# The Segonian <br> DEVOTED TO THE SHELTERED GARDENS 



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The ßegonian
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This Society shall be conducted on a nonprofit basis, and its purpose shall be to stimulate interest in begonias and shadeloving plants; to encourage the introduction and development of new types of begonias and related plants; to gather and publish information in regard to the kinds, propagation and culture of begonias and other shade-loving plants, and to issue a bulletin which shall be mailed to all members in good standing.

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Tuberous begonias: r. picotee or variegated, 2. typical lloydi or hanging basket variety combined with other forms of tuberous against tropical setting, 3. Bauman introduction, double crested. Bauman also developed the inverted picotee.

# It's Fun to Grow Tuberous Begonias 

By Jack Bauman, Palos Verdes Begonia Farm

To all of us who enjoy our garden and its everchanging beauty, the approach of February and March over the calendar horizon signifies the approach of another colorful cycle. Visions of lush growth and multitudes of gorgeous flowers, resembling camellias, carnations, and rosebuds begin to tingle the imagination. Yes, the tuberous begonia, with its potential summer and fall beauty, is ready to begin its Spring growth. During February and March, the begonia tubers are available. It is important that you select from good stock; to be assured of choice plants and blossoms. The tubers can be had in small, medium, and large sizes. Select from good stock, and all three sizes produce fine results. The large size tubers, however, will develop into larger plants and produce more flowers. They should be planted in larger pots as specimens to be set around the patio or nestled in among other shade plants in your garden. The smaller tubers are used very successfully for a mass planting in a shade garden or planter boxes.

February and March are the most satisfactory months to start your begonia tubers. Place the tubers in open trays or flats and keep in a warm place. Moisten them occasionally until they first begin to sprout. It is better to keep them on the dry side rather than too wet. When the tubers have sprouted, place in flats of moist leaf-mold and peat moss. Give them plenty of room for good root growth and
plant them close to the surface. Allow them to grow until the sprouts are three to four inches high. They are then ready to be transplanted for the season into pots, boxes, baskets or in the ground. To produce large specimen plants, limit the tuber to one shoot, since the best flowers and growth will develop from one main stem. This does not apply to the hanging basket types. To do this use a razor blade and cut the shoots close to the tuber. Plant this cutting in sand and you will duplicate the parent plant. It will bloom and form a tuber the first year.

Before the plants become too crowded in the flats, transplant them into the open ground or pots, taking care not to disturb the root system. If you desire to grow them in pots, be sure to allow for good drainage by using gravel or broken pottery in the bottom of the pot. Then use a soil mixture consisting of two-thirds coarse leaf-mold and one-third sandy loam and if possible a small amount of well rotted manure. In the lower half of the container, stir into the soil-mix a small handful of fish meal. Cover with a small amount of leaf-mold, then plant the sprouted tuber so that the crown is level with the soil and about one inch down from the rim of the container. The tuber should not be covered. This planting procedure can apply to ground planting as well.

The size of your tubers will determine the size of your container. For tubers an inch and
one-half or larger in size, use eight to ten inch pots. For three-quarter to one inch tubers, six to seven inch pots are sufficient. Since tuberous begonias have shallow roots, unglazed fern-pans or unpainted redwood boxes are ideal to use. Glazed pots and painted boxes do not permit evaporation to keep roots cool and therefore are not as satisfactory. It is well to mention this at this time that during April and May, the seedling tuberous begonias are available and can be planted in the same manner as the sprouted tubers.

Throughout the growing season a regular feeding program is advisable. In addition to the use of fish meal at the time of planting, liquid fertilizers may be used as a subsequent feeding every three to four weeks. During the growing season a steady supply of moisture is required; but do not water to excess. Watering too heavily tends to pack the ground and causes a rotting condition on the stems and roots, and premature dropping of the blooms.

The wide color range of tuberous begonias makes them the most outstanding of all summer shade flowers. As green foliage background of aralias, ferns and philodendrons, help form that semi-tropical backdrop which make the begonias a highlight of color as they bloom on into late fall.

To enjoy a full season of outstanding blooms and luxuriant growth unsurpassed; just remember sIX important rules of thumb:
I. PROPER SELECTION OF QUALITY STOCK.
2. KEEP TUBER SWARM AND LIGHT UNTIL SPROUTED.
3. DO NOT BURY TUBERS TOO DEEP BENEATH SOIL.
4. HAVE LIGHT HUMUS SOIL AND GOOD DRAINAGE.
5. GROW IN FAIRLY PROTECTED SPOT IN GARDEN.
6. ALLOW PLANTS GRADUALLY AND THOROUGHLY TO DIE BACK AT END OF SEASON TO PRESERVE TUBER.
Ed.: Jack Bauman, who received the Gordon Baker Lloyd Trophy for the best seedling begonia exhibited and a Begonias of Distinction certificate for his new tuberous begonia seedling displayed at the 1956 A.B.S. Convention Flower Show, has given us the foregoing method for successful tuberous begonia culture. He advises growers of tuberous begonias to check the colors and names of those begonias they desire for ordering next year, while they still are blooming this fall. Follow rule six to the letter. Plant tuberous begonia seed next month.

## U.C. Soil Mix

Growing is not luck, according to Phillip Chandler, outstanding horticulturist formerly of Kew Gardens and now professor at U.C.L.A., it is just common sense. The modern trends in the horticultural field deal not only with the professional plant grower, but also the hobbyist. We must always go forward. We must set a good standard of growing and give care to growing plants which are not difficult to grow now.

Anywhere we can use an artificial soil mix in containers, pots, patios and planters. The medium must support the plants and be stable both physically and chemically. The medium must supply adequate moisture and nutrients or plant foods. Select the medium which is readily available and of a uniform grade at all times and good results can be duplicated year after year.

Loams are a mixture of sand and clay, and in Southern California there is very little top soil. Soil is biologically a living thing. Fine sand which is wind blown (not beach, but coastal) or from the Chandler pits may be used. Silt which is very fine sand in grade may be obtained from gravel washings at the pit. Check sand by shaking in a quart jar with water-should get a high percentage of fine sand, not heavy clay particles on the top -have less than is per cent clay.

The use of peat moss is recommended instead of leaf mold because the leaf mold is just dried leaves which are high in salts as we have had no good rains; and their removal is not only costly (two times the price of peat moss), but also a poor conservation practice. Fir bark is a possibility for good growing as well as rice hulls, raisin hulls or spent hops. Compost is not standard as it contains living organisms. The medium should be able to be treated through the use of chemicals instead of steam. Vapam, and ethyl bromide sterilizes the mixture killing weeds, worms and fungus, but the user must follow the directions.

This u.c. medium is easy to mix and saves hours of back breaking jobs. There is not the storage time and space required of other mixes. All soil mixes should be freshly made up and used, not stored, as decomposition takes place rapidly and the mixture is not the same a week or month from now. Ladies will love it because there are no cuts or sores and dirt under the nails and the hands are not left stained or dirty. The expense of it is low
because fine sand is cheaper since it can be removed by power tools while leaf mold is dug by hand. The trace elements are basically there in the mix and need not be worried about unless for some reason the plants are not growing well. There is more danger of getting too many trace elements which may act as a poison.

There are two sources of fertilizers-organic and inorganic. In organic, there are hoof and horn, dried blood and urea formaldehyde. This form of urea gives 38 per cent nitrogen and breaks down slowly, lasting from 9 to 12 months. Fish meal may be variable. Ammonium sulfate may be used in liquid form. Potassium nitrate puts nitrogen in the mix right away. Fertilizer should be put in the seedling soil as starved seedlings in the young stage never recover. Superphosphate provides all the phosphate needs, also can use muriate of potash or sulfate of potash. The begonia growers may throw up their hands at the suggestion to use calcium or lime, saying it will bring up the pH . Dolomite lime also supplies magnesium. Calcium carbonate, oyster shell or gypsum in very highly alkaline soil, may be used. Bone meal supplies a small amount of phosphates at a high price.

The mix uses a definite weight and measure, not a shovel of this or a spoon of that. A Washington State apple box is a bushel.

To I bushel Mix- $50 \%$ peat, $50 \%$ fine sand-add:

2 oz . hoof and horn or dried blood or I oz. Uramite
$21 / 2 \mathrm{oz}$. superphosphate
I or $3 / 4 \mathrm{oz}$. sulfate of potash
5 oz . dolomite lime
This is for an all purpose mix.
For variations to give a slower growing medium, use only r oz. hoof and horn or leave out entirely. For begonias use $1 / 3$ fine sand, $1 / 3$ peat and $1 / 3$ firbark, with superphosphate and lime. For lush growth, double hoof and horn only on a vigorous plant.

The nitrogen from the dried blood or hoof and horn is available from 2 to 4 months before feeding is necessary. To a $6^{\prime \prime}$ pot, after the 4 month period, use $1 / 2$ tsp. of the fertilizer for general feeding made up by weight of I part superphosphate and I part potash. After the six to nine months, use I tsp. to a $6^{\prime \prime}$ pot. Calcium nitrate is very soluble and may be used 1 oz. to 2 gallons of water for frequent every 2 week feeding.

Sanitation is a very important point in good growing. It is not what is growing on the top of the bench, but what is under the bench
-weeds, trash or dead plants-that is the measure of sanitation. Gardeners, inspect your greenhouse or lathhouse as a housewife inspects a home in which she is visiting. Take everything out of the growing houses and give a good cleanup. Using $5 \%$ formaldehyde, I to 8 parts water, water all over the benches and then close tightly for 48 hours. Clean out all plants and scour down the benches with Clorox or Cuprisol. Take clean cuttings and root in treated medium and put in treated soil mix. Perlite and Vermiculite are sterile mediums used for rooting. Sterilize pots and flats. hang hose up erom the floor. The hose lying on the floor picks up all diseases and then the water spreads it over all the plants. The green thumb can be the black thumb. Wash hands before handling plants, especially after handling a diseased plant so as not to spread the disease. Orchid growers pay fantastic prices for their plants-they are grown from seed in sterilized agar-and then they put them in any old unsterilized mix.

SAVE TIME AND MONEY AND HAVE NO DEAD PLANTS TO THROW AWAY. GET BETTER PLANTS EVERY TIME BY USING A SAFE, STANDARDIZED SOIL MIXTURE.

In presenting this talk to the Inglewood Branch as reported by your editor, Mr. Chandler showed by colored slides the effects of smog on plants. To overcome smog effects, tests have been made in tight greenhouses fitted with coolers with carbon filters and temperature controls and it has been found that the air passing over carbon filters had the smog removed and there was no plant damage.

In closing he suggested that to have quality exhibits in shows, plans must be made a year ahead to grow quality specimen plants. Don't overpower the display with garden ornaments. Don't try to copy large spectacles, but keep simplicity of design.


BEGONIA GROWING TIP-Do not neglect your begonias at this time. The nights are a little chilly, but the days are DRY and HOT. Your plants will drop all the leaves if they get too dry. Keep them watered and protected from the dry winds if possible. This is a good time to put down cuttings for plants next spring.

## Edna Korts

bRANCHES AND MEMBERS-Send in copy immediately for your Christmas greetings, which you wish to appear in The Begonian.

# Bulbs for the Shade Garden 

By J. N. Giridlian, Arcadia, Calif.



## The Naked Lady

One of the first bulbs brought to the West Coast was the pink "lily" that is seen all over Southern California during late summer, and is variously known as the "Naked Lily," "Naked Lady," Amaryllis belladonna (which was the botanical name for it until the botanist started working on the genus and made a mess of its nomenclature until now very few persons including the botanist are sure of its proper name), "Magi Lily," "Pink Amaryllis," Calodore rosea (another botanical name it went under for a while), and now, at least temporarily it is called Brunsvegia rosea. All of these various names attest to the popularity of the plant. It is at once the most loved and the most disliked flower of Southern California.

