

September 1976

The BEGONIAN



GENERAL OFFICES:

Dues, address changes, or magazines:

5950 Canterbury Dr., Apt. C-201, Culver City, Ca. 90230

Subscription: \$5.00 per year. Foreign (Mexico and Canada) \$5.50. U.S. (Mexico and Canada) 1st Class \$8.00. Overseas Air Mail \$17.00. Pay in U.S. currency only. Single back issues 75¢.

Second Class Postage Paid at Culver City, California

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P. O. Box 82109, San Diego, Ca. 92138
Phone (714) 436-1419.

Advertising Manager Mabel Corwin
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Contributing Editors

Elda Haring Box 236 Ravenswood Loop Rd.
Flat Rock, N.C. 28731

Ruth Pease 8101 Vicksburg Ave.
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Mildred Thompson 310 Hill Street
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Views expressed in this magazine are not necessarily those of the Editors, the Society or its officers.

Cover Picture

BEGONIA PRISMATOCARPA

Front Cover by Gordon Lepisto

This cover is the first of two special photographs sent to the *Begonian* by the late Gordon Lepisto. Although he called himself an amateur photographer, Gordon was a professional color correctionist and was employed by a Minneapolis printing firm in the reproduction of color photographs. He described his technique for photographing begonias in an article which begins on page 236.

The cover is a bloom study of *Begonia prismatocarpa*, one of the few yellow-flowering begonias. Usually the tiny blossoms are nestled among the bright green waxy leaves. Seldom does one see the detail which this photo affords, especially the red-orange streaking on the petals. The upper blossom shows four stigmas. The carpel (a stigma, style and segment of the ovary considered as a unit) is prism-like in overall shape. The ovary beneath the tepals is four-angled but does not have the wing-like structure which is characteristic of most female begonia blossoms.

B. prismatocarpa is a miniature rhizomatous begonia which most plant specialists value highly for use in terrariums with other plants. It is companionable with ferns, other

small begonias and indoor tropical plants. Alone in a bubble or bowl, it makes a delightful addition to the decor of living room or office as a table piece. The overall plant is seldom taller than 3 inches and tends to creep to cover the soil of the container. I have seen it form a carpet on the surface of planting mix in a five-gallon jug laid on its side.

The natural habitat of *B. prismatocarpa* is among trees and rocks in shallow soil at about 3,000 ft. elevation on the tropical island of Fernando Po, off the coast of Africa. Gustav Mann sent the species to Kew Gardens about 1860. The staff there reported that it was difficult to bring to flower. Later on, various growers learned to give the plant enough light to improve the number of blossoms. It is not surprising that there is only one hybrid reported in the *Begonian* so far—*B.* 'Buttercup', a cross with *B. ficicola* made by Mike Kartuz, which bears strong resemblance to *B. prismatocarpa*, and has yellow and orange flowers.

Consult the October 1971 and October 1973 issues for further information.

P.B.

AIMS AND PURPOSES OF THE AMERICAN BEGONIA SOCIETY

The purpose of this Society shall be:

- TO stimulate and promote interest in *Begonia* and other shade-loving plants;
- TO encourage the introduction and development of new types of these plants;
- TO standardize the nomenclature of *Begonia*;

- TO gather and publish information in regard to kinds, propagation and culture of *Begonia* 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 *Begonia*.

PLANT PHOTOGRAPHY—INDOORS

By Gordon Lepisto, St. Paul, Minnesota

By Arrangement with *Indoor Light Garden Magazine*

The title suggests the absence of natural lighting, and for the most part it is true. I am an amateur photographer, not a pro, and while I photograph plants under all kinds of lighting conditions, this article will be devoted to individual plant photography indoors using artificial light—a somewhat specialized and deliberate method of my own, using both color and black and white films. Natural light conditions outdoors and in the greenhouse will not be discussed at this time.

When I started growing begonias and gesneriads, I quite naturally added the other hobby of photography to my ever growing interest in shade loving plants. While I am basically a *Begonia* person, I do involve myself with other plant families including orchids and ferns.

In the very beginning I brought individual plants outdoors to makeshift studios using various backdrops, props & etc. I was always at the mercy of the weather, natural light changes, the wind and shock to the plants after leaving their sheltered home in my humid plant room. I had great fun though in spite of existing problems and torture to my plants. Beautiful effects can be achieved by natural back lighting such as close-up pictures of light shining through a colorful rex leaf or a sinningia flower.

Eventually I had to turn to taking these plant pictures indoors under more controlled, sheltered conditions. Common sense dictated I build

a studio adjacent to my plant room in the basement. It consists of a 15" high table 31/2' x 31/2' with a 31/2' square back board over which I drape various cloth materials. Above and slightly forward of the table, I stationed a 4' fluorescent light fixture which can be raised or lowered. I settled on McBeth 5000 kelvin tubes (used in the graphic arts), although other type tubes can be used as long as they are between 5000 and 5500 kelvin which approaches natural daylight. This works fine with Kodacolor II color negative film for prints and Kodachrome-64 slide film both of which I use extensively. Kodachrome-64 doesn't seem to need filtering and Kodacolor II has wide latitude in that much is controlled in the printing process. I also use a moderately grained Kodak Plus-X black and white pan film. You will note that I use outdoor type color film for which the lighting was set up. Various flood lights could be used with indoor (or artificial light) color film and black and white film but I *know* the two types of color film I use and am primarily a color photographer. Cool white fluorescent tubes can be used in place of the graphic arts tubes but necessitate the use of a 30 magenta filter and increased exposure. My plants grow under cool-white tubes, so I do use a filter when photographing within the plant room. When using electronic flash, the fluorescent lights are left on but disregarded during exposure. Usually I avoid the use of electronic



Gordon Lepisto with rex begonias in controlled atmosphere plant room.

flash except for extreme close-up work. This is much too involved to discuss at this time.

