *Rhipsalis*. (Pronounced rip'-sah-lis.)

Rhips is a Greek word meaning wickerwork, hence *Rhipsalis* is commonly called Wicker Cactus. Some of the *Rhipsalis* though, look more like a small Epiphyllum. We can see then, that they are plants of rather diverse form, some with slender, cylindrical stems and others with flattened leaf-like joints. The white or cream colored flowers are quite small, measuring only about one-half inch in diameter. They are attractive and produced in great profusion and often times followed by beautiful berries as in *Rhipsalis Warmingiana*. However, the real beauty of the plant is its graceful pendant habit of growth.

The *Rhipsalis* is confined mostly to South America and is an epiphyte that is found growing as a companion with orchids and bromeliads. Their manner of growth gives us an important cultural hint, mainly, perfect drainage, but with adequate moisture required of shade loving plants. Although the *Rhipsalis* is an epiphyte it can be grown very successfully in a soil mixture such as is recommended for epiphyllums. A good begonia soil with added sharp sand proves to be very satisfactory. Due to their epiphytic habit of growth they should be planted in hanging pots or small wall bas-

kets. When growing on a mossed wall they always add that exotic touch that brings forth words of admiration from garden visitors.

Rhipsalis capilliformis is a small grower with many short, cylindrical stems forming an intricate network of hair-like branches. The name *capilliformis* very adequately describes the plant as it is derived from *capillaris* which means hair-like. The flowers are small and white. It is a hardy grower but has the appearance of being very delicate. It is really a plant possessing an ethereal beauty.



RHIPSALIS TERES

Rhipsalis cassutha is a species with numerous pendulous, cylindrical shaped branches which may reach eight to ten feet in length. The stems are a pale yellow green in comparison to the rich green of many members of the species. The flowers are white and followed by white berries reminiscent of the mistletoe berries. This is the most common species in cultivation.

Rhipsalis virgata. This species is very similar to *Rhipsalis cassutha*, having pendulous, terete branching stems terminating with clusters of short stems. The stems are sparsely covered with woolly hair.

Rhipsalis teres is a species with long slender, cylindrical, arching stems. The tips of each stem branch out into numerous short cylindrical branches giving a "shooting star" affect. An older plant with several stems will soon become a maze of tangled stems.

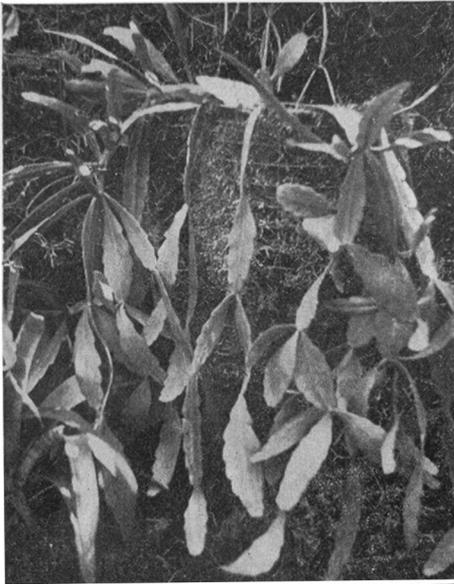
Rhipsalis Houlettiana. Although long known to collectors and a favorite, is very seldom seen in the lath garden. The long arching stems

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often reach more than three feet in length. The stem is round and cord-like at the base, then broadens out into flat, thin, leaf-like branches approximately one and one-half inches wide. The bell-like flowers are yellowish-white and produced in great profusion.

Rhipsalis rhombea. This is a much branched species often reaching three feet in length. The branches are flat and leaf-like, being rhombic in shape, hence its name *R. rhombic*. The flowers are yellow.

Rhipsalis crispata. This is an upright or slightly arching grower. The broad stems are green, but the new growth is a bright bronze color. The outer petals of the flowers are yellowish and the inner ones white.



RHIPSALIS ELLIPTICA

Rhipsalis mesembryanthemoides. As the name implies this plant resembles some of the mesembryanthemums. It is a small grower and an unusual oddity to add interest to our lath gardens. The numerous four to eight inch branches are thickly adorned with short club-like branches. The branches are terete and slender.

Rhipsalis paradoxa is a curious species called the chain link cactus. The branches are narrow and angled and may be four feet or more in length. The chain-like stems are twisted so that the side of each succeeding angle alternates with the preceding angle. The flowers are white.

Rhipsalis Warmingiana has long pendent branches reaching five to six feet in length. The branches are narrow and angled and abundantly produced giving the plant its common name "rain cactus." The bell-like flowers

THE VALUE OF ORGANIC MATTER IN GARDENING

By *Gustav A. L. Mehlquist*
Research Horticulturist

Missouri Botanical Garden, St. Louis, Mo.

Probably no component of garden soil has been so controversially discussed as the organic matter. It has been claimed by some that perfectly healthy plants can be grown in media entirely free from organic material, while others go so far as to claim that not only perfect plants but complete immunity to diseases and insects can be obtained if the right kind and amount of organic matter is used. Extravagant and controversial as such claims may be, it is interesting to note that most of them contain some elements of truth. It is a fact, for instance, that normal-looking plants have been grown in sand and other media from which all organic matter has been removed by chemical treatment. In this case all the nutrients needed by the plants have been furnished by properly compounded chemicals. In practical gardening, however, such a method is out of the question. Those who go to the other extreme and maintain that the right amount of the right kind of organic matter will eliminate all danger from infectious diseases or insects, are not only equally impractical, but what is worse, their claims are not supported by facts. To be sure, plants grown with the correct amount and kind of organic matter often exhibit a greater resistance to diseases and insects than those grown with an insufficient amount, for the same reason that children who get all the milk, vitamins, and wholesome food they need will, by and large, show greater resistance to many diseases than will their less fortunate playmates who get neither sufficient food nor the right kind. It is not my purpose to

See next page

are white followed by deep purple, almost black, berries. When this plant is growing in a basket on a mossed wall and the pendulous branches are allowed to hang between luxuriant growing bromeliads a most beautiful tropical picture is created.

Rhipsalis Neves-Armondii is made up of many arching terete stems which are terminated by whorls of short cylindrical branches.

Rhipsalis megalantha has the largest flowers of this interesting group of plants. The flowers measure approximately one and one-half inches in diameter.

There are a number of other interesting species available for our gardens. Although in the past these attractive plants have been grown only by fanciers, they should now be included in all of our sheltered gardens to add beauty and interest to our plant collections.

discourage those who are organic gardening enthusiasts but to point out that while a sufficient amount of organic matter is desirable for best results in the garden, it is not a cure-all. Granted then that organic matter is needed, just what then is meant by that term, and how is the material obtained.

Organic matter, in the language of the gardener and soil technician, means the residue from living things. For the sake of convenience, organic matter may be discussed under three categories: (1) original tissues, such as dead plants, freshly fallen leaves, garbage whenever such is used in composts, grass clippings, etc.; (2) partially decomposed materials, such as animal manures, partly rotted leaves, compost, peat moss, and the like; and (3) humus. The term humus has been variously treated in horticultural literature. The definition suggested by Wakeman seems the most concise and yet inclusive: "Humus is a complex aggregate of brown to dark colored amorphous substances, which have originated during the decomposition of plant and animal residues by microorganisms, under aerobic and anaerobic conditions, usually in soils, composts, peat bogs and water basins." Chemically speaking, humus is largely composed of those parts of organic tissues that are most resistant to decay, the less-resistant tissues having been decomposed before the humus stage is reached. Humus, however, is not a fixed material but is in a dynamic condition as it is constantly formed from plant and animal residues and is continually undergoing further decomposition by microorganisms. Thus it is clear that the organic fraction of the soil is really the life of the soil.

Organic matter has many important functions in every-day gardening. In the rough undecomposed or partially decomposed state, organic matter is invaluable for mulching. Proper mulching probably is one of the greatest gardening tricks that the present-day gardener can learn despite the multitude of new things that have become known in the last few years in the fields of plant nutrition and hormone treatments. A 6 to 12 inch layer of leaves, straw, and other undecomposed organic materials is very useful in the winter to prevent frost injury to the surface roots of tender shrubs and to bulbs and perennials. Partially decomposed materials such as leaf mold, compost, manure, peat moss, ground corn cobs, applied 1-3 inches deep, are exceedingly valuable as summer mulches. This is especially so in the middle west and southwest where the rains during the growing season are often limited to the kind of showers that beat down with great force for a few minutes, carrying away much of the best top soil, and then give way to an intense sun that literally bakes the ex-

posed roots and forms such a crust on the surface that the next shower cannot penetrate into the soil. However, if the soil is cultivated just deep enough to break the crust and a mulch immediately applied the formation of a new crust is thereby prevented, thus aiding the penetration of water whether from rain or sprinklers. Furthermore, a mulch conserves moisture by decreasing the evaporation from the soil, a very important feature in semi-arid areas. Many people still have the erroneous idea that merely breaking the hard crust of the soil will conserve moisture. Experimental evidence indicates just the opposite. To be sure, a hard crust retards water penetration but it also retards evaporation so that merely breaking it up without protecting the loosened surface soil from being washed away with the next heavy rain or beaten into a hard crust again is poor economy. Anyone who has observed the rivers in the Middle West literally loaded with top soil following a hard rain cannot help but wonder how long this can go on. To anyone who can read or talk, the dangers from atomic energy seem horrifying, and yet to most people, even those who live directly from working the soil, the yearly irreplaceable losses of soil and thus eventual lowered productivity in the face of a continually growing population mean little or nothing. Somehow starvation, either in this generation or the next, does not seem a more pleasant prospect than death from an atomic bomb.

Perhaps the greatest value from organic matter lies in its chemical and physical properties when it is mixed with the soil; that is, when it is part of the complex mixture of materials collectively referred to as the soil.