It is loved by all who do not have it in quantity, particularly our garden friends outside of California. It is disliked by the so called gardener who plants it with no thought of its growing and flowering habit, and then complains that it looks naked when in bloom, having no green foliage. Also the fact that once it has become established it increases beyond all expectations and the garden becomes overrun with it. But for my money, when well
used, it is one of the lovliest of summer flowers, and our Eastern friends who visit us when it is in flower certainly fall in love with it.

There are three varieties to be seen in and around Los Angeles County. The earliest to bloom is a solid pink turning deeper as the flowers age, is Brunsvegia rosea var. purpurea major, and more commonly known as Amaryllis belladonna major. This starts to bloom about the first week in July and continues for a month. The name "purpurea" does not mean that the flower is purple, but refers to the purple colored flower stem. It is the most common, the most prolific and the easiest one to grow of the three. A well established clump will throw a dozen or more stems, each bearing an umbel of six large flowers on a two foot stem, and making a stunning effect in the garden.

The next variety in terms of popularity is the one called Amaryllis belladonna minor or Brunsvegia rosea pallida. This blooms about a month later and is smaller in all its parts, the stem eighteen inches high, and the flower a much lighter pink. This is more common in the San Francisco area. The third variety is Brunsvegia rosea, rosea. It has large flowers of pure white lined around edges of the segments with very deep pink. This is to be seen in bloom along with the Minor but very infrequently, and is distributed all along the West Coast.

These bulbs are natives to South Africa, where there is another related bulb which was always known as Brunsvegia. The former varieties were crossed with the true Brunsvegia and many fine selected forms were named, and distributed by growers in Australia and Holland, and imported into this country by several of the horticulturists many years ago. Because of the fact that it takes a long time to work up a stock, these are still scarce, and consequently more expensive than the commoner varieties, but so far as beauty of color and form is concerned, these new mULTIFLORA type are far superior to the older ones. In fact, as soon as stock becomes plentiful the former kinds will be discarded. Among the Multiflora are pure whites, creamy whites, whites and pinks with yellow, apricot or orange throats, pinks from the lightest blush to deep garnet, and all variations imaginable.

Soon after I imported the new hybrids from

Australia in 1933, I crossed them back to the Belladonna major. From this cross I have obtained such a wide range of colors, forms and sizes that it was truly marvelous. Of the several thousand seedlings I raised, hardly any two were alike. However; one feature stands out over all others-in the original wild species all the flowers point to one side, generally towards the sun. This is a disadvantage from a landscape point of view because if they are planted on the wrong situation the backs of the flowers only might be seen. In the new hybrids the flowers open out in a full circle and may be viewed from any angle. Also there is an extention of the blooming season among the seedlings. Some start in late June while others do not bloom until middle of October.

Some of the named varieties of the Multiflora are Alba, yellowish white with orange throat; Hathor, a pure white; Rubra, a ruby pink; and Parkeri, a deep pink with yellow and white throat.

Soon after the plant is through blooming the seeds are ripened. Like the seeds of Crinum moorei we discussed last month, these seeds are fruity and full of sap, but are very much smaller, and very smooth and shiny on the surface. A casual inspection of the seeds will show that they vary in color greatly, some being purple, other deep or light pink and still others white. It has been found that this staining of the seed indicates the color of the flower it will produce. The white seed will produce white flowers, the pink will develop various shades of pink flowers according to the depth of color, and the purple ones will develop into very deep garnet tones. This is a rather unique feature which lightens the work of the plant breeder greatly, because if he is working towards white flowers he need not select any seeds but the colorless ones to grow on, etc.

Now as to culture, Brunsvegia is not very particular as to kind of soil it is planted in, so you need not prepare the ground before planting. Nor is it very particular as to the amount of light it receives so that you will have equally good success in the fullest sun and fairly dense shade. It naturally prefers high shade, but will do fairly well in close confinement. On the West Coast and in the South it should be planted with the neck of the bulb even with the surface of the ground. In the colder sections it must be planted deeper according to the degree of winter frost, but should not be planted permanently in the garden in the coldest parts of the country as it is only half hardy. Worst of all, it must
make its leaf growth in the winter time, so the only way to flower it is cold climates is to grow it under glass in the winter and plant out in the spring.

The bulbs do best when left alone in the same location for a number of years. If disturbed and allowed to dry out, it may sulk for several seasons before starting to bloom again. One thing is important, it must be kept from becoming too dry even when dormant. It will do well in borders which are watered regularly throughout the year. A summer application of manure as a mulch will help greatly, but liquid fertilizers may be used if preferred.

Because this plant is leafless from about the first week in May until late in October, it will leave a bare, uninteresting spot in the garden if an area of border or bed is planted solidly with nothing but the Naked Lady. This condition may be remedied, and the garden made much more interesting by seeing to it that green foliage is supplied during the dormant season. This may be accomplished in several ways.

Plant an annual over the bed, preferably a low-growing variety, and one with light blue flowers. If it should flower at the same time with the bulbs, it will make a very lovely combination. I will not attempt to make any suggestions as you will readily think of something or select one from your favorite seed catalog.

Plant informally in the perennial flower bed. Here you can make a permanent effect, and the lovely and graceful bare stems sprouting through the perennials, even before it blooms, will give the border a unique personality. Chances are there will be no other perennials in flower when the Naked Lady is in bloom, so you will be using the foliage of the perennials after they have finished flowering to make a green groundcover for these tall pink flowers.

Plant among shrubbery. You will be surprised what an effect you will have when these stems grow through the desnse growth of the shrubbery, and push out to one side towards the light. It will look as though the shrubs themselves were in flower. Whichever method is used, it will be much better than planting them all by themselves. Try it and see.


DO YOUR CHRISTMAS SHOPPING THE BEgONIAN way. Send a subscription to The Begonian to your shade gardening friends. Seeds from the Clayton Kelly Seed Fund would make a most interesting and lasting gift.

# Scientific Hybridizing: Part 3 The Mechanics of Inberitance 

By Merle Nelson, Taxonomist

one-fourth dwarf. A diagram will show this more clearly.

| Parent | T | $\mathbf{t}$ |
| ---: | :--- | :--- |
|  | Tt | $\mathrm{tt\mid}$ |
| T | TT | Tt |

In the box there are two Tt's, one TT, and one tt. The ratio of tall to short progeny will then be three tall to one short.

All the germ cells of the tall parent carry the gene T and all those of the dwarf the gene t. Therefore when the two parents are crossed, the hybrid is Tt. Since a germ cell cannot carry both $T$ and $t$ at the same time (one or the other but not both), and since T and t germ cells will occur in equal numbers, the germ cells will be of two kinds, those carrying $T$ and those carrying $t$, and there will be equal numbers of each. Owing to the fact, it is entirely a matter of chance which pollen grain will fertilize any particular ovule, there will be four possibilities:

T ovule fertilized by T pollen gives plant TT T ovule fertilized by t pollen gives plant Tt $t$ ovule fertilized by $T$ pollen gives plant $\mathrm{T} T$ t ovule fertilized by t pollen gives plant tt
What is really done is to combine T and t ovules in every possible way with T and t pollen grains to get the results. The ratio is governed by nothing more than one of the laws of probability.

Sometimes genes are neither dominant nor recessive, but have equal effect upon each other. In other words, the hybrid progeny will be intermediate between the two. For example flower color will be used. The wild type homozygous for red flowers RR when crossed with the wild type homozygous for white flowers rr the first generation hybrids will be heterozygous for color, having the genes Rr and the flowers all will be pink. When the heterozygous Rr hybrid is self-pollinated, one can expect from the above a $1: 2: 1$ ratio (of above which gave the $3: 1$ hybrid)-one red, two pink, and one white.

| Parents | A | x |
| :---: | :---: | :---: |
|  | B |  |
| Hybrid | RR (red) | rr (white) |
| Hr (pink) |  |  |

The carrier of these controlling factors by the germ cells from one generation to another is called a gene. A chromosome being nothing more than a chain of genes. One gene may control flower color, another leaf shape, a third the time of flowering, (while others will govern stature, water and sun tolerance and the many other characteristics which go to make up the identity of the individual plant. A modest estimate is that there are between five and ten thousand genes controlling the development and inheritance of the average flowering plant. A characteristic may be controlled by a single gene or by a number of genes, some having large and others small effects upon the characteristic. An individual at every stage of its life depends upon the play and interplay of many thousands of these genes.

An individual is a double thing, part of its hereditable material coming from the maternal and part from the paternal parent. Genes usually occur in pairs, one being contributed by the female and the other by the male parent. In wild species the members of each pair of genes are usually identical, e.g. $\mathrm{AA}, \mathrm{BB}, \mathrm{CC}$, etc., however, at rare intervals a gene may change or mutate, and is represented by a small a, e.g. aa. By using the capital A for the wild type and the lower case a for the mutant, the relationship of the two genes is then retained. For example the gene controlling height in the wild type might be given the letter TT, a dwarf mutant gene tt; a hybrid would then be Tt. A plant having the genes TT would always be tall unless stunted by adverse growing conditions while an individual having the genes $t t$ would always be dwarf. The hybrid Tt would depend upon the effect of T upon $t$. In some cases the influence of T is so great that the hybrid Tt would be as tall as parent TT'. The gene T would then be said to be dominant over t ( t being recessive).

| Parent | A | $\mathbf{x}$ | B |
| :--- | :---: | :---: | :---: |
|  | tt |  | TT |
| Hybrid |  | Tt |  |

The hybrid Tt if self-pollinated could then give rise to progeny having the genes TT, tt , or Tt , and since TT and Tt are the same height three-fourths of the hybrids will be tall and

| Ovules | Pollen | Hybrid | Color |
| :---: | :---: | :---: | :---: |
| R | R | RR | red |
| R | r | Rr | pink |
| r | R | rR | pink |
| r | r | rr | white |

When more than one pair of genes is being considered in ratio, the picture becomes much less clear. If it will be recalled earlier in the paper, it was stated that each germ cell can carry only one gene of each pair. Therefore all the germ cells of an AABB parent will contain one A and B gene; similarly the other parent will have all $a b$ genes if homozygous for the two characters. Thus, when the two parents are crossed, the hybrid will be AaBb or heterozygous for the two characters and all the individuals will be similar in appearance. Since PAIRS OF GENES ARE INHERITED INDEPENDENTLY OF EACH OTHER, there will be four possible types of germ cells formed in equal numbers within the hybrid parent. They will be:

$$
\text { I } \mathrm{AB}: \text { I } \mathrm{Ab}: \text { I } \mathrm{aB}: \mathrm{I} \mathrm{ab}
$$

If the hybrid is self-pollinated, one may expect a ratio as follows:

| Pollen | AB | Ab | aB | ab |
| :---: | :---: | :---: | :---: | :---: |
| AB | AB | Ab | aB | ab |
|  | $A B$ | AB | AB | AB |
| Ab | AB | Ab | aB | ab |
|  | Ab | Ab | Ab | Ab |
| $a \mathrm{~B}$ | AB | Ab | aB | ab |
|  | aB | aB | aB | aB |
| ab | AB | Ab | aB | ab |
|  | ab | ab | ab | ab |

[^0]Out of a possible sixteen combinations nine combinations result. The number of different kinds of plants will depend upon the expression of the genes (dominant, recessive or incompletely dominant). If the hybrid individual is back-crossed to one of the parents the ratio will be different. By crossing the heterozygous hybrid AaBb with the homozygous hybrid $A A B B$, a 1 : 1 : I : I ratio will be found. The parent $A A B B$ will give only $A B$ germ cells while the heterozygous hybrid will give the $\mathrm{I} A B: x A b: r a B: r a b$ germ cells previously shown. The resultant progeny will be

| AB | AB | Ab | $a \mathrm{~B}$ | ab | $\begin{aligned} & \text { I } \mathrm{A} A B B \\ & \text { I } \mathrm{AABB} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AB | Ab | aB | ab |  |  |
|  | AB | $A B$ | AB | AB |  | B |

The phenotype ratio will depend upon the gene expression. By the use of the above

## Begonia Ricbard Robinson

It's always a pleasure to find someone who has the patience to grow Begonia "Richard Robinson" and to grow it well. (Cover: Plant grown and photographed by William Givens.) When this begonia, a B. "Macbethi" seedling, was introduced by A. D. Robinson in 1925, it was everybody's favorite. The low, compact growth with green and silver maple-like leaves is an outstanding specimen when in bloom. The plant which blooms in the winter resembles snow in the mountains under its blanket of white flowers. This begonia lost its popularity because it was difficult to grow.

