

# The BEGONIAN

*Devoted to the Sheltered Garden*

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# The BEGONIAN

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RESOLUTIONS OF RESPECT ON  
THE PASSING OF  
CLAYTON M. KELLY  
Charter Member of the American  
Begonia Society

The departure of Clayton M. Kelly, one of the charter members of this society, and who has from the time of its inception down to the day of his passing been active in its development and achievements, has left us sorely bereft and we keenly feel the loss of one whose wise counsel and outstanding leadership have done so much to bring our society to its present state of perfection.

Those of us who have been fortunate enough to know him, testify to the fact that his years were filled with the joy of living, a joy which he himself was happily able to radiate to others and in this manner to lighten the load for all who came within the orbit of his beneficent influence.

**Be it therefore Resolved:**

That in the passing of Clayton M. Kelly the American Begonia Society has lost an outstanding member; one who has unselfishly contributed to its development.

**Resolved, further:**

While we shall miss him, the benign influence of his character, integrity and devotion to the high principle of service to others, shall continue to inspire and encourage us to devote our lives to these same high principles, and to carry on the work which he helped to establish.

**Resolved, further:**

That a copy of these resolutions be suitably inscribed and presented to his sister, Miss Flossie Kelly, and that a page of our record be permanently set aside on which these resolutions shall be inscribed.

Adopted by a unanimous vote of the National Board of the American Begonia Society at the regular monthly meeting assembled this 2nd day of February, 1942.

Edna Zieshenne  
Lena Higgins  
J. S. Williams  
Committee on Resolutions

• Please consider very seriously the importance of BUYING from really patriotic Americans. Now is the time to stand together for our family, for home, for our Country's freedom.

—Maria Wilkes

## In Memoriam

• All of us who have known Clayton Kelly as a friend must forever have faith in the purposefulness of life. Possessed of a great curiosity and a contemplative mind he constantly sought explanations for the phenomena of nature and mind. He was awed by the giant redwood and marvelled at the small sea urchin. He believed in simple fundamental truths and accepted his position as a man in this universe with rare humility befitting the true artist who knows his expression to be but a feeble echo of a greater harmony never quite comprehended in this life. He gave generously of everything he had feeling it his privilege to share and his task to understand. Unknowingly he inspired others by his delicate and sensitive perception of all that is fine and beautiful and good. His gentle kindly way was spiced by a keen sense of humor and he never lost the fresh boyish quality of sparkling spontaneity. His passing is a loss of no ordinary kind. His devoted friends are reassured that there is no beauty as joyous and everlasting and as incapable of passing into nothingness as a human life lived fully and with eagerness, tempered by experience and completed with dignity and restraint.—Sybil M. Fielder

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### “IT DEPENDS ON—ME”

• By the time this Bulletin is in the mail, and perhaps at your front door, the regular California Spring Planting Week, March 1st to 7th, will be officially on the way. All the publications in the land of freedom will be brimming over with suggestions on defense gardening, urging us all, as Secretary of Agriculture Wichard and many others have been doing to continue planting and taking care of our existing gardens. Anyone who can look into the future at all, knows how very important it is for us gardeners to lead the way in setting a quick step forward, forward to better home surroundings, more flowers and better food production—which lead to better general health, higher spirits and quicker perception. So, help each one in the family to take a share in this home defense program. Everyone will be immeasurably finer for it. On Arbor Day, March 7th, plant a fruit tree if you possibly can.—The Editor

**T**HE role water, the most essential material requirement of plants, plays in plant growth, is at best vaguely understood by the average hobbyist. Watering is usually considered a task to be done at random or when the plant begins to wilt. We shall tell here as briefly as possible just what water does so that it will give the greatest return in proportion to the care taken in its use.

Technically there are many types of water, but from a garden standpoint, these differences need not be stressed at this time. Water as we obtain it from our hydrants and wells usually contains various chemicals in addition to an abundance of minute plants and animals.

Sometimes water is what is known as "hard" water; that is, the water contains various alkaline substances which cause the water to be alkaline in reaction. The use of "hard" water tends to neutralize the acid in begonia pots and eventually builds up an alkaline condition; this condition is often evidenced by a white deposit of salts which have been precipitated by the action of the acid in the soil with the minerals in the hard water. This condition is normally combated by the use of leaf mold. Cow manure, especially if it has quantities of the liquid in it, will tend to be acid, but in cases where there is an ample supply of humus, acid forming fertilizers can be used, such as cotton seed meal. To rid the water of "hardness", one can dissolve  $\frac{1}{2}$  ounce of supersaturated alum into a gallon of water and, after it has been allowed to stand, use the clear solution at the top to water the plants. The whitish deposit in the bottom is the alkali precipitant and should not be used on the plants.

In some localities "soft" water is available which does not carry quantities of alkaline minerals. In this case, it is well to guard against building up too acid a condition by the continued use of leaf mold and other acid-forming materials, for begonias do better in a soil which is only slightly acid or even neutral. Most city water is treated with chlorine, sometimes in such concentration that it does damage to plants. If the water is drawn from a tap and allowed to stand in a container for a while, the chlorine will be dissipated into the air.