Physically speaking organic matter makes for a better structure of the soil. It "opens up" tight clayey soils and at the same time "binds" sandy soils. In clay soils the addition of an adequate amount of well-rotted organic matter prevents packing. It thus increases aeration and tends to prevent cracking and crust formation, thereby stabilizing the moisture-holding capacity of the soil. In light sandy soils, which usually dry out too quickly, the binding and water-holding quality of organic matter is equally valuable.

Chemically, the value of organic matter is perhaps even greater. Organic matter has the ability to absorb various chemicals so as to change the amounts of inorganic salts going into solution and to form compounds with certain elements, notably iron, which render them more readily available to plants. This quality manifests itself in so-called buffer action which may be defined as the ability to resist change; that is, when a dose of fertilizer is added to a soil low in organic matter most of this ferti-

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lizer becomes immediately available to the plant which is all right provided only the right amount and kind of fertilizer is applied at one time and more is added as this is used up. However, since we do not know exactly what kind of fertilizer is required nor how much, on the other hand, much of the fertilizer is absorbed by the organic matter where it may undergo many changes and is then slowly released through the process of decomposition to the plant roots in available form. Thus organic matter not only tends to prevent injury from overdoses of fertilizer but also tends to reduce the losses of soluble fertilizers from the soil through leaching by heavy rains, quite a factor in some soils.

Biologically, the organic matter serves as a source of energy for microorganisms which under proper conditions are responsible for converting many of the non-available chemicals and minerals into available plant nutrients. The microorganisms obtain the energy by decomposing the organic matter. During this process ammonia, carbon dioxide, and water are released as by-products. The carbon dioxide is released into the air from which the plants again absorb it through the process of photosynthesis. The ammonia is changed into nitrates which is the form of nitrogen most readily available to the majority of plants. The water is utilized directly by both microorganisms and plants.

The question naturally arises what is the best kind of organic matter to use and how is it obtained. The answer to this question depends on many local conditions and can therefore be answered here only in a general way. No matter where a gardener is located, he usually has access to fallen leaves, grass clippings, and plant refuse of various types.

As has already been pointed out, leaves and other course materials can be used directly as winter mulches, and with shrubs and larger perennials it is not necessary or even desirable to remove this material in the spring. It can be spaded in or just left there to serve as a summer mulch. If the material cannot be left on and cannot be dug in because additional plants are to be planted, it should be raked off and put on the compost pile. When undecomposed organic matter is mixed with the soil just before planting time, the plants often show symptoms indicating lack of nitrogen. This is due to the fact that the microorganisms in decomposing the organic matter build up their own numbers very rapidly and in so doing take away some of the available nitrogen from the soil, so the plants do not get enough. A light application of a readily available nitrogenous fertilizer will give both the plants and the microorganisms enough nitrogen and then, as

the organic matter is decomposed, the nitrogen by the microorganisms is returned, so the loss is only a temporary one.

However, for best results the organic matter that is to be mixed into the soil should be pretty well decomposed. To accomplish this it should be properly composted. Publication of methods for making compost piles seems to be a fad right now, nearly every magazine on horticulture carrying discussions on the subject every so often so it will not be necessary to go into that here. A word of warning, though, that unless the compost pile can be made large enough to develop sufficient heat to destroy diseases and insects, diseased and insect-infested plants should be burned rather than put on the compost pile. The size of pile required to develop this heat (around 135-145 degrees F.), varies with the material used, coarser materials requiring greater depth than finer materials. For average materials the pile should be not less than 5 or 6 feet wide and as high. As decomposition takes place the material will settle to less than half that depth. It should be borne in mind that, as little or no heat is developed on the outside of the pile, the material on the outside should be put on the inside when it is turned over so as to be heated up sufficient to pasteurize it. More rapid decomposition will take place if for every foot of organic refuse an inch or two of animal manure is added. Balanced commercial fertilizers put on at the rate of 3-5 lbs., per 100 cubic feet will also greatly hasten the decomposition. If the pile is kept sufficiently moist and turned over twice at intervals of 3-4 months, the compost will be ready for summer mulches or for mixture into the soil.

Recently a certain group calling themselves followers of "organic gardening" has instigated quite a campaign against the use of chemical fertilizers on the grounds that our soil will in time become poisoned. The experimental evidence indicates that this is not so. Chemical fertilizers being usually more concentrated than animal manures and composts are of course more apt to cause damage in the hands of inexperienced gardeners, many of whom have the mistaken idea that if one pound of fertilizer is good then two pounds must be twice as good. Properly used, the plants will do just as well whether the calcium comes from hydrated lime or ground limestone or whether the phosphorus comes from superphosphate or ground phosphate rock.

During the last few years we have also heard a good deal about the benefits derived from the earth worm. Such has been the praise of this modest fellow, previously of interest chiefly to amateur fishermen, that some people

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DICHORA X GLAUCOPHYLLA SCANDENS

would have us believe that if we would only invest in a few hundred of these worms our gardening troubles would be over. There is no denial that these interesting creatures do assist in the breaking down of organic matter and also help to aerate the soil by their numerous holes and passages. However, any one who has happened to include just one or two earth worms in a seed pan planted with expensive fine seed is not quite so fond of them. Furthermore, if sufficient organic matter and moisture are present, large numbers of worms seem to come from nowhere, whereas if the soil is not suitable they soon disappear regardless of brand or purchase price. In short, the chief value of the earth worm seems to lie in the role of indicator. That is, if there are lots of earth worms in your garden, you can be reasonably sure that you have a soil that contains sufficient organic matter along with the other needed mineral components to be a good soil physically, chemically and biologically.

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SEEDLINGS OF DICHROA x GLAUCOPHYLLA SCANDENS

By Sylvia B. Leatherman, El Monte, Calif.

Trailing basket begonias are not too numerous. One of exceptional beauty is the *B. dichroa x glaucophylla scandens*. (Correctly speaking, *glaucophylla scandens* is now *Limminghei*). This plant sends up branches from the base, which is essential for a nice, full basket specimen. It grows rapidly and is of easy culture.

The leaves are six inches long and four inches wide, shiny, medium green, with wavy edges and is of a leathery texture. The flowers are produced in large clusters, about four inches in diameter and are a beautiful coral color.

The pictured plant (photographed in August) was shifted from a four inch pot into the basket in June and has grown under lath where it gets filtered sunlight.

The plant is potted in one half oak leaf mold and one half sandy loam. To three gallons of this mixture, we add one quart of well rotted manure, two tablespoons of superphosphate and three tablespoons of humisite.

The plant is not watered until the soil is on the dry side and is then given a thorough soaking. It is a begonia that likes high humidity.

During the summer we spray the foliage with a fine misty sprayer, early each morning. During the day, on hot days, when the

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A. B. S. NATIONAL CONVENTION AT GLENDALE

Gladys C. Nolan, Glendale, Calif.

WERE YOU THERE? — It was a wonderful experience to entertain such an enthusiastic group of Begonia fans in spite of the "glowing" (not growing) weather. Cooperation seems to have been the keynote of the 1948 A.B.S. Convention — cooperation from every source — branches, educational and commercial exhibitors, National and Branch officers and individual A.B.S. members who entered exhibits. It is impossible to do justice to all in a few words.

A.B.S. members arrived in Glendale from Sacramento and other far points as early as Friday morning and everyone seemed eager to see the Begonia Show Saturday morning even before the judges had finished their work. Garden visitations kept many occupied until the business of the day began and all who took advantage of the hospitality of the gardens opened were well rewarded. These visitations continued Sunday for all to attend and were under the able direction of Mrs. Anna Marek.

The Begonia Show had so many outstanding plants and such large specimens that it was an inspiration and incentive to all to go home and struggle a little harder to attain such a worth while goal. Plants, worthy of the finest public conservatories, grown by amateurs who really loved their begonias, were entered. Their reward does not lie in the ribbons, cups and cash awards received but in their effort to share this beauty with all who had kindred tastes and many were most generous in sharing and making the Glendale Convention Begonia Show a success.

The A.B.S. Branch exhibits were beautiful — Southgate with many exquisite rexes too lovely for words — Pasadena Branch with a genuine symphony in begonias — it truly

Dichroa x Glaucophylla Scandens

humidity drops, we spray the ground and surrounding walks and walls with water. Propagation is by cuttings and we use three eye cuttings. Each leaf node is an eye. Make the cut just below the eye and place in the rooting medium about one and one half inches. Keep this medium moist but not wet.

To encourage the plant to branch more readily, pinch the ends of the branches off. We usually pinch these branches when they are from ten to twelve inches long.

Credit for these hybrids goes to Leslie Woodriff. There may be a slight variation in these plants as they are unnamed seedlings. We expect to see this dichroa x glaucophylla scandens become a very popular begonia.

sang! — Hollywood Branch with a cool wishing well, surrounded with rare and unusual plants, eased our drooping (from heat) spirits — and Inglewood Branch with such beautiful begonias and shade plants, many of us dream of growing but never seem to attain.

These entries were well judged by known begonia and shade plant experts.

Educational exhibits were there too—not the dry as dust kind but the sort to intrigue the imagination and give all who saw them the desire to try something new in this fascinating field of adventure. Commercial exhibitors were most generous with samples, ideas and patient information.

Gordon Baker Lloyd acted as master of ceremonies at the Begonia Show both days of the Convention and brought us many details which might have been missed in the excitement of "seeing it all." It was a happy occasion, indeed, when he called attention to our eldest visitor from afar, Mrs. Miriam Mahaffey, eighty-one years young, who had travelled from Seattle, Washington by bus to attend an A.B.S. Convention — also the delegates from the farthest branch to be represented, Mrs. T. B. McMorrough and son of Hollywood, Florida, members of the Miami Branch. Mrs. Schwerdtfeger, Public Relations Director, made every effort to personally contact each out-of-state registrant and welcome them to the Convention.

