

The BEGONIAN

JUNE, 1969

VOL. 36 • NO. 6



General offices,

dues, address changes, or magazines:

Pearl Benell, Membership Secretary

10331 S. Colima Road, Whittier, Calif. 90604

Subscription \$4.00 per year. Foreign (Mexico and Canada) \$4.50. U.S. (Mexico and Canada) 1st Class \$5.50. Foreign 1st Class \$6.50. U.S. Air Mail \$6.50. Pay in U.S. currency only.

Entered as Second-class Matter at Whittier, California, under the act of March 3, 1879.

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Views expressed in this magazine are not necessarily

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FROM THE PRESIDENT

I wonder how many of us are overlooking the tremendous potential of horticultural interest to be found within the ranks of our young people of today. I have been very pleased when visiting some of our Branches to see youngsters participating in the activities. The Theodosia Burr Sheppard Branch in Ventura, California, for example, has several young people who attend regularly. One young man, a so-called teenager, has accepted the responsibility of Publicity Chairman and is doing an excellent job. His monthly news-letter, "Begonias 'N Things", includes a column about timely hints and cultural information about *Begonias* and other shade plants as well. This young man, Davis Dalbok by name, is a fine example of the interest and ability that exists in the young people of our Society.

I have witnessed the encouragement of other youngsters who have been asked to participate in other Branches by leading the Pledge of Allegiance, reading the Aims and Purposes of the A.B.C. and participating in Branch projects. There are some shows that still include Junior Divisions for plant exhibition in their schedules. Many back issues of *The Begonian* reflect the names of many young people who have taken part in the activities of the Society.

I would highly recommend that all Branches, as well as members at large, encourage the young people of your area to become acquainted with the fascinating hobby of growing *Begonias*. It is not singly important that they assume the responsibilities of chairmanships and office-holders (however, this should not be dis-

couraged), but that they be allowed to activate certain interests and abilities which may lie dormant unless given the much needed encouragement by those whom they love and respect.

If I sound like I am on a soap box it is because I have only the highest regard for the youth of today. They are the *Begonia* growers of tomorrow. However, like the plants that we grow, they must be given the same proper care and treatment if they are to become the show material that we desire. If we could fill the so-called generation gap with a planting medium of encouragement and expressed interest, I am sure that the end result would be a field of successfully grown material of which we could all be proud.

I would be very interested in hearing about any young people who are interested in the hobby of growing plants of any kind. The potential is there, the responsibility of extracting it is ours. Let's use it for the benefit of our Society.

Walter Pease

FROM THE SLIDE LIBRARIAN

Slides are available for all of our members to use. We have been very pleased that members of the A.B.S. are requesting slides of *Begonias* to be used in programs for other garden clubs as well as our own Branches. There is a \$2.00 charge plus return Air Mail postage. If you are interested in presenting a slide program about *Begonias*, I will be pleased to help in any way I can.

Nettie Daniels

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*.

Begonias Galore—

BEGONIA DOMINGENSIS

By ELDA HARING, *Greenwich, Connecticut*

B. domingensis, also called "Peanut Brittle" for its crinkled, small green leaves, was discovered in San Domingo in 1859. It is easy to grow, always attractive and does well whether grown in the greenhouse, on the window sill or under fluorescent lights. In my experience, the characteristic ridges of the leaves are more pronounced under Gro-lux fluorescent lights but the plant produces few blooms. In the greenhouse, light pink blooms open in late winter and early spring.

The habit of growth of this lovely *Begonia* is quite bushy as it sends up shoots close to the crown of the plant. The puckered leaves are quite firm and fleshy.

B. domingensis is often offered as a miniature *Begonia* but personally I would describe it as a small-leaved *Begonia*. It will do quite well for a year or two in a four-inch pot if plenty of moisture is provided when it has become pot-bound. However, in experimenting with this plant, I moved it from a four-inch to a six-inch pot and then to an eight-inch hanging basket where it grew and thrived for

a long time. The one in the photo grew from a cutting started in late fall. Since the photo was taken it has been shifted to a six-inch pot and is now ready for the hanging basket again.

This *Begonia* seems to thrive in any soil I give it, whether it is a purchased potting mix; Peat-lite mix of my own favorite potting soil of equal parts of garden loam, peat moss and sand. The soil in the pot needs to be constantly moist but not wet when the plant is in an actively growing condition.

If you find the edges of the leaves are beginning to brown, the chances are it has not been kept moist enough. It enjoys a good misting frequently. I often take mine to the laundry tub and give it a good soaking, washing dust from the leaves. This is a very good way to keep many firm-leaved *Begonias* bright and shiny.

COVER PICTURE

B. s. c. 'Calla Lily' was grown by Mrs. Lewis Reese of Bellflower, California. Rev. Irving H. Gray's observations of 40 years ago are still helpful today.

"We have the Calla *Begonia*. Probably the reason it is not commercially listed is that it is a very delicate plant. It must not be allowed to get too dry; and yet we would say it should be watered sparingly, preferably from the bottom. It requires good light and plenty of fresh air. Last year we put some out in the open garden. They grew vigorously but lost some of their Calla semblance; the white portions coloring to a deep pink. But these made good cuttings which have developed the pure white leaves."

Photo by Ken Garrison Clarke



Photo by Walter J. Haring

HYBRIDIZING

By RUDOLPH ZIESENHENNE, *Nomenclature Director*

A HYBRID, according to Asa Gray, is a mongrel or cross-breed of two plant species. The process of hybridizing is to take the pollen from a male flower of one plant of a species and put it on the stigma of another plant of a different species.

There are various reasons for hybridizing. I hybridize sometimes to obtain a named hybrid which is no longer in cultivation. This is done by repeating the original cross. In researching plants one may hybridize to prove the origin of a so-called hybrid.

I wished to learn if *B. phyllomanica* Mart. is really a hybrid of *B. incarnata* L&O and *B. manicata* Cels, as suggested by A. deCandolle. After making the cross, I am convinced that *B. phyllomanica* Mart. (syn. *B. 'Jessie'*) is really a hybrid of the above plants. Other hybrids made by crossing *B. incarnata* L&O with other species indicate that *B. incarnata* L&O is the plant carrying the factor producing the little leaflets on *B. phyllomanica* Mart.

Hybridizing is also used to obtain certain preconceived results. When I began to grow *Begonias*, there was a definite lack of browns and blacks in *Begonia* leaves. Fortunately Mr. Thomas MacDougall found and brought back from Mexico *B. mazae* Zies. and this plant is responsible for *B. 'Joe Hayden'* and its many descendants with various-shaped black leaves. *B. mazae* Zies. also gave rise to brownish-leaved plants like *B. 'Serenata'*, *B. 'Marie Reed'*, *B. 'Tamo'*, and *B. 'Fred Brown'*.

There are many characteristics still lacking in *Begonias* we grow so there is still much opportunity to further hybridize.