Now, on with basic picture taking. I use a 35mm single lens reflex camera, a type camera well adapted for plant and flower photography because what you see in the viewfinder is what you will get on film. The normal 50-55mm lens is most commonly used although the preference is up to the photographer. Some will use wide angle and zoom lenses. The camera should have a built-in exposure meter to facilitate your exposure but it's not necessary. I keep my camera on a tripod at all times because most exposures are longer than 1/30th of a second. The tripod is located in front of the table, either

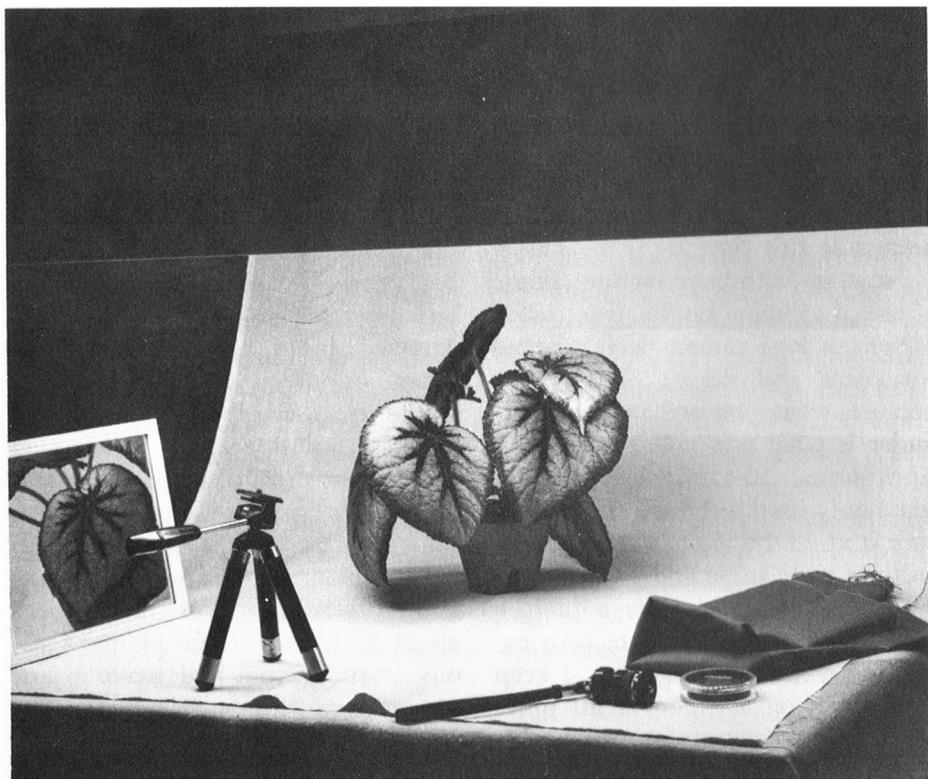
on the concrete floor or, with shortened legs, on the table itself. A dull cloth is draped over the table and backboard. I use various colors depending on the plant being photographed, but I like a neutral light green or grey. Sometimes bright colors are used, it all depends, but keep in mind that a background should not distract from the plant.

After a specified plant is positioned on the table, I move the light fixture about 8-10" above the plant and forward towards the camera about 8" ahead of the plant. Various small mirrors and white board reflectors are set up on the table (outside the area being photographed) to fill in the shadows in back and around the plant including the con-

tainer. Before the camera settles on the tripod, it is brought very close to the plant where the 'through the lens exposure meter' will read the average between the highlight and shadow areas, and the shutter and aperture set accordingly.

While the above seems a little complex, really it isn't. Any kind of camera can be used, an instamatic, a rangefinder, or even a Polaroid camera. The basic lighting set-up is the same. If the camera has no built in exposure meter, one can use published exposure data or a simple hand held light meter can be obtained for best results. Or, one can bracket his exposure by guess work until a consistent average well ex-

posed slide or print is obtained. Time consuming and a little waste of film but worth it in the long run. It must be noted here that whenever the camera is on a tripod and exposures are longer than $\frac{1}{8}$ th of a second, a cable release should be used if at all possible. The slightest camera movement during exposures can and will ruin your picture. As for aperture or lens opening, the larger the opening the less depth of field, the smaller the opening the greater depth of field. You can vary this according to the desired effect. For example, you may wish the background or back of the plant to remain out of focus by opening up your lens aperture for less depth.



Suggested placement of tripod and plant.

For close-up photographs of plants and flowers, you can use the very inexpensive 'plus' close-up lenses (+1 to +3) which screw onto the front of your normal lens. Higher diopters are not recommended such as plus 6 or 10 as distortion will occur. No increase in exposure is necessary and the basic photo set-up as explained above is used, except that focusing is very critical and depth of field becomes very narrow. It is therefore necessary to close down your lens opening as small as possible, (f:11-f:16) to obtain as much depth as you can. Remember that the use of close-up plus lenses with other than single lens reflex cameras is approached differently.

In close ups, I keep a mist sprayer handy and sometimes mist a flower petal to form dew drops. This can add striking realism to those pictures which would otherwise appear drab. I also use a 1:1 macro lens in close up work. These are fine marvelous optics, unsurpassed in resolution at close range which of course they were designed for. But they are expensive and not necessary for the amateur in moderate close up photography. I change off in their use and that of simple plus lenses. I have never used a bellows and only sparingly extension tubes. I like to keep photography as simple as possible; one can get quite involved with much sophisticated equipment.

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Although I own and use fully automatic, electronic shutter cameras, such as the Minolta XE-7 and XK, I also use and favorably recommend a moderately priced single lens reflex with built-in exposure meter for plant photography. The Canon FTb, the Minolta SRT series and the Nikkormats FTN and FT2 are fine examples. They are well constructed instruments and reliable. Although good equipment is helpful, in the final analysis it's your ability as a skilled photographer that will show.