It is impossible to describe in detail any individual exhibit but I can not refrain from expressing our delight and joy in seeing the original paintings of Begonias by Mrs. Alice M. Clark from which the drawings are reproduced in our Begonian, are made. It was most generous of her to share these with us at this time when she was troubled with personal difficulties and we are deeply grateful.

The Armchair Explorers had an interesting gathering, under the direction of Mrs. Florence Carrell, with fine speakers who related their experiences with seedlings obtained thru the Seed Fund and great pleasure was derived from this sharing of similar interests.

A lovely display of the tuberous blooms sent to us by Vetterle and Reinelt, was used in a dining room setting, on a lazy susan table set with pewter, which carried out the "royal" hobby idea. Mrs. Jay Jenks had charge of this booth, flanked with large diffenbachia specimens.

The annual business meeting of the National Board was held during the afternoon and drew a fine attendance in spite of the heat. After a busy day all present were ready for the barbecue which our General Chairman and Glendale Branch President, Mr. Frank S. Moore, had planned and a gay time was had

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BEGONIA MACDOUGALLI — Photograph Courtesy Missouri Botanical Garden

Begonia MacDougalli was collected in 1946 by Mr. Thomas Mac Dougall and was found at the foot of Cerro Carrizal, on Rancho Aguajito in the Ocozocoatula rain forests in Mexico.

The flower stem (see the comparison in picture of the man and the stem) on this plant measured about eight and one half feet with its flowers still unopened! In all observed cases, the leaf and flower stems come from near the ground level of the comparatively small tu-

berous-like rhizomes. Mr. MacDougall has collected plants in Mexico for a number of years and has obtained many beautiful and outstanding begonias. Because of his untiring efforts to bring back seeds and plants of his beautiful discoveries so we may all enjoy them, Mr. Rudolph Ziesenhenné believes it is only fitting, to name this unusual begonia in his honor. This is Mr. Ziesenhenné's introduction and see November 1947 *Begonian* for more detailed information.

by all who adjourned to the park adjacent to the Civic Auditorium. Was that barbecue well attended? Well of course, and everyone was really hungry.

The evening program drew visitors indoors to the Civic Auditorium where the stage was banked with tuberous begonia blooms donated

for the occasion by Vetterle and Reinelt of Capitola. Mr. Moore introduced Mr. Clarence A. Hall of Ventura Branch, a past National president who acted as master of ceremonies for the evening, introducing the National officers present and installing the new A.B.S.

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GROWING BEGONIAS IN THE HOME

Louis J. Kuester, New York

The degree of success in the growing of cultivated plants indoors, is dependent on the kind or nature of the environment present and the cultural skill of the grower. As both factors are necessary, cultural care can not be expected to substitute for what might be lacking in the environment, nor can the environment substitute for what may be lacking in cultural practice.

The habitat is the kind of place in which plants grow. Every part of the environment that exerts directly or otherwise a specific influence on the life of every plant, is a factor of that habitat. Some of the principle ones acting directly on plant growth are, humidity or moisture, light and temperature.

When plants are grown in the home, they are subjected to a sort of modified habitat, and there follows quite a different environment than that found in their native home. What that environment will be, depends not only on the geographical location of the home, but also on the growers individual preferences, habits, etc., and the kind and structure of the residence.

Fortunately, begonias as a group are rather tolerant in their needs for growth. Experience has demonstrated that some are more adaptable to average home conditions than others. The *semperflorens* varieties, *lucerne*, and *scharffi* (*haageana*) are a few examples. Others do their best growing in homes that offer more suitable surroundings than the average. These are the homes, located in open country in a cool, humid summer climate. These homes, during the cold season, because of location and structure, may be also difficult to overheat. Of course, the results obtained will also depend upon the cultural experience and knowledge of the grower, and good care is always essential.

In situations where the environment is not too suitable, it is quite possible to improve somewhat, "the local climate" around the plants. Light and temperature vary from room to room, and the judgment of the grower will determine the best locations. Humidity can be increased. Growing the plants over shallow trays filled with water, helps.

They should be as large as space permits, so that there can be a large surface area exposed to the air. During the heating season, radiators, stoves or hot air registers can be fitted with receptacles, kept filled with water. Heated water evaporates much more quickly than cold water. There are special radiator humidifying valves and other inexpensive equipment on the market that can be fitted to steam and hot water radiators. They use the water or steam in the heating system. Spraying plants with water helps, though it gives only temporary relief.

Growing plants to as near the ideal temperature requirements as possible, is most important, as temperature has a decided influence on the moisture content of the air. The following figures, taken from a textbook on physics, will illustrate this fact. At a temperature of 32 degrees, F., the total amount of water (in the form of water vapor) that the air can hold is about two grains per cubic foot of air. At 70 degrees, F., which is only a little more than double, the air can hold four times as much water vapor or about eight grains. This is complete saturation; a relative humidity of 100 per cent. (These are figures based on an atmospheric pressure of 30 inches.) As the temperature rises, the problem of maintaining a reasonable amount of moisture in the air, becomes increasingly more difficult. For each degree of increase in temperature, there is usually a loss of about 1½ to 2 per cent of relative humidity. As most homes are too dry for the welfare of humans as well as plants, any effort made to increase the moisture in the air, is well worthwhile.

In the area, roughly 200 miles around New York City, the temperatures, moisture, etc., varies from place to place. Though the difference between one extreme and another may not be very great, it does, in many situations, indirectly influence the growth of indoor plants. Generally, the further north the location, and the higher the elevation, the lower the temperature. Relative humidity is higher in the more open country, and in areas far distant from towns and industrial sections. As can be expected, the light quality and intensity also varies with the location, depending upon the clearness of the atmosphere. Smoke and other products of combustion account for very much of the variation.

To illustrate, I would like to compare the results obtained by two friends, living within the above mentioned area, about 175 miles apart. One is located in New England, the other in Westchester, N. Y. Both individuals are capable growers.

I was privileged to observe the begonia collection of my New England friend during several seasons of the year. This collection included many *rexes*, and many so-called difficult begonias. Most of the plants were the equal of many produced by commercial growers with controlled greenhouse facilities. This home is located in open, sparsely settled country, and is surrounded by a heavy concentration of vegetation, trees, shrubs and ground cover. The house is difficult to heat, due to its construction, exposure to the elements, and the long

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cold winter seasons. Night temperatures in the rooms where the plants are growing, range from 40 to 50 degrees, during the coldest nights of winter. The heavy dews, the great amount of surrounding moisture-producing material, vegetation, earth, snow, etc., together with the low temperatures help humidify the air. Light is good, because of the favorable exposure available, and the clearness of the atmosphere. This is indeed an ideal location for good plant growing.

The home of my Westchester friend is located in a less favorable surrounding in a New York City suburb, located in a valley. The area is a well built up residential section, serviced with plenty of paved streets, concrete sidewalks and garage driveways. Vegetation is much less concentrated than in the New England location, the snowfall is lighter and the temperatures are higher. The house is insulated, tightly built, not exposed to high winds and somewhat overheated.

Night temperatures where the plants grow are most always above 60 degrees. Most plant growth is soft and weak, there is less color in leaf and flower, the leaves smaller than normal and flowering considerably less. Temperature and humidity are the two limiting factors here. Plant growth in this home cannot be compared to those in the New England home.

I know of other homes where the plant environment fits in between the above two extremes. Results obtained are about average.

The results through cultural practice, (strictly a human effort necessary for plants grown out of their natural habitats,) is apparent in all locations.

Though general principles must be followed for all successful cultural practice, details and method do vary. Every grower, after sufficient experience, learns to solve some of the problems peculiar to his own surroundings. It is for this reason, that many authorities agree, that the growing of plants is more of an art than it is a science.

All of the successful growers practice this art most diligently, even in the most favorable environments. Others, challenged by the handicaps of a less favorable surrounding, produce results that bring them great joy and satisfaction. They have proven by their work, that as they gain in experience and knowledge, they will learn by trying, and in the process will come to know the varieties best suited for their homes. The list of begonias is a long one, and a fine collection can be built up to suit most any environment.

Based on personal experience, and what I could learn of the work of others, the following notes, should be helpful to the beginner.

Night temperatures under 60 degrees grow

the best specimens of about 90 per cent of all the begonias in cultivation. Ideal temperature might be 55 degrees.

The relative humidity should be reasonably high. As few growers use humidity gauges, I can give no figures of the percentages present in their homes. However, judging by the appearance, (no evidence of excessive transpiration damage to leaves) and growth of the plants, together with some knowledge of the outdoor climatic conditions, humidity is reasonably good. My guess is, that for the larger part of the year, it is above 50 per cent, when the temperature is 60 degrees or less. I should think that a range of 60 to 80 per cent is the ideal.

Fortunately, begonias are not sun loving plants, i. e., in the sense that they need sun for long periods each day. Filtered or diffused sunlight for a large part of the day, seems better than intense direct sunlight for part of the day with shade for the remaining part. This is an ideal not easily obtained in the home.

Potting soil mixtures vary much, and each grower has faith in his own formula. There can be no doubt, that no one mixture is best for all locations and conditions, or for all begonias, for soil has a definite relationship to all the factors of growing. Though sand is sand, clay is clay, and leafmold is leafmold, etc., they do vary, depending upon their source.

Any discussion on soils, because of limited knowledge and the complexity of the subject can become quite involved. It seems to me, that for all practical purposes, the judgment of the grower and the time honored method of trial and error will serve quite well. The amateur, generally does not have the time, the space and scientific training and equipment necessary, for a deep study of this part of culture.