A definite plan in hybridizing may not be the most enjoyable method, but it is most important in striving to reach a goal. Many excellent hybrids

have been produced by cross-pollinating just to see what will result. By pollinating haphazardly, anything can come from the cross.

Being most fortunate in obtaining plants from the wilds which have never been in cultivation, I have produced many new plants. In many cases I could see no future benefit in crossing certain species although the plants themselves were unique and beautiful. My personal ideas in this matter do not mean that interesting plants cannot be obtained. I was well satisfied to leave *B. boweri* Zies. just as it was. However, others produced such a wealth of beautiful hybrids that their names are almost meaningless, the plants produced merging from one to another.

The act of hybridizing is quite simple, the first step being to select desirable parents. We do not have established records as to what plants can and cannot be crossed and I believe it is best to use an open mind in crossing two plants. For reasons unknown, years of unsuccessful attempts to get a certain cross may be followed by a season when fertile seed is obtained.

Once the parents of a proposed hybridizing attempt have been selected, one must be certain that mature pollen is available. One can expect to find ripe pollen when the top and bottom sepals (commonly called petals) of a male flower bend backwards and the stamens are fully exposed. I usually take a pencil and brush the stamens up lightly while holding it against a dark background to see if the pollen falls freely. Sometimes it is necessary to take the mature flower into the house to dry. When the pollen is free to leave the stamens, the best practice is to hold the flower by the bent-back petals and gently rub the stamens against the stigmas of

(Continued on Page 139)

Research Report—

BEGONIAS ARE NOT INDETERMINATE

By JACK GOLDING, Kearny, New Jersey

Photoperiodism, the response of plants to the relative length of the periods of light and darkness, is a factor often overlooked in growing *Begonias* indoors under artificial light.

Originally, it was thought that the time when plants flower was dependent upon the length of the light periods and hence, the commonly used designations—long day plants (summer flowering), short day plants (winter flowering). Actually, it is the length of the darkness that determines the time of bloom and they should really be classified as long or short night plants.

Indeterminate plants are indifferent to the length of the dark periods and will bloom regardless whether the time of darkness is long or short.

Most of the authors who have written books and articles about indoor light gardening, except for the Christmas blooming *cheimantha* and *heimalis* types and the summer blooming tuberhybrida types, have classified *Begonias* as indeterminate plants.

I had followed the recommendations in the books and was growing all my *Begonias* with an approximate 16-18 hour day length, manually controlled. While I had plants with very full and lush foliage, I was getting very few flowers. Last Spring, at a meeting of the Knickerbocker Branch we were discussing this, and some of the members pointed out that many of the rhizomatous types were short day plants and bloomed in late winter or early spring.

I decided to start experimenting by changing the length of my days and obtained automatic timers for exact control. I selected, as test plants, *B. 'Erythrophylla'*, a rhizomatous type, and *B. 'Helen W. King'*, a fibrous rooted cane type. These had not flowered for me, even though I had the parents and offsprings for many years and I had grown them under a great

variety of conditions indoors and outdoors during the summer.

My cellar gardens were divided into four different time zones, and I put trial plants in each area. Trying to simulate the changes of the seasons in a condensed manner, I arranged the sequences of the time changes in each zone as follows: Zone No. 1, seventeen weeks with a twelve-hour day; three weeks with a ten-hour day; one week with eight-hour; three weeks with nine-hour; and after eight weeks still continuing with a ten-hour day.

Zone No. 2: the day length was a continuous eighteen hour.

Zone No. 3: two weeks with a twelve-hour day, five weeks with ten-hour, nine weeks with nine-hour, three weeks with eight-hour, one week with seven-hour, three weeks with eight-hour, one week with nine-hour, one week with ten-hour, one week with eleven-hour, four weeks with twelve-hour.

Zone 4: three weeks with sixteen hours of light, five weeks with seventeen hours, nine weeks with sixteen hours, three weeks with fourteen hours, one week with twelve hours, three weeks with ten hours, one week with twelve hours, one week with thirteen hours, one week with fourteen hours, four weeks with fifteen hours.

The best results were in Area No. 1—There were no signs of budding until the day length was reduced to ten hours, then some were evident on *B. kenworthyi* and *B. 'Helen W. King'*.

After the reduction to eight hours for one week and nine hours for three weeks the following had flowers: *B. kenworthyi*, *B. 'Helen W. King'*, *B. 'Erythrophylla'*.

When time was increased to ten hours, *B. 'Helen W. King'* stopped flowering, but the others continued to bloom and the following also were in flower: *B. 'Bow-Arriola'*, *B. 'Corallina de Lucerna'*, *B. 'Di-Anna'*, *B. 'Norah'*

Bedson', *B. conchaefolia*, *B. 'Fischer's Ricinifolia'*, *B. manicata aureo-maculata*.

The trial plants of *B. 'Erythrophylla'* and *B. 'Helen W. King'* in all the other areas did not bloom.

In Area No. 3, where I had the shortest day, the *Begonias* did poorly because of insufficient light, until the day length was increased to ten hours. None of the plants in this area had flowers, despite the short day lengths. Reviewing these results, I believe the plants in this area were affected by the reflected light from Area 2 (eighteen-hour). Apparently, if the darkness is not complete for the long night or is interrupted by light for a short time, the plants will react, even though the intensity of the light is low, as if they had short nights.

In Area No. 2, my *rex Begonias* were very full and had many flowers. The following *Begonias* also bloomed in this area: *B. 'Richmondensis'*, *B. 'Frances Lyons'*, *B. 'Tom Ment'*, *B. 'Orange Rubra'*.

In the Area No. 4, the following were blooming when the day lengths were as indicated: *B. 'Dyclata'* (fourteen hours to sixteen hours), *B. schmidtiana* (sixteen hours), *B. 'Preusen'* (with twelve or more hours), *B. odorata alba* (thirteen hours), *B. 'Richmondensis'* (fourteen-fifteen hours), *B. 'Margaret Stevens'* (fifteen).

I next wanted to determine if it was necessary to have a gradual increase or decrease in day lengths, as is normal by the change of seasons, or if flowering could be induced by a direct change in day lengths. Therefore, I transferred *B. 'Erythrophylla'* that was growing in Zone 4 with fifteen hours to Zone 1 with a ten-hour day. After ten days, buds were formed and the plant had flowers in three weeks. This seems to indicate that the gradual change is not necessary. To confirm this result, I have since moved other plants from zone to zone, but it is too soon to observe the results.

From my experiments and the reports of others in *The Begonian* and the *Indoor Light Gardening News*, it

is safe to conclude that all *Begonias* are not indeterminate plants.

Many of the rhizomatous types and some of the fibrous types are short day plants requiring fourteen to sixteen hours of darkness to bloom. Some are long day plants needing only six to eight hours of darkness to bloom and still others may be indeterminate plants blooming when the darkness is anywhere between six to twelve hours long.

The time required to stimulate the flowers on *Begonias* is apparently as varied as there are species and cultivars. If we consider the diversification, their original habitats, and their varied parents, this really should not be surprising.