Was it hard to grow? How many growers or hobbyists really try to find out what made its culture difficult? Gardeners love to collect plants, but when the plants don't react as they expect, they say the plants aren't any good. They treat all plants alike, never giving a thought that plants, like people, have individuality. If you would study and observe the plants you take home, I know you will have more pleasure from your begonias.

Begonia "Richard Robinson" likes rest when through blooming and becomes completely defoliated. Here is where the mistake in culture is made. We get all excited because we think we are going to lose the plant and start watering it when we should withhold the water or repot the plant when it should be left alone. Bill Givens told me he has it in bloom every winter.

Marie TURNER
checkerboard method, any number of gene combinations can be determined and the phenotypic expression. By the use of the phenotypic numbers the expression of the genes also can be determined.

It is important to notice that by self-pollinating the heterozygous individual, new types arise which are unlike the parent or grandparents. These new types are the result of recombination of the genes carried separately by the grandparents. Recombination also explains the reason for reversion or throwing back to an ancestral type. The dependence of one gene upon another for its expression or the interaction of genes upon each other may greatly alter the phenotypic expressions of the ratios. Due to its complexity the author feels it beyond the scope of this paper.

It will be seen from the above facts that the principles of inheritance are exact and orderly with characteristics being inherited from generation to generation according to very definite rules.

## Hugh Evans Suggests

Begonia "Richmondensis" was introduced to the United States public by distinguished horticulturist Hugh Evans of Evans and Reeves Nurseries in Los Angeles. It has been said that "he has forgotten more about horticulture than the average person will ever learn." Three years ago Major Pam of the Royal Horticultural Society of England sent Mr. Evans two small cuttings of $B$. "Richmondensis." One cutting died and the other was babied along until it grew into a sturdy fibrous begonia resembling B. "Digswelliana" in an enlarged image-the leaves much larger, darker glossy green and with much substance; heavier, larger, and darker rose flowers. The succulent stems of the plant are sturdier and brighter red than its original parent. When grown in a greenhouse, the plant becomes a lighter green with pale pink flowers. Under lath it is dark, glossy green with rose flowers; and in full sun the leaves become red and the flowers turn red. Under glass this begonia blooms every day of the year, but it needs pinching to keep it in shape. In every way it is far superior to our B. "Catalina" on the West Coast, which is synonomous to B. "Lady Waterlow" in the Eastern areas.

What plant but a bromelliad can you water in its natural funnel and go away for a month and then return to find it in as good a condition as when you left? These plants he recommends because they are extremely attractive for up to four months.

Other greenhouse plants suggested by Mr. Evans are: Ruttya fruiticosa found in the Mau Mau territory in Kenya Colony of East Africa is a consistent bloomer suitable for a warm sunny garden area or a greenhouse specimen. It is a sprawling evergreen shrub with most unusual yellow flowers. The two top petals of the flower which are fused resemble rabbit ears, while the other two petals are reflexed revealing a dark, rough throat which looks as if a splotch of tar had ben left there.

Clerodendron balfouri from tropical Africa and a member of Verbenaceae, is an ideal plant to climb on a small trellis in the greenhouse, where is may be found in bloom from Easter to October. It likes a rough potting soil. Lowering the night temperature to $55^{\circ}$ and withholding water gradually after the growth is completed will harden up the wood. About January, the night temperature may be raised to $65^{\circ}$, the plant watered well, fertilized or repotted as needed and new growths will break
out on the hardened wood. The flowers appearing at the end of the shoots have long white corolla tubes ending with a red cap which spreads into a five parted flower.

His son Bill made the cross of Pbilodendron speciosum and $P$. selloum which produced $P$. "Evansi" (the very large solid leaf with slightly cut flutted edge), a philodendron hybrid which is in such great demand.

Last, but not least, is his great love-orchid species. Through Mr. Evans' courtesy we carry excerpts from an orchid plant collector's letter:
"I returned last night (August 28) from a plant collecting trip. The collected plants of Oncidium macrantbum have been here in this warm Guayaquil climate too long. They are not dead, but they have lost practically all of their leaves. About a month ago I located a very fine oncidium. For the past five years I have known this oncidium had been found in Ecuador many years ago, and have had many inquiries about it, but in all of the sections that I have covered, I had never found any. A short time ago, I found a plant of this oncidium in bloom, and I can tell you it is one of the most beautiful orchids I have ever found. It really should have been in an orchid show, instead of wild in a tree. I looked the section over very well and found many more in bloom-all in all, between 300 and 350 large blooming sized plants. So it really is a scarce and very rare orchid.
"This plant that I am speaking about is the Oncidium serratum. From the information that I have been able to get, this Oncidium serratum is not on the market for sale by anyone else, in any country. In case you don't happen to know this oncidium, I shall describe it to you:

Oncidium serratum-This plant grows something like the Oncidium macrantbum in size, but the flower scapes grow much longer, and are branched the entire length of the scape. These plants also come from a little warmer and lower section than the Oncidium macranthum. I found many large plants with scapes up to 16 feet long, and with 18 to 20 branches, and with around 100 blooms to the scape. Also found plants with as many as four scapes of blooms. The blooms are around two inches across, and over three inches long. The entire bloom is a very dark red-brown. The sepals having a bright yellow edge, which is frilled. The petals having a deep fringe, which also is the same bright yellow. These blooms

# Houseplants---the Challenge 

By Glenn Hiatt, Orchid Research

The MOST desirable location, esthetically speaking, in the living room, den, or dining area, seems too often to be in a dark corner or in a planter some distance from a window. Most plants, large or small, used for foliage and color effects in the home have their origin in the tropical regions. This does not mean a dense, dark jungle dripping with moisture and devoid of air circulation. Rather, in many instances, the plants are epiphytic and are found quite high in the trees with only a sparse covering of leaves. In order to acclimatize these plants to our home conditions, several factors must be kept in mind.

Light can only be useful to plants if it shines directly on them through a window or from an artificial light source close to the foliage. A built-in planter as much as ten feet from a north window, for example, even if the glass is floor to ceiling, would not receive enough light for continued health of the plants and normal growth. Thus the only way to have healthy plants in the home, if too far from a proper light source, is to shift the plants from the low light to high light about one-half the time. In a planter, this may necessitate an extra plant as a "spare" to provide for the "plant changes."

Most planters of small size have no drainage and should be filled with very light, humus material such as any of the well known planter mixes that are compounded especially for this purpose. If a larger planter or separate container without drainage is used, leave the plants in the pots and completely fill around and over the pots with a coarse grade of Vermiculite. This material is inert and will not decompose when wet. It will absorb excess water within reason and evaporate the moisture from the surface. Besides holding the plants erect, affording an attractive color (gray), keeping plants from drying out quite as quickly as normal, being easy to pour into the planter,
are very showy, and these plants are very rare.
"I will collect the Oncidium serratum that are large and have bloomed before, when I go after the Oncidium macranthum in a couple of days, as they are not too far from the Oncidium macranthum section. If you are interested in oncidiums, I am sure you will like this one.
"Gborge M. Wagner"
and inexpensive to obtain, it is quite simple to take a plant from the planter and replace with another.

Many plants will tolerate a low light condition longer than others. This only means that instead of having to shift these plants every two weeks into a good light, they may remain for as long as six weeks before moving. Plants in this category are aglaonema (Chinese evergreen), foliage anthurium, spathiphyllum, Pbilodendron lacineatum, P. cordatum, sansevieria, bromeliads, saintpaulia (African violet), cypripedium orchids, some indoor dwarf palms, and some ferns. Plants requiring more light or more frequent shifting are most of the philodendrons, nephthytis, caladium, cattleya orchids, ficus (rubber plants), dieffenbachias, Aralia elegantissima, coleus, begonias (rex and fibrous), dracaenas, and peperomias.
There is a very strong tendency to water plants in the home too much at a time. If the planter has no drainage, this can be disastrous. All roots rot quickly with no aeration and the potting medium soon decomposes and becomes lifeless. It is much better to water more frequently but only enough at a time to moisten the material evenly over the surface. This moisture will seep down to the root zone and maintain proper air-moisture balance. When plants are shifted to a good light, they may be fed at that time with any well known liquid plant food. Don't ever feed a plant as long as it is in a dark area.

Leaves of plants become progressively smaller under too low light intensity. Also the space or length of stem between each succeeding leaf will stretch out longer and longer. The color of the leaves gradually will get a darker green and the stems may have difficulty holding the leaves erect. If this low light is coupled with too much water, large brown spots will form in the leaves causing eventual rotting. Also growth will stand still when roots begin to lose their function from overwatering.

The challenge is not great, in spite of the foregoing suggestions, to grow and have flourish a few plants about the house. The seemingly momentous task of shifting alone may take only a few minutes every two or three weeks. Let the "hovering" method of caring for plants be gone and sit back with the assurance that most plants don't require nearly as much care as we seem to insist on giving them.


## Begonia Iron Cross

AN ASIATIC, rhizomatous begonia of obscure origin (some say from China, others from India) is $B$. Iron Cross brought to England in 1952 by L. Maurice Mason. Is it a species or a hybrid? I have been told it does not set fertile seed. B. Iron Cross is distinctively marked on its apple-green puckered and pimpled leaf with chocolate brown which surrounds the four main veins in the form of the German Iron Cross, thus giving the begonia its name. This chocolate brown color of the cross darkens with leaf age. Each hair folicle is red and from it erupts a short red hair. The serrated margin of the leaf is red hairy. The prominent pale green veins of the underside of the leaf are surrounded with red. The plant propagates readily from leaves and is grown easily. Bedson describes it in his book, ${ }^{*}$ "Foliage like a giant imperialis." The general appearance of this begonia is that of coarseness. In Exotica, the new picture book of exotics just published by Julius Roehrs, it is shown with other unusual begonias, including B. paulensis.

## Oscar Green

*"Successful Begonia Culture," Fredrick J. Bedson. ED.: This book is in the A.B.S. Library.

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## AWARDS COMMITTEE

The following are members of the Awards Committee: Mrs. Ethel G. Arbuckle, chairman, 5932 Seville Ave., Huntington Park, Calif.; Mrs. Jean Kerlin, 3207 Perlita St., Los Angeles 39, Calif.; Mrs. Elsa Fort, 6123 Cedar Ave., Merchantville, N.J.; Mrs. Barbara Philip, 600 North Kellogg, Santa Barbara, Calif.; Mrs. C. W. Snodgrass, 265 North Walnut, Ventura, Calif.

## Primeval Propagation

Scientists believe that life started in the oceans, that water was the cradle from which all life evolved. If this is true it adds a curious emphasis to a new technique of plant propaga-tion-the controlled use of water, applied as a fine mist or fog to the plant materal during the process of rooting. Commercial growers and keen amateurs the world over report spectacular results.