There are of course a few general rules that are acceptable to all good growers. Light loam mixtures, composed mostly of sand and humus for seedlings and rooted cuttings, containing no fertilizer, and heavier loam mixtures incorporating more clay plus fertilizer, for older vigorous plants are advisable. Modifying the formula to suit certain types seems to help, though I know of very successful begonians who use the same mixture, for all types of begonias, rexes, fibrous, tuberous and rhizomatous. I don't think that the soil is as important to the growth of houseplants as many growers believe. When grown outdoors in favorable climates and in greenhouses where all growth factors are closer to ideal, the demands made upon the soil are greater and more exacting, because of the vigorous vegetative and root growth of the plants. If the soil under these

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favorable conditions, is or becomes deficient in any part of the work, then a limiting growth factor is present. Houseplants are usually already suffering from one or more limitations, and under these circumstances the demands on the soil are less, and the full work the soil is capable of, is not used.

Ventilation is always important, as it improves air circulation and keeps to a minimum the harmful concentrations of toxic gases that may be present. Drafts and high winds should be avoided, because of their effect on transpiration and temperature.

Feeding, or the use of fertilizers is a part of begonia culture, that demands more judgment than perhaps any other chore. The damage that can be done through the careless use of fertilizers is quick, and sometimes it is permanent. Mistakes made in other cultural chores, can in most cases be rectified, and the grower experienced, the results of the improper use of fertilizers, apparent on a plant, are often mistakenly accredited to other cultural errors. It is obvious that few can afford to make many errors of this nature.

When and how to feed, depends on the available food in the soil, the rate of growth, size and condition of plant, the pH of the soil, the analysis of the fertilizer used, etc. Generally, young plants growing well are in need of more nitrogen than older ones. As phosphorus seems less plentiful in the soils we use than other elements, and as flower production is supposed to depend much on this element, it should be used about the time the flower buds are expected to appear. Recommendations for feeding outdoor and greenhouse plants, are not for the plant living in the home. When in doubt about the food needs of the plant, don't feed, or give less than the directions recommend, and watch the results.

Some successful growers do not feed plants between potting periods. They include fertilizers in the potting mixture, just enough to last from one potting to the next. Others use a mixture without fertilizer and do supplementary feeding. For some growers, the second method might be the better, because it offers the advantage of individual treatment. No capable grower feeds a plant during its rest period, nor one not in vigorous growth, and he follows directions carefully.

Like all other plants, begonias are subject to attacks by insects and disease. As a group they are more easily injured than many other class of plants by chemical dusts and sprays, though the amount of possible damage varies with different kinds. The advice to start with clean plants is still the best safeguard, and good plant housekeeping is another.

The statement often made, that only weak

plants are attacked is not quite correct. Healthy plants are attacked, especially if in contact with infested ones. Because of their vigor they are more able to stand corrective treatment than the weaklings.

Propagation is perhaps the most interesting part of begonia culture. There are many methods, all equally successful with begonians. I believe that most failures are due to working with poor plant material. Good cuttings, taken at the right time, come only from good plants, and never from poor stock. There seems to be strains, good and bad, among begonias as in other plants. Over propagation, stock grown under unsuitable environments or neglected culturally, stimulated plants, and those that through hybridizing have had the vigor of their ancestors bred out of them, are likely to be of poor strain.

Pinching and pruning are necessary for many begonias, and the method varies with the plant. The free branching types, seem to need little or none. Many of the cane types do not seem to respond to tip pinching satisfactorily. Usually only the top auxiliary bud is forced to develop, and you trade one straight cane for one crooked one. The growth of the plant depends more on the production of new canes from the base, rather than branching at many nodes. When grown under ideal conditions, especially in free soil, they attain great size, and are really at their best in flowering and appearance. Their bare canes go unnoticed, and are usually hidden by the young growth always coming up from the soil level.

For appearances sake, house grown specimens, should have the old canes cut almost to the ground, to encourage new growth at the base. As the canes usually flower when quite young, not much of the flowering growths of the old canes will be missed.

Too much severe pruning or pinching of some varieties, especially on old plants, sometimes encourages stems to die back from node to node. Root and shoot balance is effected perhaps, though there are other reasons, not important enough to be mentioned here. Varieties that flower heavily and almost continuously, should have each branch cut back to the node that contains a live shoot bud. All nodes above this one that contains a scar in the axil, left by the peduncle of the inflorescence will be useless. No growth will develop at these points. Rhizomatous types are induced to branch, by pinching out the tips of the rhizomes.

Sooner or later, the indoor gardener discovers that there are begonias in his collection, that do not seem to thrive, despite all of the care he is capable of giving them. He learns

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PLANT GROWN BY MRS. EDNA KORTS, Glendale, Calif.

THE YEAR AROUND WITH THE SPATHIPHYLLUM

By Dr. W. C. Drummond, Los Angeles, Calif.

The perky, glossy green leaves and streamed lined flowers of the *spathiphyllum clevelandi* are a lovely sight to behold in the green house. The flowers last a long time, either on the plant or as cut flowers and excell as corsage material.

Coming from a country of high rainfall and with lots of decaying organic matter, the soil reaction is naturally acid, so keep them on the acid side with a pH of 6.5. Where soil reaction is alkaline, use sulphur or a soil acidifier, or you may experience leaf burn and poor growth.

A suggested soil mixture consists of two parts clean sharp sand, two parts leaf mold, two parts good loam and one part old, dried cow manure. To this is added a five inch pot of bone meal to each bushel of the mixture. Instead of cow manure, one may use an equal amount of chopped bean straw. For subsequent feeding use weak liquid cow manure water. Do not over feed or try forcing, as the roots may rot.

For best results, give your *spathiphyllum* a warm, high humidity greenhouse. When grown in a day temperature of 70 or higher and night temperature not lower than 60 degrees, a humidity of 70 per cent or higher, with proper feeding, they will bloom throughout the year. When grown in a cool greenhouse in winter they will not bloom, even though they will grow and bloom in a much cooler temperature than their cousin the anthurium. Keep the soil moist, never very wet and never let them dry out. Give them all possible light but no direct sunlight.

Spathiphyllum are not often bothered by the common pests, although nematodes, ground mealy bug and thrip attack them occasionally. For the ground mealy bug, use chlordane as directed, for thrip spray with DDT, especially the sheaths and buds.

The plants are not too expensive to buy and when well grown they multiply and form large clumps. Propagation is by division, which is done when repotting in the spring. Their nearest relatives are the anthuriums and common white calla lily.

ABS CONVENTION

(Continued from page 231)

National president, Lt. Col. Carroll Gale. Mr. Raymond T. Wilson, president of the Hollywood Branch, presented an A.B.S. life membership from the Hollywood Branch to Mrs. Alice M. Clark of San Diego, who so richly deserved this honor for bringing us all so much beauty thru her talent. Mrs. Mary Hazel Drummond, our outgoing A.B.S. president, delivered her "farewell" speech, urging all to bring in new members and keep them active and suggesting the possibility of this organization becoming an affiliate member of the Royal Botanic Garden at Kew, England, to our mutual benefit. Mrs. E. L. Korts, Chairman of the Begonia Show, made the awards to the winners and space permits the mention of only a few:

Mrs. Thos. E. Mullen, Glendale Branch, Best plant in the show.

Mrs. Louise Jenkins, Huntington Beach, Mary H. Drummond cup for best Tuberous begonia.

Mrs. Lewis Reese, Bellflower Branch, Gonda Hartwell Cup for best Rex.

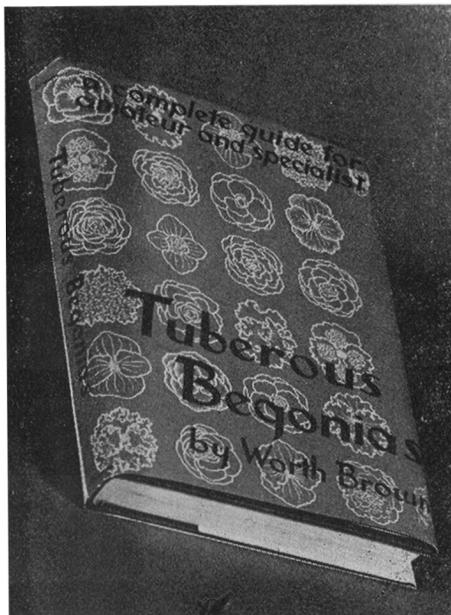
Hollywood Branch, Best Branch exhibit.

Capt. Roy K. Dere, Best educational exhibit.

And cash awards to best in each division.

The business of the evening having been attended to, all present relaxed and enjoyed our speaker, Mr. Rudolph Ziesenhenné of Santa Barbara, who showed many new begonias he is developing for our enjoyment, telling their source, conditions under which they grow and some experiences he has enjoyed in developing them.

Sunday, September 12 was devoted to visiting gardens, renewal of old friendships, closer inspection and enjoyment of the plants in the Begonia Show and a general feeling that it was all so worth while that we will be ready to dash off to Ventura next year and do it all over again. Let's meet there—if Mrs. Mahaffey could travel on a bus for fifteen hundred miles at eighty-one years—Well! Shame on us if we do not show up in Ventura.



Sheltered Garden Book Reviews . . .

TUBEROUS BEGONIAS by Worth Brown.
Published by Barrows.—\$2.75.

It is with a great deal of pleasure we announce the publication of the book on tuberous begonias so eagerly awaited by begonia enthusiasts. Written by an experienced hybridizer and grower of these lovely flowers, it brings first hand information to the amateur and specialist alike.

It is very well illustrated with black and white drawings and shows in minute detail the methods of propagation by seed, stem cutting and division of tuber methods. The species and hybrids are well defined and this easily read book, of large print, will prove invaluable to followers of the Royal Hobby.

Reviewed by Frank Overton.