It is my hope that this report will stimulate others to experiment with photoperiodism and will report their results to *The Begonian*. Also, the effect of the other factors—temperatures, light intensity, humidity and fertilization should be considered. After sufficient data has been correlated from many of our members, we will be able to make positive recommendations for the optimum time cycle to promote the best flowering of *Begonias*.

OBSERVATIONS

From Irving H. Gray, Vermont: Is it a fact that white flowers are not frequented by bees and other insects as much as flowers of other colors? Also are white flowers less productive of seed than colored ones? I would like to hear what observers of flowers and insects may have to say along this line.

From Rena Bauer, Wisconsin: Blue, it has been said, is the favorite color of bees.

If white flowers are least attractive to bees, they loom up more at night and attract the moths and night flyers that fertilize the flowers, thus producing seed. I have noticed that white flowers are usually very fragrant which may be another means they use to attract moths and insects.

BEGONIA HYBRID REGISTRATION

The American Begonia Society is the International Registration Authority for the genus Begonia appointed by the International Horticultural Congress. See "How To Register Begonias", Dec. 1967, p. 266 and "Nomenclature News," Aug. 1968, p. 157. For further information write: Rudolf Ziesenne, A.B.S. Nomenclature Director, 1130 N. Milpas Street, Santa Barbara, California 93103.

Editor

No. 233—*Begonia (manicata x Cuban Species No. 3) 'Alamo'*—

B. 'Alamo', a rhizomatous Begonia, has a tendency to grow upright, according to Clara E. Cooper, originator and propagator, 716 Chelsea Blvd., Houston, Texas. Developed in 1957, the plant first bloomed in 1958 when Mrs. Cooper first distributed it to members of the Houston Branch of the A.B.S. Leaves are bright green, rhomboid, up to eight inches, with red margins, the veins having red bristles. The flowers are pink, shaped like those of B. Cuban Species No. 3 and the flower stem is from three to three-and-a-half feet long, spiking in February. Registered September, 1966.

No. 234—*Begonia ('Cernaroa' selfed) 'Stiletto'*—

B. 'Stiletto' was originated and propagated by Clara Cooper, 716 Chelsea Blvd., Houston, Texas. This plant is a tall cane, with narrow, long lanceolate, medium leaves about seven-and-three-quarters by one-and-a-half inches, having a large basal lobe. The margin is even, texture papery, and the veins pinnate. The petioles are round, about one inch long. Fire-red flowers hang in panicles. Developed and bloomed first in 1963; distributed in Houston Branch of the A.B.S. in 1964. Registered September, 1966.

No. 235—*Begonia ('Cernaroa' selfed) 'Aislee'*—

B. 'Aislee' was originated and propagated by Clara Cooper, 716 Chelsea Blvd., Houston, Texas. A basket

cane, this plant has leaves shaped like B. undulata but spotted when young, lanceolate, five by one-and-five-eighths inches long, with wavy margin, thin textured, veins pinnate, petioles round, three-eighths inch long; leaves medium green. Developed and first bloomed, 1963; distributed through the Houston Branch of the A.B.S. in 1964. Registered September, 1966.

No. 236—*Begonia (paulensis x echinosepala) 'Paul-bee'*—

B. 'Paul-bee' was originated and propagated by Ruby Mae Budd, 6440 Will Rogers St., Los Angeles, California 90045. Developed in 1965; first bloomed in 1967. Distribution limited. This cane has a very glossy sheen and a few white hairs. The leaves are long, seven by two-and-a-half inches, thick and shiny; veins underside, red-flecked; petioles three inches, red and white flecked; leaf color, red-flushed. The blossom is yellow-white with wine-colored hairs like B. paulensis. Registered May 3, 1967.

No. 237—*Begonia 'Sally Harrison' (origin unknown, bought tuber)*—

Propagator, Sally Harrison, Faraday House, 22 Ferry Road, Hullbridge, Hockley, Essex, England. This winter-flowering tuberous Begonia is about six to nine inches high, with deep pink, rounded-shape blooms, the double blooms like a pom, close to stem head. There are quite a few flowers on the plant. The leaves are rounded two to three inches, brittle, and deep green. The flowers are about two inches across, one double and one single to the flower stem. The flower stem is six inches. Blooms from the end of October to end of November. Developed and first bloomed 1966; name first published June 9, 1967. Registered July 9, 1967.

No. 238—*Begonia rex cultorum 'Edna Mae Stewart' (unnamed spiral rex x B. r. c. 'Merry Christmas')*—

Originator and propagator, Mrs. O. A. Dorsey, 8110 N. Edison Avenue,

Tampa, Florida. Developed 1964; first bloomed 1966; first distributed 1967. The leaves are double spiraled, eight by ten inches, serrate and irregularly pointed; rough textured quilted effect with an overall lustre; maroon in the center with margin zone between over-laid silver with crimson glow. The veins are depressed red, with hairs underside; the petioles are red with red hairs, stipules red and hairy. The flowers are one inch, pink, flower stem about eight inches blooming in summer. Available to the trade in the spring 1968. Registered July 9, 1967.

No. 239—*Begonia* ('Orange Rubra' x cane type) 'Melanie Babin'—

B. 'Melanie Babin' is a cane type developed in 1963, first bloomed and distributed in 1964. Originator and propagated, Mrs. Harry Kennedy, Route 1, Box S-1-R, Hammond, Louisiana 70401. An intermediate cane, it is a very fast grower, quite hardy, and doesn't need pinching back to make a bushy plant. The angel-wing type leaves are red underneath, with bronzy green top, eight by three-and-a-half inches, margin plain, smooth textured, with veins indented; petioles one and a half to two inches. Stipules at every joint, one quarter inch. Flowers are bright orange, one-and-a-quarter by one inch, in clusters on stems four-and-a-half inches tall, blooms constantly. Registered July 9, 1967.

No. 240—*Begonia* ('Joe Hayden' x unknown) 'Black Velvet'—

B. 'Black Velvet' (synonym 'Black Star') is a rhizomatous *Begonia* developed 1961, first bloomed 1962, first distributed 1963 by originator and pro-

pagator, U. U. Stanford, 4749 Lewis Drive, Port Arthur, Texas 77640. Mr. Stanford is a member of the Texas State Branch. Leaves are star-shaped, five to six inches, margin wavy with white eyelashes, texture velvety, color black, red underneath; veins pale green, petioles six to seven inches, hirsute, stipules light green. Blooms late winter and early spring in clusters three inches above foliage, size approximately one inch; flowers are red on backs. Registered August 1, 1967.

“ . . . to come to know a specimen well enough to succeed with it, gives one the thrill of a conquerer.”

Rev. Irving H. Gray



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BEGONIA TRICHOMES

By KALIL S. BOGH DAN AND FRED A. BARKLEY

Northeastern University, Boston, Massachusetts

One of the most common, and often striking, features of higher plants are the epidermal appendages. Many people when describing the leaves of *Begonia* mention that the leaves are hairy or pubescent, but do not really know what these hairs of the *Begonia* leaf are like. These hairs, or trichomes as they are more technically called, are epidermal in origin and are outgrowths of some of the cells from the leaf epidermis. Any cell from the epidermis of the developing leaf is capable of producing a trichome.