In 1936 in the British West Indies, a Dr. Evans, concerned with the problems of propagating special cacao plants from which we get the cocoa bean, decided to try rooting the cuttings under mist. Though first results were inconclusive, he persevered and ultimately proved that mist greatly aided the rooting of certain cuttings. Since then research has shown what can and cannot be done with mist.

Early failures were traced to the use of constant mist which supplied far more water than is really necessary to keep plant material healthy and inflated. The green was leached from leaves and the cuttings died. Intermittent misting controlled by a simple percentage timer was the next step and worked much better. Finally, Harvey Templeton, a cotton farmer in Tennessee, produced a simple device which he calls the "electronic leaf," a thin strip of plastic with two carbon electrodes embedded in it. This may turn out to be the ultimate in accurate control of water in plant propagation. The "Leaf" is set in a bed of cuttings perhaps 3 or 4 feet away from the source of mist (water).

This sensing unit is connected to a simple electric circuit which operates through the film of water between the two electrodes. The water film completes the electric circuit which, working through a relay, closes an electric solenoid valve and shuts off the water. As sun and wind evaporate the water the film is broken. Immediately the circuit goes into action, opens the valve and applies water through the mist nozzles. Infinite variation of control is possible by the simple positioning of the 'leaf' in relation to the source of water. When the cuttings are first inserted, the 'leaf' is placed at its farthest point from the jet. As the cuttings root, it is moved closer and closer to the source of water, thus reducing both the frequency and quantity of mistings. When rooting is complete, the unit is disconnected, the cuttings shaded from direct sunlight by laths, and the hardening off process completed in a normal way.

Bert Slatter
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# American Begonia Society 

## I 956

Constitution and Bylaws

## CONSTITUTION

## ARTICLE I. NAME

Section 1. This organization shall be known as the American Begonia Society and shall be conducted on a non-profit basis. The main office of this Society shall be within the County of Los Angeles, California.

## ARTICLE II. PURPOSE

Section 1. The purpose of this Society shall be:

To stimulate and promote interest in begonias and other shade-loving plants;

To encourage the introduction and development of new types of these plants;

To standardize the nomenclature of begonias;

To gather and publish information in regard to kinds, propagation and culture of begonias and companion piants;

To issue a bulletin which will be mailed to all members of the Society; and

To bring into friendly contact all who love and grow begonias.

## ARTICLE III.. MEMBERSHIP

Section 1. All persons who are interested in begonias shall be eligible to membership, subject to the approval of the Board of Directors. The Board of Directors may revoke the membership of any member for just cause.

Section 2. There shall be three classes of membership in this Society, known as Annual, Life, and Honorary.

Annual Members. Annual members shall have all the usual privileges of membership, and shall pay dues of an amount stated in the Bylaws. Annual Membership shall be for one year from date dues are paid.

Life Members. Life members shall have all the usual privileges of membership. The payment of fifty dollars ( $\$ 50.00$ ) shall entitle any person to Life Membership and Life Members shall be exempt from any further nayment of dues. Life Memberships shall not be subject to cancellation or refund of any part of dues for any reason.

Honorary Members. Any person whom this Society shall deem worthy of the honor may at any Annual Meeting be elected an Honorary Member by a twothirds vote of the members present; and such election shall specify whether such Honorary Membership is Annual, terminating at the next Annual Meeting, or for life. For each person elected an Honorary Life Member, fifty dollars ( $\$ 50.00$ ) shall be transferred from the current funds of the Society to the Life Membership Fund. Honorary Members shall have all the usual privileges of membership and shall be exempt from the payment of dues.

Section 3. Each Annual, Life or Honorary Member shall be entitled to one vote
on all matters brought before the Society. Membership shall cover the immediate family, except that only one member of the family shall receive the official publication and exercise the right to vote, unless additional dues are paid.

## ARTICLE IV. OFFICERS

Section 1. The officers of this Society shall be: President Emeritus, President, President Elect, Past President, three Vice Presidents, Treasurer, Secretary, one Director from each Branch Society, and one Director for each Department of the Society.

Section 2. The President Emeritus shall be Herbert P. Dyckman, Founder and First President of this Society.

Section 3. The President Elect one Vice President, the Treasurer, and the Secretary shall be elected in August each year by ballot, each member of the Society being entitled to one vote. The President Elect shall serve one year as President Elect, one year as President, and one year as Past President; the Vice President shall serve for three years, the Treasurer and the Secretary shall serve one year. These officers shall be installed at the Annual Meeting.

Section 4. A Director shall be elected annually by each Branch Society and shall serve for one year.

Section 5. All remaining officers shall be Directors to serve as heads of departments, and shall be appointed annually by the President, subject to the approval by a majority vote of the above named elected officers.

Section 6. Any appointed officer may be relieved of his office for just cause, and/or for the good of the Society, by a majority vote of the Elective Members of the Board of Directors.

## ARTICLE V. BOARD OF DIRECTOTR'S

Section 1. The Board of Directors shall consist of the President Emeritus, the eight officers elected by the entire membership of the Society, the Branch Direc-tors-one elected by each Branch Societyand the Department heads appointed by the President.

## ARTICLE VI. MEETINGS

Section 1. There shall be an annual meeting of the Society at a time and place to be designated annually by the Board of Directors.

## ARTICLE VII. BRANCH SOCIETIES

Section 1. Any group of seven or more members of this society who wish to affiliate themselves to forward the work and purposes of the Society may be organized into a Branch Society, and upon approval of the Board of Directors shall be issued a Charter.

Section 2. The Charter of any Branch, upon approval of the majority of the Board of Directors, may be suspended, and after due hearing before said Board, upon action of a majority of the Board, may be withdrawn.

## A'RTICLE VIII. FUNDS

Section 1. The current funds of the Society shall be expended only upon order of the Board of Directors.

Section 2. Neither the Board of Directors, nor anyone delegated by them, nor any of the officers, shall incur any debt or liability in the name of the Society beyond the availalbe or maturing funds in the hands of the Treasurer, excluding money and securities held for a specific purpose.

Section 3. All monies received for Life Memberships shall be invested by the Treasurer as may be directed by the Board of Directors, and only the interest accrued therefrom shall be used for the current expenses of the Society.
Section 4. The fiscal year shall start on September first.

## ARTICLE IX. AMENDMENTS

Section 1. Amendments to this Constitution may be initiated by a two-thirds vote of the members present at any Annual Meeting. Such amendment shall then be submitted by mail to the membership
in accordance with Section 2 of this Article.

Section 2. The Membership Secretary shall mail a ballot covering the proposed Amendment to each member of the Society within thiry (30) days after the Annual Meeting at which the Amendment was initiated, with the request that the member vote upon said Amendment and mail his ballot to reach the Secretary within sixty (60) days after the Annual Meeting at which the Amendment was initiated. If two-thirds of the votes cast are in favor of its adoption, the Amendment shall be declared adopted at the next meeting of the Board of Directors, when published in the official publication of the Society.

## ARTICLE X. RULES OF ORDER

Section 1. Robert's Rules of Order shall govern the conduct of all meetings, and the decision of all questions not specifi-call- covered by this Constitution and Bylaws.

## ARTICLE XI. ADOPTION <br> OF CONSTITUTION AND BYLAWS

Section 1. This Constitution and Bylaws shall be subject to the same rules of adoption laid down in Article IX concerning Amendments, and upon adoption shall go into effect, superseding all former Constitutions and Bylaws, when published in the official publication of the Society.

## B Y L A W S

## ARTICLE I

## DUTIES OF ELECTED OFFICERS

Section 1. The President shall preside at all meetings of the Society and of the Board of Directors; shall appoint the heads of the various Departments; and shall have general supervision of the affairs of the Society.

Section 2. The President Elect shall perform the duties of the President in the absence of the latter, or whenever the President is unable to perform the duties of his office.
Section 3. The Past President shall be the Chairman of the Finance Committee. This committee shall consist of the Past President, Treasurer, and Business Manager, and shall submit an annual budget for the approval of the Board of Directors at the first meeting of the Board of Directors following the Annual Meeting of the Society. Any proposed expenditure in excess of $\$ 50.00$ shall be submitted to the Finance Committee for recommendation before being voted upon by the Board of Directors.
Section 4. The Vice Presidents, in the order of their seniority, shall perform the duties of the President in the absence of, or the disability of the President and the President Elect. The Vice Presidents may be assigned by the President the duties of one of the appointed officers outlined under Article II of these Bylaws.
Section 5. The Directors elected by each Branch shall attend the meetings of the Board of Directors of the American Begonia Society when possible, shall make such reports and recommendations as will further the interests of the Society, and shall file an annual written report of the Branch activities with the Secretary of the American Begonia Society at the last regular meeting of the Board of Directors prior to the Annual Meeting.

Section 6. The Treasurer shall receive and account for all monies of the Society and shall pay out the monies under the directions of the Board of Directors. He shall file bond in such surety company and in such sum as the Board of Directors may determine. He shall make, to the Board of Directors monthly, and to the Society annually, a report of all receipts and disbursements. The annual report made by the Treasurer shall be presented at the Annual Meeting of the Society and shall be accompanied by a report of audits made by an audit committee of two members appointed by the President.

Section 7. The Secretary shall keep the records of the proceedings of the Society and of the Board of Directors, shall conduct necessary correspondence, and shall have charge of the records of the Society, except such basic records as are necessary for the proper functioning of the various departments and offices. The Secretary shall condense the minutes of the regular Board meetings, and shall transmit them to the Editor for publication in The Begonian, not later than the first day of the month following the regular meeting of the Board of Directors.

## ARTICLE II. APPOINTED OFFICERS AND THEIR DUTIES

Section 1. The officers to be appointed by the President as Directors to serve as heads of Departments shall be as follows: Editor, Business Manager, Membership Secretary, Research Director, the Clayton M. Kelly Seed Fund Director, Nomenclature Director, Public Relations Director. Librarian, Chairman of the Speakers Bureau and Slide Library, Chairman of the Flower Show Committee, Historian, Chairman of the Committee of Awards, Chairman of the School for Judges, Parliamentarian, and such other heads of Depart-
ments as shall hereafter be established by the Board of Directors.

Section 2. The Editor shall have charge of the Publications Department and shall, under the direction of the Board of Directors, prepare and issue such publications as the Board of Directors and Society shall authorize and shall perform such other duties as the Board of Directors shall require of him. The Board of Directors shall determine his allowable expenses.

Section 3. The Business Manager shall act as business agent for the Board of Directors and for the Publications Department; shall act as advertising manager for the official publication and shall perform such other duties as the Board of Directors may require of him. The Board of Directors shall determine his allowable expenses, if any.

Section 4. The Membership Secretary shall receive all dues, which shall be deposited immediately with the Treasurer; keep an accurate roster of the membership of the Society; and have charge of the mailing and selling of back numbers of the official publication, less than one year old; and of the sale and distribution of all other special bulletins and directories. The Board of Directors shall determine his allowable expenses.

Section 5. The Research Director shall have charge of the Research Department; of arranging for the testing of begonias in test gardens in different locations throughout the country; and of collecting information relative to the culture, propagation and housing of begonias and companion plants.

Section 6. The Clayton M. Kelly Seed Fund Director shall have charge of the inportation of seed of new begonias and companion plants, and the distribution of the same to the membership. The Board of Directors shall determine his allowable expenses.

Section 7. The Nomenclature Director shall have charge of determining and establishing correct names of species and established varieties of begonias; of approving and registering all newly developed horticultural varieties of begonias; and shall cooperate with the Editor in the publication of the results of his work.

Section 8. The Public Relations Director shall have charge of the Public Relations Department; of contacting prospective members; promoting and assisting in the formation of new Branch Societies; and seeing that the affairs of the Society receive the fullest publicity.