Lilies

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INTERESTING

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GROWING BEGONIAS

(Continued from page 234)

that this is the experience of many other growers, though a grower here and there, does succeed. These are the plants that have the reputation of being difficult or temperamental. The calla lily begonia, cathayana, goegoensis, Arthur Mallet and imperialis are a few examples. Some say they just grow and do not fuss with them. Others say, they give good cultural care, special soils, certain locations, etc. A few have no opinion, and others say, the environment does the job. Apparently, these are types that under cultivation are very exacting in most of their needs. This could be so, if their ancestors were natives of special habitats, difficult to approximate. This of course, would apply mostly to the species. The mutants could be expected to be difficult, and like many hybrids, vigor will vary from plant to plant. The problem seems to be mostly environmental, for in well controlled greenhouses, where their needs are understood, they do quite well. The xmas begonia group, are plants that pay well commercially, and the special conditions given them in all stages of their growth, by commercial specialists, demonstrates, what demands some kinds present, to the grower.

I believe there is a psychological factor inherent in every good gardener, that has some bearing on the results of his work. His philosophy, peculiar and personal with him, brings understanding and judgment; an intangible that cannot be measured or analyzed, and is neither emotional or intellectual. This is perhaps what many call the "green thumb," but whatever it is, it is there, and cannot be passed on to others.

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Personalities of the Begonia World



BESSIE R. BUXTON

Mrs. Buxton was born in Danvers, Massachusetts, but moved to the adjoining town of Peabody, in infancy. For many years her major interest was music, although there were always house plants and a garden in the background. Her active interest in begonias began in the early 1920's. She became interested in the garden club movement in 1925, organizing her own club and various others. In 1926 she helped to organize the Massachusetts Federation of Garden Clubs and served as its first secretary, 1927-1930.

In 1929 she was sent to Washington, D. C. to represent Massachusetts on the committee which formed the National Council of State Garden Clubs, and served as the first secretary of the new organization 1930-1937. Her horticultural writing and lecturing began in 1925. In 1934 the Massachusetts Horticultural Society published her pamphlet on *Begonias*. This was followed in 1936 by her first book, *The Window Garden*, published by Orange Judd & Co. of N. Y. In 1939 the book, *Begonias* was published by the Massachusetts Horticultural Society. Several editions sold out quickly, but the war made further printings impossible. In 1946, *Begonias and How to Grow Them* was published by the Massachusetts Horticultural Society.

Mrs. Buxton's friends in California are hoping the day is not too far off, when she will again visit with them.

STAG-HORN FERNS

By Alfred W. Roberts

Platycèrium is a small group of ferns of widely separated habitats. The species most frequently seen in private collections are *Platycerium alcicorne*, *P. grànde*, *P. aethiòpicum* and *P. Hillii*.



Platycèrium alcicorne, (often called stag-horn or elkhorn fern) the comonest species of the group is found growing on branches of trees in Australia, Java, the East Indies, Madagascar and Peru. It is the widest distributed of the genus and the easiest of all known *Platycerium* to grow. They are easily propagated from young plants produced on the roots. The fertile fronds of this species grow from two to three feet long. They emerge from the barron shields. These barron shields protect the roots and provide a trap for moisture and organic matter. Although the barron shields do not attach themselves to objects on which the plants grow, they closely lay on trunks of trees, tree-fern trunks, wire wall baskets, etc. This striking fern proved quite hardy in Southern California, where it is known to have survived temperatures as low as 24 degrees F. for almost a week.

Platycèrium grànde (often called moose-horn fern) which most writers consider a stove or warm house species, survived the same low temperatures and in several locations below 26 degrees F., without the slightest sign of frost injury.

Platycerium Hillii is a native of Queensland. The fertile fronds are erect to one and one-half feet long, several spring up close together. In the young state they are clothed with white hairs. Although slightly resembling *P. alcicorne*, its habit is much more rigid, its fertile fronds showing a tendency to grow more erect. Its sterile shields are of heavier texture and are inclined to confine themselves closely to the

crown. Therefore it is best planted on tree trunks or tree-fern trunks and not in wire baskets.

Platycerium Stemmaria (aethiòpicum) is a native of the Guinea coast and Angola, Western Africa. The barron fronds have their edges more or less cleft into spreading lobes. The fertile fronds which are two to three feet long and clustered, are of a pendant habit and twice divided. Their disk and first divisions are broader than in most other species. This species requires warmer temperatures and should not be exposed to freezing temperatures.

Stag-horn ferns do best if planted in any of the following containers:

1st: Wire wall baskets lined with wet green moss and packed with wet, used osmunda.

2nd. In wooden crates, similar to a flat, with one side removed and cedar or redwood slats nailed approximately two inches apart to provide drainage and to allow the vegetative growth from the roots, to emerge. No moss is needed for this method, but wet osmunda fibre should be packed in very firmly. Fill the crate with osmunda to the point where the plant is to be located, then continue nailing slats and adding more osmunda. A more decorative effect is obtained by substituting strips of tree bark for the slats.

3rd. If planted on logs or tree trunks, the roots of the ferns should be wrapped with a ball of wet moss to give the plant a chance to become established.

Stag-horn ferns require lots of air and light and should be kept quite moist during the growing season. Their appearance will improve wonderfully if grown in a high humidity. Should brown spots develop on either the sheilds or the ends of fertile fronds, look for the following causes: over or under watering, thrip or other insect injuries, salt burns resulting from quick evaporation of water when fronds are sprayed with alkaline water during hot or windy days, or improper use of insect sprays. During the growing season they respond remarkably well to mild liquid fertilizers applied at monthly intervals. A 2 per cent light oil spray, as super-destruxol, using five table-spoons to a gallon of water and applied with a high pressure sprayer will control mealy bug and scale, should these make their appearance.

If you live close to an advertiser, stop in and see him and his merchandise. If you live at a distance, write to him and tell him you are a member of the A.B.S. and would like to know more about his wares. Patronage with our advertisers keeps our Begonian growing.

INLAND FUCHSIAS

By M. Merrill Thompson, *Alhambra, Calif.*

The grower and fancier of fuchsias who happens to live 'inland' collides, most generally, with some severe problems and conditions. 'Inland' means anywhere in California (or similar area) where the fog or cool air from the ocean does not mitigate the temperature and humidity variations. 'Inland' fuchsia growers fight a continual battle with wide temperature and humidity variations. These variations can be as much as 50 degrees F. and 50 per cent humidity. Frequently, during the fuchsia blooming season 'inland' (May to November) sudden changes in temperature can be effected in twelve hours. It is not unusual to experience one week of 75 to 80 degree F. temperature daytime and 60 degree F. nighttime, and then to find the next week up around 95 to 100 degree F. with the night time 75 degree F. plus. Such conditions make fuchsia raising interesting, to say the least.

Inland growers must realize fuchsias need steady not changeable temperature, constant humidity of 50 per cent or more and that fuchsias can stand cool and cold weather better than 90 degree F. or hotter, weather. Some growers attempt to meet the humidity lack with fog nozzles. This results in a high evaporation rate and a consequent lowering of temperature, but in certain areas, a film of water borne salts (alkali minerals) is left on the leaves, stems and soil surface. This film is similar in composition to the scale inside a teakettle. The higher the temperature, the quicker the water evaporates and the finer the water droplets, the higher the evaporation rate. Lowered temperatures from such operations are desirable but the water source must be considered. Salt accumulations on soil surfaces do not help fuchsias.

Inland growers should plant fuchsias in cool soil areas. The plant should be shaded from the soil surface up to at least four feet. The upper structure of the plant can usually withstand a good deal of sunlight. Not many (I would say very, very few) fuchsia varieties can tolerate full inland sun conditions. Irrigating fuchsias does not alleviate matters very much. Most of the time the water loss through the fuchsia foliage is so great, in hot weather, the roots cannot absorb the soil water fast enough to meet the plant demands. Wilting then takes place and this, in many varieties such as *Butterfly*, invariably means defoliation. Therefore, excess moisture in the soil does not seem to be the answer, particularly if the soil is heavy or inclined that way. Overhead sprinkling is best.

The function of humidity around fuchsias is to prevent this excessive water loss through the

foliage. Maintenance of humidity at 50 per cent or more is really necessary in good fuchsia culture.

Heat, as distinct from sunlight, also plays a great part in fuchsia culture. California sunlight, in spite of "smog," is very strong in itself. Many clear sunny days in California will see ten thousand foot candles of sunlight shining on any leaf surface. This has a deleterious effect on the leaf cells, actually burns them as the same sunlight does a person's white, untanned skin. Fuchsias must be given "broken" or filtered sunlight. This sunlight must meet the needs of the plants for the amount of sunlight on the young, growing stem tips controls the function of the flower production.

Display, Haute Monde and *Cardinal* demand much light but *Brentwood* and *Butterfly* bloom very well in subdued light. Each fuchsia variety responds to very subtle variations in length of day, intensity of light and shadow patterns. Successful growers will study and experiment until the best (or optimum) formula for their situation will be perceived.

Even if the sunlight pattern is controlled, a sudden or prolonged exposure to heat will cause most fuchsias to respond with smaller and smaller flower sizes, greater or less defoliation and a general inclination toward dormancy. Fuchsias will revive quickly however, when a cool spell comes along. Varieties grown at seacoast levels or in fog belt areas are risky in 'inland' areas until they have had a chance to acclimate themselves. Same holds true for San Francisco Bay area varieties, when introduced into Southern California areas.

Lush growth on the upper part of a plant will many times so darken the lower plant areas, that many leaves turn yellow and die for lack of sufficient light. This often happens where fuchsias are planted closely together or where other shade plants such as daphnes, camellias, rhododendrons, etc., are planted with them.

Begonias are excellent therefore, in planting under fuchsias.

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SEED FUND NEWS FOR OCTOBER

The convention is over and what a grand time we had! Those Glendale folks certainly know how to entertain well. The barbecue was something to remember and a great many beautiful plants were displayed, many beautiful booths with beauty everywhere. I will leave the rest of the show for others to tell about, but I want you to know about our Seed Fund Booth which attracted many people. Many Armchair Explorers were on hand to visit with their Skipper. Members from San Francisco, Oakland, Berkeley, Seattle and Florida talked with us. This Convention will not be forgotten for a long, long time. We missed some of you folks, sorry you could not be with us. Plan now to take your vacation next September in Ventura, for that is where our 1949 Convention will be held.