When water is applied, the first thing it does is to help to dissolve the various

necessary elements in the soil, (potash, phosphorous, lime, etc.), from which the plant constructs its food or which it uses in the building of its tissues.

The water containing the various elements in solution then, by the process of osmosis enters into the root hairs and is conducted through the roots up the water tubes to the upper parts of the plant and to the places where they are needed by the plant. Less than 1% of this water is used in the process of making starch in the green tissue with the aid of the sun. About  $\frac{1}{3}$  of the water is retained by the plant. The rest of the water is given off into the air by the plant. The rate of transpiration is governed by various conditions, such as dry atmosphere, wind and temperature, as well as the amount of foliage, the covering of the stem or leaf, such as hairiness, etc.

When growing begonias indoors, the amount of moisture in the air usually spells success or failure with the plants. The plants try to maintain a zone of moist air around the leaves and if the air does not provide this condition, the plants will transpire moisture in an effort to create it. The rate of transpiration is usually very great indoors for the atmosphere is usually warm and dry and warm air can retain more moisture than cool air.

Under house conditions the wallpaper, books and various other objects will absorb moisture from the air and for this reason the plant and the porous pot will give off large quantities of water and the soil will seem to be continually dry. This condition may be remedied by the growing of a number of plants in the room as each plant will then be required to give off less water and thus will require less watering. Too, plants can be placed in a fern stand containing a layer of sand or gravel, which, if kept moist, will help to humidify the air. Glazed containers will not give up much moisture and require less watering, but do not help to maintain a moist condition in the air which its plant requires. Where heat or steam heat is used, a pan of water on the register or radiator will also help to keep the air moist. Moistening the foliage will help to humidify the air. However, this should not be done unless one is sure that bacterial virus is not present.

(To be continued)

# HISTORY OF BEGONIAS (Continued)

by HELEN K. KRAUSS  
Wynwood, Pa.

HERE appear to be no records of living Begonia introductions into Europe before *B. nitida* was introduced by Dr. Wm. Brown in 1777, the same year that Ruiz, Pavon and Dombey set sail for Peru and Chile from Spain.

Before proceeding with the subject on Begonias, an outline of the influences which contributed to the introduction of the earliest living specimens into Europe is of special interest.

Sir Joseph Banks (1743-1827) was both directly and indirectly responsible for the transplanting of fruit trees and other plants and trees which improved the supply of food in Europe and the English Colonies. He was instrumental in making the Royal Gardens at Kew the depository of every known plant of utility and those of ornamental value to the people of Europe. During his life time nearly 7000 exotics were introduced into England, the greater part of which were sent by his collectors from all parts of the world at his expense, and resulted in Kew Gardens becoming the Mecca of botanists. In connection with this enterprise Botanic Gardens arose in many parts of the world including remote Colonies in the Far East. The first Botanic Garden of Colonial England was started in Jamaica in 1775 and soon became a planter's paradise.

Sending explorers was nothing new but Banks was the first man of wealth and position who personally undertook the hazards of exploration. His first expedition was made at the age of 23 and at 25 he circumnavigated the globe with Capt. Cook. At this early age he recognized the fertility of Australia, when with Capt. Cook they dropped anchor there, and in his memory lingered the very spot suitable for colonization at a later date and which his influence and suggestions brought about. Botany had become one of the dominant interests of Englishmen of this period and the Colony was named Botany Bay. Banks' example aroused men, roaming in foreign lands and seas, to habits of observation and a desire to contribute to the human knowledge of men. His constant inspiration and readiness to finance scientific expeditions brought many volunteers. His keen understanding of human nature enabled him to choose men who later rose to eminent heights. A few of the men who attained prominence in

botanical science and who were directly inspired by him will be briefly described.

Botanists were to be found in all parts of Europe but none possessed the fortunate combination of scientific interest, adventure and the necessary wealth such as Banks enjoyed. For further stimulation and indulgence in their subject many of the continental botanists migrated to England. France and The Netherlands made their contributions on a smaller scale. Germany did not have a navy during this period but played a great part in introducing Begonias after 1814. Many of the European botanists were eager to join the English expeditions and some of them were enabled to do so through the aid of Royal Patrons.

C. P. Thunberg, to whom we owe much, was a Swedish botanist commissioned by the Dutch government and sailed on an English ship. He sailed with Francis Masson, the first collector sent out by Banks.

Between the years of 1776 and 1813 Begonia introductions diminished because of the various wars in almost all parts of the world. Every English ship however, carried its naturalist and interesting specimens were brought to England nevertheless. In the event of scientific expeditions Captains were provided with passes in the interest of science which were usually respected by the enemy. In case of seizure scientific collections were almost always returned to their owners.

Although Lt. Wm. Bligh, under Lord Nelson, later became an Admiral there was an interlude devoted to botanical expeditions under the auspices of Jos. Banks, who had earlier discovered Bligh's interest in botanical science. After the mutiny on the *Bounty* he made another expedition to the South Sea Islands and successfully introduced the bread-fruit trees to Jamaica and returned to England with *B. macrophylla*.

