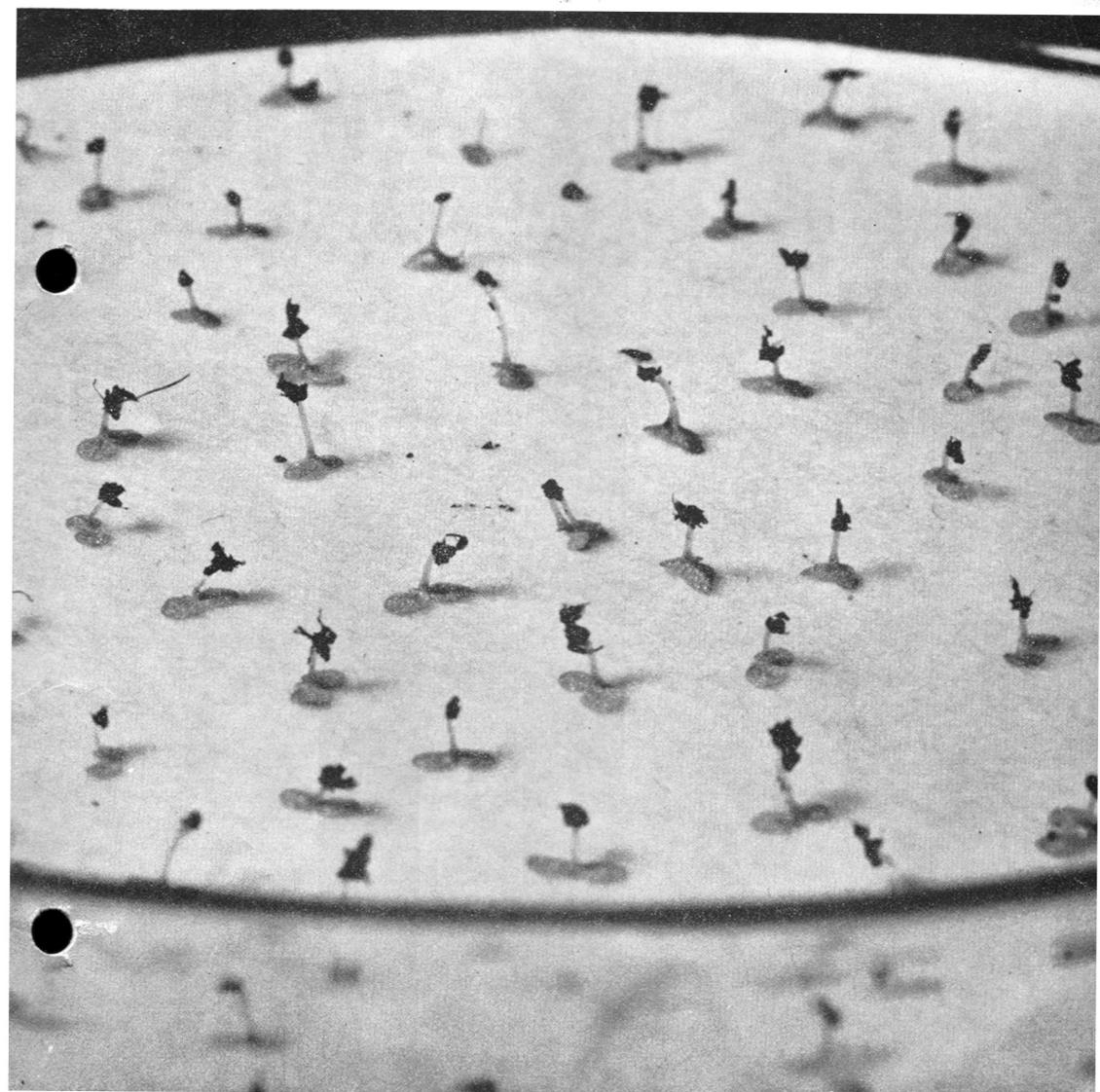


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Views expressed in this magazine are not necessarily those of the Editor, the Society, or its officers.

AIMS AND PURPOSES OF THE AMERICAN BEGONIA SOCIETY, INC.

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 plants; 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.

FROM THE PRESIDENT

Late in February, some 25 A.B.S. members of the Seattle area applied for enrollment in the A.B.S. Judges' Course. They asked that the courses be sent immediately as they had already started forming study groups and were eager to get under way. Their objective is to complete the course by July of this year in order that they may have some accredited A.B.S. judges for their show at that time. We are delighted to see this growing interest in learning to judge *Begonias* as well as grow them. There is a shortage of accredited *Begonia* judges throughout the country, and I would like to encourage all of you who are interested to take this course offered by the A.B.S. (See page 88.)

The present course was started in October, 1965 and until now has processed 157 registrants. It is designed as a correspondence course. However, much added enjoyment can be had by a group taking the course together. Once again, the advantages of learn-

ing by sharing are many. The course is open to A.B.S. members and non-members alike.

With winter gone and spring well on its way, showtime should be fast approaching the many areas throughout the nation. Many of you may be unaware of the fact that the A.B.S. has available certain awards which are given to exhibitors who grow *Begonias* with outstanding cultural perfection. These culture awards are beautifully hand decorated and highly regarded by those who have won them in the past. They are available through the A.B.S. Awards Chairman. One of the requirements of the award is that the plant to which it is given must have been judged by three accredited A.B.S. judges.

Judging can be a lot of fun as well as educational, so if you are the least bit interested, contact the A.B.S. Judges Chairman at once. We cannot guarantee that you will enjoy taking the course, but why not give it a try. You may be in for a big surprise.

YOU BE THE JUDGE.

Walter Pease

PATRONIZE OUR ADVERTISERS

When you are planning to buy something in the gardening line, pick up *The Begonian* and read through the ads. If you find what you want, then "patronize that advertiser" by ordering it from him.

When you do order something from one of our advertisers, be sure to tell him you saw his ad in *The Begonian*. This is the best way you as a member can say, "Thank you for supporting our organization by advertising in *The Begonian*." A word of thanks is always appreciated.

Anne Rose,
Advertising Manager

COVER PICTURE

Colchicine treatment of *Begonia* seedlings. Colchicine is a toxic substance produced by the meadow saffron, *Colchicum autumnale*. It affects cell division in the plant in a very specific way. A classical method is to let seed soak in a colchicine solution. When treating seedlings, the seedlings are put upside down in a Petri dish on a filter paper soaked in a 0.5% colchicine solution. Covered and left 24 hours, the plants are carefully removed and pricked out in soil. (See page 76.)

Photo by Dr. J. Doorenbos

COLCHICINE TREATMENT OF *BEGONIA*

By DR. J. DOORENBOS, *Laboratory of Horticulture, Agricultural University, Wageningen, Netherlands*

What are chromosomes?

Plants are built from cells, which at least when young, are little clots of protoplasm containing a nucleus and surrounded by a cell wall. When plants grow, cells divide. At the onset of this division process, the content of the nucleus contracts into a number of rod-shaped bodies. These are the chromosomes.

The number of chromosomes is constant for a plant, and so are the shapes of the individual chromosomes. When these are studied in detail, it turns out that usually for each chromosome of a given size and shape, there is another one that is exactly similar. In other words, chromosomes occur in sets, and a nucleus has two of these sets. Such a set is called a genome, and a nucleus with two genomes is called diploid.

When a cell divides, each chromosome splits lengthwise into two. Each new nucleus gets one of these halves, so that it remains diploid. A difficulty arises when a new individual originates by the fertilization of an ovule by a pollen cell. In this case two nuclei, one of the pollen parent and one of the seed parent, melt together. If both were diploid, the resulting nucleus, and consequently, the new embryo would be tetraploid; that is contain four genomes.