Latice work, trailing fern and ivies decorated our booth, and a fine new sign depicting palm trees in the South Seas and a sailboat, attracted folks to our corner of the show. At one end of our booth Mrs. Cheney of Pasadena displayed her ferns, showing all stages of fern growth from spores to mature plants. The fern seedlings in a glass bottle attracted much attention. Mrs. Maud Nichols of Burbank was at the other end of the booth giving away husky little begonia seedlings, begonia seeds and Society literature to all our visitors. On the tables were begonia plants grown from our seed of which many were rare and unusual. Mr. Rudolph Ziesenhenné, begonia specialist of Santa Barbara whose ambition it is to grow every begonia found in the world, honored us by allowing us to display his wonderful new hybrids. These were the lovely plants shown at the Saturday night program. We had a steady stream of interested visitors and twenty-eight signed up for our coming cruise by contributing two dollars each, to the Seed Fund.

Our Second Annual Meeting of Armchair Explorers was at one o'clock, short talks on various plant subjects made it an unusually interesting meeting and the one hour was far too short. Miss Flossie Kelly of the Parent Branch, Long Beach, told of the beginning of our Seed Fund in 1935, when her brother generously shared with other interested members the rare begonia seeds he received from India. In the back numbers of the Begonian, to January, 1935, one may read fine articles written by the late Clayton Kelly. You may borrow these back issues in bound form from your A.B.S. Librarian by paying the postage charges. Mrs. Marie Minter gave a report on our Armchair Explorers Correspondence Club which is proving very popular, especially with our members in the east. Mrs. Cheney demonstrated how she grows ferns from spores. Mrs. Louise

Scwerdtfefer of Santa Barbara, told how she starts tuberous begonia seeds in glass casserole dishes. Dr. Drummond gave another of his fine talks and demonstrations on planting seeds, told how to prevent damping off, etc. Next year we had better plan on more time for our program.

It might be well now to mix up soil for seed planting and to have a general greenhouse cleaning. Wash the unused flower pots and get all set for a busy time in the spring when those new seeds arrive and need to be planted.

WANTED: Someone to translate letters written in French.

Will those of you growing tropical plants of the aroid family, please write your Skipper, we may be able to work out something of interest to you.

Cheerio, until next month,

Your Skipper, Florence Carrell.

KEEP INFORMED

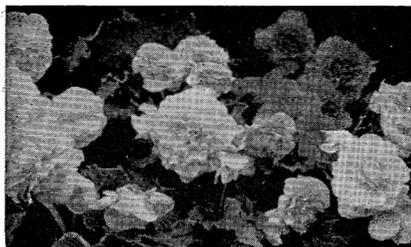
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BEGONIA PRONUNCIATIONS

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

Countess L. Erdoedy (còunt-ess L.
Ehr-dò eh-dee)

Sometimes spelled Erdody (Ehr-dò-dee).

crístàta (criss-tày-tah)

deliciòsa (del-iss-ee-òh-sah)

Dàvisii (dày-visee-eye)

decòra (dee-còr-ah)

diadèma (dia-dèem-ah)

dichótoma (di-kòh-toma)

dichròa (di-kròh-ah)

Digswilliàna (digs-willy-àne-ah)

Sometimes spelled Digswelliàna (digs-welly-àne-ah).

domingénsis (do-ming-éhn-sis)

Drègei (drèeg-eh-eye)

Drùryi (drèw-ee-eye)

echinosépala (ek-ino séh-pala)

Evansiàna (evan-see-àne-ah)

Fèastii (fèes-tee-eye)

fimbriàta (fim-bree-ày-tah)

foliòsa (fohlee-òh-sah)

Froèbelii (fro-èe-belee-eye)

frutèscens (frut-èss-sens)

fruticòsa (fruh-tih-còsa)

fuchsioides (few-sheeo-èye-des)

gigantèa (ji-gan-tèe-ah)

glaucophýlla (glah-co-fil-ah)

goegoénsis (go-go-éhn-sis)

grácilis (grá-sil-iss)

Haageàna (hagee-àne-ah)

heracleifolia (her-aklee-if-òhl-eeah)

hiemàlis (hee-mày-liss)

hirtèlla (her-tèll-ah)

Houghtonii (hòw-tonèe-eye)

See the September 1948 issue of the *Begonian* for additional begonia pronunciations.

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SOME OF SYLVIA'S 'MUST HAVES'

People starting a begonia collection often ask what I would consider a 'must have,' for a beginner. This is a problem that must be considered by the individual collector. All begonia collections will vary as persons and personalities vary. One must first take into consideration where they are to grow these plants. Some begonias require more sun than others, some want higher humidity, etc. One collector will be growing his collection in a mild climate, while another will grow his in a glasshouse and there is the large group of collectors growing their plants in their homes, as house plants.

There are many types of begonias, as there are many types of people and tastes.

My first choice would be varieties of easy culture and I hope will give beginners a few suggestions. Of the tall types: *Begonia lucerna*, because of its large flower clusters, *B. templini* for its beautiful blotched foliage and airy pink flowers in winter, *B. metallica* for its metallic lusterous foliage and buds like pink chenille. Intermediate types: *B. preussen* for its autumn colored foliage and large clusters of pink flowers ten months of the year, *B. catalina* (improved *digswelliana*) because it will take abuse and still bloom constantly. Rhizomatous: *B. riciniifolia* for the large leaves and tall spikes of airy pink flowers, *B. Sunderbruchi*, for its unusually dark star leaves.

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IT HAS BEEN SAID . . .

Thorough deep watering in summer is much more effective and economical than sprinkling. In sprinkling much water is lost by evaporation, we also encourage the shallow rooting of plants. This does not mean we should not spray our plants to increase humidity or does it mean we should not keep the soil surface moist for shallow rooted plants, as begonias, ferns, etc.

ROTENONE is safe to use on any plant, vegetable or flower. Do not use it on lilies in a fish pond, as you may kill the fish.

Chicken manure contains so much more nitrogen than other fertilizers, it should be used sparingly. It is best mixed with shredded peat moss and then applied.

When the fertilizer packages say 5-10-5 it means there are five parts nitrogen, ten parts phosphorous and five parts potash. These are the food elements used in the largest amounts, by plants.

In the growing of seed in flats, pans or boxes, damping off is best prevented by pouring several gallons of boiling water over the soil of each flat. Then wait until partly dry before planting seed. This kills most of the damping off fungi.

The stamens of the male flower of the double flowered tuberous begonias have turned to petals, so there are no remaining stamens for pollinating. Stamens can be encouraged to form near the close of the season, by prematurely drying off the plant.

If soils containing large amounts of clay are worked when too wet, the finer and smaller particles of soil become wedged between the coarser ones. This is sometimes called puddling. We drive out the air and water. When this puddled soil becomes dry it is very hard. Freezing and thawing in winter tends to correct this condition. Do not work gumbo or adobe soil when wet.

The pH is the name of a scale first used and described by a man named Sorensen. It is used to describe the degree of acidity or alkalinity. In the scale, 14 is most alkaline and 7 is neutral, while 1 is the most acid. In the past soils were said to be sour (for acid) and sweet (for alkaline). These terms are relative, they do not tell us how acid or how alkaline a soil.

Rex begonias will grow and have beautiful coloring in less light than most fibrous and tuberous begonias.

It is best to remove old and dead rex begonia leaves as they only harbor disease.

Remove all the dead stems from your fibrous begonias.

Copy of a letter of Congratulations to Mr. Dyckman from T. H. Everett, New York Botanical Garden.

August 3, 1948

Mr. Herbert P. Dyckman
American Begonia Society
Dear Mr. Dyckman,

For the longest time I have meant to drop you a line to congratulate you on the good work you have done with the American Begonia Society and then, when I saw your cheery face grinning at me from the April number of *The Begonian*, I was especially pleased and delighted. I read with great interest the biographical sketch of you, prepared by Mrs. Hixon: it is good to know that people interested in begonias appreciate the splendid work you have been doing.

With best personal regards to Mrs. Dyckman and yourself, and trusting it will not be too long before you make another trip to the east.

Very truly yours,
(Signed) T. H. Everett,
Horticulturist.

THE BOARD ENJOYS MILLER'S HOSPITALITY

The Miller's Rex Begonia Gardens were enjoyed again this year on August 29th. It was a typical August (hot) day, but under the lath and tree shaded garden area, the heat was forgotten. The attending Board Members of last years Board were anxious to see how the begonia, named after them, was growing and thriving. There were hundreds of full grown plants lining the many shelves and thousands of small plants in small pots or waiting to be potted. It was truly a magnificent sight to wander through this lovely garden.

The pot luck dinner was enjoyed by more than sixty Board members, including the wives and husbands of the acting members. Mr. Miller showed colored slides in the evening, of many of his rex, while Mrs. Miller was the commentator. This trek to Whittier is a truly outstanding highlight of the year. Many thanks to the Millers!

COLORED SLIDE LIBRARY

I would like to thank L. E. Cristman, Mary McClure and the Whittier Branch for their contribution of slides. See the September issue of the *Begonian* for list of Slide Groups available. A fifth selection of miscellaneous Begonias is being assembled and will be available soon. May I thank all my friends for their fine spirit of cooperation, which made my work most pleasant.

Grace L. Bayer, Chairman.

HOW TUBEROUS BEGONIAS ARE GROWN IN TASMANIA

The San Francisco Branch at the July meeting, had a rare opportunity of entertaining a visitor from far away Tasmania. It was rather a pleasant surprise to learn that Tuberous Begonias arouse as much enthusiasm "down under" as they do here in California.