William Aiton, probably the first Englishman to describe Begonias, secured employment at Kew Gardens through the influence of Banks and was appointed Superintendent in 1759. Aiton, Banks and a select group of men founded the Royal Horticultural Society in 1804 which popularized gardening among all classes of society.

Ed. note: Due to typographical error in Feb. issue correct discovery of *B. microphylla* by Capt. Bligh from 1803 to 1793.

(To be continued)

# "VERY FAVORITE" FOR THE DURATION

by B. L. SHIPPY, Lockport, N. Y.

**B**EGONIAS are the children of my 'old age' and like all such children are more cherished than those that preceded them. They come as a new enchantment when perhaps my interest in flowers had begun to lag somewhat after many years of happy adventure extending back to childhood on the Iowa prairie where the multitudes of shooting stars still glanced their darts toward the sun and the blue-eyed grass twinkled above the stubborn sod.

In those days my mother was the only woman for miles about that spared time for more than a few meager flowers out of a boundless vitality that was not quite all consumed by the tasks imposed by rather primitive conditions and a growing family. One year, I remember, we plowed under the whole front yard and sowed it to flowers, because we had too many seeds for the space available in the vegetable garden. That plot in full bloom drew admiration and wonder but doubtless also a little pity that so much labor could have been put into a project that gave no economic returns.

I was my mother's chief disciple and abettor in all of her floral undertakings and had more fun in weeding than in playing with dolls. Beginning then, at an early age, I worked my way through the wild and cultivated flowers to the best of my ability until a short time ago when time and circumstance brought me to begonias, and what a happy time to discover them! Never have people been more interested in their history, culture and the search for new species.

When I became the fortunate owner of a small house about five years ago, I at first experimented with all kinds of indoor bulbs and plants, among which cropped up a few begonias mostly donated by flower friends, and although I was more than passively interested in several species of plants that I had tried, I soon found them pushed to the sidelines by my growing begonia tribe. Before I knew it I was off on a spree of collecting. I continue to be intrigued by the same diversities of leaf and growth characters that first attracted me to begonias and am thrilled with each new one that is added to the large collection that threatens to push out the sides of my glass house.

Soon I joined the Begonia Society for

I have learned from experiences with other flower societies that one receives manifold returns in terms of fellowship in the sharing of experiences beyond the small sum invested in membership. One can find no better friends than those made through a common devotion to the beauty and spiritual values in flowers.

Begonias are fascinating too because it seems that the end of the rainbow will never be reached in the search for new species. As far away as we can look into the horizon they beckon us on with the promise of other rarities. Of course, as time goes on the number of new varieties produced by hybridization will doubtless be multiplied many times to the delight of the collector and the despair of those patient souls who try to keep order in the begonia world.

My own propensity for hybridization strays slyly into the field of begonias and although I certainly have no intention of raising them from seed my hand often dabs a bit of pollen here and there, and if the seeds happen to fall down on the moist sand between the pots and germinate there, although I hold myself in no way responsible, it would take a harder heart than mine to let them pindle away for lack of potting up!! This is a form of back-hand hybridization that relieves me of the usual tedious record keeping. However, by this method, or rather lack of one, I have secured several hybrids that are developing into interesting plants.

Due to war conditions large outside gardens must be curtailed for many of us but even so we can still find heart's ease with our begonias for large collections of them can be cared for with a minimum of effort in a small glass house, in the dwelling or outside if the climate permits. So I know that for one they will continue to be my very favorite for the duration and I hope for many years beyond that.

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536 Willow St.	Lockport, N. Y.

# PLANTLY SPEAKING—ON THE SHADY SIDE

by JOHN S. VOSBURG  
Los Angeles, Calif.

A perennial that adds much to our winter color here in California is, well, I believe: *Bergenia crassifolia* var. *orbicularis* is the acceptable name today. I have known it and find it still offered as *Saxifraga cordifolia*, *S. crassifolia*, *S. ligulata*, and *Megasea crassifolia*. Regardless of name, it is worthy and should add many more to its hosts of admirers. Improving each year if left undisturbed for four or five years and then divided to get it off to a fresh start. Its broad, dark green leaves are attractive at all seasons of the year and much used for flower arrangement enthusiasts. Its branching habit gives room for an abundance of flowers. These are borne on scapes in dense panicles in generous quantities. A light rose in color, with all the grace and dignity so acceptable to the flower and garden lover. Flowering period is from December to March in Southern California, but in colder sections from March to May. Again, the flowers are most delightful and long lasting in flower bouquets which makes it a very useful plant for the home garden. There are few plants of this character that will bloom in shaded areas. It is worthy of comment that it is quite adaptable to pot culture too. Divisions can be rooted readily. I have seen this plant on the North side of shrubbery borders one hundred or more feet in length with every plant bearing a grand array of flowers flaunting the rich pink color against the dark green background in such a manner as to delight even the most casual garden enthusiast.



*Bergenia crassifolia* var. *orbicularis*

## HONORABLE GENTLEMEN

• The American Begonia Society is proud to announce the addition to the list of Honorary Directors two men, each outstanding in his own field of activity. Mr. E. D. Merrill, Director of The Arnold Arboretum, Harvard University, Jamaica Plain, Mass. who is also on the Board of The New York Botanical Garden. He has described a considerable number of the species Begonias from the Philippines and Borneo, besides doing some notable work with the Old World species.

