

The BEGONIAN



OCTOBER, 1971

Devoted to the Sheltered Garden

VOL. 38 NO. 10



B. prismatocarpa (see page 240)

Photo by Gene Daniels

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

FAREWELL FROM YOUR PAST PRESIDENT

I apologize if I appear to be late with my farewell and THANK YOU but with so many things yet to be done, the Installation Banquet and Annual Show, which just closed as I write this, it seemed premature to even think of good-bye.

I am most grateful to the many, many people who set up the Show, to those who were in attendance as host and hostesses and to those who displayed their gorgeous "babies".

A special THANK YOU to all the wonderful people who worked with me on the Board of Directors and to those others who were asked to assume other necessary tasks. The American Begonia Society is made up of so many hard working people who are needed to make the Society function. The Branch Representatives are most important as they are the Board of Director's link with the thoughts of the Branches. I would like to send a personal THANK YOU to all members but the postage would be prohibitive.

I will not tell your new President she will have an easy job in the Presidency. There is a lot of hard work yet to be done. I know the next Board of Directors will gladly put forth every effort so that each one of you will feel honored to be a member of the Society.

I believe all Presidents have a secret desire to "Bow Out" in a blaze of glory but I did it the hard way. My car caught fire on the freeway with a load of ABS members on the Garden Tour. Luckily no one was injured.

I appreciate having had the opportunity to serve all of you members. It was a great and rewarding experience. I wish to each of you loads of fun and success growing beautiful *Begonias*.

Pearl E. Benell,
Past President

ACROSS THE PRESIDENT'S DESK

As this message is being written, the Annual Show and Convention of the American Begonia Society is yet to be. As the membership reads this, it will be a memory. Mrs. Benell and the Committees have been planning and working for weeks for a pleasant, happy and informative occasion. How we wish all of you could attend. The November issue of *The Begonian* will be a special Show and Convention report.

This points up how far in advance the Editor had to think and work to have *The Begonian* ready for you by the first of each month.

Let us give some thought about the Editor of *The Begonian*. The Editor, like the members of the Executive Board, gives time and talent for an almost negligible fee. It is truly a "labor of love". The person must be qualified, however, educationally and business wise. May we be lenient in our criticism, and grateful in our praise for all our Editors, past and future.

Heartiest congratulations go to the Sixth Annual Eastern Begonia Convention and Begonia Show as it convenes October 7th. We all wish it were possible to be there with them.

SUCCESS

*Success is the sum of small efforts,
Repeated day in and day out,
With never a thought of frustration,
With never a moment of doubt.
Whatever your cherished ambition,
Begin now to make it come true,
Through efforts, repeated, untiring,
Plus faith in the thing that you do.*

Margaret B. Taylor
President

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* and companion plants;

- 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*.

BEGONIA TENERA (SYN. THWAITESII) AND BEGONIA MORELII

by Carrie Karegeannes, *Research Committee*



Begonia thwaitesii Hooker

Curtis' *Botanical Magazine*, Vol. lxxix (1853), Tab. 4692.

The mystery of *Begonia thwaitesii* has arisen from confusion between two early names given, some sixty years apart, to one species from Ceylon and the name has been further confused with a new, similar species.

Begonia thwaitesii was found to be the same as *B. tenera*, described and published earlier. Although corrections were published, the second name had already spread among horticulturists in England, France and America. Then in 1958 seed was grown of a similar plant that was later named as a new and separate species, giving us three names in the literature and two species. *B. morelii* was not a new name for *B. tenera* (syn. *thwaitesii*) but a new species very like it.