Section 9. The Librarian shall establish and maintain a circulating library for the use of the officers and members of the Society; shall preserve three copies of all publications of the Society and shall have charge of the mailing and selling of all issues of the official monthly publications over 12 months old. The Board of Directors shall determine his allowable expenses.

Section 10. The Chairman of the Speakers Bureau and Slide Library shall provide lists of speakers and a slide library for the use of the Branches.

Section 11. The Chairman of the Flower Show Committee shall prepare show schedules and encourage begonia shows and the use of begonias in flower shows, and maintain a register of the American Begonia Society Trophies.

Section 12. The Historian shall maintain a complete history of the Society.

Section 13. The Chairman of the Com-
mittee of Awards shall be the representative of this Committee on the Board of Directors. The duties of this committee are outlined in Article $V$ of these Bylaws.

Section 14. The Chairman of the School for Judges shall have charge of the instruction and examination of potential Begonia Judges, and will accredit those qualifying, the names of whom shall be submitted to the Board of Directors with his regular monthly report.

Section 15. The Parliamentarian shall see that all proceedings of the meetings of the Society and the Board of Directors are conducted according to the Constitution and Bylaws of the Society and where a question is not specifically covered therein, Robert's Rules of Order is to be cited by him.

## ARTICLE III. BOARD OF IIRICNORS

Section 1. The Board of Directors shall be the administrative and executive body of this Society; shall transact all business of the Society between Annual Meetings; arrange for Annual Meetings and any special meetings; establish and appoint such special committees as may be necessary to promote the objectives of the Society; approve the establishment of Branch Societies and issue charters to them; and make such regulations as may be necessary for the good of this Society.

Section 2. The Board of Directors shall meet at least four times a year and/or monthly on call of the President, or in his absence by the President Elect, the time and place to be published in the official publication.

## ARTICLE IV.

## DEPARTMENTS AND COMMITIEES

Section 1. The activities of the Society shall be divided into Departments and Committees under the charge of officers elected or appointed for such department or committee.

Section 2. The Department Directors may recommend the appointment of such special officers, assistants, or specialists as may be necessary to properly conduct the affairs of their departments.

Section 3. Each Department Director shall make a report at the annual meeting and such other reports as may be required by the Board of Directors.

## ARTICLE V. COMMITTEE OF AWARDS

Section 1. The Committee of Awards shall consist of six members and the Nomenclature Director. Two members will be appointed yearly for a three year term by the President, subject to the approval of the Board of Directors. In the event of a vacancy it shall be filled by appointment by the President, subject to approval of the Board of Directors, for the balance of the unexpired term. The President shall appoint the Chairman of the Committee of Awards.

Section 2. The Committee of Awards shall study each year the system of ratings and awards and make its recommendations of general policy to the Board of Directors.

Section 3. The Committee of Awards shall receive and study carefully the reports of the judges and on the basis of this study shall make it recommendations to the Board of Directors.

Section 4. The Committee of Awards shall grant the awards of the American Begonia Society, including the Alfred D. Robinson Memorial Medal, the Eva Ken-
worthy Gray Award, and such other spe-cial awards as may be established and approved by the Board of Directors, subject to such regulations as the Board of Directors may adopt.

## ARTICLE VI. ANNUAL DUES

Section 1. The dues for annual members shall be two dollars and fifty cents ( $\$ 2.50$ ) payable in advance. Members in arrears thirty days shall be dropped from the rolls of the Society and their names removed from the mailing list of the official publication until the arrearage has been paid.

## ARTICLE VII. ELECTIONS

Section 1. The President shall appoint, not later than 150 days before the Annual Meeting, a nominating committee of three, who shall be Presidents or Past Presidents of Branch Societies. This Committee, not later than 90 days before the Annual Meeting, shall report to the Board of Directors at east two nominations for each elective office to be filled at the Annual Meeting.

Section 2. Additional nominations may be made by a petition signed by at least fourteen members of the Society, if made and delivered to the Secretary at least 80 days before the Annual Meeting.

Section 3 An official ballot containing: the names of all nominees shall be mailed to each eligible voter at least 30 days prior to the Annual Meeting.

Section 4. Eligible voters shall mail their ballots to the Secretary of the Society not later than 14 days prior to the Annual Meeting. Only ballots received seven days prior to the Annual Meeting: shall be counted.

Section 5. The Secretary shall deliver the ballots on the seventh day preceding the Annual Meeting to a committee of three members appointed by the President. This committee shall count the ballots and make an immediate report in writing to the Secretary of the results of the election, together with the ballots cast. after which all candidates shall be notified of the results of the election immediately by the Secretary.

Section 6. Vacancies in office, either elective or appointive, shall be filled by appointment by the President, subject to approval by a majority vote of the Elected Members of the Board of Directors.

## ARTICLE VIII. QUORUM

Section 1. Fifty members shall constitute a quorum for the Annual Meeting or any special meeting.

Section 2. Fifteen members of the Board of Directors shall constitute a quorum for any Board Meeting.

## ARTICLE IX. BRANCH SOCIETIES

Section 1. Any member of this Society may affiliate with any Branch Society provided he meets the requirements for membership in that Branch.

Section 2. Each Branch. Society shall have a Constitution and Bylaws, both of which shall be approved by the Board of

Directors of the American Begonia Society; it shall require that one member of each family maintain membership, in the American Begonia Society; it must include among its officers a President, a Secretary, and a National Director, each being a different person; it may determine its own officers, other than those specified above; it may make additional qualifications for membership; it may determine the manner in which its local activities shall be financed; and it may determine its own activities and meetings provided that those activities and requirements in no way conflict with the National Constitution and/or Bylaws.

Section 3. Each Branch Society shall file with the Secretary of the American Begonia Society a copy of its Constitution and Bylaws and all subsequent amendments.

Section 4. Each Branch Society shall file with the Membership. Secretary of the American Begonia Society the names and addresses of all new members, together with their dues, as received.

Section 5. Each Branch Society shall furnish the Secretary of the American Begonia Society with the names and addresses of all officers of the Branch immediately following elections.

## ARTICLE X. PIROPERTIES

Section 1. All properties and physical assets of the Society are under the controi of the Board of Directors.

Section 2. Approval must be obtained from the National Board before the disposal of any property of the Society. This shall apply to material going to individuals as well as institutions.

Section 3. Each officer, whether elected or appointed, shall be responsible for a complete accounting of Society properties through equipment lists, book lists or inventory of other Society properties to the President Elect at the time accounting for the year is closed, prior to the Annual Meeting.

## ARTICLE XI. AMENDMENTS

Section 1. Amendments to the Bylaws may be initiated by a majority vote of the members present at any Annual Meeting or special meeting called for this purpose, or by a two-thirds vote of the Board of Directors. Such amendment shall then be submitted by mail to the membership in accordance with Section 2 of this Article.

Section 2. The Membership Secretary shall mail a ballot covering the proposed amendment to each member of the Society within thirty (30) days after the amendment is initiated, with the request that the member vote upon said amendment and mail his ballot to reach the Secretary within sixty (60) days after the meeting at which the amendment was initiated. If two-thirds of the votes cast are in favor of its adoption, the amendment shall be declared adopted at the next meeting of the Board of Directors when published in the next issue of the official publication of the Society.

## Begonia Verschaffelti

Begonia "Verschaffelti" is too little known, though it is an old hybrid, produced in Switzerland in 1853 , from a cross of B. manicata $\times B$. caroliniaefolia. Since both parents are rhizomatous, it too must be so classified, though the stem is rigidly upright and slender for the size of the plant, green with white dots.

At first the stipules, serving as bud sheaths, are pale green, thin, wide at the base and narrowing to a blunt point, which ends in a tuft of colorless hairs. They dry soon, but persist.

When the leaves first free themselves from the sheaths, they are tight folded and club like, covered thickly with silky, colorless hairs, which soon turn tan. As they begin to open, the inside, soon to be the upper surface is seen to be completely smooth. Gradually, they become large and roundish, with one long point opposite the sinus, and four or five lesser points at the sides. Above, the veins become rosy, noticeable against the pale green surface. Below, the tan hairs persist on the veins for a time. The leaf stems are pinkish and carry a few $\tan$ hairs until fully developed.

The flowers are borne on long, slightly hairy stems, well above the leaves. The male flowers are seen only as flattened, heartshaped, pink structures, which fall without opening. They apparently have two petals. The females have two pink petals. The three pistils are forked, but not spiraled. The three wings of the ovary are almost the same size and shape, though one may be a little larger.
Mrs. Krauss says that tip cuttings make the best plants and that new shoots will come from the base if the plant is topped. I have at this moment three tiny plants growing from the veins of a leaf, which, after being accidentally broken off at the sinus, was allowed to wilt, then set upright in sand. Whether they will survive, only time will tell.

This is a handsome plant, with its large, shining leaves on long petioles, ascending sharply at first, later drooping. A mature specimen needs plenty of space, but otherwise presents no problems.

MAY 'T. Drew
(Written for Bulletin for Eastern Fans)

## Begonia Charm

Begonia "Charm" is one of the most striking plants anyone can imagine. It is a New Hampshire hybrid.

In 1949 I visited a friend who lives on a large farm in Maryland. In the east kitchen window were several pots of the most outstanding and breathtaking begonia I ever had seen. My friend said that it was given to her as Begonia "Charm." It had come from her friend in Iowa. I did some investigating there and was referred to other places. I never did learn where it really came from or from whom. For several years my friend gave me cuttings and none of them lived through the winter. Cuttngs given me in the spring grew and bloomed nicely. Along came winter and they all died again. I decided that this was truly a begonia to be raised only in the country where the rooms are not over-heated and plants have fresh air daily. Now I have a lovely small plant that is growing in special soil and sets in another pot so the air is moist around it. It is growing in the east kitchen window
where it gets fresh air daily and does not get furnace heat.
Begonia "Charm" is a dainty version of $B$. "New Hampshire," having all the characteristics of $B$. "New Hampshire." The leaves have the same texture and shape, and the blossoms are alike. While the leaves of B. "New Hampshire" are lightly mottled, the leaves of $B$. "Charm" are greatly mottled with white, yellow and at times with a little pink. The allover blotching results in the most beautiful foliage imaginable. One good feature of $B$ : "Charm" is that is lacks the woody rank growth of B. "New Hampshire."
Several women in Pennsylvania and New Jersey have obtained cuttings from my friend and they all are delighted with it. A friend near Baltimore is propagating $B$. "Charm" this winter and hopes to have it for sale next spring.
L. R. Maslin

ED.: This description sounds very much like the semperfloren seedling of B. "Nanny Etticoat" (calla lily) made by Logee in 1948.

## Begonias of Distinction



Begonia "Silver Jewel"
OUR a.b.s. Schedule for the Show this year had a class for new begonias only, in which any member hybridizer could exhibit as many plants as he or she wished judged.

Certificates of special design for "Begonia Hybrids of Distinction" were awarded at top honors in this class.

Some hybridizers brought only one, others more than one, making a total of thirty plants in the class. Seven judges were given cards and asked to score each plant separately using the new hybrid scoring as adopted by the A.B.S. An average taken from these cards showed that six plants rated high enough to be awarded certificates. All the plants in this class were good new begonias and the results of this judging were very interesting.

Following is a brief description of the six begonias winning certificates.

Begonia "Silver Jewel" took top honors with 86 points and received the trophy plaque given by the Glendale Branch for the highest rating begonia hybrid. B. "Silver Jewel" is a new introduction from the Zug Gardens and was described in The Begonian, May 1956. This begonia being a $B$. imperialis hybrid, makes a full bushy plant and is very beautiful.