Solereder (1908) has a very comprehensive classification of trichomes ("hairy coverings"), listing their distribution in the various orders and families of plants. Solereder subdivides his heading of "hairy coverings" into "clothing hairs" and "glandular hairs," the clothing hairs being non-secretory and the glandular hairs having some secretory function irregardless of the substance secreted. These two types of hairs are morphologically distinct and can be distinguished (with the aid of a strong lens or a dissecting microscope) from the fact that at the top of a glandular hair is an obviously secretory structure called the "head," which is absent on the clothing hair.

Metcalfe and Chalke (1950) described the hairs of the *Begoniaceae* as being of two types, nonsecretory (non-capitate) and secretory (capitate). Esau (1953) classifies plant hairs into unicellular and multicellular trichomes, and these may be either unbranched or branched. As far as observed, all trichomes for *Begonia* are multicellular.

On *Begonia* leaves, those trichomes which are most often observed, especially with the naked eye, are the non-capitate trichomes with long axis, such as is found on *B. schmidtiana* Regel (Fig. 1) and *B. monophylla* Pavon ex

A. DC. Some additional species with similar trichomes are *B. rex* Putz, *B. cathayana* Hemsl., and *B. paulensis* A. DC. These hairs not only vary in length, but also in abundance upon the leaves of various species.

Many non-capitate trichomes are difficult to observe on the *Begonia* without the aid of a hand lens, such as the multicellular whip hairs with a long axis which can be observed on the under surface of *B. hydrocotylifolia* Otto ex Hook. leaves (Fig. 2), and the stellate hairs which can be observed on the under surface of leaves of *B. mannii* Hook f. (Fig. 3).

Of the capitate hairs reported for *Begonia* leaves, all have a multicellular shaft as is seen in *B. hydrocotylifolia* Otto ex Hook. (Figs. 4 and 5). These are sufficiently small as to need a dissecting microscope to be observed. Some other species with similar hairs are *B. rex* Putz, *B. imperialis* Lem. and *B. liebmannii* A. DC. The stalk of the capitate hair may vary considerably in length, as may be observed in the capitate hairs of *B. francosis* Liebm. (Fig. 6).

DESCRIPTION OF FIGURES

Fig. 1. Multicellular nonsecretory trichome from *Begonia schmidtiana* Regel.

Fig. 2. Multicellular nonsecretory whip hair from *Begonia hydrocotylifolia* Otto ex Hook.

Fig. 3. Stellate trichome from the under surface of the leaf of *Begonia mannii* Hook. f.

Fig. 4. Capitate glandular trichome as seen on the under surface of a section of the leaf of *Begonia hydrocotylifolia* Otto ex Hook.

Fig. 5. Capitate glandular trichome with a short stalk from the under surface of the leaf of *Begonia hydrocotylifolia* Otto ex Hook.

Fig. 6. Capitate glandular trichome with a long stalk from the leaf of *Begonia francosis* Liebm.

All figures from Boghdan's "Pubescence in *Begonias*" 1967.

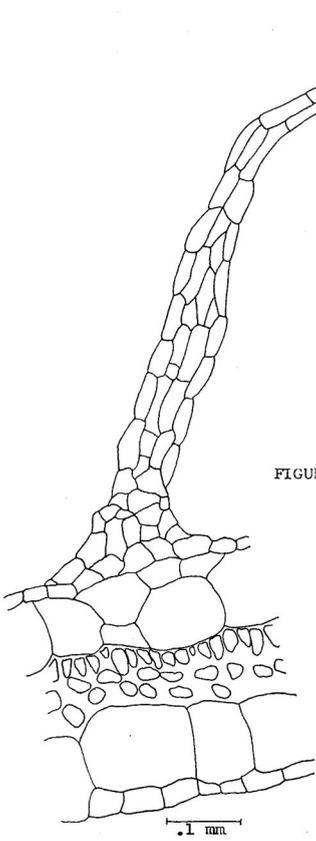


FIGURE 1.

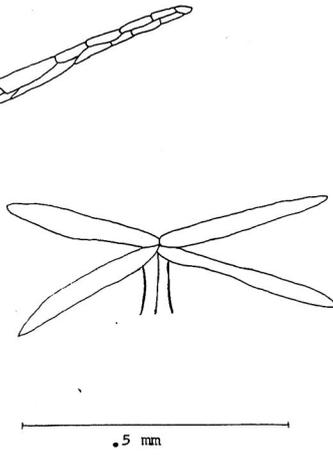


FIGURE 3.

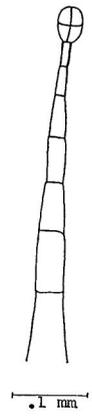


FIGURE 6.

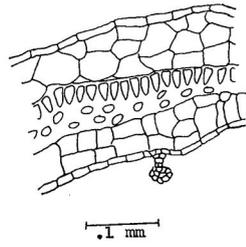


FIGURE 4.

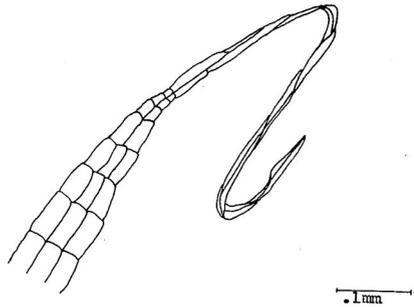


FIGURE 2.

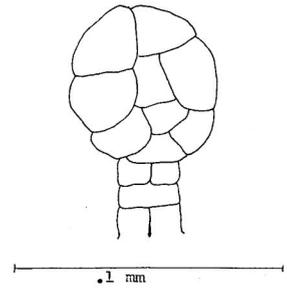


FIGURE 5.

Just as the abundance and type of trichomes on *Begonia* leaves vary, so do the shape and the length of the hairs. To describe the shape and size variations on the various leaves, there is a special terminology to designate the types of trichomes on the surfaces of plants. When a plant surface is without trichomes, it is said to be glabrous, but when it has hairs it is said to be pubescent. When the hairs are long, straight and silky, the condition can be called villous, when the hairs are stiff and bristly the surface is termed hirsute, and finally when the hairs are long, curled and matted the surface is said to be tomentose. All of these types of surfaces are represented in various *Begonia* species. However, it should be mentioned that one type of pubescence found on the upper surface of a leaf is not necessarily the type found on the under surface, nor like that found on the stem. One often finds strikingly dissimilar types of pubescence on the upper and lower surfaces of *Begonia* leaves.

In the *Begoniaceae*, trichome variation ranges greatly and shows no discernable pattern from either taxonomic position nor geographic origin. Even in a single section of the genus one can find much variation in trichome type and abundance.

As one can plainly see, this large and pan-tropic genus is not only one of many beautiful species, but is also morphologically diverse and interesting.