B. thwaitesii Hooker

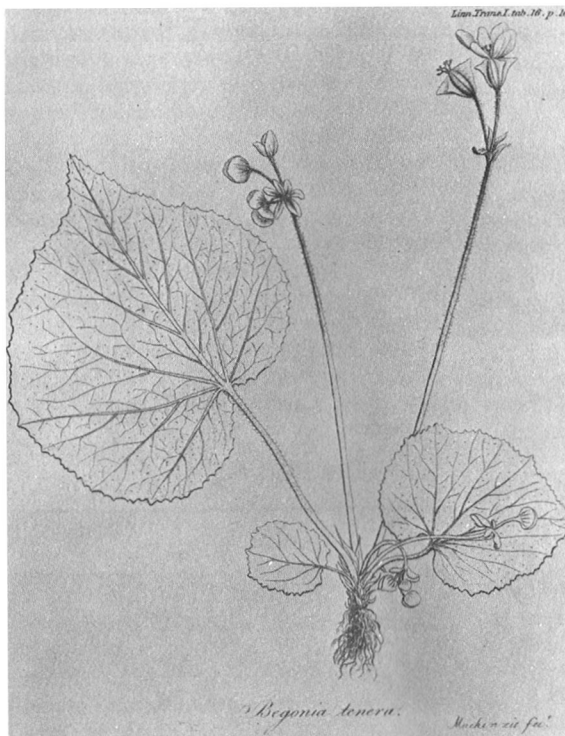
In Curtis's *Botanical Magazine* of 1853, Sir William J. Hooker, Director of the Royal Botanical Gardens at Kew, England, published a handsome color plate (Tab.

4692) of what he thought was a new species. He named the colorful little plant *B. thwaitesii* for the collector, Mr. Thwaites, Superintendent of the Botanic Garden at Peradenia, Ceylon, who had sent living plants to Kew. The plants had flowered at Kew in June 1852.

Hooker described a stemless plant with heart-shaped, "highly coloured, coppery leaves, clothed on both surfaces with the deep red-purple velvety hairs" that did not extend to the edge. These "rich coppery" leaves came from the base of the plant and were "a mixture of green and red-purple, redder beneath, the upper surface frequently blotched with white". The flowers were "moderately large", white tinged with pink. The capsule, or seed pod, had three small, rounded, nearly equal wings "ciliated with a double row of hairs".

Equal to *B. tenera* Dryander

By the time Hooker's son and succes-



Begonia tenera Dryander
Transactions of the Linnean Society, Vol. 1 (1791),
 p. 169, Tab. 16.

sor at Kew, Sir Joseph D. Hooker, published Volume II of the *Flora of British India* in 1879. C. D. Clarke, who contributed the *Begoniaceae* section of the *Flora*, had found that the plant was identical to the tuberous Ceylon species that had been named *B. tenera* in 1791 by Jonas Dryander in the *Transactions of the Linnean Society* (Vol. 1, p. 169, Tab. 16.) Clarke wrote that the herbarium specimen marked by the authority Alphonse de Candolle as *B. tenera* was identical to Thwaites' specimen No. 2808. He described *B. tenera* on pages 652-653 of the *Flora*.

Since the species was named *B. tenera* Dryander first, that is its rightful name, with *B. thwaitesii* Hooker listed as a later synonym to keep the records straight.

Kew listed the correction, uniting *thwaitesii* with the earlier *tenera* in Volume I of its *Index Kewensis*, which attempts to list all the known species of flowering plants. Meanwhile, however, other publications like C. M. Hovey's *Magazine of*

Horticulture in Boston in 1861, already picked up the name and description of Hooker's plant. No doubt many did not see the *Flora of British India* or the *Index Kewensis*. The *Index Londinensis*, listing illustrations of the time, cites in several publications and countries under each of the two names used for this plant.

B. morelii Irmscher

Much more recently, in *The Begonian* of 1958, seed was offered in the Seed Fund as *B. thwaitesii*? (with a question mark) and as resembling *B. Thwaitesii* Hooker. A description of *thwaitesii* accompanied the listing. The March 1962 "Begonian" explained that Dr. Georges Morel, Director of research at the French Ministry of Agriculture's Station Centrale de Physiologie Végétale in Versailles, had sent the earlier seed, as a species "near" *B. thwaitesii* and that he had also sent plant material to Dr.

Edgar Irmscher in Germany for identification.