Begonia "Mac-Alice" also is a B. imperialis hybrid from the collection of Mrs. Louise Schwerdtfeger, and rated 84 points. This is A.B.S. registered begonia No. 46, of parentage B. imperialsi x B. macdougalli. The mature star leaf measures approximately $4^{\prime \prime}$ wide by $5^{\prime \prime}$ or $6^{\prime \prime}$ long and has 4 to 5 points. The color is the $B$. imperialis green overlaid with silver, which makes an outstandingly lovely plant. The growth is rhizomatous and thick.

Begonia "Ruthanne" is another hybrid from the Schwerdtfeged garden, but of entirely different parents. B. mazae x B. liebmanni made a: small to medium leaf, sometimes pointed,
sometimes not, which is dark in color but blotched with silver. It makes a nice compact plant if the rhizomes are kept within the edge of the container, but also will basket similar to $B$. mazae if allowed to grow over.

Begonia "Leslie Lynn," a dark, star-leaved, rhizomatous plant exhibited by Mrs. Dorris Motschman, made a very interesting plant. The parentage is not stated in the registration, however the leaf is quite large, with five to seven finger-like points that have ruffled edges. The color is dark similar to $B$. "Joe Hayden."
Begonia "Buckskin Baby" was named at the Convention and I must say the name fits the plant. This is a very small, star leaved, rhizomatous begonia of a different color than any I ever have seen before. The plant was Mrs. Leatherman's and she tells me it is two years old and it holds the color; buckskin with pale green veins describes it fairly well.
Jack Bauman's new tuberous seedling was rated very high by the judges and while I know nothing about the tuberous begonias, it was lovely to see. This plant also was awarded the Gordon Baker Lloyd trophy for the best seedling.

Many of the other begonias in this class were rated very good and all or any of them would be a welcome addition to our begonia collections.

## Edna L. Korts

Chairman, Awards Committee, 1956


## From the Robins

## FUCHSIA ROBIN NO. 3

I have quit feeding the fuchsias until spring and will let them harden for winter.

At our last Fuchsia Society meeting our speaker, a horticulturist, gave a talk on "Soil and Water." Much of California soil is on the alkali side and since we have 80 per cent alkali and 20 per cent artesian water, we are bothered with alkali building up in the soil. Our speaker said, "Our plants can't make use of the iron and some other elements in the soil when the soil becomes too alkaline. The leaves often turn yellow and the plants fail to grow well. Azaleas, camellias, begonias and fuchsias do best in a slightly acid soil." He recommended vinegar water (I part vinegar to Io parts water), put on soil only, rinsing off any that may be thrown on the foliage.

## Now's the Time!

It's time to get your begonias ready for the winter. If your plants are planted in the ground, mulch the roots or rhizomes so in case of frost the tops will be burnt, but the roots and rhizomes will be there next spring. Treat your begonias that are planted out as perennials.
Begonias in pots also should be taken care of right now. Those that need repotting should be taken care of now. Those that don't need repotting should be given a top dressing of half leaf mold and half steer fertilizer. This should take care of the plants through the winter.
When repotting, watch for the white roots which will tell you the plant is growing. Dark roots mean that the plant is standing still. I had an occasion to work on and inspect plants that were too long in the pots. That is, they were shifted from pot to pot, using the same soil, only adding more as the plants were shifted until they were in $10^{\prime \prime}$ or $12^{\prime \prime}$ pots. Those same plants were planted in the ground -the roots not separated, but the pot and all put right into the ground. When I saw the plants, the roots were black and woody and not an inch of live roots was present. The cane also was woody, resembling a fishing pole, and there was not a leaf nor branch along the whole pole except a tassel of leaves at the very top.

What can be done with such plants? The only answer is to give them new soil to encourage growth and start cuttings. In other words, "start from scratch." Fortunately I saw these plants and began working with them early in the spring and now should have enough growth with which to start new cuttings. It has seemed to be a long process, but that alone will renew plants which otherwise would have disappeared from cultivation. -M.

## Round Rabin Notes...

Now that Autumn is here we will have to prepare our plants for winter. Many of them can remain in the lathhouse in California, but the tender plants must have protection from the cold weather.

Those who have a greenhouse are fortunate but others have to take their plants in the house. We all enjoy our plants so much that we enjoy having them in the house. In fact I receive many letters telling me how the plants are cared for during the winter and early spring. It is very interesting as each individual has his own problems. Some grow them in the basement under lights.

One member wrote me that she has four hundred (400) plants of different kinds in her house during the winter. It surely requires a great deal of time and care for so many plants, but there is also the satisfaction of knowing it is something well done.

While some plants bloom in the winter others are just resting as winter is the dormant season. Much luck to those who grow their plants all year around.

I should like to thank those who have sent in material for The Begonian. I am delighted at the response to my request that members write of some interesting idea or plant and send it to the editor. Some very nice letters have been sent, even a nice little poem from one of the Robin members and again I am asking you to keep up the good work. The editor enjoys getting material for The Begonian.

The Robins I have started this year have been very successful and I am planning on another Beginner's (Begonias). I also could use a few more in Geraniums, and if there is any Robin you are interested in and there is not one at this time I shall be glad to start one if I get enough requests. Just drop a card.

Marie Reed, R. R. Cbairman

Hope it works on African violets for I have treated about 40 and will await the results.

Many of the new fuchsias coming out have been poor growers for me. Many of them will do well in a hot country and are not good growers here in the fog belt.

I do not have a greenhouse so I start my seeds in plastic ice box dishes. I put them in my east kitchen window and they are protected from the hot sun by the overhang of the roof. Growing begonias from seed is tedious work, but not nearly as slow as growing ferns from spores.

Vern Dixon, Santa Maria, Calif.

I was afraid to plant my first begonia seeds, but not any more. This summer I have hundreds of fibrous begonias whcih have come up from seeds that lived over in the beds in the lath house. How such tiny seeds could live and grow after a winter outside, I can't imagine. I lost all my tuberous begonias and all my fuchsias last winter except a few fuchsia cuttings I had in a hot bed. They are in full bloom now and quite showy.

> WInifred Smith, Hillsboro, Ore.
> $\mathrm{B}-$

Copy for The Begonian must be received by the editor by the first of the month.


## San Francisco Flower Show

Once again, the annual San Francisco Flower Show, counterpart of the City and County Fair of San Francisco, was held August 23 and 24. For many years, the City Hall has been the locale of the floral exhibits of begonias, dahlias, fuchsias roses, orchids, African violets, cacti, and succulents. Most unique is this annual show as compared to the many floral shows held in California, in the fact that all entries and exhibits are staged primarily by amateur growers through their respective Societies.

The Society won second place in its main exhibit in competition with all the other societies, with the entry of a huge basket flowing over with huge tuberous blooms. Other society awards were for a Gardener's Work Bench by Harold Gaetjen, and spectacular flower arrangements by Mrs. Hyacinth Smith, Mrs. Theresa Ferrero, and Carl Ogliatti.

This year the Begonia Display was an eye-
opener. More amateur and beginner members of the San Francisco Branch displayed more and a much better quality of plants in all four categories of begonias. President Mrs. Don Thomas easily won the Sweepstakes award in the amateur division, while Mr. and Mrs. Orris Roy Martin captured the Beginners' Sweepstakes Trophy. Mrs. Hyacinth Smith, past president, received the award for the Best Plant in the Begonia Division.


## BRANCH MEMBERSHIP SECRETARIES

From Bill Walton, membership secretary: We are anxious to give your members the very best possible service. Please urge members to send address changes promptly and to let us know if, for any reason, the magazines are not being received. Please indicate on receipts whether the membership is new or renewing. This will speed the service from this office.

## The A.B.S. Library

A NEW book has been added to the National Library-one that will be very valuable to all flower lovers, Window-box Gardening by Henry Teuscher.

Mr . Teuscher has gone into all phases of the window-box and planter in this book. Diagrams for the construction of window-boxes, their care and plant materials for the right effect for specific growing locations is thoroughly covered, and is written for the general layman.

The following is quoted from the book cover. "Henry Teuscher has been Curator of the Montreal Botanical Garden since 1937. From the beginning, he has been instrumental in building this 260 acre area into one of the world's leading botanical gardens in terms of horticultural collections and educational work. For this achievement, Mr. Teuscher was awarded a citation from the American Horticultural Council in 1954.
"Born in Berlin, Mr. Teuscher became an assistant at the famous Berlin-Dahlem Botanical Garden at an early age. He spent a number of years in the United States, serving successfully on the staffs of the Morton Arboretum, the Boyce Thompson Arboretum, and the New York Botanical Garden. He is now a Canadian citizen.
"Cultural directions are given in an alphabetical list containing more than 100 different kinds of plants. Directions also are included for growing outdoor plants in urns of stone and terra cotta, wooden tubs, and hanging baskets. More than 60 photographs illustrate the directions of the text. Every aspect of win-dow-box gardening is covered here, including after-season care, winter protection, and arranging for a series of seasonal displays the year around."

Mr. Teuscher is devoting time to our Test Garden at the Montreal Botanical Garden, and contributes articles for The Begonian.

Members, do not forget that your Library has many other books which may be purchased or borrowed, such as How to Increase Plants by Hottes, \$3.65; Begonias for American Homes and Gardens, Krauss, \$4.I6; Ferns for Garden and Greenbouse, Macself, \$5.20; and Begonias and How to Grow Them, Buxton, \$4.I6.

We have complete files of The Begonian from I95I to date which sell at 25 cents per copy or $\$ 2.50$ for a calendar year. Issues prior to 195 I are not complete, but we try to

## Greenhouse for Begonia Display

How wonderful it would be to see specimen begonia species all grown to perfection under the protection of glass. This way the public could become acquainted with these beautiful plants. Begonia society members would have an opportunity to identify their plants correctly, and learn of their cultural requirements.

Two glasshouses for the display of orchids have been provided by the orchid societies at the Los Angeles County and State Arboretum. It is time that begonias be put on display in the center of the largest begonia area in the United States.

A glasshouse $20^{\prime} \times 40^{\prime}$, metal construction, would cost approximately $\$ 4,500$.

Instigated by the San Gabriel Valley Branch of the American Begonia Society is a move for all Branches, members of the A.B.S. and friends to participate in such activities as are necessary to raise or secure by donations money for such a worthy project which would aid not only every grower of begonias, but also the whole horticultural world.
let us give our support to the development of the arboretum with which the american begonia society is affiliated. All members, Branches and friends, address your communications to Louise Cramer, 839 Woodward Blvd., Pasadena ro, Calif.
find the ones you want. These sell at io cents per copy. All inquiries on books for loan or sale and for copies of The Begonian are welcome, and this Department will do its best for you.

We ask the cooperation of all Members who have borrowed books in the past. Many books are still out after nearly a year. Our rules require a borrower to reutrn books within 30 days from the time they are received, plus the amount of postage indicated upon the wrapper. Unfortunately, there are a number of borrowers who have had books out for over a year, and who have completely ignored correspondence requesting return. This Department considers this as very dishonest. These people should know that there are many people waiting for these books. The Library wishes to serve all Members, but we can not do so while some Members hold books out over a year.

If there is any particular book that is desired by Members, your Library can get it for you.

LUCY A. SAULT, Librarian<br>26938 Dapplegray Lane<br>Rolling Hills, Calif.

## Clayton M. Kelly Seed Fund Flight

No. I. Tuberous Begonia Seed Offer: We are now in a position to offer you the very best in tuberous begonia seeds. These seeds are from one of the largest and best growers in the West and were hand pollinated from choice blooms. We have seen huge beds of this grower's plants in bloom and can assure you of the very finest quality obtainable anywhere. The following types are included in this mixture. Camellia (or rose bud), double crested (carnation), picotee and ruffled. The colors are everything to be desired-pink, gold, red, yellow, apricot, orange, cream, light pink and many others. In the picotee the combinations are pink and white, red and white, and salmon and white. Start seed in December and January using the same method as other begonias or fine seed. We would suggest in transplanting seedlings to take them up in small bunches instead of trying to plant each seedling singly. Price, 500 per package. No. 2. We have received from England seed of the tuberous variety called Carter's single fringed mix. Blooms are large, single, and ruffled in various colors. 25 c per package.