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FROM THE SHOW CHAIRMAN

Here I am again telling you to start thinking about the A.B.S. Annual *Begonia* Show. The dates are September 6 and 7 and the place is the Los Angeles State and County Arboretum, Arcadia, California.

Because of the limited space at the Arboretum, this year's show will be *BEGONIAS ONLY*. Those portions of last year's show schedule which pertain to *Begonias* will remain essentially the same. The show schedule will appear in the July *Begonian*. Study it carefully and make your plans early. For those too far away to attend, read page 133 and plan to enter by mail.

Please remember that I am going to need as much or more help than I had at the last show. If one of my Chairmen asks for your help, please give us your full cooperation as it is YOUR show, not mine alone. I still need several Chairmen, so please prepare to say yes or at least to suggest members who might be able to help.

I know that you probably get tired of reminders about care and grooming but the quality of the plants at the last show bore out the necessity of good care and grooming to raise beautiful plants that can be prize winners. Competition was very tough last year due to the high quality of the plants that were entered. It was a very beautiful and impressive show. Let's do it all over again this year.

Show season is here and I know that Show Chairmen around the world are very busy people right now but I would be very glad to correspond and exchange problems and ideas with other Show Chairmen. Write me.

Jim Somes, A.B.S. Show Chairman
4849 W. 130th St.,
Hawthorne, Calif. 90250

Metcalfe, C. R. and L. Chalk. *Anatomy of the Dicotyledons*. 2 Vols. Oxford Press, London. 1950.

Solereider, Hans. *Systematic Anatomy of the Dicotyledons*. 2 Vols. Clarendon Press, Oxford. 1908.

PHOTO DIVISIONS OF THE SHOW SCHEDULE

The show schedule for the A.B.S. 1969 *Begonia* Show will have nine classes in two divisions for photographs.

A division for photographs of *Begonias* will include the following classes open to anyone regardless of geographic location: (Print size 3½" x 5" or 5" x 7". Slides mounted in 2" x 2" cardboard frames).

1. Black and white print of a single *Begonia*.
2. Color print of a single *Begonia*.
3. Color slide of a single *Begonia*.
4. Black and white print of three *Begonias*.
5. Color print of three *Begonias*.
6. Color slide of three *Begonias*.

The second division will be for photographs of Branch Garden Displays and Education Exhibits and will include three classes open to branches outside a 100 mile radius of the show: (Print size 5" x 7" or 8" x 10")

7. Black and white print.
8. Color print.

Each photograph should have the name of the plant or plants (spelled correctly and printed legibly) on the back of the print followed by the name and address of the exhibitor. Slides should be placed in an envelope (one slide per envelope) with this same information enclosed on a separate piece of paper.

A self-addressed stamped envelope must be enclosed if you want your pictures returned. Pictures which are not returned will be used in the historian's book, *The Begonian*, or the slide library.

Photo entries must be received by August 15, 1969. Mail your entries or questions to:

Mrs. Nettie Daniels
Photo Div., A.B.S. Show
Box 83
Camarillo, Calif. 93010

ENTER YOUR PLANTS BY MAIL

By GENE DANIELS,
ABS Photographer

The show schedule for the 1969 A.B.S. *Begonia* Show includes two divisions for photographic entries. Although this is not a photographic contest there are some photo tips which might help you take the best picture possible.

If you have not used your camera for a while, it is wise to buy a roll of your favorite film and shoot the whole roll to be sure the camera is in good working order. It would be wise to shoot this roll in the location and on the plants you plan to enter.

When planning these pictures, remember that you are entering the PLANTS in competition, NOT the photographs. Therefore, prepare the plant for the picture. Be sure that it is a well-groomed healthy plant in an appropriate container. Study your plant through the viewfinder. Notice what angle makes it look best.

The plant should be the center of interest in your photograph and you should avoid any distraction in the background. This can be done by providing a solid background. Remember that the plant should be identifiable. When using a solid background, be sure that it covers the entire frame of your picture. A black strip, a porch railing, or a post in the background would be distracting.

Before you shoot, study your picture through the viewfinder of your camera. CHECK THE PLANT FOR CLEAR FOCUS, THE BACKGROUND FOR CLUTTER, AND BE SURE YOUR PLANT FILLS THE PICTURE.

If you have an adjustable camera, you may like to take more than one picture of each plant, using different exposures. A "perfect" exposure may not show the best leaf detail. From these, choose the one which most accurately shows the quality of your plant.

See the next column for details on entering. Groom, shoot, and enter! Nettie is waiting to hear from you.

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. subnummularifolia* Merrill—

"The Flora of Banguay Island." *The Philippine Journal of Science*, Vol. 29, Jan.-Apr. 1926. Herb. subbare, stem creeping, slender, about one-sixteenth inch in diameter, the young part moderately long-ciliated, internodes to one-and-three-sixteenths inches long; stipules one-quarter to three-eighths inches long, lance-like, longer pencil-long pointed, leaves membranous, roundish to sun roundish, even, tip equally rounded, base unequally slightly heart-shaped, radiating seven-nerved one to two inches in diameter, margin shortly ciliated, both sides bare, on the nerves slightly reddish-ciliated; petioles one to two inches long; inflorescence peduncle, few flowered, bracts egg-shaped and elliptical-egg shaped, three to three-and-a-half mm long; flowers male one-quarter inch in diameter, sepals bare, elliptical, one-quarter to three-eighths inches long, roundish, sepals subequal, narrow oblong-inverted egg-shaped; stamens one-half to one mm long, anthers



Photo by J. Doorenbos

unevenly egg-shaped, shorter than filaments, capsule equally three-winged, one-quarter inch long, with wings three-eighths to one-half inches wide, bare in outline sugrhomboid, wings rounded. Banguay Island 1545 P. Castro and F. Melegrito, September 1923 on forested slopes altitude about 150 miles.

A species well characterized by its slender, prostrate nearly glabrous elongated stems and especially by its equilateral, entire rounded, small, cordate, orbicular or suborbicular leaves; it manifestly belongs in the same group as the Philippine *Begonia negritarum* Steud. although differing totally from that species in its vegetative characters. Banguay Island is in North Borneo.

Collectors note: "We have had no trouble in growing *B. subnummularifolia*, but it has to be kept warm and out of the sun." See photo. Price \$1.00 per pkt.

No. 2—*B. sudjanae* Jans.—

This *Begonia* belongs to the Asiatic section, *Reichenheimi*, comprising about a dozen species from India to Malaya. It has a thick, short stem more or less creeping. The petioles are erect to suberect, four to seven inches long, round and densely pilose. The entirely light-green leaves are symmetrically peltate, ovate and acuminate to cuspidate. Both leaf surfaces are covered with stiff hairs, below more concentrated to the nerves. The lamina is concentrically wrinkled round the navel, from which nerves extend all directions and reach the margin in distinct teeth somewhat bent downwards.