Dr. Irmscher found this plant to be a new species, similar to *B. thwaitesii* (*tenera*) but separate, smaller and less hairy, and named it in honor of Dr. Morel. A beautiful painting of *Begonia morelii* Irmscher, provided by Dr. Morel, was printed with Dr. Irmscher's description in that issue of *The Begonian* (March 1962, pp. 46-47). Since seed of this *Begonia* has been offered in the Seed Fund (although before the species was named), some ABS members are still growing *B. morelii*.

Dr. Irmscher wrote that the species was "especially remarkable for the structure of the inflorescence" which forms "a cyme consisting of three forked dichasia following each other. Each dichasium has one strong and elongated branch, the other being very short. Each of the two branches forms a cyme at its end, with two to four flowers, having a very short

(Please turn page)

and therefore barely visible internode. The terminal flower of the cyme is female. The remaining flowers are entirely male."

B. tenera & *B. morelii* compared

The descriptions and illustrations of the two species indicate very similar plants, in growth habit, shape of leaves, flowers, and tuber (or small "almost tuberous rhizomes", Dr. Irmscher said of *B. morelii*) — but *B. tenera* (syn. *thwaitesii*) is a larger plant with longer petioles (two to five inches instead of *morelii*'s eight tenths to about 1 inch) and larger leaves (2 to 4 inches in diameter instead of *morelii*'s a little less than 1 to 1½ inches). Petioles come from the base on both. *B. morelii*'s leaves are bronzy with silver dots rather than the rich copper of the *Botanical Magazine's thwaitesii*, Dr. Morel writes.

B. morelii is not as hairy, the hairy capsule taken as a distinguishing trait by Hooker for *thwaitesii* (*tenera*) being a noticeable point. In the *Botanical Magazine* Plate, the capsule of Hooker's plant has short, nearly equal wings with a double row of hairs on each. Clarke mentions much lax pubescence on petioles, peduncle, and young ovary of *tenera*. *B. morelii*, on the other hand, appears to have less or no hairs on its various parts. It has more unequal wings, the largest almost triangular, without the hairs. *B. morelii* leaves were described as only sparsely hairy above and with short bristles below, especially on the veins (contrasting with the copious, velvety hairs Hooker mentioned for *thwaitesii*).

Stipules are described and shown at the base of *thwaitesii* (*tenera*) in Hooker's publication, but are not shown in the painting of *morelii* or mentioned by Dr. Irmscher. Dr. Morel had grown and observed living plants (as had Sir William Hooker) and he had sent the material to Dr. Irmscher; however, if *morelii* has deciduous stipules it is possible that they had already fallen.

The inflorescence, or flower cluster, also grows from the base on both. Male flowers of *tenera* have four tepals (horticulturally known as petals), the 2 round ones downy-backed. Female flowers have 5 tepals. *B. morelii* flowers also have 4 and 5 tepals, but no down was mention-

ed. *B. tenera* has 40 stamens and *B. morelii* 22. *B. tenera*'s bracts are ovate and pointed, the upper ones ciliate and downy and the lower ones glabrous. Bracts of the cyme of *morelii* are "almost leaf-like," oval or long-oval, and under a lense are sparsely covered with tiny black glands. Bracteoles of the female flowers of *morelii* are tiny, lanceolate, and remote from the ovary.

Both *Begonia* plants should be beautiful for cultivation and probably would grow best in terrariums. The London Horticultural Society reported in Hovey's *Magazine of Horticulture* (April 1861, p. 172) that *thwaitesii* was dwarf growing and confirmed the rich coloring.

A NEW BEGONIA BOOK

Thelma O'Reilly, *Research Committee*

Begonia lovers, take note! The *Begoniaceae for the State of Santa Catarina, Brazil* written by Dr. Lyman B. Smith and Ruth Smith, his wife, will be available before the end of this calendar year, 1971.