Nature prevents this by a special mechanism for the production of pollen cells and ovules. The crux of this mechanism (called meiosis) is that a nucleus divides without division of the individual chromosomes. In this case each new nucleus gets one of each pair homologous chromosomes, in other words, one genome. Pollen cells and eggs are therefore haploid. After fertilization (the fusion of two haploid nuclei), the new nucleus (the first one of the new individual) is again diploid with two genomes.

What does colchicine do?

Colchicine is a toxic substance produced by the meadow saffron, *Colchicum autumnale*. It affects cell division in the plant in a very specific way. It does not interfere with the division of the chromosomes, but it upsets the mechanism by which the halves pull apart. In this way nuclei may arise which have a very abnormal number of chromosomes. Many of such nuclei are not viable and perish or do not divide further, but nuclei with an even number of complete genomes may develop more or less normal tissues, shoots or whole plants. Usually such plants are tetraploid; they have four genomes.

Tetraploid plants have large cells and consequently, usually larger and thicker leaves and stronger stems than the diploid plants. Flowering is sometimes retarded but the flowers are usually larger. Fertility is often reduced, but may be restored to normal after some generations.

Tetraploid plants produce gametes (pollen cells and egg cells) which are diploid. When these unite with the haploid gametes of a normal diploid plant, embryos are formed with three genomes (two from the tetraploid and one from the diploid parent). These are triploid.

Triploid plants may differ from the diploid plants in the same way as the tetraploid plants. They are nearly always completely sterile, however. They are of particular importance in *Begonia*, where triploid plants are often superior to both diploids and tetraploids.

How to apply colchicine.

Colchicine is soluble in water. From the foregoing, it is clear that it should be applied to plant parts with many dividing cells. A classical method is to let seed soak in a colchicine solu-

tion. The germinating seeds take up the solution readily and the young embryo is full of dividing cells.

This method has one draw-back, however. Colchicine is a toxic substance and the damage to the seedling is extensive. If the whole seedling is treated with it, the roots are severely injured and it takes a long time for the plantlets to become established, if they do not die prematurely.

We, therefore, treat the plants as follows. Seed is sown in the ordinary way. When the cotyledons are about two millimeters across, the seedlings are taken up and placed upside down on filter paper that has been soaked in a solution of 0.5% colchicine (cover picture). In this way the roots are in the air and do not come into contact with the toxic substance. This treatment is given in dishes which are covered to prevent drying out. After 24 hours, the plants are carefully removed and pricked out in soil.

How to recognize tetraploids.

The treated plants recover slowly. In some the growing tips have been damaged so severely that they do not show further growth. It is of the utmost importance to save as many as possible of the very weak plants; those that resume growth immediately as if



Seedling from *B. (socratana x dregei)* which was treated with colchicine. The left part has become tetraploid and shows larger leaves and flowers than the diploid branch to the right.

Photo by Dr. J. Doorenbos

nothing had happened are never the desired tetraploids.

When the seedlings are well established again the diploid and tetraploid ones have to be separated. This is very difficult. The greatest complication is that the plants are never completely tetraploid; part of their tissues remain diploid, and there is a considerable risk that the diploid shoots may outgrow the tetraploid ones.

The surest way to establish if a shoot is diploid or tetraploid is to count the chromosomes. This is never easy, and particularly difficult in *Begonia*, where the chromosomes are extremely small. This is strictly a job for the professional.

Fortunately for a close observer, there are characteristics that can be seen with the naked eye. As the photo shows, the leaves are larger and thicker and the flowers when they appear are usually larger too. When taking leaf cuttings we found that diploid leaves root much more readily than tetraploid ones, and we have used this also as a method to separate the two types. So far, we have obtained tetraploid plants different of six species.

Uses of polyploid *Begonias*.

Some of the existing *Begonia* varieties are tetraploid, many tuberous *Begonias*, for example. These forms, which have arisen spontaneously, would not have been selected and propagated if they were not superior to the parent variety. It may, therefore, well be that when one makes a systematic effort to "double" *Begonias*, other cases come to light where the tetraploid form surpasses the diploid.

We believe, however, that the greatest importance of tetraploid *Begonias* lies in the fact that they may be used to produce triploids, by crossing with diploids.

Systematic chromosome counts have revealed that all superior varieties of the *semperflorens*, *B. 'Gloire de Lor-*

(Continued on Page 94)

THRILLS IN THE PANAMANIAN COUNTRYSIDE

SUSAN E. VERHOEK, *Missouri Botanical Garden, St. Louis, Missouri*

What a surprise to read in the February *Begonian* that another *Begonia* fancier has "discovered" the *Begonias* in Panama! I too was thrilled to see plants that I had known only from pot specimens actually growing beside trails through the forest. My purpose in Panama was to collect plants as a member of the Missouri Botanical Garden expedition working on the Flora of Panama. Although I was familiar with the flora through dried specimens, the live Panamanian plants seemed strange and I greeted the first *Begonia* as a long lost friend. From then on I searched first for *Begonias* at every place we stopped and along every forest trail.

Our collecting was done mostly in remote places which we reached by helicopter. Many of the plants we found had not been reported from those parts of Panama before. My first "find" was the delicate *Begonia filipes* Benth., the first of the species known to grow in the province of Coclé. The ones I saw were growing from the moss covering the trailside rocks. The moss makes a perfect place for the young seeds to sprout, moist with lots of crannies to fall into and take root. In the rare patches of sunlight the asymmetric leaves and reddish stems of the tiny plants were illuminated by the sun shining through them.

A little farther along the same trail we had the luck to find *B. tonduzii* C.DC., once seen, easily recognized by its canes with narrowly asymmetric leaves and persistent stipules. Although the flowers are small and few to a cyme, their red color shows well against the shiny, dark green leaves.

Two of the *Begonias* we found blooming in December were plants that grew directly from a short rhizome. One was a fleshy peltate-leaved plant with very hairy petioles and

flower stalks. The inflorescence was made up of many small pinkish-white flowers of both sexes. I came across this one in the cloud forests of the province of Panama, growing in the crook of a tree. Later we identified it as *B. conchifolia* A. Dietr. The waxy, oval leaves alone would make it a beautiful pot plant. *B. conchifolia* has been collected only a few times in Panama.

The second of the acaulescent plants that we found on this trip has been collected all over Panama. This is *B. plebeja* Liebm. I collected it from a shaded place along a roadcut nearly surrounded by roadside weeds and in the mountains of the western province of Los Santos. The leaves are large and ovate, sometimes sharply toothed. The whitish flowers are small in comparison to the leaves and are borne on long, rather gangling stalks.



Begonia tonduzii C. DC.

Photo by Claude Johnston,
Missouri Botanical Garden

The *Begonian*



Begonia conchifolia A. Dietr.

Photo by Claude Johnston,
Missouri Botanical Garden

In the same mountains of Los Santos we found the most amazing *Begonia* I have ever seen. From a distance we thought that the white flowers were on a small tree. When we got closer we saw that our "tree" was really a *Begonia* with a fully seven foot stem! The lower stalk was quite succulent, perhaps one-half to three-quarters inch in diameter with long internodes. It was an extremely impressive sight. To keep it as fresh as possible until we returned to the Canal Zone, we folded the plant into a plastic bag. Getting such a large plant into the small bag was easily

accomplished because the stems broke apart readily. This beautiful giant is *B. guaduensis* H.B.K. and the first reported from the province. I am inclined to think that the plants Mrs. Mercier found growing in the Canal Zone were the same species. Her photograph and description match very well with the plant we collected. In addition, the Missouri Botanical Garden Herbarium has a very large specimen of *B. guaduensis* collected near Madden Dam. Certainly, though, whether the plant is as large as *B. guaduensis* or as dainty as *B. filipes*, collecting them from the Panamanian hillsides is a real thrill.