The white and rather small flowers are arranged in cymes and have a varying number of tepals (petals and sepals), in male flowers from two to four and in female flowers, from two to three. The yellow stamens of male flowers are united in one group by connation of their filaments. As already mentioned, *B. sudjanae* belongs

to the section, *Reichenheimi*. Though well separated from *B. goegoensis* N.E. Browne of the same section, it shows in many respects near relationship with this species. It does not require especially humid conditions and shows a good growth in ordinary, central-heated rooms. The best vegetative development is in rather shaded conditions but when exposed to intense sunshine, the leaves get clear signs of chlorosis. Properly grown, it seems to flower independent of season. *B. sudjanae* is beautifully shaped and attractive, and its high value lies in its ease of cultivation. Price \$1.00 per pkt.

No. 3—*B. versicolor*—

China. Miniature terrarium plant. Three inch leaves are toned mahogany, emerald, silver, apple-green and maroon. Flowers are salmon-pink. Germination will not take place in TWO weeks so don't expect it. At least from three to six weeks are required and under favorable conditions then. Temperature should be 70° to 75° and humidity should be high. This plant will not survive in dry conditions. My plant is growing in a terrarium-type container and has suffered several set-backs from two siamese cats but it is beautiful now and is in bloom. We suggest that if you are not willing to wait the required amount of time for seed to germinate and cannot give them the proper conditions, please do not try them, as seed are scarce and very difficult to find. Please do not ask for more than ONE packet, we just can't supply them. Price \$1.00 per pkt.

(Ed. note: Here in the Tagg Household, we have discovered that our *B. versicolor* prefers a soil medium of straight unmilled sphagnum. Since barerooting our *B. versicolor* plants and wrapping the rootballs in sphagnum moss, they have started growing forwards again. If you have had trouble growing this plant, try sphagnum. It may work for you also.)

No. 4—*B. conchaefolia*—

Costa Rica. Meaning "shell-shaped

leaves." Thickish, succulent green leaves above creeping rhizome; one of the smallest species in cultivation. Leaves to two-and-a-half inches long, ovate-pointed and cupped, suggestive of a mussel shell, glossy-green, lighter green beneath with brown tomentum on the nerve; flowers pale pink in erect inflorescence. Good terrarium or window sill plant. Price 50 cents per pkt.

No. 5—*B. semp. c. 'Gee-Gee'*—

This is a hybrid created by Chester Nave, California and very popular with Seed Fund patrons. Leaves are huge light green in shade and brilliant red in sun. Flowers also large and very red with yellow stamens. Price 50 cents per pkt.

No. 6—*B. tafiensis* Lillo—

Tucuman, Argentina 1916. Price 50 cents per pkt.

No. 7—*B. boliviensis*—

Medium. Stems succulent, smooth, green, tinged with red or brown. Leaves ovate-lanceolate, broad at the base and tapering to a slender point, glossy dark green, double toothed. Flowers orange-red, nodding petals long. Price 50 cents per pkt.

No. 8—*B. rotundifolia* Lam.—

Pygmy creeper that stays terrarium size for years. Small round leaves, yellowish-green; flowers pink. Price 50 cents per pkt.

No. 9—*B. malabarica*—

Asiatic species. Low, bushy, pubescent; leaves small, ovate, green toothed; inflorescence short; flowers blush-pink in short stemmed clusters. Price 50 cents per pkt.

No. 10—*B. foliosa*—

Meaning "full of leaves." Smallest leaf of all; sometimes called the fern *Begonia*. Precise little green canoe-shaped leaves alternate on each side of slender, drooping stems. Midget "bleeding-heart" flowers. Keep warm, moist, humid. Price 50 cents per pkt.

No. 11—*B. acuminata*—

Jamaica. Means "narrow, pointed." Dainty plant with many dainty white

flowers from arching stems; glossy, soft green leaves crinkled on edge. Price 50 cents per pkt.

No. 12—*B. mazaë*—

Mexico. Round leaves with tiny pointed tail, bronze-green marked red-brown along the light veins which meet in a white eye; deep red underneath. Small, light pink, red spotted flowers. Grow warm, protected, fairly dry, with perfect drainage. Beautiful smallish *Begonia*. Price 50 cents per pkt.

No. 13—*B. (heracleifolia x strigillosa)*—

This is the same cross that produced *B. 'Fuscomaculata'* (syn. *B. 'Rubellina'* meaning "brown-spotted."): Gray-green, star-shaped, star leaves lightly chocolate-spotted, drooping on long stems. This is a hybrid and variation will appear. Price 50 cents per pkt.

No. 14—*B. kellermannii*—

Guatemala. Deeply cupped green leaves, thick and completely covered with sheer white felt; angel-wing like clusters of white flowers in winter, early spring. Easy from seed. Price 50 cents per pkt.

No. 15—*B. palmaris*—

Mexico. Stems erect; petioles to four inches long; leaves roundish to eight inches long, usually palmately lobed, sometimes merely once-cleft between the base and tip, green, slightly hairy above and on the nerves beneath, margins toothed and ciliate; flowers

in dense axillary clusters. Price 50 cents per pkt.

Please note—

We have huge amounts of the following to be distributed WITHOUT charge. However, postage is required if seed from the regular listed are not requested. As follows: *B. schmidtiana*, *B. leptotricha*, and *Gloxinia*, mixed. Please send requests for seed to:

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

IN MEMORIAM

*They are not lost who find
the light of sun and stars and God.*

GONDA HARTWELL

Gonda Hartwell was a charter member of the San Gabriel Valley Branch and had served as secretary for the A.B.S. for ten years. She passed away in late April.

LUCILE WRIGHT

Lucile Wright, A.B.S. Librarian, passed away April 24, 1969. She had served as Librarian for two years and was active in both the Inglewood Branch and the North Long Beach Parent Chapter.

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INFORMATION, PLEASE

To all my friends in the A.B.S., I want to say that I am so sorry to have skipped a month. It was not deliberate, but was due to my confusion on the deadline. I am so sorry for the few people who did respond to have had to wait so long.

I think it would be a good idea, if anyone wants a quick answer, to send a self-addressed envelope along with your questions so it will then be answered within the shortest time possible. Also, if anyone would like an answer and would not like to have his name published, please tell me and your wishes shall be obeyed.

If anyone has any ideas to improve the column, or if anything incorporated into the column is objectionable, please voice your ideas.

Q. From Mrs. M. Medved, Winnipeg, Manitoba: Is one 48 inch fluorescent lamp containing two 40 watt tubes sufficient to grow *Begonias* properly? Should those that need more light, such as angel-wing types, be placed closer to the tubes or would it be better to use four tubes side by side?

A. It is not necessary to have four tubes side by side, since the two tube stands will give you sufficient light to even bloom *semps*. If you put angel-wing types, *semps*, and others needing more light in the center of your stand and *rexes* at the ends, you will do well.

Q. From Bob Dalgaard, Minneapolis, Minnesota in a *rex* robin: How can I get rid of soil mealy bugs in African violets?

A. Most any good soil insecticide will do from experiences of people I know. But, the experts recommend aldrin. Should you not be able to get it, most nursery supply houses carry it.