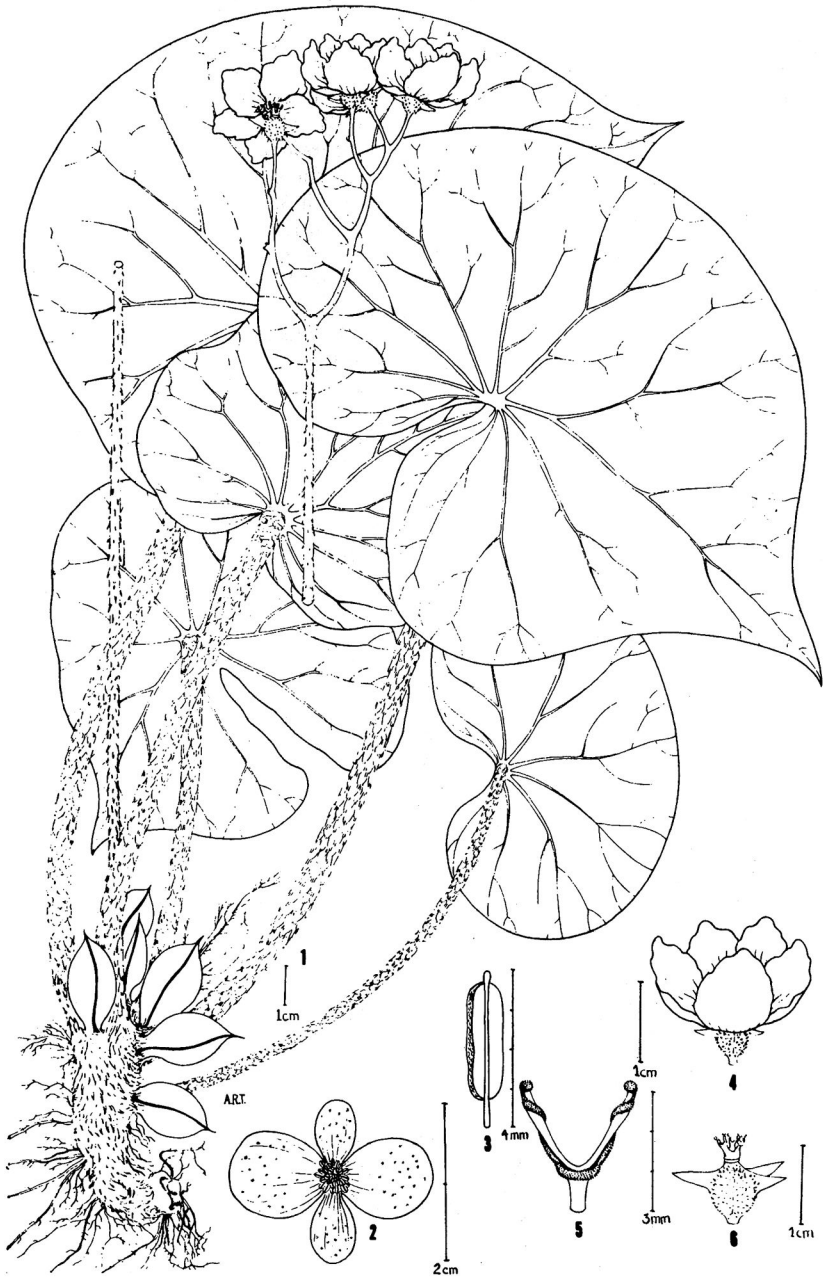
The text and key are printed in Portuguese, but the 37 species, including several new ones, are all illustrated by excellent line drawings. Several of Dr. A. C. Brade's species, which are known only in Santa Catarina, are included. Padre Raulino Reitz, Director of the Jardim Botânico in Rio, Brazil, is the editor.

Many members have been anxiously awaiting the publication of Dr. Smith's new book. Dr. Smith has kindly given us a preview by making the illustrated line drawings available.