Mr. J. Eric Cuthbertson has over seven hundred plants in his garden in Hobart, Tasmania. The tubers are imported from England and cost from ten to twenty-five dollars each. Naturally, they are treated with great care. The method of raising Tuberhybrida is rather different from that employed here. Mr. Cuthbertson told us that at the beginning of the season he plants the tubers in a small pot containing equal quantities of peat, coarse sand and compost. When the shoots reach the height of about four inches, he transplants them into a larger pot using equal quantities of sand and compost. Later he transfers them into a still larger pot with a higher percentage of compost. Finally, the plants are placed in eight to ten inch pots filled with compost only.

The laterals and side blooms are being constantly removed so that the plant finally consists of a single stalk sometimes attaining the height of five feet, bearing a large single flower of eight to ten inches in diameter. The purpose of this method, according to Mr. Cuthbertson, is to allow the plant to concentrate its entire energy in producing a single strong, tall stalk with as large a bloom as possible. The stalks are staked and the blooms must be supported with wires.

Mr. Cuthbertson feeds his plants with "soup" (liquid cow manure, as we call it here) about every week. The quantity depends upon the size and strength of the plant as there is always the danger of overfeeding.

The compost is made of stable manure, leaves and fern roots. It is kept in a pile which is turned over once a month. This mixture is evidently of a high nutritious value as it contains a large percentage of nitrogen compounds in organic form.

The eminent Tasmanian was very much surprised to see at Frank Reinelt's, Tuberhybrida with many laterals, bearing several blooms often exceeding in size his single flowers atop tall stalks. He said he had corresponded with Mr. Reinelt for many years and in fact, purchased some tubers from him before the war.

Mr. Cuthbertson just completed an extended tour of the United States having visited every important city.

He said that he is returning home having seen and learned during his sojourn in our country, many new and interesting things. His informative and interesting talk was interspersed with humorous anecdotes and tales.

BEGONIA HISTORY

Prior to 160 years ago Begonias grew only as wild plants in their native tropical habitat. When they were discovered, brought to civilization and classified botanically they were found to be only distantly related to other living plants. They were grouped in a new family—Begoniaceae—honoring M. Megon, a French patron of botany.

The first Begonia to be introduced into Great Britain, in 1777, came from Jamaica and is still grown commercially as *nitida* meaning shining leaves. Other early introductions were: *humilis* from the West Indies (1788) and *macrofolia* from Jamaica (1793). Early in 1800 many more fibrous types came from Brazil and two from the Cape of Good Hope. (*dregei* and *diptera*). The originals of the *semper-florens* groups came from Brazil in 1828.

As botanists and plant-explorers penetrated unexplored tropical countries other new species were added, until 350 natives are known, half of which have horticultural value. As late as 1908 China gave us a new species—*cathayana*. Around 1860 two entirely new types were found, the Rex (1857) in Assam, India, in the Himalaya Mountains and on the east side of the Andes, several tuberous varieties. In Natal South Africa was found another tuberous, *sutherlandii*. Later from the island of Socotra in the Indian Ocean, came a winter-blooming semi-tuberous or bulbous one, *socotrana*.

Hybridizers early began working with these native species and have developed the hundreds of improved garden varieties we now have in the four groups, fibrous, tuberous, semi-tuberous and rex. A request reprint from the *Begonian*.

In appreciation of his interest in Tuberhybrida, his captivating humor and his fine fellowship, Mr. Cuthbertson was made an honorary member of the San Francisco Branch of the American Begonia Society. We are indebted to our prominent member, Mrs. Sidney Stein Rich, for bringing such an interesting and versatile person to our meeting.

The second feature of the evening was a brief talk by Arthur Navlet on the use of Vermiculite as a propagating medium. He also showed numerous colored slides of New England landscapes in the fall. The richness and variety of the autumn colors aroused a desire to visit this part of our country.

It was a lucky coincidence that at this meeting we entertained, as our guests, the members of the San Francisco Branch of the American Fuchsia Society. Thus, our eminent visitor enjoyed a very large and appreciative audience.

Lillian Asbe, Secretary.

IN MEMORIAM

ROBERT E. LEE

All members of San Diego Branch were greatly saddened by the passing of our beloved Past President, Robert E. Lee, August 18th.

A friend to all and a ready worker at all times, Mr. Lee's memory will be cherished by all who knew him. Born in Buftelo, Kentucky, February 8, 1880, he moved to San Diego about eight years ago, where he made a host of friends and was very active in many Flower Societies, always holding positions of importance. Our deepest sympathy goes to Mrs. Lee in her great loss.

HARRY B. FASMER

It is with sincere regret we announce the sudden death of Harry B. Fasmer of the Inglewood Branch. He was a Past President, having served two years, and was Secretary at the time of his untimely passing. Our sincere condolences go to Mrs. Fasmer and family.

HARRY CARDOZA SLOAN

Born in Litchfield, Illinois and moved to Florida when a small boy. Came to California in 1920 and entered the real estate business in Balboa, later moving his home and office to Corona Del Mar. He became keenly interested in the Cardoza Gardens with Mrs. Sloan. He passed away Sept. 5th at the age of eighty-one. Our deepest sympathies are with Mrs. Sloan.

SACRAMENTO BRANCH: Members displayed many of their lovely begonias in the American Fuchsia Society Show. Arthur M. Larwick showed tuberous begonias imported from New Zealand, where he became interested in the flowers during his three years war-time service in the Navy. A birdbath-filled with cut blooms was the centerpiece of the shaded garden exhibit.

Mrs. A. E. Morrison.

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WESTERN RESERVE BRANCH: Has an interesting member, Dr. Bernard E. Miller, growing tuberous begonias in the Greater Cleveland Area, with the help of a very interested thirteen year old son. His yard has many trees, trimmed high to allow flickering sunlight to reach his bed of twelve hundred tuberous begonias. The sides of the yard are banked in with shrubs interplanted with fibrous rooted begonias and fuchsias. Dr. Miller is also growing wonderfully colored gloxinias and orchids from seed. Ventilating the greenhouse has proved quite a problem and shades must be dropped to mitigate the glare of the noon-day sun, and sometimes Dr. Miller has left his dentist office and driven home at noon just to take care of his plants.

Phil Meyer, President.

SAN GABRIEL VALLEY BRANCH: Held a very successful Begonia Show Aug. 14th and 15th with approximately three thousand plants on display and viewed by over six hundred visitors and one hundred and forty members. The grand prize was won by Mrs. A. N. (Gonda) Hartwell, First Prize for booth won by Mrs. Etta Morant, Second Prize for Booth won by Mr. and Mrs. George Johnson, Best Collection won by Mitchell Washburn, Best Rex won by Mrs. Bessie Trilot, Second Best won by James Daley. An Award of Merit went to Caro and Grace Krebbs of Orchid Manor for their gorgeous display of orchids and other tropical plants. Twenty-five ladies were made happy by gift orchid corsages donated by the Krebbs. Two hundred attended the pot luck dinner and our roster was enlarged with ten new members.

Clarence Johnston, Publicity Chairman.

INGLEWOOD BRANCH: Will hold a pot luck dinner at their next meeting, October 14th—6:30 p.m. at the Inglewood Woman's Clubhouse, 325 N. Hillcrest, Inglewood, Calif. Public invited.

LeRoy Frost, Pres.

THREE BULBS

Bulbs for Mild Climate Gardens and Potting
50 Ranunculus, Giant Tecolote Hybrids, \$1.00
50 Anemones, Tecolote Strain, mixed, \$1.00
25 Freesias, Rainbow Hybrids\$1.00

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Department B

PETALUMA BRANCH: Held a pot luck dinner in celebration of Founders Month, with their tables decorated with tuberous blooms from the gardens of Mrs. Lillian Bradbury. Over a hundred members and guests attended enjoying the dinner and the blossoms, and the blossoms were sent to a local hospital after dinner as a gesture for Founders Month. Mrs. Martha Phillips, well known gardening authority and a charter member of Petaluma Branch, told her story of England several years ago when attending the spring sessions of lectures at both the Royal Horticultural and Kew Gardens in London. Colored slides of many beautiful formal, rock and cottage gardens were shown, to illustrate her talk. A novel idea was enacted by having the officers, directors and committee chairmen serve the dinner and clear the tables.

Mrs. Cuma D. Wakefield, Secretary.

FOOTHILL BRANCH: Would like to invite one and all to their November meeting which will be quite different. Country Store in a Poke. Anyone attending is invited to bring something to sell, in a poke (paper bag), with a string tied around the top so the contents will only be known by the donor. Sounds like a lot of fun and every one is asked to save the date, November 5th, and come to the regular meeting place.

Mrs. Bertha Whisler, Publicity Chairman.

RIVERSIDE BRANCH: Held their August meeting in the patio of Mr. and Mrs. John Prater. The hosts are new members and have an interesting garden, with Mrs. Prater specializing in begonias and rare shade plants, while Mr. Prater has large glass houses with hundreds of small orchids. Forty members and guests enjoyed a delicious pot-luck supper. Mrs. Sylvia Leatherman was guest speaker and she talked on ferns and other shade loving plants. The September meeting was held in the patio of Mr. and Mrs. A. J. Bazil. Our host dressed up in a perky chef's cap and apron and grilled hamburgers for the more than forty attending members and guests. Mr. Terrell, our Director of Information, showed colored slides of Alpine Shade plants. These meetings held during the summer under the stars, has created a very friendly feeling and has helped enroll new members.

(Mrs.) William Purcell Gall, Pres.

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CONDENSED minutes meeting National Board held in Room 55, City Hall, Los Angeles, Calif. Aug. 23rd, 1948. Meeting called to order at 8 p.m.

Salute to the Flag and Declaration of aims and purposes of the Society led by President.