Fresh seed of begonias listed below is available now. Incidentally, in order to offer you fresh seed each month we do not usually carry the same varieties over from month to month. However, there are a few exceptions when we have a generous supply of fresh seed. No. r. B. SARABELLE-small, erect plant. Oval flat, green, silver-spotted leaves flushed red beneath. Flowers rose-pink to pink. No. 2. B. MAC-BETHI-small, deeply cut leaves. Flowers are white. No. 3. B. LACINIATA-India. Small rhizomatous; leaves broad-ovate with shallow pointed lobes. Flowers are large, pink, petals hairy on the outer surfaces. No. 4. B. GIGAN-TEA-Himalaya. Medium growth. Leaves green ovate-pointed. Flowers are white or pale pink in closely bunched clusters. Beautiful and unusual. No. 5. B. EPIPSILA-Brazil. Fibrous procumbent. Dark, smooth, glossy green leaves with dark veins. Flowers pink tinged and makes a beautiful hanging basket. No. 6. B. CREDNERI (B. scharfi x B. metal-lica)-Medium bushy growth. Leaves olivegreen, soft white-hairy, red beneath; flowers are large, pink. No. 7. B. RUBRA MIXEDBeautiful cane type plant. Flowers pink or orange. The above may be purchased for 250 per packet.

We still have seed of B. RUBRA-VENIA, B. FUSCA, B. FUSCAMACULATA, B. VENOSA,
B. HOOKERIANA at 25 c per packet. The semperflorens begonia listed in August and September The Begonian are still available with the exception of one or two varieties for which we will substitute. We have tested these seed and germination was good; however, some were slow so don't despair and discard them. New members may purchase back issues of The Begonian from our librarian. Fresh choice Rex Begonia seed at soc per packet as previously listed.

This is from a member in Vermont. "From the seeds of the B. "Calla Lily" I obtained from you in May, I had 12 blooming plants, but so many of my friends seem to want them I have only two left. Some of the rex plants are beautiful! The leaves are still all a little different, but I think the next ones may be more uniform. I am always quite impatient to see the new leaf unfold on each plant because each new one is lovlier."

Greenbouse plants: No. i. GLOXINIA (Buell's). Large, ruffled, slipper type. White three inch blooms with pink lavender dots. Beautiful and dainty and should be in every collection. No. 2. GLOXINIA, SLIPPER TYPE -Deep red. No. 3. STROXINIA (Reed's) Purple spotted with white spotted throat. No. 4. GESNERIA TUSSICA-Unusual with orange flowers with tiny brown dots inside. See March 1956 The Begonian for complete cultural directions for gloxinias. Above 25 c per packet.

Our files are overcrowded with seed of other genera so we have decided to offer you choice and in some cases, rare seed at a bargain. These seed are all fresh. Practically everything has come into the seed fund during the past few months. As our space is limited we hope you will help us clear them out. Here is the list. No. r. WATSONIA - South Africa. Bugle lily, mixed colors. Showy flowers in terminal clusters on tall stalks. Unequalled as a cut flower. No. 2. CALLA LILY. Beautiful white flower of the arum family. Grown outdoors in tropical climates where it reaches huge proportions. Popular greenhouse or house plant in cold climates. No. 3. ISMENE. Spider lily. Bulbous plant of the amaryllidaceae family. Has cuplike, white, fragrant, conspicuous flowers. Narrow strap leaves. Tubers should be grown in the greenhouse in cold climates. No. 4. AGAPANTHUS ORIENTALIS-Evergreen plant of the amaryllidaceae family. Perfect for accent planting or in the foreground of the
shrub border. Has straplike evergreen foliage and large heads of blue flowers on tall stalks. No. 5. AGAPANTHUS ORIENTALIS ALBUS. A pure white form of the above with narrow leaves, but the plant is more dwarf. No. 6. SCHLUMBERGERA GAERTNERIEaster cactus. Favorite houseplant. Drooping branches and has scarlet flowers $21 / 2^{\prime \prime}$ long followed by red fruit. No. 7. STAPELIA spe-cies-South Africa. A cactus-like plant grown with greenhouse succulents. Showy flowers. No. 8. MELALEUCA LEUCADENDRON-cajuput tree. Also known as punk tree. Conspicuous tree with spongy bark, shredding in strips. Leaves are tapered at both ends. Flowers are creamy white in terminal spikes. No. 9. SEMELE ANDROGYNA or ruscus androgynus. Interesting plant that is remindful of giant smilax. Can be grown on a fence or trellis. The new shoots come up like asparagus and are $3 / 4$ of an inch in diameter, sometimes growing to ten feet before unfolding into beautiful large evergreen trees. Flowers are small, yellow, and are borne in the axil of the leaves. Afterwards a bright red berry appears. Nice for dry arrangements. Seeds should be soaked in water before planting and should be planted singly in three inch pots. Here is something rare and worthwhile for your garden. No. ro. BULBINELLA ROBUSTA. South Africa (Chrysobactron). New Zealand. Hardy plant with swordlike foliage. Flowers are bright yellow on slender stems. Excellent plant for the border. Although some of the above seeds are rare and not readily available to the average gardener, we offer them to you at 25 c per package.

Sometbing special. MOCUCELLA LAEVIS, Bells of Ireland-annual. This plant has become immensely popular with floral arrangers and is being used widely for this purpose. Plants branch at the base with two foot stems which are closely set with large, bell-like sheaths of translucent green surrounding a small insignificant white flower. May be used fresh or dried and is easily grown in greenhouse or outdoors in warm or mild climates. For a real thrill in gardening try some of these fascinating plants. Plenty of seed available at 25 c per packet.

> Mrs. Florence Gee
> Seed Fund Administrator
> 4316 Berryman Avenue Los Angeles 66, California
> B-
A.B.S. PINS, \$3.35; stationery; and signs, \$1.oo. Write to Fred Browne, 817 Novelda Road, Alhambra, Calif.

## Roses for Coastal Areas

The 'perpetual' rose was developed in Europe and was called "Perpetual" because it bloomed so often. "Polyantha" means "small and many," such as the Cecil Brunner rose. From the Polyantha came the "Multiflora" rose. The "Floribunda" rose was crossed with the "Tea Rose" and the result was named our "Grandiflora" rose. Armstrong's "Buccaneer" and "Carrousel" are two favorite Grandiflora roses. Southern California is the center of rose growing and California-bred roses win the most awards in the American Rose Trials. Howards of Hemet introduced "The Texan," so named because of its wonderful growth and bloom. Two new All American Roses are "Golden Showers," introduced by Germain's, a strong upright pillar type that grows 8 to 10 ft. tall, needing no support, and "White Bouquet," a floribunda, introduced by Jackson and Perkins. Many white varieties are not good for coastal planting. "Buccaneer" is a must on the list of desirable roses, as it grows taller than other grandifloras and the beautiful blooms are easily seen. As Mr. Kenneth Terry showed us the beautiful colored slides of the different roses he gave a brief narrative on them and here are points on some of them to remember when you are buying roses:
"Mrs. E. P. Thom"-Good lemon yellow color and good for coastal planting. "Showgirl" -by Armstrong is good for coastal planting; "Snowbird"-beautiful white rose; "Tom Bren-neman"-a great rose, named after a great man; "Southport"-a true scarlet, good for coastal planting and blooming; "Texas Cen-tennial"-a good vigorous grower; "Tallyho" -a beautiful red and pink rose introduced by Armstrongs; "Autumn"-a lovely bronze colored rose but not good for coastal plantings for it is subject to and carries rust; "The Chief" -lovely but not for coastal planting as it is subject to and carries mildew; "Peace"-huge, beautiful and good for coastal plantings; "Ru-baiyat"-doesn't always do good first year of planting but usually gets beautiful and hardy afterwards; "Mary Hart"-not desirable as it is a sport with some branches throwing different colored blooms; and "Nocturne"very desirable, blooms often, even just before Christmas at times.

Mr. Terry advised us that Germain's is introducing this coming bare root season a "climbing Chrysler Imperial" and that "Countess Vandel' could be purchased for around a dollar now because the patent has run out.

Redondo Beach Area Branch

# Leaves From Our Begonia Branches 

## GLENDALE

"Companion Shade Plants" was discussed and illustrated with plants by Miss Charlotte Hoak, renowned horticulturist. For orders of leaf mold call CI $1-7696$.

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## MARGARET GRUENBAUM

We have had a very busy summer preparing for the various begonia exhibits in which we were taking part. The plant sale held in August on the Horsham Friends Meeting Grounds was quite a success both in attendance and financially The Snellenburg Flower Show was also most outstanding-especially the begonias.

The begonia display placed in the annual flower show of the Ambler Colony Club was very much admired Some 90 different plants, which consisted of large and small, rexes, semps, thizomatous, fibrous-unusual and rare were used. A large cluster of $B$. evansiana was nestled among the rex and gray foliage begonias which gave a most pleasing effect. (The B. evansiana were in water but the vase was out of sight.) For this exhibit the Branch received a Gold Seal Special Prize Ribbon.

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## PENNSYLVANIA BRANCHES

The first annual Snellenburgs Flower Show held September 5-8 was designed to bring forth original ideas for making Philadelphia more beautiful. Among the displays were hanging baskets of flowers for the city street lamp posts, mantle displays for historic shrines and museums, window boxes for stores, and many containers of beautifully arranged cut flowers.

There were masses of orchids shown by private owners who grow these exotic plants as a hobby. They were so arranged to make these beautiful flowers most attractive. Ferns were used as a filler which hid the base of the orchid plant which sometimes in not too eye-appealing.

The Begonia Exhibit was sponsored by four Eastern Branches of the American Begonia Society: the Elsa Fort, Margaret C. Gruenbaum, Philobegonia and William Penn. The plants were staged on so-called islands (in back of counters of merchandise, well above the eye and out of reach of the passers by). The dis-
play consisted of several hundred plants ranging from the more common to the very rarest. There were the stately rexes, semperflorens, rhizomatous and fibrous rooted-large and small.

Begonia hostesses were on duty during the entire store hours and the many questions asked by the visiting public were well taken care of by them.

In another section of the store the Barrington Greenhouses had a display of house plants among which were many choice begonias.


## REDONDO BEACH AREA

Mr. Joe Taylor gave an interesting ten minute lecture on the culture of Begonias "Ricky Minter," "Freddie," and "Vershaffelti," with his own fine specimens of those plants before us to emphasize his topic. Points of interest were:
B. "Ricky Minter"-A rhizomatous with a creeping habit, that has spiral crested leaves. Enjoys a fibrous soil, plenty of light but no direct sun, leaves darker with less light. Can stand some abuse, as it is good to let it get almost dry before watering. Parents of $B$. "Ricky Minter" are B. manicata cristata and B. mazae.
B. "Freddie"-A rhizomatous whose parents are B. barkeri and B. manicata aureo maculata. It is very possible to develop a varigated seedling and could be fun to try since the one parent, B. manicata aureo maculata, is yellow spotted.
B. "Vershaffelti"-A rhizomatous with an upright type of growth. Mr. Taylor emphasized how to propagate it with a pot of his own cuttings of one and one-half inches laid in sand, which he advises to use.


## WHITTIER

After installation of officers by William Spitz, the members were entertained by Mr. and Mrs. J. D. Stokiasa, who showed colored movies of garden scenes, begonias, orchids and California desert wild flowers. Mrs. Rose, outgoing president, was presented with the past president's pin. Cal Trowbridge, national A.B.S. president, discussed the habits, culture and new varieties of semperfloren begonias.