The author holding the giant *Begonia guaduensis* collected in Los Santos province of Panama.

A. B. S.

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BEGONIA ULMIFOLIA

By ELDA HARING, *Greenwich, Connecticut*

In my collection there is an interesting *Begonia*. I do not recall where I first obtained it but it is the kind of *Begonia* of which the uninitiated remark, "That's a *Begonia*?" in an incredulous tone of voice. *Ulmifolia* means "elm leaved," the leaves resembling those of the elm. They are soft, somewhat hairy and light green. Flowers are white and quite small. According to the *Buxton Check List*, it was first discovered growing in India in 1818 but it was also found in Venezuela in 1851.

At first I found *B. ulmifolia* difficult to grow, because I placed it under warm white fluorescent lights where I was growing most successfully a number of Gesneriads. *B. ulmifolia* was not happy — edges of the leaves browned and many of the bottom ones fell off. Not wishing to discard it, I took cuttings and put them in our favorite rooting mix of equal parts of vermiculite, perlite and milled sphagnum moss in the greenhouse where they took root and grew vigorously with an occasional feeding of Ortho-Gro. They grew so well with this treatment that I decided to pot them in this same mix rather than in potting soil. They were given weekly feedings of Ortho-Gro. The plant pictured was photographed in August.



Photo by Walter J. Haring

On January 15th when we were making ready to depart for a Florida vacation, where this is being written, the plant has doubled in size. Since August I had been pinching out the new growth at the tips of the stems to encourage it to branch. It is now truly magnificent although *B. ulmifolia* is a tall grower and really needs more room than I can spare. From the type of growth which mine has assumed, I think it might be excellent in a large hanging basket.

As my plant has never bloomed, I am not quite sure of its season of bloom but hope that I may get a photo of it in full bloom for use in *The Begonian* at some future date.

In experimenting with this plant, I have found that the leaves fade in too much sunshine although it needs strong light. I am growing it on the west side of the bottom shelf of a double-deck bench where it receives about three hours of sunshine daily. In the summer, the greenhouse is shaded by maple trees and we also give added protection from the hot summer sun by coating the glass with shading paste.

INVENTORY

Have you ever made an inventory of your plants by name? It is quite enlightening to know your total number and which plants continue to grow successfully in your environment. None of us have complete success with all types of plants. It is interesting to study and try to find out why some plants in our growing spaces die out. We can learn a lot in trying to analyze our environment for various plants.

From *Shady News*
September, 1968
Bellevue, Washington

The Begonian

CLAYTON M. KELLY SEED FUND

Instructions—

"*Begonias* From Seed—Sowing and Growing" gives step by step easy-to-follow instructions and encouragement for beginning seed growers. Price 25 cents.

No. 1—*B. rex* seedlings—

From a beautiful collection of all of the best and choicest in *rex Begonias*. Many seed available and there is no limit to the amount you want. Price \$1.00 per pkt.

No. 2—*B. rex* seedlings—

German type. Plants of outstanding color and color-combinations may be produced from these seed. Imported from Germany. Price \$1.00 per pkt.

Rex seeds are touchy about warmth. Bottom heat is desirable. Seeds require from three to four weeks to germinate, sometimes longer. Sow them especially thin, to give seedlings room to grow undisturbed as long as possible before transplanting. Do not transplant until they have produced the second set of true leaves. True characteristics will not be evident until the fourth set of adult leaves appear, and sometimes they are not permanent as they can change color and texture during the first three years. Small or slow-growing seedlings should not be destroyed as they may turn out to be worthwhile plants. *Rex Begonias* are such complicated hybrids, they will not come true from seed. One seed pod seldom produces two plants alike.

No. 3—*B. lubbersii*—

Brazil. Exotic *Begonia* with silver-splashed, dark leaves and is unlike any other *Begonia*; has a peltate leaf, pointed at the top and bottom, with the surfaces patterned in silver blotches. Has the rare look of *Caladium humboldtii*, with its boat-shaped leaves that will not show silver spots at first. Flowers and seed pods are very large; flowers white and seed pods lightish green. Fresh hand-pollinated seed that should germinate quickly. Price \$1.00 per pkt.

No. 4—*B. evansiana alba* and pink—

Pink and white mixed. Seeds were accidentally mixed by collector. However, about half are those of the white variety which should add interest when grown with the pink variety. We do not often see the white variety and perhaps someone could grow plants separately and produce seed for our Seed Fund. Very hardy type and if grown in the open ground, the bulbils will drop to the ground and new plants will appear in spring. Effectively used in borders outdoors or as potted plants. Price 50 cents per pkt.

CLOSE OUT SALE CONTINUED

In looking through our files, we find more seed that you should be growing and in order to make room for new seed, we continue the close out sale until later. Many members are taking advantage of this sale and are growing plants for themselves, for plant sales, and various other projects.

No. 1—*B. 'Corallina'* seedlings—

Long time favorite cane with large clusters of pink flowers.

No. 2—*B. glabra*—

Basket or vine type, rampant grower with coral flowers.

No. 3—*B. 'Mouilliereana'* seedlings—

Vigorous grower with white flowers.

No. 4—*B. tomentosa*—

Brazil. Thick, succulent leaves rich green with downy hair beneath. Pink-rimmed white flowers with short red whiskers.

No. 5—*B. dichroa*—

Brazil. One of the most beautiful cane type *Begonias*. Flowers orange.

No. 6—*B. venosa*—

Medium height, stems succulent, green with small white lines, surrounded entirely with large, almost transparent, fine, venous, light brown vesicular bracts. Fragrant.

(Continued on Next Page)

SEED FUND

(Continued from Page 81)

No. 7—*B. fagifolia*—

Fibrous. Medium leaves green above, red beneath. Flowers rose-red.

No. 8—*B. semperflorens* seedlings—

Double, semi-double, mixed.

No. 9—*B. #86*—

From Colombia.

No. 10—*B. convolvulacea*—

Brazil. Climber or basket with graceful stems. Leaves light green, oval, flowers white.

No. 11—*B. lobata*—

Silver-spotted leaves of ruffled green satin, white flowers.

No. 12—*B. vitifolia*—

"Grape-leaved" or lobed. Branches from base, leaves large, finely toothed on edge. Flowers pink or white.

No. 13—*B. crispula*—

Crinkly leaf, collector's item. Not easy to grow. Seed scarce, state second choice.

No. 14—*B. 'Cinderella'*—

Mixed colors—pink, red, and white with large, yellow, fluffy centers. Satisfactory plant for shrub borders. *Semperflorens* type.

No. 15—*B. 'Adeline'*—

Small type *sempervlorens* with bronze foliage and pink flowers. Good outdoor bedding plant. Colorful and satisfactory.

No. 16—*B. sceptrum*—

Good cane type with large pink flowers and serrated leaves.

The entire collection is offered to you at a real bargain of sixteen (16) pkts. for \$4.00 or any six (6) for \$2.00. Single pkts. are 50 cents each.

GREENHOUSE PLANTS

Sinningia pusilla—

Brazil. Miniature rosette only two inches high, of little oval, puckered leaves olive green with brown veins, hugging the ground, slender stems bearing a quarter inch attractive tubular flower with five spreading lobes, orchid-colored with darker veins and lemon-yellow throat. Price 50 cents per pkt.