Mr. George Otten, of Seaside, Oregon, is well known to our readers. This busy octogenarian finds there is plenty of spice to life while he is continuing his experiments which he has carried on these sixty-five years, especially when he gets thrilling results from his crosses on his pet Tuberous Begonias.

—Ferd. P. Neels, Pres.

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# BEGONIAS AS HOUSE PLANTS

by TRISTRAM COFFIN WHITAKER  
Germantown, Philadelphia, Pa.

**W**E have received so many letters from Begonia lovers and beginners requesting information as to which varieties are best suited for window culture in the home, that I feel a word here might be helpful.

When selecting Begonias for the home, the first consideration, of course, is to take stock of the conditions you have to offer them. All Begonias like a moist, moderately warm air 60 to 70 degrees Fahrenheit, but many varieties will do well in a cool room 50 to 60 degrees Fahrenheit. These plants require less humidity than those grown under warmer conditions. Begonias like moisture, but the air must be fresh and buoyant, never stuffy and oppressive. Some varieties do well in a North window others are best suited in a sunny room but removed a little from the window so that the strong direct rays of the sun do not blister the leaves.

One of the primary reasons for failure with Begonias, is the attempt to grow varieties suited only to a greenhouse or outside in a warm climate. An amateur grower should never think of starting out with the following varieties. The varieties in this group are very lovely, but difficult:

These should be undertaken only by one with experience in growing Begonias in the home or in a greenhouse:

- B. Cathayana
- B. Cathcart
- B. gogoensis
- B. Mme Fanny Giron
- B. diadema
- B. Richard Robinson
- B. luxurians
- B. Mrs. Kimball and
- B. Arthur Mallet

The following is a list of a few of the many varieties which will make good house-plants—if given anything like the proper conditions:

The several STAR varieties:

- B. Sunderbrucki
- B. ricinifolia
- B. Mrs. Mary Peace
- B. Marion, etc.

The so-called hairy varieties:

- B. Loma Alta
- B. Houghtoni
- B. Scharffi (Haageana)
- B. Scharffiana
- B. metallica
- B. prunifolia
- B. Credneri
- B. Morgano, etc.

The semi-tuberous are excellent:

- B. Dregei
- B. McBethi
- B. Weltoniensis
- B. Sutherlandi, etc.

The many rubra varieties:

- B. Rubra Red
- B. Rubra Pink
- B. Lucendro
- B. Annabelle
- B. Mary
- B. Shasta, etc.

The vine or climbing types:

- B. glaucophylla scandens
- B. alba scandens, and
- B. Marjorie Daw

Then, under Varied Types, the following are simple enough to grow under fair house conditions:

- B. Mme de Lesseps
- B. Helene
- B. peltata
- B. Verschaffeltiana
- B. Washington Street
- B. palmifolia
- B. Lindleyana
- B. Caroline de Lucerne
- B. Dorothy Grant
- B. Druryi
- B. odorata alba and others

Thirty-two is a good beginning for an amateur, once one can grow these well, the Begonia field will beckon the true plantsman ever onward.

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# Bromeliaceae—The Pineapple Family

by GEORGE

• Have you ever thrilled as you watched a new plant burst into bloom for the first time? Your heart may skip a beat as nature in her splendor brings out all of the colors and the combination of colors that are known to man. If you are one of these fortunate people who thrill at such a sight I would like to recommend what I believe to be among nature's rarest treasures, the Bromeliaceae or Pineapple family. I have made a hobby of collecting Billbergias (a more common name) for the past eight years.

It is my opinion that many of our prize orchids are dull compared to Billbergias for color. Billbergias range from white, pink, red, and yellow to the deepest of blue or brightest of orange. Many of our flowers have all of these colors but not in the combinations that the Billbergias have, nor are they as easy to grow as these Bromeliads.

The Billbergia is a tropical plant from Central and South America and it will take plenty of water. It makes wonderful pot plants but can be used in many other ways. One of the most novel and attractive uses for Billbergias is to make balls of them. To do this take two 9 or 10 inch baskets, line with moss and fill with leafmold and sandy loam then wire the two baskets together to make the ball. Make holes on the sides in the moss to plant the Billbergias. Use enough Billbergias to make the ball look well. It is now ready to hang in the lath house or under a tree. The new sprouts will soon make a solid ball which is very attractive when it is in full bloom. All the care needed is to water about two or three times a week with a hose or a watering can. Try one, you will like it.

Billbergias are also very nice to put in the sides of wire baskets that have Achimenes or other summer blooming flowers. When the Achimenes die down in the winter the basket is still very attractive because then the Billbergias are beginning to bloom.

If you live in the Southwest and have a large date palm try planting Billbergias in the sides of the palms for a most pleasing effect.