## WILLIAM PENN

At the July meeting, held at the home of Mrs. Ernest C. Drew, we saw Begonia dichroa and B. sutherlandi, which had handsome orange flowers; several forms of B. schmidtiana were represented heavy with pink and white blooms. We also saw B. "Phoebe Mather," which is similar to a small and dainty $B$. "Joe Hayden"; B. "Braemar" was a handsome green and red veined plant; B. "Richmondensis" (developed from B. "Catalina") had red flowers. B. acetosa, B. venosa, B. incana, and B. "Morgana" also made a fine show.

The plant chosen for analysis was B. "Margaritae," a French hybrid whose parentage was B. ecbinosepala and B. metallica. B. "Margaritae" is an excellent house plant, requiring nothing special in its culture and propagates easily from stem cuttings and bearing pink hairy flowers freely from summer to fall.

We will stage co-operatively with the Margaret C. Gruenbaum Branch at the Swarthmore Chrysanthemum Show in November a begonia exhibit.

## Calendar

Nov. I-Whittier Branch-J. N. Giridlian of Oakhurst Gardens.

Nov. 13-San Francisco Branch-Annual banquet and installation of officers by National A.B.S. President Cal Trowbridge.

Nov. 23-Redondo Area Branch-"Begonias," LeRoy Borchardt followed by panel discussion on plants in general.

Nov. 28-San Gabriel Valley BranchFrank Simerly, Chief Information Aid, Los Angeles State and County Arboretum, slides on flowering trees, "How to Select and Train Young Trees."

Dec. 28—Redondo Area Branch-New Year's Party and installation of officers.

Jan. 23, 1957-San Gabriel Valley-Peggy Sullivan at Annual Birthday Dinner.


## $\mathfrak{Z n}$ Allemoriam

Mrs. Zelma Palstine, a charter member of Long Beach Parent Chapter, A.B.S., an early editor of the Bulletin (The Begonian) and secretary of the Society in its infancy, passed away Sept. 16, 1956. To her husband and family we tender our heart-felt sympathy and we will always cherish her memory.

## An Oak Is Named

Believed to have once provided shade to the Rancheros after Jose Maria Verdugo obtained his Rancho San Rafael land grant from Spain in 1784, one of the venerable Live Oaks in Los Angeles County's Descanso Gardens in La Canada soon will bear a plaque designating it as "Patriarch." The name "Patriarch" was selected by the Board of Supervisors after it had been submitted by Mrs. Jessie Chapman Ogden, 4517 North Ivar Avenue, Rosemead; and by Dorothy K. Meyers, 320 South Lamer Street, Burbank.
"It is the wish of Descanso Gardens to perpetuate the traditions of the Verdugo family which lived for so many years on the original Rancho San Rafael," declared Gardens Superintendent John Threlkeld. "We have in Descanso what we think is the largest grove of oaks- 29 acres with about 4,000 trees, -which remains of Rancho San Rafael. The oak which has been designated 'Patriarch' is worthy of that name and should live for many years."

Threlkeld said he has written a letter of honorable mention to 14 -year-old Susan J. Martin, 7419 Columbus Avenue, Sherman Oaks, for her originality of statement in submitting a name of "Old Resistor" for the oak.

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## Branch Meeting Dates ...

## VISITORS ALWAYS WELCOME AT THESE MEETINGS

## AMERICAN BEGONIA

HYBRIDIZERS BRANCH
Called Meetings Quarterly
Mrs. Daisy L. Walker, Secy.-Treas.
2425-A Silver Lake Blvd.,
Los Angeles 39, Calif.
BRITISH BRANCH
F. J. Bedson, Secy.

Kent, England
CENTRAL FLORIDA BRANCH
4th Thursday, 8:00 p.m.
Homes of Members
Mrs. Leo Spengler, Cor. Secy.
15 West Preston Ave., Orlando, Fla.
DALLAS COUNTY BRANCH, TEXAS
1st Thursday, 7:00 p.m.
Members' Residences
Mrs. Ruth Cook
923 S. Edgefield, Dallas 8, Texas
EAST BAY BRANCH
2nd Thursday, 7:45 p.m.
Willard School, Telegraph at Ward, Berkeley, California
Mr. Stuart C. Smith, Secy.
3147 Stanley Blvd., Lafayette, Calif.
GL MONTE COMMUNITY BRANCH 3rd Friday
Lions Clubhouse, 225 W. Garvey Blvd.
Monterey Park, Calif.
William Edwards, Cor. Secy.
1886 San Pasqual, Pasadena, Calif.
FOOTHILL BRANCH
3rd Thursday, 8:00 p.m.
La Verne Community Bldg.
2039 Third St., La Verne
Mrs. C. W. Hall, Cor. Secy.
358 E. Arrow Hwy., Upland, Calif.
FORT, ELSA BRANCH
1st Saturday, 2:30 p.m.
Miss Lola Price, Secy.
628 Beech Ave., Laurel Springs, N.J.

## GLENDALE BRANCH

4th Wednesday, 8:00 p.m.
Tuesday Afternoon Club, 400 N . Central
Mr. and Mrs. Frank Coe, Cor. Secy. 28904 Cliffside Dr., Malibu, Calif.

GRAY, EVA KENWORTHY BRANCH 3rd Monday, 7:30 p.m.
Community 'House, La Jolla
Mrs. Charles Calloway
1311 Torrey Pines Rd., La Jolla, Calif.
GRAY'S HARBOR BRANCH
2nd Monday, 8:00 p.m.
Hoquiam Public Library, or Messingale and Rosenear Music Store Aberdeen, Washington
Mrs. Jessie B. Hoyt, Secy.
1013 Harding Road, Aberdeen, Wash.

## GRUENBAUM, MARGARET BRANCH

4th Tuesday, 10:30 a.m.
Homes of Members
Mrs. Adolph Belser, Cor. Secy.
Welsh and Veree Rd., Philadelphia, Pa.
HAMSHIRE, TEXAS BRANCH
3rd Tuesday of each month
Mrs. Peter DeYoung, Hamshire, Texas
HAWKEYE STATE BRANCH
3rd Friday, Members' Homes
Ruth Anderson, Secy.
Underwood, Iowa

HOLLYWOOD BRANCH
3rd Wednesday, 7:30 p.m.
Plummer Park, 7377 Santa Monica Blvd.
Mrs. Mary Hazel Drummond, Cor. Secy.
1246 N. Kings Rd., Los Angeles 46. Calif.
HOUSTON, TEXAS BRANCH
2nd Friday, 10:00 a.m.
Garden Center, Herman Park
Mrs. Grant Herzog, Secy
12601 Broken Bough, Houston 24, Texas
HUB CITY BRANCH
3rd Wednesday, 7:30 p.m.
Mrs. L. R. Kellogg, Secy.
1120 E. 71 st St., Long Beach 5, Calif.
HUMBOLDT COUNTY BRANCH
2nd Monday, 8:00 p.m.
Los Amigos Club, Loleta, Calif.
Miss Margaret Smith, Secy.
P.O. Box 635, Ferndale, Calif.

INGLEWOOD BRANCH
2nd Thursday, 7:45 p.m.
Inglewood Women's Club
325 North Hillcrest, Inglewood, Calif.
Mrs. Hattie Bradford, Secy.
1825 W. 73 rd St., Los Angeles 47, Calif.
LONE STAR BRANCH
3rd Monday, members' homes
Mrs. Chester Terry, Secy.
5511 Richmond Ave., Dallas, Texas
LONG BEACH PARENT CHAPTER
First Thursday, 7:30 p.m.
Machinists' Hall, 728 Elm Ave.
Mrs. Alice Waldow, Secy.
2175 Cedar Ave., Long Beach 6, Calif.
LOS ANGELES BRANCH
4 th Wednesday, Homes of Members
Mrs. Glenn Morrow, Secy.
2821 N. Musgrove Ave., El Monte, Calif.
LOUISIANA CAPITAL BRANCH
2nd Friday
Mrs. H. E. Dorris
3213 Eaton St., Baton Rouge, La.
MIAMI, FLORIDA BRANCH
4th Tuesday, 8:00 p.m.
Simpson Memorial Garden Center
Mrs. W. C. Gorman, Secy.
2296 Coral Way, Miami, Fla.
MISSOURI BRANCH
3rd Tuesday, 7:00 p.m.
Mrs. Hattie Taylor, Secy.
P.O. Box 25, Raytown, Mo.

NEW ENGLAND BRANCH
3rd Saturday, Homes of Members
Mrs. Lester H. Fox, Secy.
170 Marsh Hill Road, Dracut, Mass.
OCEAN COUNTY, NEW JERSEY BRANCH 1st Tuesday, 12:30 p.m., members' homes Mrs. Anna Peck, Secy.
23 So. Gateway, Toms River, N.J.
ORANGE COUNTY BRANCH
2nd Thursday, 7:30 p.m.
Garden Grove Grange Hall
Century and Taft Streets
Garden Grove, Calif.
Mrs. Maybelle Woods, Secy.
604 South Helena St., Anaheim, Calif.
PASADENA BRANCH
Meetings on call.
Homes of Members
Col. C. M. Gale, Secy.
40 N. San Rafael, Pasadena 2, Calif.
PHILOBEGONIA BRANCH
2nd Friday, Members' Homes
Mrs. Robert York, Secy.
3311 Fremont St., Camden, New Jersey

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PORTLAND, OREGON BRANCH
    4th Friday, 8:00 p.m.
    Members' Homes
    Mrs. Helen Parrott, Secy.
    3955 S.E. Kelly, Portland 2, Oregon
RAYTOWN, MISSOURI BRANCH
    4th Tuesday, 7:30 p.m.
    Homes of Members
    Mrs. Mildred Schorr, Secy.-Treas.
REDONDO BEACH ARLEA BRANCH
    4th Friday each month
    2308 Rockefeller, Redondo Beach, Calif.
    Opal Murray Ahern, Secy.
    1304 Poinsettia Ave.
    Manhattan Beach, Calif.
RIVERSIDE BRANCH
    2nd Wednesday, 7:30 p.m.
    Shamel Park, 3650 Arlington,
    Riverside, California
    Mrs. Olive Thaller, Secy.
    7195 Orchard St., Riverside, Calif.
ROBINSON, ALIFRED D. BRANCH
    3rd Friday, 10:30 a.m.
    Homes of Members
    Mrs. Merrel H. Taylor, Secy.
    4285 Sierra Vista, San Diego 3, Calif.
SACRAMENTOO BRANCH
    3rd Tuesday, 8:00 p.m.
    Mrs. Gordon Long, Secy.
    5 4 1 6 ~ D a n a ~ W a y , ~ S a c r a m e n t o , ~ C a l i f .
SAN DIEGO BRANCH
    4th Monday
    Hard of Hearing Hall,
    Herbert & University
    Mrs. Maurice P. Mitchell, Secy.
    2329 Bancroft St., San Diego 4, Calif.
SAN FRANCISCO BRANCH
    1st Wednesday, 8:00 p.m.
    Forest Lodge, 266 Laguna Honda Blvd.
    Mrs. Louise Allmacher
    1963 45th Ave., San Francisco, Calif.
SAN GABRIEL VALLLGY BRANCH
    4th Wednesday, 8:00 p.m.
    Masonic Temple, 506 S. Santa Anita Ave.
    Masonic Temple, 506
    Mrs. Merilyn Jewett, Secy.
    461 E. Mariposa St., Altadena, Calif.
SAN MIGUEL BRANCH
    2nd Monday
    V.F.W. Hall at Imperial and Lincoln,
    Lemon Grove, Calif.
    Ida M. Barker, Secy.
    7591 Central Ave., Lemon Grove, Calif.
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