Gesneria cuneifolia—

Low-growing rosette of leathery, glossy-green, long wedge-shaped leaves with toothed margins; and tubular somewhat bottle-shaped flowers burning-red, yellow inside, borne singly on short wiry axillary petioles. Price 50 cents per pkt.

Streptocarpus 'Constant Nymph'—

Originated at Kew Gardens, England and distributed to growers in America in 1963. It is a vigorous grower and each flower stalk carries four to six blue-violet one and a half inch flowers, creating a spectacular effect. Seed will germinate quickly. Price 50 cents per pkt.

Gloxinia #1—

Large white flowers with pink dots. Price 35 cents per pkt.

Gloxinia #2—

White with red dot. Price 35 cents per pkt.

Gloxinia #3—

White and blue dot. Price 35 cents per pkt.

Three above may be purchased for \$1.00 or as quoted.

FERN SPORES

Pteris ensiformis—

Small green and white fern for terrarium or pots. Price 35 cents per pkt.

Pteris albo-lineata—

Beautiful small fern with white bands. Price 35 cents per pkt.

Pteris quadriaurita 'Argyrea'—

One of the most beautiful small variegated ferns. Price 35 cents per pkt.

The three varieties listed above may be purchased for \$1.00; otherwise as quoted.

Gunnera manicata—

Haloragidaceae. Large leaf, lobed and toothed, more kidney-shaped than *chilensis*, rough puckered, light green with buff veining on thick light brown stalks. Price 35 cents per pkt.

Please send requests for seed to:

Mrs. Florence Gee
Seed Fund Administrator
234 Birch Street
Roseville, California 95678

BEGONIA VISCIDA ZIES.

On a dry bank at Lapajua, district of Miahuatlan, Oaxaca, Mexico, Mr. Thomas MacDougall on January 21, 1964 collected a most unusual *Begonia* which he numbered C.251. He routinely brought in tubers and seeds but apparently was not aware of the significance of this *Begonia* which because of its unique characteristics I am naming *Begonia viscida* (vis-kee-da). The entire plant (except the petals, front side of the sepals and the inside of the bracts and stipules) is covered with hairs which are thin and of various lengths from one-sixteenth to one-quarter inch (one to six mm.) long and intermixed. In working with the plants and staking them, I found they produced a disagreeable sensation to the touch, the first *Begonia* ever to feel unpleasant to me. The plant felt sticky but left no residue on my fingers. Examining some of the leaves under the microscope, I discovered that the hairs (Figure 1) were clear or pale green but the tip of each hair has a minute ball which is colored red from within. The little red balls apparently break on touch and the substance which is exposed produces the viscous sensation, this sticky characteristic unique to this plant being the reason I name it *Begonia viscida*.

This plant is different from the usual tuber-producing plant in which normally the lowest joint or section of the stem of the first year plant swells up and stores in a tuber the essential material sufficient to send up a new flowering plant the next year, the tuber being classified as perennial as it usually increases in size and lasts for years. (I planted seed of a tuberous *Begonia* hybrid in 1940 and the same tuber it produced was doing nicely in 1965.) *B. viscida* is not a plant of this type, being most unusual in that the top and the tuber both are annual. When the tuber (Figure 2) is planted, the smallest end is placed up and will send up one or

more stems. This tuber remains in the soil all season until its substance is used up, shriveling during the dry months after the top of the plant is lost. As the stems produced from this tuber grow, however, each one sends down into the soil a growth which gradually develops into a new tuber to produce a new plant the following year. I have studied this tuber formation in a closely related *Begonia palmaris* A. DC. which has the same habit. As an experiment, I planted the tuber with the top one inch above the soil. A stem was produced, and when it was about six inches tall, a peculiar growth developed from the stem bud at a joint nearest the soil. This growth entered the soil and grew right on down to the bottom of the pot, and at the end of the growing season I found the new tuber. I have also learned that if the tuber is planted deeply and the new stem has to grow some distance to reach the surface, each stem bud below the soil can develop into a tuber, the tubers produced alternately on opposite sides of the stem just like a branch would be produced above ground. When the stem is fully grown and the tuber is produced, one can see that the tuber is affixed to the stem at a node, the side shoot of the previous year actually producing a main plant this year. The next node above and below this point have buds on the opposite side of the stem which may also produce tubers. The tuber produces fine, thin roots all over its surface.

The use of a tall flower pot instead of a shallow fern pan is almost mandatory as the swelling of this tuber resting against the pot bottom will lift the entire soil ball an inch or more off the bottom of the pot. In a shallow pot, this growth sometimes goes out the hole in the bottom of the pot, the tuber swelling on both sides of the hole and being necessarily damaged when one tries to harvest it. The

tubers are of various shapes influenced by hard materials such as sticks and stones in the soil but are mostly as pictured in the illustration (Fig. 2).

Because each stem which arises from the planted tuber produces its own new tuber, the plant increases its number naturally. I have even observed the formation of small tubers on the base of the old tubers from the base of the few larger roots.

Besides *B. palmaris* A. DC., *B. ignea* Warz. has similar tuber production, both *Begonias* being closely related to *B. viscida*. I am increasingly convinced that it is necessary to study growing *Begonias* in order to really understand them and properly describe the plants. The dried plant resembles little of the living plant but in the past has been the only means of obtaining the plants. The study of the plants technically should now be done with living material in order to present the species in a clear and correct manner. *Begonias* are so similar that only through modern methods can the whole *Begonia* confusion be cleared up.

It was by growing *B. viscida* that it was possible to discover that this plant is dioecious. This means that a plant is either a producer of male flowers or female flowers but not both. We have been taught that all *Begonias* are monaceous, producing both male and female flowers on the same plant, but the male flowers are usually gone before the female flowers mature, thus preventing the female flowers from being self-pollinated. I have grown dioecious *Begonias* for many years. *Begonia palmaris* A. DC. is a dioecious plant which Mr. MacDougall collected in Mexico and as I mentioned is closely related to *B. viscida*. I have grown another dioecious tuberous *Begonia* which is not closely related to *B. viscida*, a plant collected in Argentina and sent to the University of California at Berkeley where I obtained it with the designated number 1456 U. C. I learned through growing it that the plant is dioecious and that the flower of the male plant