(To be continued)

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## BRANCH NEWS:

• **Inglewood Branch:** A happy surprise for the Inglewood Branch members was the donation by Mr. and Mrs. O. D. Bradford of a hand-wrought Gavel made by Mr. Bradford. The head of the gavel is made from a piece of Eugenia wood grown in their own back yard and cured for about three years, the handle has quite a history, but suffice it to say it has been a cherished piece of rose-wood collected at least forty years ago by Mr. Bradford Senior.

The members are looking forward to a lecture to be given at the next meeting by Mr. H. Britton-Logan, author-scientist on nutrient solutions and the use thereof.

## Newly Elected Officers, Pasadena Branch

• Pres., Fred Willard, 81 Fulton Ave., Pasadena; V. P., Chester Dennis, 1918 New York, Altadena; Secy., Miss Sadie Weir, 3652 Huntington Drive, San Gabriel, Cal.; Secy.-Treas., Mr. R. S. Works, 71 North San Gabriel Blvd., Pasadena.

## Invitation to Show Begonias

• The Pasadena Branch would very much like to combine with some other Branch or Branches in staging an exhibit in the Southern California Spring Flower Show at the Morrison Horticultural Centre Pasadena on March 12-15, inclusive. Contact Mr. S. R. Works, Secretary, 40 N. San Gabriel Blvd., Pasadena, Calif., or Mr. Fred Willard, President, 81 Fulton Ave., Pasadena, Calif.

## VICTORY . . . Another Branch is Born

• A new Branch of the American Begonia Society was formed recently in Lynwood, California. The paternal pride of our Treasurer, Mr. J. N. Nutter may well be understood as he presented the 26th child "Victory Branch" for adoption at the last meeting of the Board of the A.B.S. Congratulations were offered and accepted all around and we wish the Victory Branch good luck and many happy years studying and enjoying Begonias with all the companions possible. To the first officers elected our sincerest greetings and a warm welcome to the fold.

Mrs. Mary A. Chapman, President; Mr. C. A. Moore, Vice-President; Mrs. Clara Moore, Sec.-Treasurer, address 11275 Duncan Ave., Lynwood, Calif.; Mrs. Betty Lutz, National Representative; Mrs. Helen Hartman, Sunshine Chairman, Mrs. Rose Heinbach Historian; Mrs. Georgia Terpstra, Plant Chairman; Mrs. Lela Mathews, Program Chairman; Mrs. Mastanich, Publicity; and Mrs. Katie Steinen, Ways and Means. The Victory Branch meets every third Thursday of the month. We note that they are well organized for real work and look forward to fine reports from the group.

• The Hollywood Branch: We are informed by Mrs. Marek, Director Public Relations, that due to pressure of other duties, Mrs. Sadie McPherson resigned from the Speaker's Bureau, however, Mrs. W. C. Drummond of the Hollywood Branch, has graciously accepted the appointment to the post. This Branch will attend in a body, the second of the special series of lectures open to the public by William A. Reynolds, Ph.D. at 7377 Santa Monica Blvd., in Plummer Park, at 7:30 p.m., Tuesday, March 3rd.

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# Santa Barbara Branch, Officers for 1942

Mrs. Elsie Frey.....President  
Mrs. Pauline Gullifer.....Vice-President  
Mrs. Thelma Sommerfield.....Secretary  
Mrs. Betty Davis.....Treasurer  
Mrs. A. F. Duncan.....Historian  
Mrs. Margaret Ziesenhenn.....Nat'l Rep.



• **Riverside Begonia Club:** Met at the home of Mrs. W. Purcell Gall, on the thirteenth of February, holding a penny plant auction, the greater part of the proceeds for the Red Cross. Mr. Harry M. Wallace resigned from his office. Mrs. Harriet E. Meyer was elected Sec.-Treas.

"Mention The Begonian to our Advertisers as you make your purchases."

## Important Notice

The Bala-Cynwyd Garden Club will devote their April meeting to the subject of Begonias. Mrs. Albert H. Gere, and Mrs. Helen K. Krauss of the Philobegonia Branch of the A.B.S. will have slides and moving pictures of Begonias including factual information.

The meeting is open to the public for 25c a person.

Time and place: Thursday morning, 10:30 A.M., April 2nd, 1942 at Woman's Club of Bala-Cynwyd, Bala Ave. & Levering Mill Road.

It will be well worth the effort you make to attend this meeting.

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# WHAT MAKES PLANTS GROW

by ALEX. F. THORNTON

Pasadena, California

**T**HIS is supposed to be an article on soil conditions in the shade, and I will try to stick to that but if I digress occasionally it is because soil and shade conditions digress.