Don't forget, in plant photography as in all photography, composition plays an important role. It's something that's hard to define and comes with experience. What is pleasing to your eye doesn't always please others. Take constructive criticism in good spirit — it will make a better plant photographer of you.

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BEGONIA SOLANANTHERA A. DC.

by Mildred L. Thompson, Southampton, N.Y.

Photo by Ed and Millie Thompson

Begonia solanantha was discovered in the Organ Mountains of Brazil. This species was originally described by Alphonse DeCandolle in 1859 in "Memoire sur la Famille des Begoniacees," *Annales des Naturelles*, Series 4, *Botanique II* page 128. Later, in 1864, a more detailed description by Alphonse De Candolle appeared in *Prodromus Systematis Naturalis Regni Vegetabilis*.

B. solanantha is a beautiful trailing plant. The glabrous, medium green leaves are ovate with acute or cuspidate apices and obtuse bases. Leaves are small, averaging under 3". This plant branches fairly readily producing a full plant. The beautiful fragrant flowers are white with crimson centers. The inflorescences are many-flowered and blooming is profuse during the winter months.

The botanical classification places *B. solanantha* in the section *Solanantha* of the genus *Begonia* of the family *BEGONIACEAE*. All species presently placed in this section are originally from Brazil.

The horticultural classification in *The Thompson Begonia Guide* for *B. solanantha* is "trailing-scandent, species." There are about forty-five species and hybrids of *Begonia* in this horticultural grouping. Begonias are placed in this grouping because they will either trail or climb, and, in many cases, begonias in this group will do either according to their environment. Most begonias in this horticultural classification have similar cultural requirements.

B. solanantha is an excellent plant for growing suspended in a basket. We prefer to grow this species and most other trailing begonias in a moss-lined wire container because in these containers there is excellent drainage, and the porosity allows perfect aeration of the root system. During the summer months it is best to grow this begonia in a semi-shady location because too much sun will quickly cause uncharacteristically pale foliage. Watering should be done carefully; be certain that the plant is always kept slightly moist but never soggy-wet. For a full plant it is essential to pinch new shoots continuously throughout the life of the plant. Old woody stems should be removed to allow new growth to take over. As with most other begonias, fertilizing must be done regularly with a complete fertilizer. A properly fed plant will be full, beautiful and resistant to disease.

B. solanantha is an outstandingly beautiful species for the suspended area of the indoor and outdoor garden. This lovely begonia will richly reward the grower for his care.

Carrie Karegeannes, Annadale, Virginia, has very graciously given permission to print her translation of the Latin description of *B. solanantha* A. DC. as it appears in *Prodromus*:

105. *B. solanantha* (Alph. DC., *Annales Sciences Naturelles, Botanique*, Ser. 4, Vol. 9 [1859], p. 128), half-shrub, rooting below, subscaudent; branches glabrous; leaves ovately acute or cuspidate, palmately 6-veined, obtuse at the



B. solananthera inflorescences

base, wavy-dentate, here and there angled or else entire, membranous, glabrous above, underneath — chiefly on the nerves — fulvo-pubescent (tawny-hairy); *stipules* oblong, acuminate, falling off early, glabrous. *Peduncles* shortened, often dichotomous (forked), tawny-hairy; *bracts* ovate, ample, membranous, glabrous, falling off early. *Male flowers* with sepals [2 outer tepals] amply ovate; petals [2 inner tepals] obovately oblong, somewhat shorter than the sepals. *Female flowers* with lobes elliptic. *Capsule* not seen.

Woody. In the forest of the Organ Mountains of Brazil (*Lhotsky!* 135, in part), at Mandioca (*Riedel! & Langsdorf* 532 in the Lenningrad Herbarium), in Sierra Estrella (*Wedd.!* in the Paris Herbarium).

It appears parasitical, falsely. It grows to 1/2 to 1 foot tall. *Branches* at length glabrous. *Leaves* 2 to 3 inches long, 1 1/2 to 3 inches wide, with a petiole of 1 to 2 inches, the blade scarcely unequal-sided, with principal subcentral vein sending out

2 veins from the middle on both sides. *Stipules* 1/2 to 2/3 inch long, 1/6 to 1/3 inch wide. *Cymes* quasi-terminal, 5- to 10-flowered, scarcely longer than the leaves. *Bracts* 2/3 to not quite 1/2 (i.e., 5/12) inch long. Flowers pink? *Male* sepals 1/2 inch long, 5/12 inch wide. Petals 5/12 inch long, 1/12 to 1/6 inch wide. *Antthers* 1/6 inch long, with tips truncate, inflexed-hooded, with dehiscent pores borne under the hood in the mode of the *Solanum* (the Nightshade). *Female* lobes [tepals] 5/12 inch long. Ovary 3-winged, very slender, minutely pubescent (minutely downy) — dusty (powdered).

(Seen in the dry state.)

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THE BONDS' LOVE AFFAIR WITH BEGONIAS

By Joe Bond, Balboa, Canal Zone

To us begonias are not a One Man Show, but instead are a hobby which belongs to the entire family. Each of us contributes time and a lot of T.L.C.: my parents, Hilma and Joe, Sr.; my wife, Marielos; and our children, Hilma Helen and Joe IV (Jaycee). We all work together and we all enjoy our plants together. In addition we have made friends all over the world because of our begonias.

This whole affair began some three years ago when we were making the garden around our recently finished home that I had just designed and built. Once having finished the garden, out of curiosity we counted the begonias we had collected in the various greenhouses in Panama and found that they totaled 23 different varieties. We were positive that we had collected almost all the different varieties of begonias there were. However, a trip to the library and a glance through *Exotica IV* made it very obvious that we had only scratched the surface of the begonia world. For me it was too late . . . I had become addicted to begonias. So letters went out to several greenhouses in the U. S. and in a month or two, the first order of begonias arrived from Kartuz Greenhouses. This was the beginning of what is today the largest collection of begonias in Panama and perhaps Central America. Our collection numbers slightly over 1000 varieties.