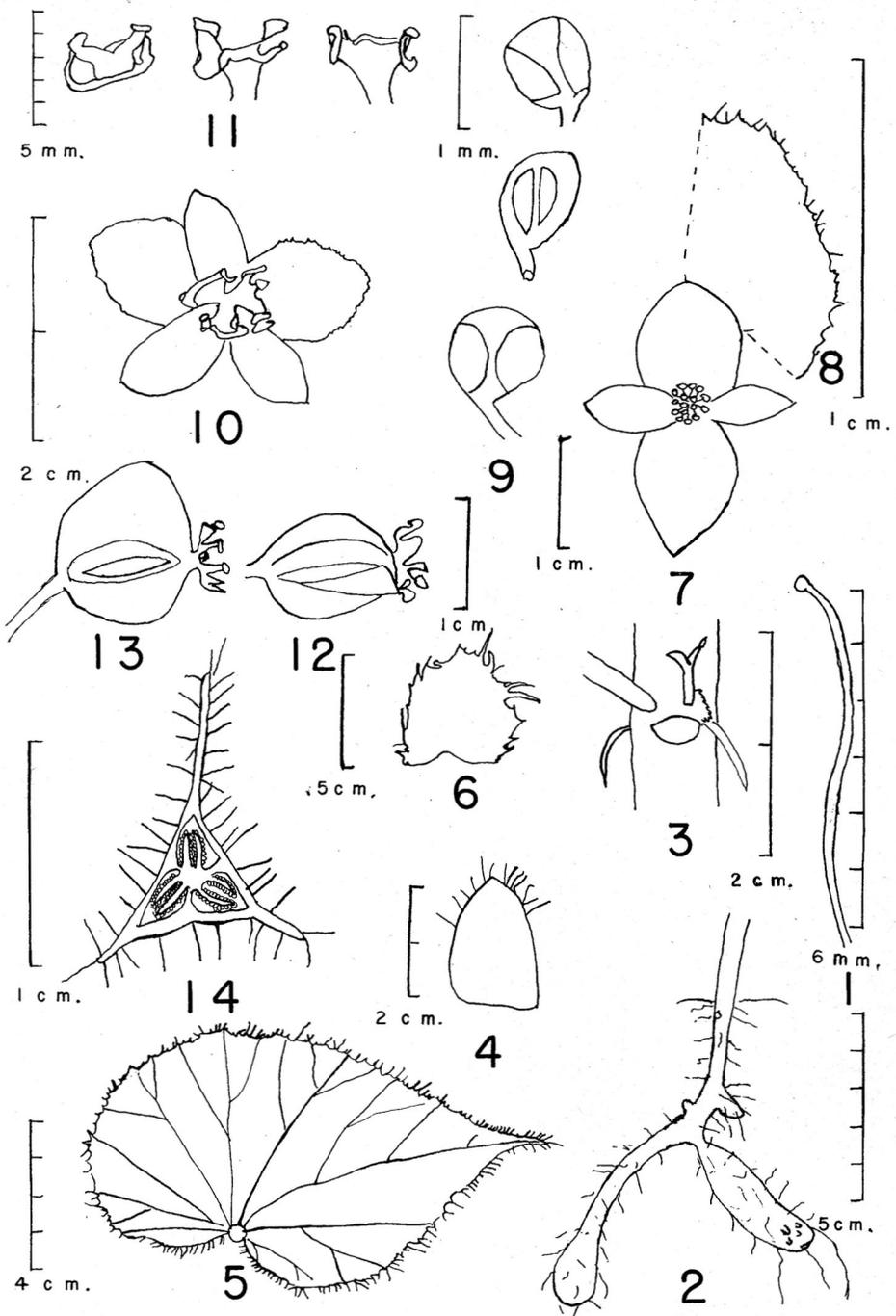
has four tepals while the female plant produces flowers with six tepals and a four-celled seed pod, occasionally producing a pod with three cells. This dioecious plant, which produces a tuber similar to the Andian *Begonias* and is perennial, was named *B. micranthera* Grisebach var. *foliosa* by Drs. Smith & Schubert. Another plant, which I have grown for over thirty years, was identified as *B. micranthera* Grisebach var. *fimbriata* Smith & Schubert but in my opinion is *B. cinnibariana* Hooker. It is monaceous, producing a tuber similar to the tuberous hybrids of the gardens. To the best of my knowledge the original *B. micranthera* Grisebach and its other varieties are monaceous. Other possible cases of dioeciousness in *Begonia* are *B. extranae* Smith & Schubert, and *B. nemoralis* Smith & Schubert, listed in the description as "perhaps dioecious."

A characteristic of *B. viscida* which needs further investigation is a growth (Figure 3) on the stem of the female plant just above and to one side of the leaf stem and opposite the flower stem which produces a stipule or bract at its base with two green stipules on the tip. The largest growth I have seen is about an inch long. Study of this immature growth has given me no clue as to what it will be when mature but I will try during the year to develop these growths to maturity.

The new *Begonia* is described below:

Begonia (Section *Begoniastrum* (A.DC.) Irmscher) *viscida* Ziesenhenné, new species. Herbaceous annual; stem base an annual tuber (Figure 2); stem annual, erect, round, fleshy, 36 inches long, one-quarter inch in diameter, not branched, distance between stem joints about two inches, thickly covered with long, slender hairs up to one-quarter inch long, each capped with a small round, red gland; stipule (Figure 4) remaining, papery, egg-shaped, blunt tip, margin even, ciliated with glandular

(Continued on Page 86)



Begonia viscida Zies.

B. viscida—

(Continued from Page 84)

hairs, outside thickly hairy with thin, long hairs with a red gland on the tip, to three-eighths inch long; petioles round, to three inches long, dull, light green, covered with long to one-quarter of an inch thin hairs topped with a red glandular ball: leaf blade (Figure 5) thin, papery, light green with a brownish cast in the center of the leaf and along the nerves, entire surface uniformly covered with glandular hairs spaced about one-sixteenth inch apart up to one-sixteenth inch long, the base of these hairs clear and impressing one that the leaf is covered with minute, silver spots, dull; below pale, reddish in the leaf center and along the nerves, becoming light green between the nerves, entire surface uniformly covered with glandular hairs spaced about one-sixteenth inch apart, up to one-sixteenth inch long; unsymmetrical egg-shaped, coming quickly to a point which tapers out gradually to a thin point and ending in a hair, margin with teeth and smaller teeth each tipped with a hair up to one-sixteenth inch long and capped with a red ball-like gland, five and three-quarters inches long and three and three-quarters inches wide; palmately eight-nerved: inflorescence axillary, dioecious, male flowers seven to an inflorescence, females mostly in twos, summer-flowering; peduncle male plants one to one and a half inches long, female plants about one inch long, round, dull, light green, covered with thin almost one-eighth inch long, greenish hairs tipped with a red, ball-like gland; pedicels male one-half inch long, female one-half inch long, covered with hairs; bracts (Figure 6) egg-shaped with the tip blunt, the margin slashed variously and fringed with glandular hairs, outside covered with glandular hairs, three-sixteenths of an inch long, one-quarter inch wide; male flower (Figure 7) tepals four, white, outer two egg-shaped, tip blunt, margin (Figure 8) fimbriated, three-eighths inch long,

five-sixteenths inch wide; outside covered with glandular hairs, inner two narrow inverted egg-shaped, tip coming to a point abruptly, five-sixteenths inch long, one-eighth inch wide; stamens about 48, filaments free, much longer than the anthers, anthers (Figure 9) ball-like; female flower (Figure 10) tepals five, white, exterior two, egg-shaped, blunt, margin minutely toothed and ciliated, back covered with glandular hairs, one-half inch long, five-sixteenths inch wide; interior three, long egg-shaped, tip coming sharply to a point, three-eighths inch long, three-sixteenths inch wide; styles (Figure 11) three, shallowly two-divided, fan-shaped, stigma papillae are along the edge and make only one twist; capsule (Figure 12) about one-half inch long, three-eighths inch wide, oblong, ends blunt, green, thickly covered with glandular hairs; wings (Figures 12 & 13) three, largest uneven depressed ovate, other two narrow crescent shaped; ovary (Figure 14) three-celled, placenta axial, two-divided, carrying seed on all surfaces. Type specimen T. MacDougal C. 251. Lapajua, district of Miahuatlan, Oaxaca, Mexico. On dry banks. January 21, 1964.

The closest relative of *B. viscida* that I have been able to locate is *B. nemoralis* Smith & Schubert which is very likely dioecious. A study of the photograph of the type specimen of *B. nemoralis* Smith and Schubert and the written text reveal the following differences between these two plants: *Begonia nemoralis* Smith and Schubert has leaves which are angular in shape, the hairs are of uniform length, the sepals of both the male and female flowers are deeply toothed, the filaments are united and the largest wing on the seed pod is low and symmetrically rounded. *Begonia viscida* has leaves with no angles on the margin, glandular hairs of various lengths intermixed all over the plant, sepals of both male and female flowers which are slightly serrate, filaments free, and the largest wing on the seed pod unsymmetrical depressed ovate.