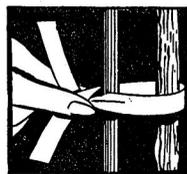
Earth, water and air are the three factors that are needed for any type of plant growth. Sterile earth, sterile water and sterile air would have no effect on plants; I mean by that, that the only growth a seed or plant would make under those conditions would be from what the plant or seed had within itself and it would exist but a short time on its own fat. Light or sunshine, the more sunshine the more light, plays a most important part as lacking it we find all growth soft and pale with flowers anaemic and frail. It is quite evident that if sterile water, earth, air and light don't bring results it must be what that earth, water and air contain that makes plants grow. It is difficult if not impossible to change the water and air but we can do a lot for the soil and incidently the plant will get more good out of the other two whether it is in the shade or sun. We hear a good deal about shade loving plants here in sunny California and I sometimes wonder just what is a shade loving plant. A lath house supplies shade; a wall or house will supply it, and then there is the shade in the corner that never sees the sun. Just what is the action of sandy, or clay (adobe) soil under one or all of these conditions? Strange as it may seem the sandy, clay or adobe soils of California, the heavy muck soils of Indiana or the lime soils of Kentucky and Florida all respond in a general way to the same fertilizer treatment in ordinary field cultivation, but in the shady locations the soil treatment should vary with the type of soil and its location. The fundamentals of agriculture and the actual manufacture of fertilizer are scientific but the application of those fundamentals, it has always been my belief, is an art. If that were not so then all of us could make a success by following a book and John Jones would be just as successful a grower as John Smith. As it is in horticulture so it is in painting. The artist starts with certain definite things, the

tools of his trade. Canvas, pigments and brushes for the painter; soil, water, light and air for the gardener and it is how these are combined that makes them successful or otherwise. It is always advisable to start a garden with first class fundamentals and this is particularly true for a shade garden. First the soil; regardless of its type just so it's well drained; move in about twelve inches of good potting soil and the way to make that is the same whether in Maine or California—good top soil, leaf mould and sand about one third each by volume, the mixture should be moist but not wet. And by the way while it's fresh in my mind, know where your leaf mould comes from for we used some that was full of poison oak and that's not so good on arms and hands. There's nothing further to do so far as the soil goes except plant your crop. Now the shade; lath shade is the best for it filters the sunshine and there is plenty of light but some of our tropical plants won't thrive there as their natural habitat is the jungle where the light of day is pretty dim, so a well protected corner is the place for them. The soil in this corner, even a good potting soil, will have a different reaction there. Organic material (leaf mould) in this instance rots much slower but the soil bacteria seem to be more active and the nitrogen is given off much faster causing a lush rapid soft green growth. The gorgeous blooms of some of these tropical plants in their native heath are breath taking and they must have some air and light to do this as without carbon dioxide, which comes from the air the plant just can't manufacture the needed bud and bloom carbohydrates. Plants breathe through their leaves and feed through the roots in most cases. Nitrogen, Phosphoric Acid and Potash are the three full meal elements that all growing plants must have. They are known as the major fertilizer elements. Beside these there are many minor mineral elements called secondary or micro-nutrients such as iron, manganese, cobalt, copper, nickel, etc., etc. A proper soil contains all known plant food but in insufficient amounts to give our garden plants all they need so they are supplied

by concentrated fertilizers of one kind or another. Bear in mind though, some are called major and some minor elements. The lack of any one of them in the soil may be the limiting factor to successful growing. As I have said, organic matter decomposes slowly in the shade so the plants should have regular feedings of well balanced fertilizers containing nitrogen, phosphoric acid, potash as well as iron and manganese and these should be in shape so the plant can take them up almost at once. The best form of fertilizer to apply for this would be a liquid fertilizer or one that is entirely soluble in water. Tropical vegetation thrives in an acid to neutral soil and we try to emulate this condition in our semi-arid naturally alkaline sunny California. Alkaline soils and an alkaline water from our hydrants combine to make our task difficult and sometimes impossible. Creating alkalinity in soils is much easier than creating acidity. In the former case all one has to do is add enough carbonate of lime to counteract acidity but to lessen alkalinity we use peat and sometimes inadvisedly aluminum sulphate. Let's look at peat first as it is the best sort of acidity from several angles. Before this war most of the peat we used came from Germany and Scandinavian countries. These channels were closed to us and we brought it from Scotland and Canada and now that this avenue is closed. California, Oregon and Washington are our present sources. The German and Scandinavian peat had an acid or pH reaction of less than 2, the Scotch and Canadian about  $4\frac{1}{2}$  and our own Pacific coast peat about  $5\frac{1}{2}$ . That means we have to use about two or three times as much to get the same acidity and while that may be alright on outside plantings it might play hob in our potting soil. Peat of itself, is no benefit except in its water holding capacity and its chemical soil reaction. It has no plant food value. Now for aluminum sulphate. This chemical would appear to fill a long felt want if it weren't for the fact that its continual use will eventually prove costly as it will in time cause a toxic condition in the soil that may well kill the plant. Iron sulphate on the other hand may be used with much more impunity though care must be taken that none of the solution gets on the stems or leaves. One teaspoonful in a gallon of water saturating the soil once every few months should do considerable good. Sulphur (agricultural)

may also be incorporated with the soil and in time will assist in acidifying though its action is very slow as it must oxidize first and in shady spots that would indeed be slow. It must be self evident to most everyone why I made the statement that fertilization is an art and not a science. You may try these fertilizers and soil amendments or soil conditioners with marked success but there is no set rule of thumb for you to be guided by. Trial and error is about the only way and sometimes that is costly. By the way, before finishing with alkalinity and acidity may I say that I have taken hundreds of tests of different Southern California soils and never yet have I found a so called sour or very acid soil. In one or two instances I have found neutral or slightly acid soil but 99 times out of a hundred the reaction is alkaline. Even that corner the sun never reaches which you think may be sour, a chemical test will probably show it alkaline.