Through Rosetta White, I became a member of the American Begonia Society and later was introduced into

several 'Robins. Through ABS and the Robins, I have come to know many people. Some have become very close friends—Gordon Lepisto, Millie Thompson, and on and on. As you can see, begonias have become more than just plants to my family and me: they are a whole new world.

Because of Gordon Lepisto's overwhelming enthusiasm, I decided to try my hand at photographing begonias. With his help I was able to develop some skill and, at his insistence, have put together an audio-visual program of 602 slides. A part on Panama has about 100 slides; the remaining slides are of the plants which make up our collection. For us it has been a great pleasure to be able to share our program with you.

Now to tell you a little about growing begonias in Panama. Our small country joins North and Central America to South America. It has divided itself into two so that a canal could be built that would serve world commerce. However, Panama is not known only for its canal, it is also a world finance center, an exporter of bananas, coffee, citrus products, sugar, shrimp, and is at present in the process of developing one of the world's major copper deposits.

The climate is tropical with only two seasons, a rainy season which lasts from April to December, and a dry season the remaining three months. The relative humidity varies from 93% in the rainy season to 80% during the dry season. The temperature is fairly constant through-

out the year, varying from a high of 85-90° in the day to a cooler 74-76° at night.

In order to successfully grow begonias in Panama, we had to vary the growing procedures that you would use in the U. S. The soil used is a mixture of 3 parts rich top soil to 1 part river sand. No peat moss or other moisture holding material is used. The soilless mixes used in the States cannot be used here because they hold too much moisture. All our soil mix is sterilized either chemically or thermally because nematodes are a real threat.

Our plants are all grown outdoors in special, roofed benches. The purpose of the roof is twofold: one to protect the plants from the hard driving rains, and the other, to offer shade from the warm tropical sun.

Because our collection of begonias numbers over one thousand varieties, we use an automatic watering system such as the one produced by Chaplin Watermatics. We have found this system to be a great aid in caring for our large collection.

About 90% of our plants are grown in 4" pots. Some of the larger varieties are grown in 6" pots. Such begonias as 'Wanda', 'Exotica', 'Ra-

jah', 'Mumtaz', the *masoniana* group, the *imperialis* group and others that are normally considered as terrarium plants by growers in the U.S. are grown out in the open on our benches along with all the other plants. We have found that with our climate these plants do not require terrariums nor special soils.

Propagation is done with our regular soil mix, using the wedge method for rexes and rhizomatous varieties. Stem cuttings are used for the propagation of all other varieties.

We fumigate our begonias with a mixture of 50% malathion and Iso-tox every fifteen days to protect our plants from insect attacks. Every six months, they are treated with VC-13 for protection from nematodes. Every fifteen days they are fertilized with 1/2 strength solution of Rapid-Gro.

The only type of begonia which does not do well in the warmer climates of Panama is the tuberous type. However in the highlands of Panama where the temperature range is 72° to 55-60°, these begonias are a glorious sight.

It is our intention to continue to share with you the photographs of our plants.

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BEGONIAS IN PANAMA

By Gordon Lepisto, Twin Cities Branch

An extraordinary showing via color slides and cassette tapes of scenic Panama and the begonia collection of Joe Bond took place at the regular meeting of the Twin Cities Branch on April 1st. Joe, an architect in Panama, grows over 1000 varieties of begonias plus other plant families in a climate well suited to tropical plants. His many talents beside the culture of beautiful begonias include superb photography and an interesting arrangement of presentation.

The showing was introduced by a visual history of Panama with geographical notes. Then the slides of individual begonias were presented in such a way that the viewer saw not only a picture of the plant itself, but also many views of each begonia including close-ups of its flowers and leaves and backlighted effects. Truly a remarkable educational showing. The program, which lasted

about an hour, included 500 of the most outstanding slides of begonias that I have ever seen. The audience response was enthusiastic.

The meeting was hosted by Mr. and Mrs. Doug Forbes of Minneapolis.

Originally scheduled for our March meeting, the Bond program was unavoidably delayed. So on March 11th, at the home of Jane Johnson, we presented Ed and Millie Thompson's audio-visual program, "Begonias in General." It was beautifully prepared and highly educational. We all marvelled at the in-depth knowledge of begonias and the Thompsons' exceptional photography. This program is 2½ hours long, includes tapes as well as slides, and is available on loan to the ABS Branches through the Slide Librarian. It is highly recommended for both the novice and the advanced grower.

BRANCH CHANGES NAME

Douglas Forbes, the branch national representative, reported that the Twin Cities Branch recently voted to change its name to the Gordon Lepisto Branch because Gordon was instrumental in helping the Branch get started and because he was a friend to all its members. They have started a library of begonia resource material which includes some of Gordon's work.

Their enthusiasm is reflected in the report above which was sent to the *Begonian* late last spring by Gordon. The Branch members along with Joe Bond have been handling the ABS Slide Library since his death. Further arrangements for the use of Slide Library programs will be published soon, including a list of those available in addition to those described. P.B.



Top left: Gordon Lepisto Branch members gather for slide program. right: Doug and Joy Forbes host April meeting, watch slides intently.
 2nd row left: Three members view slides. right: Members as meeting is called to order.
 3rd row left: Pat Worley, vice president, and Ann LeFlem, president. right: Oldrich Otypka and Pat Rummenie examine terrarium with begonias.
 4th row: Jane Johnson, March hostess, among her plants.