Q. From Helen Maloney, North Bernardston, Massachusetts: Are there

any books, pamphlets, or sources of *Begonia* information that gives pictures of each plant?

A. I am confused by what you mean, "each plant." Since there are literally thousands of *Begonia* hybrids. Besides the unknown quantity and undiscovered botanicals, it is nigh impossible to have pictures of "each plant." I think the best job, so far, is in *Exotica* 3. I might also suggest Bernice Brilmayer's *All About Begonias*. The greatest source of information on *Begonias* is, of course, *The Begonian*. Back issues are available through the Library Bookstore. (see page 129).

Q. From Mrs. Katherine Watkins, Hillsborough, North Carolina: Why do fibrous rooted *Begonias* turn brown around the edges of the leaves?

A. There are several reasons and they are the same for any *Begonia*. If the leaf edge is dry and crisp, then it could be a lack of humidity or salt burn. If the leaf edge is mushy, then it is a form of botrytis and a good fungicide is necessary such as fermate, or horticultural sulphur. If it is a lack of humidity, then it is a good idea to get a hygrometer and see what it says. If necessary, spray at least twice a day with luke warm water, or set your pots on a bed of wet sand. Salt burn is caused by alkaline conditions in the soil. This is best controlled through your watering and feeding. Too much fertilizer tends to create alkaline conditions unless the pH of the fertilizer is controlled. Proper leaching of the soil medium is a big help but, here again, is determined by the pH of the water you use. A good pH test kit will help you decide what steps to take.

In closing, I would like to add that you keep the questions coming and I will do my best to keep you informed.

Ben Marcus
1547 West Eighth St.
Brooklyn, New York 11204

ROUND ROBIN NOTES

Most of the flights are flying with good speed, full of interesting information on *Begonias*. Requests keep coming in and new flights are being formed.

Bloom:

Hazel Harmon, Ottawa, Kansas wrote in February, she thinks her best bloomers of the Kusler hybrids are *B.* 'Laura Engelbert' and *B.* 'Lenore Olivier'. Murray Morrison, Bronx, New York says "*B.* 'Anna Christine' is an erratic bloomer for me, I cannot ascertain why it blooms when it does, nor why it doesn't when I want it to. It is a very hardy plant, almost indestructible, and sends up new growth rather readily. A very ready "rooter" and so simple to start new plants from stem cuttings."

Murray Morrison and Anita Sickmon, Cheney, Kansas both feel that *B.* 'Esther Albertine' is a very striking plant. The bracts of flowers are magnificent. They are full, they dangle and their pink is vibrant. It has much of the beauty of *B.* 'Sophie Cecile' and blooms much more readily.

Mae Blanton, Mesquite, Texas reports at the end of January that her *B.* 'Dorothy Barton', a nice basket plant, started blooming in December and was still in bloom in February. It has the fragrance of a rose when the air is warm and humid, usually in the afternoon. She finds its leaves tend to water spot during a cold spell.

Mae finds *B.* 'Sophie Cecile' happy any place in her greenhouse.

Ruth Wille, Jackson, Mississippi reports bloom on *B.* 'Raquel Wood' in February, a very charming deep pink flower. The markings on plantlets from rooted leaves change as they get bigger and look like leaves on mature plant.

Rosetta White, Newton, Kansas reports *B.* 'Laura Engelbert' blooms more often for her than any of the other Kusler hybrids.

Hazel Harmon reported in February she had a *B.* 'Gloire de Sceaux'

that is three feet high and at least two dozen bunches of buds. Buds were coming out all over at almost every leaf node from top to bottom. As each new branch grows, it has buds.

Murray reported at the end of January that his *B.* *lubbersii* with its beautiful leaves was in bloom with all male flowers that measured two inches closed and double that open.

Mae reported at the end of January that her *B.* 'Anna Christine', *B.* *ulmi-foia*, and *B.* *kellermannii* were blooming. Also *B.* *paranaensis* was blooming its head off. The first stalk had all male blooms first, heavy with bloom and all were gone when pistillate flowers came, five pointed petals almost equal in size, making it look like a star; one very long wing, just a ridge for the other two. She collected some of the male flowers when she realized they would all be gone when she needed them to self it. So much pollen fell onto a large leaf, she tried touching them to that. She has several seed pods ripening, the next flower stem was heavy with male flowers but a third stem was budding.

Propagation:

Pat Burdick, Burnsville, Minnesota got leaves of *B.* *staudtii* in October and by mid-February had plantlets. She thinks they like warmth of lights along with her *B.* *cathayana* plants.

Rosetta says when starting *B.* 'Jill Adair' from a leaf, a young leaf is the best; she can't get old leaves to send up plantlets. She finds it doesn't make any difference what age leaf you use on *B.* 'Gwen Lowell', *B.* 'Rosalie Wahl', *B.* 'Grace Lucas', and *B.* 'Swirley Top' takes quite a long time to root for her. Leaves of *B.* 'Victoria Kartack' root quite readily. It took over a year for a leaf of *B.* 'Freda Stevens' to grow a plant.

Robert Dalgaard of Minneapolis, Minnesota wrote at the end of January that the little *rex* plants that he has grown from rooted leaves, he plants them in pots and puts them in covered plastic hat boxes. After a couple of weeks or when they start growing, he

removed the lid a few inches at a time to harden them off. They adjust very well when being taken out of the box.

Bea Blake of Barneveld, New York took cuttings of *Begonias* in February, she put part in water and the rest in tufflite. These cuttings in tufflite rooted quicker and were nicer plants than those in water.

B. listida:

Description of three double-triangle leaves appearing on a plant of the already unusual Brazil species *B. listida*, grown by Carrie Karegeannes in Annandale, Virginia sent Jane Neal of Worthing, England to look at her seedlings. She found only one strange one—but that had a sunburst effect instead of the usual white stripe through the center of the dark green leaf. "Most effective if it stays." Later leaves on Carrie's plant were all normal. Daisy Austin of Julian, California commented that this one has some very interesting leaves show up at times and she had tried propagating these cuttings, but they did not keep their odd shapes and markings. Neither did they stay on the plant. Bob Shatzer had heard from Brazil that wild plants were prone to nematodes. Could damage to parent plants effect structure of their seedlings?

B. eminii:

Chuck Tagg in Fullerton, California had his African species *B. eminii* growing on driftwood, happier than in a pot. It was rooting right into the wood where there was no sphagnum—was beautiful.

Gesneriads:

Claire Roberts of Clovis, New Mexico reports she has found that *Columneas* do much better for her in small pots. She has beautiful plants growing in two and three inch pots.

Ferns:

Vivian Stewart of Redmond, Washington reports in December she had a lovely rabbits foot fern, the long feet have grown all the way around

the container, in and out the sides and is putting out new fronds on all the feet. Ruth Stanley of Bellefontaine, Ohio is trying to find the names of ferns that grow bulbils or plantlets on the fronds.