To sum it all up, it would seem evident that soil conditioning and fertilization in the shade is about the same as in the sun. Shade holds moisture and gives off plant food slower. The same general horticultural practices hold good for both. Do not use carbonate of lime in California use sulphate of lime (gypsum). Most all plant life grows best in neutral or slightly acid conditions, so choose your acidifying agent carefully and use it with discretion. Build your soil up with organic matter and rely on liquid fertilizer for feeding the plants. Do your part well and nature will do her part.



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# MEETING DATES

1942		MARCH						1942	
SUN	MON	TUE	WED	THU	FRI	SAT			
1	2	3	4	5	6	7			
8	9	10	11	12	13	14			
15	16	17	18	19	20	21			
22	23	24	25	26	27	28			
29	30	31							

# AND SPEAKERS

It would be much appreciated if the Secretaries of the Branches would send meeting data to reach the Editor not later than the tenth of the month.

The American Begonia Society Board will meet the first Monday of every month, Council Chamber, City Hall, Inglewood, California at 7:30 P.M.

### HOLLYWOOD BRANCH

**Tuesday, March 3rd**  
Plummer Park, 7377 Santa Monica Blvd.  
Mrs. Helen Ehret, Secy.  
7507 Lexington Ave., Hollywood, Calif.  
SPEAKER: WM. A. REYNOLDS  
SUBJECT: Soils

### PALOMAR BRANCH

**Tuesday, March 3rd, 7:30 P.M.**  
Jefferson Street School, Vista, Calif.  
Margaret Rutherford, Secy.-Treas.,  
Route 2, Box 340, Escondido, Calif.

### THEODOSIA BURR SIPHERD BRANCH

**Tuesday, March 3rd**  
American Legion Hall,  
North California St., Ventura, Calif.

### BELLFLOWER BRANCH

**Tuesday, March 3rd, 7:30 P.M.**  
Home of Ralph A. Boggs, 263 California St.  
Mrs. L. D. Thalheimer, Secy.-Treas.,  
222 S. Woodruff St., Bellflower, Calif.

### SANTA BARBARA BRANCH

**Tuesday, March 3rd**  
Girl Scouts Headquarters  
1835 San Andres St., Santa Barbara.  
Mrs. Thelma Sommerfield, Secy.,  
314 E. Anapamu St., Santa Barbara, Calif.

### DOMINGUEZ BRANCH

**Wednesday, March 4th**  
Dominguez Community Church,  
21503 Prospect at Adams  
Mrs. R. L. Warren, Secy.  
21718 So. Alameda, Long Beach

### SAN FRANCISCO BRANCH

**Wednesday, March 4th, 8 P.M.**  
1060 Francisco St.,  
Harry F. O'Donnell, Secy.-Treas.,  
1575 31st Ave., San Francisco, Calif.

### ORANGE COUNTY BRANCH

**Thursday, March 5th**  
College Hall, Santa Ana J. C.  
917 N. Maine St., Santa Ana, Calif.  
Mr. Clarence Dudderar, Treas.

### INGLEWOOD BRANCH

**Friday, March 6th, 8 P.M.**  
Woman's Club, Inglewood, Calif.  
Mrs. R. R. White, Secretary  
937 Harding Ave., Venice, Calif.  
SPEAKER: H. Britton Logan  
SUBJECT: Nutrient Solutions

### EAST BAY BRANCH

**Monday, March 9th, 8 P.M.**  
Berkeley Council Chambers.  
Dick G. Goodnow, Secy.-Treas.  
2116 Derby Street, Berkeley, Calif.

### SAN DIEGO BRANCH

**Monday, March 9th, 7:30 P.M.**  
4037 39th Street  
Mrs. Clarence Moore, Secy.-Treas.  
3664 31st St., San Diego, Calif.  
SPEAKER: Ella M. Fewkes

### PASADENA BRANCH

**Tuesday, March 10th**  
La Casita Del Arroyo,  
177 So. Arroyo Blvd.  
Samuel R. Works, Secy.,  
71 N. San Gabriel, Pasadena, Calif.  
SPEAKER: R. C. Long  
SUBJECT: Camellias

### PHIOBEGONIA CLUB BRANCH

**Thursday, March 12th, 10:00 A.M.**  
Home of Mrs. Albert J. Gere  
Mrs. Albert H. Gere, Sec.-Treas.  
362 Brokway, Merion, Pa.

### LONG BEACH PARENT CHAPTER

**Thursday, March 12th, 7:30 P.M.**  
Odd Fellows Temple  
728 Elm, Long Beach, Calif.  
Mrs. Ethel G. Arbuckle, Secy.-Treas.,  
5932 Seville Ave., Huntington Park, Calif.