BEGONIA 'KEW SPECIES'

J. Doorenbos, Dept. of Horticulture, Wageningen, the Netherlands



B. 'Kew species' in the male phase. Note fruits.

The cover of the *Begonian* of January 1973 surprised us with a picture of an unknown begonia with leaves marked with large round light blotches. The only information supplied was that it came from Kew and that the photo had been sent by M.L. MacIntyre. Recently we have learned from *The Thompson Begonia Guide* than this begonia was collected by J.A.R. Anderson at Kuching, Sarawak, in 1965.

For a while this new cultivated species led a precarious existence, as Kew lost it and it survived only with Mr. MacIntyre. Fortunately, he proved to be a very accomplished

plantsman, who not only kept the plant alive but also induced it to produce seed, of which he kindly sent me a sample.

I have now been growing the plant for about a year and a half. When my plants started to flower I tried to find out the name of the species. But although I have learned a lot about Bornean begonias, my efforts to identify the Kew species have been in vain. Nevertheless, it seemed worthwhile to write down some of my findings, as they may be of interest to others, and will perhaps stimulate someone to continue where I had to give up.

The story of the begonias of Borneo begins in a very modest way in 1856, when Miquel stated on p. 686 of his *Flora of the Dutch East Indies (Flora Indae Batavorum)* that *Diploclinium repens* occurs on the island. This plant had been described from Java in 1827 by Blume as *Begonia repens*, but this name was not legitimate as it had already been used in 1783 by Lamarck for a West Indian species. For this reason A. de Candolle, who saw no reason for a separate genus *Diploclinium*, called Blume's plant *Begonia mollis* in his monograph of 1859. As *Begonia mollis* it appears in Koorders' *Exkursionsflora von Java* (1912) which states that the plant grows not only in Java but also in Borneo, apparently unaware of the fact that Ridley had already doubted that the material from Borneo belonged to the same species. This matter has not yet been cleared up.

In 1857 a second Bornean species makes its entrance in a much less equivocal way. Plate 4974 of the *Botanical Magazine* presents *Begonia microptera*, an upright plant with narrow leaves, obliquely triangular, with red veins on the underside. The flowers are pink and the fruits have very narrow wings. This species flowered in England in December 1856 in the greenhouses of Messrs. Low at Clapton. Its somewhat glandular, villous stems, red veins, and narrow wings distinguish it from *Begonia borneensis*, described two years later, which is much like it in many respects. The latter species is still being grown, but *B. microptera* was never heard of again.

We have to wait until 1880 be-

fore we hear of other species from Borneo. In that year, or the next, the firm of J. Linden at Brussels, Belgium, famous for its introductions of new greenhouse plants, imported *B. diadema* and *B. deliciosa*. Both are still being grown. *B. diadema* became famous as a parent of many rex hybrids, particularly those with lobed and/or silver-dotted leaves. But although Linden said they came from Borneo, most subsequent authors have doubted this and suggested that these species came from India.

Meanwhile, the years 1865-68 had been very important for the study of Bornean begonias. In this period the Italian explorer and botanist O. Becari collected in Sarawak and discovered a considerable number of new species. Many years had to pass, however, before his specimens were properly studied; in the meantime, several species discovered by him had also been found by British collectors (Haviland, Hullett, Ridley) and were described from their material. Stapf described 4 species in 1894 and in 1906 Ridley published a paper on the begonias of Borneo in which he described no less than 21 species, 16 of them new.

L.E. Gibbs described one species in 1914, Ridley added another in 1915, so that E.D. Merrill in his *Bibliographical Enumeration of Bornean Plants* of 1921 could record 26 species — two too many because he included *B. diadema* which is probably not from Borneo, and listed both *B. repens* and *B. mollis*, which are the same species.

In 1926 Merrill added a species of his own, *B. subnummularifolia*,

followed by 3 species in 1928. Meanwhile Beccari, who died in 1921, had been honored by *Begonia beccarii*, described by Warburg in 1922. Beccari's herbarium specimens were finally studied by Irmscher in 1953, who found 10 new species among them. He added another species in 1964.

This brings the total of species from Borneo described so far up to 41, not counting *B. deliciosa* and *B. diadema*, but including *B. mollis*. Of these 41, 11 have creeping rhizomes, while 30 grow upright. The former belong to the sections *Diploclinium* and *Reichenheimia*, which differ in the placentas. As these have often been ignored in the descriptions, it cannot always be said with certainty to which of these sections a species belongs. Of the upright species, 1 belongs to the section *Platycentrum* on account of its two-celled fruit, the other 29 with three-celled fruit belong to the sections *Petermannia* and *Bractebegonia* (which I feel unable to separate).

Apart from *Begonia* 'Kew species' only two Bornean species are cultivated: *B. borneensis* (of the section *Petermannia*) and *B. subnummularifolia* (of the section *Diploclinium*). Before turning our attention to *B.* 'Kew species' we should pause here a moment to reflect on the 39 species known only from descriptions, ranging from the 8 ft. tall *B. burbridgei* to the small tufted *B. speluncae*, only 2-3 in. high, which Ridley compared to a white-flowered violet.

Begonia 'Kew species' belongs to the section *Petermannia*. Among descriptions of Bornean begonias,

and I have read through all of them, I have been unable to find one that tallies with this plant. Consequently, I believe that *B.* 'Kew species' is new to science.



Female flowers open; male part of inflorescences still in bud.

B. 'Kew species' is characterized by its very ornamental leaves and by its compound inflorescence, which bears two large (5 cm) female flowers at the base and hundreds of very small (1-1.5 cm) male flowers at the top branches. The 5 petals of the female flowers are white; the two male petals have a crimson blotch at the base. The female flowers open first, and have already dropped their petals before the first male flower opens. This is unusual: in most begonias, it is the other way around.

A similar inflorescence has been described for *B. inostegia* and *B. congesta*, but the former has broadly oval leaves, and in the description of *B. congesta* the very first sentence ('stems tall, hairy') shows that it is not our plant, which is rather compact (up to 1 ft.) and quite glabrous.