Elaine reports a climbing fern that grows wild there at the edge of a clearing so thick it covers the ground and is a pest.

Want to join a robin? Write to:

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

HYBRIDIZING . . .

(Continued from Page 125)

the female flower. I usually fertilize several flowers on the same flower stem to be sure that at least one develops fertile seeds. I have learned that if only one flower is pollinated, too often the plant discards it.

To make certain what cross was made, I always make an aluminum-foil label which I hang on the individual flower stem. On the thin aluminum foil, using a pencil and a soft surface underneath, I write the data regarding the cross with the name of the plant onto which the pollen was placed first and the name of the plant from which the pollen came just below. The label with the embossed notations is very light and by using a very thin piece of raffia to tie it to the flower stem, there is never any damage to it.

It takes time for the seed to be produced but gradually the seed pod will begin to dry near the stem. When this time arrives, I remove the seed pod and label, put them into an envelope, and take them indoors to dry in my study. It is too easy for the seed to be lost if the pod is allowed to dry on the plant.

When the seed is mature and I am about to plant it, I always make sure to remove all foreign matter from it by rolling the seed off a tilted paper by gently tapping it.

FOURTH ANNUAL EASTERN BEGONIA CONVENTION

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September 19 - 20, 1969

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PROGRAM

Friday, September 19:

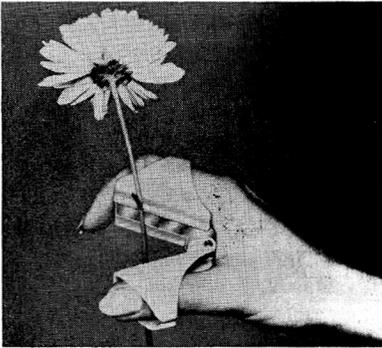
- 3:00 - 5:00 p.m. Begonia Show entries accepted.
- 5:00 - 6:30 p.m. Social Hour
- 6:30 p.m. Dinner
- 8:00 - 10:00 p.m. Begonia Show entries accepted.

Saturday, September 20:

- 8:30 - 10:30 a.m. Begonia Show entries accepted.
- 9:30 a.m. & noon Buses leave for Longwood Garden Tour.
- 1:30 p.m. Lunch—Speaker, Mrs. Carrie Karegeannes,
Annandale, Virginia, Round Robin
Co-Director, A.B.S.
- 2:30 - 10:00 p.m. Begonia Show opened to public.
- 6:00 p.m. Social Hour
- 7:00 p.m. Awards Dinner—Speaker, Rudolf Ziesenhenne,
Santa Barbara, Calif., Nomenclature
Director, A.B.S.

FLORIDA STATE PRISON EDUCATION DEPARTMENT ORNAMENTAL HORTICULTURE

Training in the Ornamental Horticulture area attempts to accomplish three major objectives; namely, first, to develop in the inmate student such personality adjustments as to accomplish the feeling of belonging. This we attempt to do through co-operative efforts, where working together causes stress and strain of clashing personalities to be controlled. Quick results such as: observing seeds that have sprouted or air layers rooted, does curb or deflect that grudge or flighty disposition. Secondly, citizenship training where again the give and take idea, so necessary in an atomic age, is stressed. The roles of a successful farmer as he exercises his civic and religious responsibility as an American Heritage is given a prominent role in our training effort. This idea is fur-



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ther stressed by indicating the free use of organizations and agencies interested in promoting that which is good for all farmers.

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There are many facets to these and other parts of Ornamental Horticulture that are included in our teaching program; even flower arranging receives its place of importance as an employable skill.

Formal classroom teaching takes place in the morning part of the day with some supervised study from books, bulletins and magazines. The afternoon is spent with each inmate having a definite area of landscape to develop and maintain. Here he exercises self-expression.

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FUCHSIA FANTASY

The Fifteenth Annual Fuchsia and Shade Plant Show "Fuchsia Fantasy" will be presented by the California National Fuchsia Society at the Orange County Fair Grounds in Costa Mesa, June 20, 21, 22, 1969. Open to the public Friday, June 20, 2 to 9 p.m.; Saturday, June 21, 10 a.m. to 9 p.m.; Sunday, June 22, 10 a.m. to 6 p.m.

Objective theme "Fuchsia Fantasy" is the key to a bonanza of displays by the various branches of the Fuchsia Society. Sweepstakes Trophy and other awards combine to create a competitive atmosphere. Additional Awards will be extended to Garden Clubs and individuals entering companion shade plants such as African violets, *Begonias*, ferns, Bromeliads, orchids, Gloxinias and floral arrangements. In addition, many commercial growers will enhance the beauty of "Fuchsia Fantasy" with their outstanding displays.

Visitors will be welcomed by a King and Queen, chosen to reign at the show. They will assist the Master of Ceremonies in the prize drawings donated by merchants, nurseries, restaurants, and many other commercial and individual friends of the California National Fuchsia Society.

Price of Admission: Adults \$1.00 and Students (12 to 16) 50 cents.



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CALENDAR

- June 5—Westchester Branch: Potluck Dinner. Speaker, Steve Talnadge of San Diego, "Rare and Unusual Ferns." 7:30 p.m.
- June 10—Glendale Branch: Speaker, Hazel Snodgrass from Ventura. 8:00 p.m.
- June 10—North Long Beach Branch: Ham Dinner, adults \$1.25, children \$.75. Speaker, Alberta Logue on "Preparing Plants for Show". 7:00 p.m.
- June 11—Inglewood Branch: Joyce Bingenheimer, a Cal Poly student in Ornamental Horticulture, will demonstrate use of *Begonias* in Flower Arranging. Bring any *Begonia* blossoms you would like to see used in an arrangement. Member donation plant table. 7:30 p.m.
- June 13—San Gabriel Valley Branch: Speaker, Kenneth Drennon, "Fertilizing of *Begonias* and other Shade Plants," 8:00 p.m.
- June 17—Seattle Branch: Slides from previous garden shows. 7:00 p.m.
- June 19—Foothill Branch: Speaker, Kenneth Drennon, "Fertilizing of *Begonias* and other Shade Plants." 8:00 p.m.
- June 20—SHOW COMMITTEE: South Gate City Auditorium, 7:30 p.m.
- June 23—A.B.S. BOARD: South Gate City Auditorium, 4900 Southern Ave., South Gate, Calif. Meetings are always open to members. 7:30 p.m.
- June 25—Eastside Branch: "Show Plans, Exhibition Techniques, and Preparation of Display Devices and Materials," by Jack Eller. 7:30 p.m.
- June 27—Redondo Area Branch: Speaker Alice Martin, "*Begonias*" 7:30 p.m.
- July 1—DEADLINE for all material for the August *Begonian*.
- July 1—DEADLINE FOR AWARDS NOMINATIONS: Eva Kenworthy Gray Award, Herbert P. Dyckman Service Award, and the Alfred D. Robinson Memorial Medal. See *The Begonian*, May, 1969, page 106. Make your nominations now.

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