### RIVERSIDE BRANCH

**Friday, March 13th**  
Mrs. Harriet E. Meyer, Secy.-Treas.,  
4219 Sunnyside Dr., Riverside, Calif.

### HERBERT DYCKMAN BRANCH

**Friday, March 13th, 7:30 P.M.**  
Home of Mrs. P. C. Mathewes,  
1845 Lemon Ave., Long Beach, Calif.  
Mrs. Charlotte Sisson, Secy.-Treas.  
Long Beach, Calif.

### SAN GABRIEL VALLEY BRANCH

**Sunday, March 15th at 2 P.M.**  
American Legion Hall  
716 North First Ave., Arcadia  
Mrs. N. H. Powell, Secretary  
419 South Ynez Ave.  
Monterey Park, Calif.

### GLENDALE BRANCH

**Monday, March 16th**  
329 No. Brand Blvd.  
News Press Bldg., Glendale, Calif.  
Mrs. M. B. Dewar, Secretary,  
709 Milford Ave., Phone Citrus 17517

### EVA KENWORTHY GRAY BRANCH

**Monday, March 16th**  
Mrs. Henry O. Colt, Secy.-Treas.,  
7221 Olivetas, La Jolla, Calif.

### MARGARET GRUENBAUM BRANCH

**March 16-21st**  
Mrs. Wm. L. Paxson, Secty.  
Willow Grove, Pa.  
Philadelphia Flower Show

### VICTORY BRANCH

**Thursday, March 19th**  
Mrs. Clara Moore, Secy.-Treas.,  
11275 Duncan Ave., Lynwood, Calif.

### NORTH LONG BEACH BRANCH

**Monday, March 23rd**  
Democratic Hall, 5662 Atlantic Blvd.  
Mrs. H. A. Cuyler, Secy.-Treas.  
5676 Olive Ave., Long Beach, Calif.

### SANTA MARIA BRANCH

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Mrs. B. W. Skinner, Secretary.

### NEW ENGLAND BRANCH

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### PHILADELPHIA AND VICINITY BRANCH

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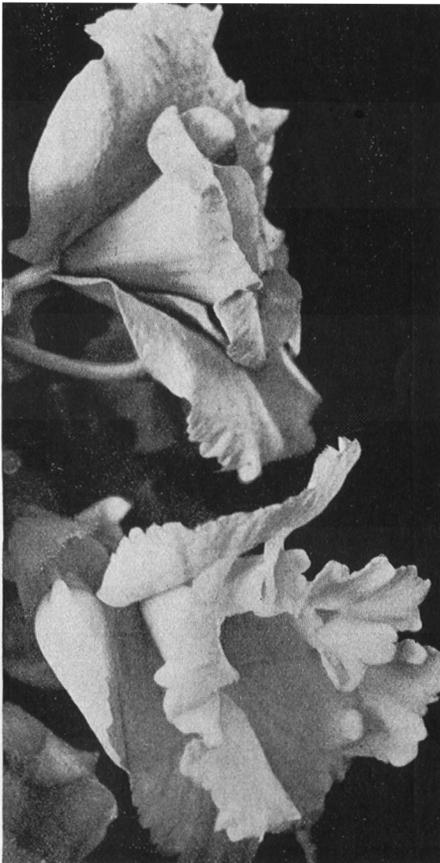
# TRANSPLANTING OF TUBEROUS BEGONIA SEEDLINGS

by VICTOR REITER  
Capitola, Calif.

**P**REPARE the flats with the same mixture as advised for seed but it is not necessary now to sift the top layer. About one to one and a half inches of soil is sufficient as in this way the soil will drain much better. The soil must not get sour for it will check growth. Transplant the seedlings into this, one inch apart when the third leaves are developed.

Before they get too crowded, transplant again in the same manner but farther apart until strong enough to be planted out in the open or, if desired, potted up. If planted in open ground, enrich the soil liberally with well-rotted cow or sheep manure and a sprinkling of bone meal. If the soil is heavy, add

plenty of either leaf mold, peat or sand or a mixture of all, so that the ground will be light and porous. Plant in a shaded place, such as under trees, or north side of a house, where direct sunlight cannot reach them. Keep well watered with fine, overhead sprinkling preferred. If you follow the easy road to production of beautiful Tuberous Begonias, now is the time to get your tubers and through March place them about three inches apart to sprout in open flats filled with peat. They should be only slightly covered and kept moist, this to be done gradually a little more as the sprouting takes place. Do not keep them wet. The place should be warm, well lighted, and the tubers should be left until three or four inches of green develops, then plant them in pots or permanent position as desired. **THE FRONT IS ALWAYS** where the tips of the leaves are pointing. Often if dormant tubers are planted in the open ground, especially if it is cold and too wet, numbers of them rot, and the planting will be uneven, some coming earlier, some later, and facing haphazard way. Started first in peat, they will develop splendid root systems, which are necessary for developing good specimens.



Tuberous Begonia—Narcissiflora type

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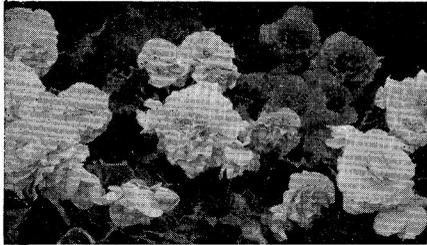
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