According to Mr. MacIntyre, *B.* 'Kew species' is from Kuching, Sara-

wak. Two other species are known from this locality, viz. *B. propinqua* and *B. artior*, but the former has 4 male petals, the second is a much larger plant, and both are more or less hairy.

I have not had any difficulty in growing *B. 'Kew species'*. It should be kept in the shade, while a high air humidity has a favorable effect. I doubt that it could stand the dry atmosphere of a centrally heated home. Unlike many other species of the section *Petermannia*, it sets seed rather easily.

I am much indebted to Mr. M. L. MacIntyre for sending me seed of this lovely plant, and to Mr. Jack Golding for some literature that I had been unable to find in Holland.

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SAIKEI

Tom Badetta will speak on the topic "Saikai, Living Landscapes in Miniature" at the Westchester Branch meeting to be held October 14. Mr. Badetta, from Rosemead, California, is an outstanding lecturer on both Bonzai and Saikai, the Bonzai forms in landscaping. He studied with Melba Tucker. The meeting will be held at 7:30 at 5347 Sepulveda Blvd., Culver City.

ABS LENDING LIBRARY

To borrow books from the ABS library, write to Mrs. Lydia Austin, 15329 Eastwood Ave., Lawndale, CA 90260. List your name and address and the title(s) you want.

This is part Three of the List. Part One appeared in the March issue and Part Two in the June issue.

Herb Gardens — John Scharff

Growing Orchids Indoors —

American Orchid Society

Your First Orchids —

American Orchid Society

All About Geraniums — Peggy Schultz

Adventures in Dish Gardens — Beard

The Tropical Garden — Kuck and Tongo

Arranging African Violets — Sterebing

My Garden in Florida — Nehrling

Gardening in the Shade — H. K. Morse

Compost and How to Make It —

J. I. Rodale

Secrets of Successful Propagation —

A. A. Longmire

How to Increase Plants — Hottes

Spring Flora — Kellerman, Gleason,

Schaffner

Soils and Fertilizers — Bear

Soil Warming by Electricity —

R. H. Coombes

Soils and Fertilizers for Greenhouse and

Garden — Laurie and Kiplinger

Bonsai Miniature Potted Trees —

Norio Kobayashi

Old and New Plant Lore —

A. S. Hitchcock, Smithsonian

Institution Series

The Greenhouse — Preson

Plant Hunters of the Andes —

T. Harper Godspeed

Plant Life — Vol. V, 1949; Vol. VI,

1950; Vol. VII, 1951; Vol. VIII, 1952

Plants & Gardens — Vol. 5, 1949; Vol. 6,

1950; Vol. 7, 1951; Vol. 8, 1952

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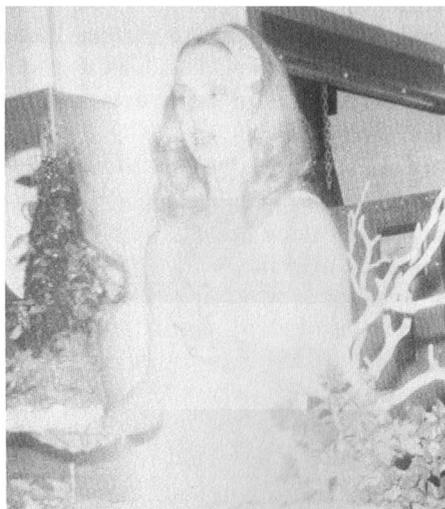
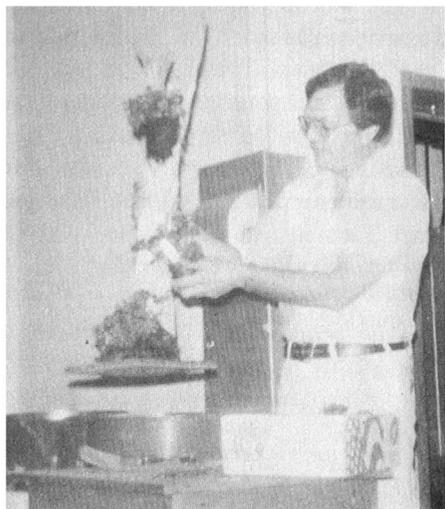
Division of Agricultural Sciences, Univ.

Of California

Flora of Costa Rica — Part II, Vol.

XVIII, Botanical Series, Field Museum

of Natural History



Frank Kerin and Sue Colaizzi demonstrated ways of using rooted begonias in artistic arrangements and also novel ways of growing begonias such as planting in stone or driftwood at the July meeting of the Edna Stewart Branch. They were discussing various classifications in which plants may be entered in the Show at the Eastern Regional Convention which the Branch will host September 16, 17, and 18 in Pittsburgh. A record breaking crowd is anticipated. •

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REGISTRATION OF BEGONIA CULTIVARS

Note: The American Begonia Society is the International Registration Authority for cultivars of the genus *Begonia*. Information regarding registration may be obtained from ABS Nomenclature Director Rudolf Zieshenne, 1130 N. Milpas St., Santa Barbara, CA 93103.

No. 524 was omitted from its correct position in an earlier issue to allow for further checking.

No. 524 — *Begonia* (B. *sudjanae* x B. *rajah*) 'Rajkumari'

This rhizomatous plant was originated by Philip Seitner, 736 W. Waveland Ave., Chicago, IL 60613, in 1973. Name means "Daughter of a Rajah" (i.e. equivalent of a "princess" in the Occident). Areas between veins flushed brown-red reminiscent of *B. rajah*. Registered December 9, 1975.