LATIN DESCRIPTION

Begonia (Section *Begoniastrum* (A.DC.) Irmscher) *viscida* Zies. spec. nov. Herba. annua; caule annua, base tubre annua. erecto, elliptico, carnosu, 1 m. longu, 6 mm. crasso, non-ramoso, internodis ca. 5 cm. longis, dense pilis longis teneris rectis pellucidis apice ruberis glandulosis 1-6 mm. longis: stipulis persistentibus, papyraceis, ovatis, obtusis, marginibus integris, ciliatis, apice ruberis glandulosis, extus dense pilis longis teneris rectis pellucidis apice ruberis glandulosis. 1.1 cm. longis: petiolis teretibus, 2 mm. crassis, 2.5-5 cm. longis. dense pilis longis teneris rectis pellucidis apice ruberis glandulosis: foliis papyraceis, supra viridibus, bruneolis in centro et nervisquetibus, dense pilis teneris rectis pellucidis apice ruberis glandulosis, 2 mm. longis, base pilorum similis punctato argenteo, opacis; subtis viridibus, rubellis in centro et nervisquetibus, dense pilis teneris rectis, pellucidis apice ruberis glandulosis, asymmetricis ovatis, acuminatis, foliis 12 cm. longis, 9.5 cm. latis, margine duplicato-denticulatis, ciliatis pilis teneris rectis pellucidis apice ruberis glandulosis; palminerviis, nervis 8: inflorescentia cymosa, pauciflora, planta individua dioecia, inflorescentia masculina floribus septeni, inflorescentia femina floribus binis, pedunculis masculinis axillaribus, teretibus 2.5-3.8 cm. longis, feminis 2.5 cm. longis, viridibus, dense pilis teneris rectis pellucidis apice ruberis glandulosis, 4 mm. longis; pedicellis masculinis 1.3 cm longis, feminis 1.3 longis, pilis ut super; praetis primaris deciduis, viridibus, opacis, late ovatis, apice obtusis, margine fimbriis pilis longis rectis, pellucidis apice ruberis glandulosis, extus dense pilis longis teneris rectis, pellucidis apice ruberis glandulosis; tepalis masculinis 4, albis exterioribus 2, ovatis, obtusis, serrulatis, ciliatis, extus dense pilis longis teneris rectis pellucidis apice ruberis glandulosis, 1 cm. longis, 8 mm. latis, interioribus 2, obovatis, acutis, 8 mm. longis, 4 mm. latis; staminibus ca. 48, filamentis liberis, 2 mm. longis, antheris globosis .8 mm. longis, .7 mm.

latis, connectivo haud producto; tepalis femineis 5, albis, 2 exterioribus ovatis, obtusis, serrulatis, ciliatis, extus dense pilis longis teneris rectis pellucidis apice ruberis glandulosis, 1.2 cm. longis, 8 mm. latis, interioribus 3, obtusis, acutis, 1 cm. longis, 5 mm. latis; stylis 3, stigmatibus flabellatis dilatatis, brevissimis bicruibus, fasiaris papillis semel spiraliter tortis anticis continuis cinctis; capsula 1.3 cm. longa, 1 cm. lata, ellipsoidea, obtusa, viridi, dense pilis longis teneris rectis pellucidis apice ruberis glandulosis, inaequaliter trilata, ala maxima depresso ovatis. reliquis angustis; ovario 3-loculari, placentis bilamellatis undique ovuliferia. Typo T. MacDougall C.251. Laajuaia, regione Miahuatlan, Oaxaca, Mexico. In ripis aridis.

BIT OF HUMOR

His toes curled in the black soil. It was marvelous to feel the good cool earth beneath his feet again. Tenderly he bent down and crumbled a piece of sod between his fingers. A man was a fool to leave the land. He thought of the city with a loathing. All it brought him was unhappiness and sorrow, but that was over. He was back to his first love—the earth. For a while he was motionless in silent contemplation: a prayer of thanksgiving rose from his heart. Once more he was part of nature and not just a shadow in the city. A voice called, "Dinner's ready." Slowly and reluctantly he took his foot out of the flower pot...

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CLASSIFICATION OUTLINE AND SHOW HANDBOOK

By RUDOLF ZIESENHENNE
Classification Committee

In the early 1930's the American Begonia Society held its first *Begonia* show. It was apparent that the experienced plant judges employed for this and later shows found their general knowledge of other plants did not help them in deciding the merits of this most complex genus. It became necessary to establish our own school to train persons to be capable judges and this school is still thriving.

At this time the A.B.S. has reached a point where it is desirable to have a handbook for *Begonia* shows throughout the country. Because there is no written material adaptable to the needs of the A.B.S., the classification committee is also compiling information to be used in a *Begonia* and shade plant show handbook as an adjunct to the classification outline. The handbook will contain suggestions covering the needs for a successful show and answer the questions being asked by persons interested in putting on a shade plant show or incorporating *Begonia* classes in other types of shows.

One of the most challenging parts of the handbook will be a *Begonia* classification outline which is adaptable to the production of a show schedule for the smallest show and yet will be useful to those putting on various shows including the Annual A.B.S. Convention Show which would presumably have the largest number of *Begonias* displayed. To accomplish this, an entirely new approach has been taken because it has been found that in many cases *Begonia* plants are not properly named, in others the names are not known, and the people working on the show cannot be expected to know every plant by name. Also different growers handle the same plant in different ways so that it may have large or small leaves, or the

(Continued on Page 94)

JUDGES' COURSE AND REGISTRATION

By SYLVIA B. LEATHERMAN
Judging Course Director

WHAT?

The A.B.S. offers a correspondence course for judges. This course teaches the exhibitor to become more aware of judging techniques and facts which help in growing *Begonias* for show. For those judging or desiring to become judges, this is a study in all phases of judging and emphasizes the growing, grooming and showing of specimen *Begonias*.

WHY?

This course is designed to train accredited A.B.S. judges. After completing the course, the members are asked to register with the Judging Course Director to receive a judges' card and to be listed as an accredited A.B.S. judge. This list is made available to any show chairman requesting a list of judges qualified to judge *Begonias* in order that he may choose qualified judges from his locality. Members are required to register their desire to be listed as accredited A.B.S. judges separately from taking the course in order that no name will appear on the list without that person's specific permission.

WHEN?

The judges' course is available at any time. You may take it as an individual or join with some friends to establish a workshop and study together. *Begonia* enthusiasts learn the technique of growing and showing specimen *Begonias* and this in turn creates a desire for others to find out how. Their questions prove to be inexpensive publicity for our "Royal Hobby" and our Society.

HOW?

To obtain the judges' course, send a check for \$5.00 made payable to the A.B.S. to Mrs. Walter Pease, 8101

(Continued on Page 94)

INTERESTING MEETINGS

By Phyllis Wright, *Northwest Editor*

Most of our clubs are always on the lookout for something unusual or at least a little different in order to create enough interest to get the folks out to the meetings. I believe every organization in the country asks the same question, "Why don't we get better attendance at our meetings?" We have come up with something a little different here in the Seattle area. The Eastside Begonia Club in Bellevue has tried this with good results so we will pass it along hoping that it will be of help to some other club.

A table is placed in a conspicuous place at the meeting where unusual plants of any type are featured; also insecticides, sprays, leaves—both the common type and the unusual—soils, fertilizers, gadgets, most anything that is of interest to the grower. These articles are all labeled and a short resume written about each one. This enables the members to take their time looking the items over. If they are interested in any one thing, the data is there for them to either jot down or, better still, to talk about with one of the members. This is somewhat on the order of "Show and Tell" but we prefer to call it "The silent approach to gardening."