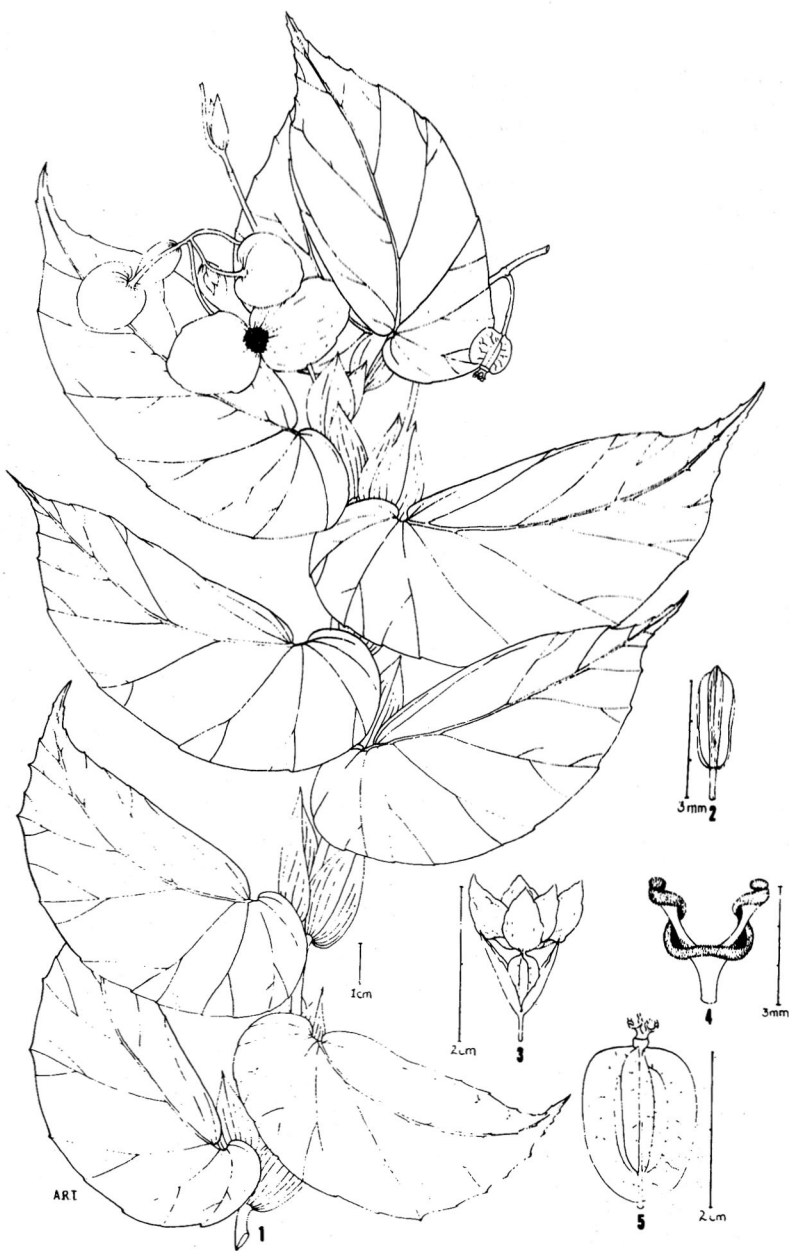
Watch for notice in *The Begonian* quoting prices and where to purchase this book.

(See illustrations on following pages)

Plan to succeed! The price of success is always cheaper than the cost of failure.



Begonia squamipes Irmscher, not illustrated before.



Begonia konder-reisiana Smith & Smith

THAT PLANTS MAY LIVE

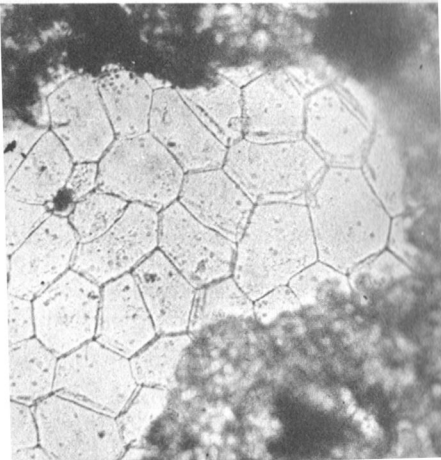
by Burnell E. Yarick*

Just look over the cross-sections of the various *Begonia* species as prepared and presented in the June '71 "Begonian" by Fred A. Barkley. In no other plants have I seen leaves with such huge upper and lower epidermal cells. Even their being multilayered is rare.