No. 530 — *Begonia* (B. *fernandoi-costae* x Brazil Sp. 2 June 1965) 'Lorene Brown'

F. Michelson, 1820 N.W. 112th Ter., Miami, Florida, developed this fibrous, hairy plant in 1974, which first bloomed in 1975. Medium green, red underneath, leaves have white hairs on top side; ovate, oblique, overlapping shape, 4 x 7 in.; margin is dentate, texture hairy, veins having white wool underneath. Petioles are covered with white wool and stipules are light brown. Pink flowers, 1 in., have red hair on back of blossoms, blooming January-March. Registered March 26, 1976.

No. 531 — *Begonia* (B. 'Chumush' x B. 'Chumash') 'Huopo'

Originated by Peter P. Lee, 1832 31st St., San Diego, CA 92102 in

1972, *B. 'Huopo'*, meaning "son," is a rhizomatous medium-sized plant with apple green leaves with chocolate stripes above and below, broad ovate-lobed shape, 2 x 4 in., margins serrate-ciliate; texture is glabrous-heavy, nerves 7, petioles pale green with red dashes from which emerge white hairs, a red collar of white hairs; stipules are light green and waxy. Flowers are pink, paler towards the outer edge, $\frac{3}{4}$ in., petals male 2, female 2 with green ovaries, pink wings, in upright panicles on 6 in. stem, blooming in spring. Registered June 30, 1976.

No. 532 — *Begonia* (B. 'Norah Besson' x B. 'Sunderbruck') 'Paiute'

Originated by Margaret Lee, same address as above, in 1969 and first distributed in 1974, this rhizomatous begonia has dark rose flowers with green ovaries with red dots and rose wings, 1 in. in diameter, petals male 2, female 2, on upright panicles, blooming in spring. The dark-green leaves with black lines and splotches have a broad-ovate shape with cleft, 4 x 5 in., margin dentate-ciliate, texture heavy and glabrous above, nerves 7, and petioles of pale green with white hairs from red pores. Registered June 30, 1976.

No. 533 — *Begonia* (B. *bogneri* Zies. x B. *solananthera* A.DC.) 'Little Winky'

Originated by Leslie Woodriff, McKinleyville, CA in 1973 and first distributed in 1975, this rhizomatous plant is compact-type and erect similar to *B. prismatocarpa*, stays small in enclosed atmosphere. The green leaves have elliptical shape with an

gular, margins, nerves 4, petioles 1 in., dimensions 1 x 3/4 in. Small flowers are white to pale pink, 1/4 in., petals male 2, female 2, on 1 in. flower stem, blooming in the spring. Available Wyrzten Exotic Plants, Floral Park, N.Y. 11001. Registered July 18, 1976.

No. 534 — Begonia (chance seedling) 'Lynn'

Originated by James Wyrzten, 165 Bryant Ave., Floral Park, New York 11001, in 1975, this rex cultorum has light and dark green leaves, ovate shape, 14 x 18 in., margin dentate, texture squarrose, nerves 8, petioles red and hairy; pink flowers. Registered July 18, 1976.

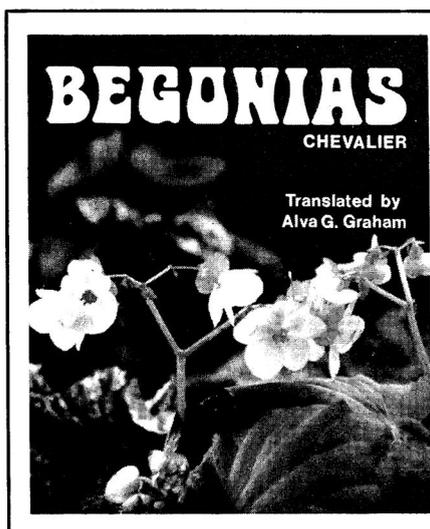
No. 535 — Begonia (chance seedling) 'Snooky'

Originated by Barbara Phillips, Santa Barbara, CA, in 1972 and first distributed in 1975, the rex cultorum has ovate, curly leaves, green with darker center, 14 x 10 in., margin slightly serrated, texture pebbly, nerves 7, petioles pink and hairy. The pink flowers bloom all seasons; there

are 4 male petals, 4 female petals, 1 1/4 in., opposite arrangement on 2 in. stem. Available Wyrzten Exotic Plants, Floral Park, N. Y. 11001. Registered July 18, 1976.

No. 536 — Begonia (B. bowerae Zies. x B. 'Eppley') 'Mustang'

This star-leaved rhizomatous begonia has an exotic leaf-shape, reniform with basal lobes overlapping, black-green with light veins, sinus pink with red spots, fan-shaped on some leaves; 115 mm. x 80 mm.; margin wavy, shallow-lobed, toothed, eyelashed; texture medium, veins 7 to 10, light-green; petioles flesh with red spots, sparse hair; stipules triangular, keeled; very compact. Flowers are light-pink, 15 mm, positioned just above foliage on 120 mm stem, blooming winter and summer. Available through Ball Pacific and various specialists. Originated in 1972, first bloomed in Dec. 1972, and first distributed in November 1975 by Wallace Wagner, 3987 Cascade Highway, N. E., Silverton, OR 97381. Registered July 18, 1976.



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- Sp 6 — *B. manicata*. A rhizomatous species, found in Mexico. It grows with an upright but sturdy rhizome; nearly round, glossy green leaves. Collar of stiff red bristles at top of stem under leaf. Plantlets pop up on rhizome near soil and can be carefully removed and planted. Large racemes of beautiful, pink blooms.
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Evelyn Cronin

Branch Relations Director

The newest member branch of the American Begonia Society is off to a flying start. President and organizer Anne Helton is brimming with enthusiasm and ideas. Assisting her are: Leota Simpson, Vice President; Mary Harrell, Secretary; Edwin Harrell, Treasurer; and Lucius Gordon, A.B.S. Representative.

Starting with 21 charter members, membership has almost doubled during the past months.