In conjunction with this we also have many nice plants, new and old, as well as the unusual ones. We find that folks love all types of plants and are eager to get them. These are disposed of at a lively auction, which creates a lot of fun as well as adding to our treasury.

The program and the study groups are the very best we can obtain. All of this is topped off by a nice lunch and good fellowship. We just ask the members to come to the meetings and enjoy what we have to offer them.

Volume 36 • April, 1969

CUTTING DAYS

By Davida Arnold, *Pana, Illinois*

I just returned from a planning session of our local garden club. We are planning a weekend "cutting workshop" as a community beautification endeavor. Our purpose is to instruct and encourage our community in the proper care of plants.

Our workshop is divided into two parts—"stay-put" headquarters and a mobile unit. Both will be set up to give demonstrations in spring garden care. The "stay-put" headquarters will emphasize the care and cutting back of potted plants and give demonstrations and instructions in propagation of cuttings.

The "stay-put" headquarters will be set up on the main street of town close to the nursery. We are not depending on the townsfolk to bring any plants to us for cutting back but they are welcome to do so and will be invited to do so through the many articles which will appear in our local paper. Each of the members of our garden club is asked to bring a plant which he can afford to "sacrifice" for the cause.

The mobile unit will emphasize over-all garden care—spring clean-up, fertilizing, spraying, landscaping, etc.—and will travel from one neighborhood to another working in private yards. Persons wishing to have the mobile unit visit their yards must request their visit well in advance so that the persons in charge may have an opportunity to visit the yard and plan the demonstration that will be presented there. As you can see, publicity is vitally important and must be begun early. A timetable will be established and adhered to as closely as possible.

This is essentially a community project spear-headed by our garden club. We are a small town and the success of our project will be the result of total community cooperation—newspaper, police force, churches, businesses, and individual families.

(Continued on Page 94)

SAFETY HINTS AID GARDENER

Garden chemicals can make the difference between having a grubby garden or a beautiful one. But they have to be handled with care.

Don't spray or dust on windy days. Pesticides may blow into your eyes and nostrils.

Don't spray in the heat of day, either. It is never good to wet a leaf in hot sunlight, not even with plain water. Spray or dust in the cool of early morning or late afternoon.

Always read the label. Reading labels is worth the small effort. It is important that you use garden chemicals exactly as labels instruct. Heed cautions.

Some chemicals mix and others don't. So don't mix any chemicals together unless the label tells you to.

When you finish spraying, thoroughly wash out the spray mix jar.

Put everything away in your storage cabinet, and lock it. Now wash your hands with soap and water.

Never save empty chemical containers. Don't burn them, either. Dispose of them in the garbage can.

From *News Tribune*
February 1, 1969
Fullerton, California

ROUND ROBIN NOTES

The sharing of ideas, methods, use of equipment, experiences of disappointments and successes are what make up Round Robins.

Rooting Mediums and Containers:

Bob Dalgaard, Minneapolis, Minnesota has excellent propagation results in closed plastic bread boxes. Gener Thurmon, Home, Louisiana writes her favorite rooting medium is black peat moss and perlite mixed together. She sets the cuttings right in the same plastic pots that she uses for shipping. Winifred Smith, Hillsboro, Oregon has never tried anything but sand. She has a three foot square bed filled with sand with a heating cable underneath. She has good rooting except during damp winter months when some leaves rot. Esther Latting, Warner, New Hampshire uses vermiculite for *Begonias*, perlite or sand for geraniums. For African violets she uses mostly individual pots and puts a little soil in the bottom so she won't have to repot so soon. Bessie Paul, Freeport, Illinois finds a turtle box a blessing and wishes she had more. She uses plastic shoe boxes in the same way but they become so cloudy; they are a little low in height. She uses wide-mouth jars laid on their sides for leaf cuttings, but likes the turtle boxes best. Yvonne Wells, Mesquite, Texas starts cuttings and leaves in a variety of things, sometimes whatever is handy. She roots most in water. Some of the felted ones have to be rooted in some sort of medium. She likes vermiculite and perlite for rooting and has used sharp sand. She says she has a friend who roots in redwood saw dust. Bill Yingley, Naples, Florida roots angel wings and canes in straight sided tumblers with about one and a half inches of tepid water with a pinch of crushed charcoal. The rhizomatous types were placed in clean, sharp white builders' sand within a wooden propagating box with glass sides. The glass tumblers are on a kitchen window sill on the south side of the house and has the propagating

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box on a shelf also on the south. Since the daytime temperature was running 75° to 80°, he covers the propagating case with a single thickness of burlap to screen out the sun from 11 a.m. to 4 p.m. He uses a rooting hormone.

How Much Cold?

Winifred reports that her tubehouse protected her *Begonias* as well as the greenhouse did. She had the oil heater going and except for some leaves that got nipped because they were too close to the walls of the tubes, the plants came through okay. In fact, the coldest day she went out to check and some of the pots were frozen to the bench but it didn't seem to hurt anything.

On Bloom:

Winifred has several *Begonias* blooming on a north window sill. Her own *B.* 'Tatoosh' and *B.* 'Nootka' are holding many blossoms about six to eight inches above the leaves. *B.* ('Tatoosh' x *sunderbruchii*) has beautiful pink flowers about eighteen inches high. *B.* 'Beryl' has fat buds about ready to open. Another *Begonia* which she calls *B.* (unknown green star x *rotundifolia*) 'Puntzi' is sending up its first bloom stalk. Thelma O'Reilly of La Mesa, California reports her *B.* (*hidalgensis* [dayi] x 'Gloire de Sceaux') plants seemed to be trying to bloom themselves to death. They started to show buds in late December and were in full bloom in late January but had all male blossoms that refused to open. A few female flowers opened in February, with lovely three-fourths to one inch blooms in delicate ivory shade. Wings and ovaries were studied with pink spots. Blossoms come about twenty males to one female and females are irregular—some with three petals, some four, some five. Ovaries are three or four-winged, because the top one has partially divided. Drooping peduncles that were loaded with bloom earlier were still blooming in the summer and as a plant made new tip and side growth, blooms kept coming. New bottom growth was forming buds also. How-

ever, she had not been able to set seed or to propagate by cuttings thus far.

Seedlings:

Edna Stewart of Tarentum, Pennsylvania had seedlings up from *B.* (*popenoei* x *hidalgensis* [dayi]), *B.* ('Texas Star' x 'Maphil'), and *B.* ('Bow-Nigra' x *boweri nigramarga*). Her 1967 self-pollination of *B. manicata aureo-maculata crispera* gave wonderful germination. Not one plant had shown the parent's yellow splotches, but all had the white veins and were heavily crinkled. Some had long petioles like the parent, but a few were very dwarf with heavily curled leaves. Edna had trouble setting seed on *B. kenworthyi*; only the last pods on it took. But seedlings were up from these. She had not been able to make a cross on it that season. A pod from *B.* (*lubbersii* x 'Laura Engelbert') was still hanging on and petals had fallen. Seedlings of Chuck Tagg's, Fullerton, California, *B.* (*epipsila* x *purpurea*) were growing slowly; all seemed identical to *B. epipsila* except that the brown scurf was missing from stems and leaf backs. None had the compound *B. purpurea* leaf. They had not bloomed so far.

Dormancy:

Both *B. philodendroides* (philodendron-like species *Begonia* that goes dormant six months of the year) and *B.* (*mazae* x *philodendroides*) 'Santa Monica', a hybrid by Ed Sherer, were doing well on Chuck's patio despite wind. He understood that *B.* 'Santa Monica' does not go completely dormant the way its parent does. None of the other *B. philodendroides* crosses go fully dormant either, Ed had told him.