On motion by Mrs. Korts, seconded by Mr. Walton, reading of minutes of meeting July 26th dispensed with as minutes in condensed form had been previously published in the Begonian.

Reports of Treasurer, Advertising Chairman, Membership Fees, Librarian and Editor read and on motion reports accepted as read and made part of the minutes.

Reports from Public Relations Director, Mrs. Louise Schwerdtfeger and the Colored Slide Library and Speakers Bureau Chairman, Mrs. Grace Bayer and Miss Charlotte Hoak on Fibrous, Mrs. Jay C. Jenks on Publicity and Mrs. Rose Hixon, Historian.

See Branch news for Branch activities reported at the meeting.

Bills read and ordered paid by the Treasurer. On motion Treasurer ordered to pay the regular monthly bills up to Sept. 1st, the end of the annual year.

President announced that as outlined in the June 1948 BEGONIAN, under the caption of "The American Begonia Society Committee on awards" she had four appointments to make—

Alice M. Clark for the San Diego Territory; Emma M. Carlton for the San Francisco and Berkeley territory; H. P. Dyckman for the Long Beach territory and Louis J. Kuester for the New York territory.

These Directors will select two members in their territory to serve on the Committee with them. Gracious letters of acceptance from the above four committeemen are on file with the Secretary.

Committee on membership cards reported: "We the Committee to look into the matter of changing the membership cards, agreed to let it stand just as it is for the present as any changes seemed unnecessary at the present time." Secretary instructed to write Mr. Owen of the San Diego branch and convey this information.

Editor called attention to the contest started last February and now ended and asked for an expression of the Board as to the nature of the Winner's prizes.

Pest Control Bulletin up for discussion and at the conclusion of expression of opinions, Mr. Brown offered the following motion: I move that the Committee go ahead and finish the Pest Control Bulletin at their own discretion." CARRIED.

Mr. Bozon moved a paragraph be inserted in every issue of the Begonian urging members to patronize our advertisers and to tell the advertiser of seeing their ads in the Begonian.

President appointed Col. Gale (chairman), Capt. Dere and Mr. Bailey as a committee to work out all features of the membership cards, the mailing of the Begonian, number of Begonians to print and all such matters. APPROVED.

Brief talks by the candidates.

President urged each Branch to have reports for the Annual meeting.

President called attention to the pot luck dinner at the Miller Gardens, Whittier on Aug. 29th. See you at the Annual Meeting.

Respectfully submitted,

GONDA HARTWELL, Sec.

Bessie Buxton's book, "Begonias and How to Grow Them" and Helen K. Krauss' book, "Begonias for American Homes and Gardens" may be purchased from the Librarian.

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"CHECKERBOARD" and "MISSION BELL"
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Branch Meeting Dates and Places

BARTON, DOROTHY PIERSON BRANCH

Regular meetings, Quarterly, 1st Fridays
Flint, Michigan, Nov. 5th.
Mrs. S. V. Clark, Sec.,
1919 Zimmerman St., Flint 3, Mich.

BELLFLOWER BRANCH

1st Monday, Oct. 4, 7:30 p.m.
I.O.O.F. Hall, Ardmore and Palm Sts.
Mrs. Margaret Hanson, Sec.
9652 E. Center Street, Bellflower, Calif.

EAST BAY BRANCH

3rd Thursday, Oct. 21, 7:30 p.m.
Willard School, Ward Street
Mrs. E. Carlson, Sec.-Treas.

EL MONTE COMMUNITY BRANCH

3rd Thursday, Oct. 21, 4 p.m.
Columbia Grammar School, Rm. 64
Mrs. Mary Bradley, Cor. Sec.
701 Asher St., El Monte, Calif.

FOOTHILL BRANCH

1st Friday, Oct. 1, 6:30 p.m.
Pot-Luck, San Dimas Park
Mrs. Phyllis Heth, Secretary
228 Bonita Ave., Azusa, Calif.

GLENDALE BRANCH

4th Tuesday, Oct. 26, 8 p.m.
Glendale Library Bldg.
319 East Howard St., Glendale, Calif.
Mrs. Joyce Lorenz, Secretary
5227 El Rio Ave., Los Angeles 41, Calif.

GRAY, EVA KENWORTHY BRANCH

3rd Monday, Oct. 18,
Community House, LaJolla
Tillie Center, Sec.-Treas.
7356 Eads St., LaJolla, Calif.

GRUENBAUM, MARGARET BRANCH

Mrs. W. E. Jones, Sec., Willow Grove, Pa.

HOLLYWOOD BRANCH

2nd Thursday, Oct. 14, 7:30 p.m.
Plummer Park, 7377 Santa Monica Blvd.
Mrs. Edith Pedgrift, Rec.-Sec.
6551 Fountain Ave., Hollywood 28.

HUB CITY BRANCH

3rd Monday, Oct. 18, 7:30 p.m.
Roosevelt Hi Sch. Cafe., 1200 E. Olive, Compton
Mrs. Eloise Scheller, Sec.-Treas.
3586 Imperial, Lynwood, Calif.

HUMBOLDT COUNTY BRANCH

2nd Monday, Oct. 11, 8 p.m.
Lanes Memorial Hall, 1st Christian Church
Miss Margaret Smith,
P. O. Box 635, Ferndale, Calif.

INGLEWOOD BRANCH

2nd Thursday, Oct. 14, 8 p.m.
325 No. Hillcrest, Inglewood, Calif.
Harry B. Fasmer, Secretary
5129 So. Manhattan, Los Angeles 43, Calif.

LA MESA BRANCH

2nd Monday, Oct. 11, 8 p.m.
La Mesa Grammar School, La Mesa, Calif.
Mrs. Edna F. Barker

LONG BEACH PARENT CHAPTER

3rd Tuesday, Oct. 19, 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, Oct. 26, 8 p.m.
Simpson Memorial Garden Center
Mrs. Elizabeth S. Hall, Sec.
2572 Trapp Ave., Miami 35, Fla.

MISSOURI BRANCH

4th Tuesday, Oct. 26, 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. Norman Hedley
71 Willard Terrace, Stamford, Conn.

NORTH LONG BEACH BRANCH

2nd Monday, Oct. 11, 7:30 p.m.
Houghton Park Club House
Harding & Atlantic, No. Long Beach
Miss Evelyn Peterson
1414 E. 68th St., Long Beach, Calif.

ORANGE COUNTY BRANCH

1st Thursday, Oct. 7, 7:30 p.m.
Farm Bureau Hall, 353 So. Main St., Orange.
Sec.-Treas., Mrs. Ethelyn Morgan, 250 N. Center
Orange, Calif.

PASADENA BRANCH

1st Tuesday, Oct. 5, 7:30 p.m.
2031 E. Villa Street
Mrs. Frank Clark, Sec.-Treas.
2168 Cooley Place, Pasadena 7, Calif.

PETALUMA BRANCH

3rd Friday, Oct. 15, 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, Oct. 13, 8 p.m.
Mrs. Wm. Allen, Sec.-Treas.
7904 Magnolia Ave., Riverside, Calif.

ROBINSON, ALFRED D. BRANCH

4th Tuesday, Oct. 26, 8 p.m.
Loma Portal School

3341 Browning St., San Diego, Calif.
Mrs. Louise Gardner, Secretary
3212 James Street, San Diego 6, Calif.

SACRAMENTO BRANCH

3rd Tuesday, Oct. 19, 8 p.m.
Garden Center, McKinley Park
Mrs. A. Boyd Collier, Secy.
2777 Harkness Way, Sacramento, Calif.

SAN DIEGO BRANCH

4th Monday, Oct. 25
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, Oct. 11, 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, Oct. 6, 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, Oct. 27, 8 p.m.
Masonic Temple, 506 S. Santa Anita Ave.
Mrs. Myrtle Jones, Secretary
132 May Ave., Monrovia, Calif.

SANTA BARBARA BRANCH

2nd Thursday, Oct. 14, 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, Oct. 13, 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, Oct. 28, 6:30 p.m.
Steckel Park
Margaret Richardson, Rt. 2, Box 242A
Santa Paula, California

SHEPHERD, THEODOSIA BURR BRANCH

1st Tuesday, Oct. 5, 7:30 p.m.
Alice Bartlett C. H., 902 E. Main, Ventura, Calif.
Miss Carolyn Peyton, Secretary
335A So. Evergreen Dr., Ventura, Calif.

SO. ALAMEDA CO. BRANCH

3rd Thursday, Oct. 21, 8 p.m.
Scout Room, Markham School, Hayward, Calif.
Mrs. Dorothy Bayliss, Corr.-Sec.
26706 Monte Vista Dr., Hayward, Calif.

SOUTHGATE BRANCH

4th Tuesday, Oct. 26, 8 p.m.
Girls Scout Clubhouse, Southgate Park,
Mrs. Mary Casey, Sec'y-Treas.
4085 Tweedy Blvd., Southgate, Calif.

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WESTERN RESERVE BRANCH, CLEVELAND, O.
 4th Wednesday, Bimonthly, Oct. 27, 8 p.m.
 Garden Center, 10013 Detroit St., Cleveland, O.
 Mrs. Fred McCune, Secy., 1470 Waterbury Rd.
 Lakewood, Ohio

WHITTIER BRANCH
 4th Tuesday, Oct. 26, 8 p.m.
 Union High School, Room 19
 Lindley Ave. Entrance, Whittier, Calif.
 Mrs. Isamae M. Capell, Sec.
 445 N. Comstock Ave., Whittier, Calif.

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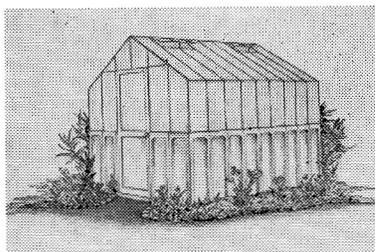
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