Ann Helton writes: "We meet monthly at members' homes, and our first five meetings have had outstanding attendance. We've had an auction, a show-and-tell program, plant exchanges, sale of cuttings, a mini show where ribbons were awarded for first, second and third place. At our May seminar meeting we were honored to have members of the Tampa Branch as our guests. At this meeting, one of our active senior citizens, Mary Wise (who is 85 years young) related some of her experiences of 35 years of growing the beautiful rex begonias. Part of the day's program was a visit to gardens in the area. Our first stop was at the garden of Arthur and Leota Simpson. Then across the beautiful St. Johns River to Ernie and my gardens and greenhouse, with a final stop at Lucius and Mildred Gordon's.

"As we reflect on our brief experiences thus far, each of us has a feeling of pride in saying . . . WE BE-LONG! We extend a hearty invitation to all A.B.S. members in the area to visit with us at one of our meetings."

CONDENSED MINUTES OF A.B.S. BOARD MEETING JULY 26, 1976

The meeting was called to order by President Margaret Ziesenhenné; the flag salute was led by Ethel Arnold and the Aims and Purposes were read by Nathan Randall. Parliamentarian Peggy McGrath read Robert's Rules of Order pages 387-388 regarding the duties of the Parliamentarian.

The minutes, as published and circulated, were corrected: page 2, paragraph six was clarified: the committee reviewing officers' expenses recommended reducing phone calls to business which could not be done via letters. The minutes were approved as corrected. Minutes of May 1976 were approved as corrected.

The letter from Branch Relations Director Evelyn Cronin was read and the charter for the Jacksonville Branch (Florida) was presented and approved. Motion was made by Mrs. McGrath.

Treasurer Jim Porter read his report. Receipts for the month total \$4,927.41 and disbursements were \$3,498.22. Correction was made on the Catalogue Fund disbursement: the \$95.64 amount should be broken out to Catalogue Fund \$47.82 and Research Fund, \$47.82.

Mrs. Perz questioned the \$13.30 disbursement to Social Security. It was explained that the editors and Seed Fund Chairman's income are covered by Social Security. Treasurer Porter reported that he had received 13 bills totalling \$990 for unpaid Social Security taxes for the last three years; this \$990 amount includes taxes, penalties, and interest. The treasurer was given authorization by the Board to pay the past taxes by the July 29, 1976 deadline. ABS will be informed shortly of the results of a formal determination of status of federal coverage. The first quarter reported was the quarter ending December 1975 was paid by Mrs. Ziesenhenné. Mr. Sullinger moved to approve the \$990 payment by July 29; motion carried. No action was taken on the Finance Committee's idea to have two signatures on the checking account for the Show Committee. Membership Secretary Jacqueline Garinger reported 4300 members to date.

Research Director Carleton L'Homme-dieu's report was read. His fine work for ABS was commended. Seed Fund Director Pearl Benell reported a profit of \$478.15. Nomenclature Director Ziesenhenné read a letter from Mr. L'Homme-dieu concerning the general interest in the translation of a technical book. Minimum interest was shown. The report of the Librarian Lydia Austin was read.

Speakers' Bureau Chairman Nathan Randall hopes to get 30-40 speakers for the Southern California area.

The Twin Cities Branch in Minnesota will continue the duties of the Slide Librarian for the late Gordon Lepisto until the end of the term.

Margaret Lee reported for the Show Committee. The publisher has arranged an autograph party for Elda Haring and her new book. Mr. Corwin suggested that small hand wagons are useful to transport plants to the show area from the parking lot. The AIRPORT offramp is the correct offramp to get to the ABS Convention at the Royal Inn at the Wharf. It is felt that the various branches are responsible for transporting plants for OPERATION DONATION to the ABS Show.

The report for the 1975 ABS Convention in Santa Barbara was presented. The profit was \$1603.53, \$203.53 of which the 1975 Show Committee designated to the officers' travel expense fund.

Judging Course Director Margaret Lee read her report. An invitation to the ABS Show will be sent to Mrs. Dyckman.

Advertising Manager Mabel Corwin reported that advertising information had been sent to the book publishers. Over \$400 was received from advertising during the month. Circulation Managers Mr. and Mrs. Krupnick sent in their annual report. July 31 is the end of the ABS fiscal year for officers' making annual reports.

Pearl Benell moved to approve the appointment of the balloting committee Douglas Lace, Wanda Elin, and Hazel Snodgrass. Motion carried. It was agreed that ballots sent to Mrs. Garinger's address will be validated. Mr. Ziesenhenné moved to approve the appointment of Avril Butler and Ethel Arnold to the auditing committee. Motion carried.

The Editors' report was given by Business Manager Gil Estrada. Mr. Sullinger moved that ABS absorb the cost of 200 copies of the **Begonian**, instead of the Show Committee. Motion carried. It was moved that 100 copies go to the ABS Show in San Diego and 100 copies to the Eastern Convention. Motion carried.

Chuck Richardson stated that a new branch in New Orleans may be formed. Gil Estrada moved to enter into a contract for mailing services with Jacqueline Garinger for another year at \$275 per month and 5¢ per copy over 3500 copies.

Results of the questionnaire regarding distribution of the minutes are: 29 yes, 2 no (retiring Board members), 1 yes for minutes, not Board news. Questionnaires are still being received.

Mabel Corwin moved to establish the positions of District Public Relations Directors to the Board with full voting privileges and to appoint additional district

directors as the need arises. Motion carried. Mrs. Perz moved to donate ABS membership to the library of the University of California at Davis. Motion carried. Meeting adjourned.

Respectfully submitted,
Rochelle Rose
Secretary

Mini-Ads

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The new Jacksonville Branch

meets the second Saturday of each month, 1 p.m. Contact President Ann Helton, 334 Brunswick Rd., Jacksonville, Florida for place.

IN MEMORIAM

Peggy McGrath passed away August 16, 1976. She was currently serving as Parliamentarian to the A.B.S. Board of Directors.

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