The Unusual:

Thelma had found odd female blossoms on *B.* ('Lenore Olivier' x *dregei*) 'Nancy Gail', Belva Kusler's hybrid—as Mae Blanton of Mesquite, Texas also had reported in an earlier robin. Thelma saw a plant belonging to Steve Talnadge which had some fe-

(Continued on Next Page)

ROUND ROBIN

(Continued from Page 91)

male blossoms growing additional blossoms until there were five female blooms, each joined at the ovary of the previous one, while petals had dropped from the first. One must have measured three to four inches, with five joined blooms.

***B. macdougallii* and *B. purpurea*:**

Thelma finds the huge, finger-leafed, Mexican rhizomatous species *B. macdougallii* a "stinker" to grow. Friends became tired of replacing it each year, so moved it inside the glasshouse last winter. It thrived all winter, becoming a very large, beautiful specimen. It must like heat and humidity, Thelma thought. Chuck agreed it was difficult. It didn't seem to mind the cold of his patio in winter, but the dry air gets it in a hurry; it needs humidity. *B. purpurea*, which has been termed a variety of *B. macdougallii*, comes from Brazil. Chuck says it has redder stems, larger leaves, more surface texture (mostly from indented veins), a more serrated edge to each leaflet, and a wider leaflet for the length. It is much tougher, grows right on the edge of his patio, with lots of sun, no problem with dry, hot air. Edna Stewart's *B. purpurea* was three feet across with five huge, eight-fingered leaves. It bloomed in her greenhouse last winter and produced quite a bit of seed. First leaves of seedlings are entire, beginning to divide with perhaps third or fourth set of leaves. She warns to be careful of water with this *Begonia*; it should be allowed to dry out between waterings, but not to the point of wilting. It can be a beautiful show-piece.

Want to join a robin? Write:

Mrs. Anita Sickmon
Round Robin Director
Route 2, Box 99
Cheney, Kansas 67025

LETTERS

Dear Mrs. Benell,

No, no, never let my membership expire!! We had the Hong-Kong flu over the Holidays. My mail piled up on my desk unanswered. I don't remember a notice of the expiration of my membership, and am sorry for your inconvenience. I have let other plant society memberships lapse due to their inability to keep my interest sparked. But this one, never! I just love *The Begonian*. It's so informative and written in such a friendly style. Don't ever change that.

Question for your research department: I have had scale in my greenhouse brought in on the *Amaryllis*. It spreads to the orchids, but never find it on the *Begonias*. Now in controlling it, I use Black Leaf 40, but find the fumes from this very irritating in the enclosed area. Last week, I made a mixture of one of the new Enzyme pre-soak powders (Axion to be exact) and used that on the orchids that had scale. The brown hard-shell body had turned soft in about three days, no damage to the leaf. The cottony bodied scale had dried up. Since this enzyme is supposed to digest protein substances, such as food stains on clothes, etc., maybe there could be a good use of this to control unwanted fungus and bacteria in the plant hobbyists world. Please let me see this printed in *The Begonian* and discussed. Thank you.

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Send 10c for a complete list of plants we grow.

COLCHICINE TREATMENT

(Continued from Page 77)

raine' and B. 'Elatior' (*heimalis*) groups are triploid, and we have already found additional examples in other groups. The most promising way to breed new and better *Begonias* may well be to produce tetraploids with the help of colchicine and then to cross these with diploids. In view of the reduced fertility of the tetraploids, the latter should be used as the seed parent.

CLASSIFICATION

(Continued from Page 88)

plant may be large or small. For these reasons, it is not practical to base a show schedule on plant names alone although names must be used as a simple guide as to what kinds of plants are meant to appear in a certain class.

The plants must of necessity be judged by their appearance above the soil and grouped in such a way that each plant has an equal chance of winning first prize. Plants can also be grouped according to their structure and for large groups this method is utilized. To be capable of passing judgment as to a plant's structure, a person should be fully familiar with several hundred *Begonia* plants as a grower and student.

It is felt necessary to have a name classifying each group in the schedule but it is difficult to find a name exactly suited to the group and acceptable to everyone. For this reason, the terms selected will necessarily be arbitrary ones best suited according to the committee's judgment.

If names of plants are unknown or cannot be relied on to be accurate, the simplest way to group plants is by measurement. If the general classification is known, such as shrub, cane, rhizomatous, tuberous, etc., one can measure the height of the plant or the size of a leaf to tell where the plant should compete. This method has

been used very successfully in some shows and is considered preferable for the classification outline.

JUDGES COURSE

(Continued from Page 88)

Vicksburg Ave., Los Angeles, Calif. 90045.

To obtain an accredited A.B.S. judges' card, send your request for judges' registration forms to Mrs. Sylvia B. Leatherman, 2637 N. Lee Ave., South El Monte, Calif. 91733.

PLEASE NOTE:

It is not necessary to take the judges' course in order to become an accredited A.B.S. judge. Anyone can apply for a judges' card by filling out the judges' registration forms and returning them to Mrs. Leatherman. She needs to know where the judges are, how far they will travel, what other plants they are qualified to judge, and what experience they've had.

Therefore, if you are interested in learning to judge, send for the judges' course. But if you are already a qualified judge and wish to be registered as an accredited A.B.S. judge, send for the registration forms.

CUTTING DAYS

(Continued from Page 89)

Although our project is being planned on a grand scale, an imaginative program chairman could easily develop a cutting and propagation workshop as a part of a study group. An all-day workshop at a local nursery might be the special attraction event your nurseryman is looking for. A mobile spring clean-up crew to get members' yards and gardens ready for spring planting might be just the social event to spur more enthusiasm in your older members and to create curiosity in new-found friends.

Big or little, activity workshops have much to offer. As our President says, "To do is to learn."

CORRECTION

In the January issue on page 19, the location of the *Shady News* was given as Seattle, Washington. This is incorrect. *Shady News* is the newsletter of the Eastside Begonia Society of Bellevue, Washington. The article "New Plants and Cultural Expectancy" is a good example of the material they prepare and print each month. They are a hard-working, forward-looking organization and are to be congratulated for their fine newsletter.

My apologies to the members of the Eastside Begonia Society of Bellevue. I shall be more careful next time.

Mae Tagg, *Editor*



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The following selection of books are FOR SALE

- *Gesneriads And How To Grow Them...\$7.95
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CALENDAR

- April 3—Westchester Branch: Sylvia Leatherman will speak on "Rex Begonias." 7:30 p.m.
- April 9 — Inglewood Branch: Silent Auction. Come and join the fun. 7:30 p.m.
- April 9 — Riverside Branch: Chuck Tagg will speak on "Begonias From Cuttings — Why and Which How." 6:30 p.m.
- April 11—San Gabriel Valley Branch: Mrs. Mabel Corwin will speak on "Grooming Begonias for Show Competition." 8:00 p.m.
- April 15—Seattle Branch: "Spraying and Fertilizing Plants and Shrubs This Time of Year." 7:00 p.m.
- April 28—A.B.S. BOARD: South Gate City Auditorium, 4900 Southern Ave., South Gate, Calif. 7:30 p.m.
- May 1—DEADLINE for all material for the June *Begonian*.
- May 14 — Inglewood Branch: Plan Ahead—Presidents' Dinner with Starey Gange, speaker.

EDITOR'S NOTE

Because of the weather, the February meeting of the Board of Directors was cancelled. Therefore, there are no minutes to report this month.

I would again like to remind the secretaries to check the listing of your branch as it appeared in the Branch Directory, page 22 of the January issue. If the listing for your branch is not correct, send the correct information to me **NO LATER THAN APRIL 25**. The Branch Directory will appear again next month.

May Tagg

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