If one carefully tears a leaf as you might a piece of paper, small flaps of colorless skin may appear along the torn edge. Then a microscopic study of this upper epidermis will show that each cell is quite irregular and surrounded by 5 to 7 others, (see photo). When a leaf looks

stomata appear in Dr. Barkley's remarkable drawing as four thin cells in a row. The break in the center is the opening, the stomata.

A leaf is only a thin flat lung and it breathes through the stomata. The upper and lower epidermal cells are covered with a waxy layer called cutin. It prevents evaporation of water. Air circulates freely between the cells in the center of the leaf where they are loosely packed and have perhaps 70% pore space. Transfer of oxygen and carbon dioxide takes place on the wet surface of these cells. These



Upper epidermal cells separated from the central cells simply by tearing.

Photo by Burnell E. Yarick

green, these upper cells are clear and merely transmitting back to the surface the green color of the photosynthetic cells beneath. But in patterned leaves and in highly colored leaves, the epidermal cells may be filled with water-soluble pigments called anthocyanins. These range from blueish through reds and purples.

Try as I might, no flaps of the lower epidermis would separate by tearing. The picture of the stomata shown is exactly as you might see them through a microscope. Each little mouth is called a stoma, plural stomata. They occur irregularly in the lower epidermis only, and up to 100,000 per square inch. The



Lower epidermal showing paired guard cells. Each pair creates a stoma.

Photo by Burnell E. Yarick

stomata are shown here with their mouths open. But when a plant wilts, the stomata closes to prevent or reduce evaporation. If let go too long, the plant will most certainly die. But most plants can stand a little moisture stress without too much harm. The closing of the stomata is a system that functions automatically without brains, nerves or muscles.

*Professor of Botany, Glendale City College, California.

REGISTRATION OF BEGONIA CULTIVARS

Note: The American Begonia Society is the International Registration Authority for the genus Begonia. Information regarding registering Begonias appeared in the December 1967 and August 1968 The Begonian and may be obtained from Rudolf Ziesenhenne, Nomenclature Director, 1130 N. Milpas St., Santa Barbara, California 93103.

No. 283 — *Begonia* ('Vigorousa' x 'Merry Christmas') 'Ruth Hurd'

A large leaved spiral rex, leaves heart-shaped, 6 to 8 inches, heavy textured, margins maroon and silver-spotted, dark maroon in center to light maroon, silver green to dark maroon; petioles hairy. Flowers pink, 3/4 inch to 1 inch, rising from the rhizome on 5 inch stem; blooms July to September. Originator: Erna Newton, 2721 Copa de Oro, Los Alamitos, Ca. 90720 from whom it is available; developed 1966, first bloomed 1970, Reg. March 22, 1971.

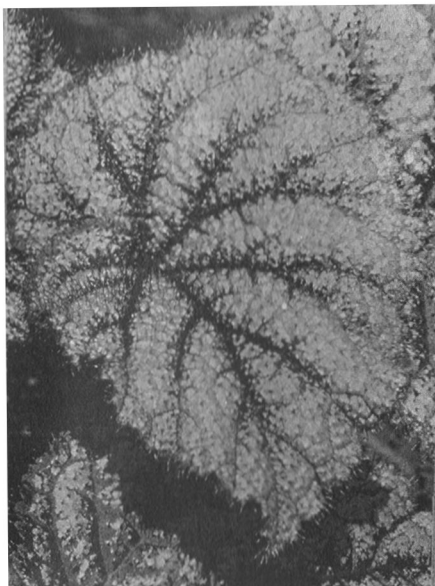
No. 284 — *Begonia* ('American Beauty' x 'Gretl') 'Red Taffeta'

A grape leaved rex, developed by Erna Newton, 2721 Copa de Oro, Los Alamitos, Ca. 90720, in 1966, and which first bloomed in 1968, has taffeta-sheened leaves, 5 x 4 1/2 inches, red, with margin deeper red, serrated and wavy; veins black; petioles red, sparsely hairy; stipules red. Flowers red, 3/4 to 1 inch, on stems 3 to 5 inches, blooming July to September. Registered March 22, 1971.

No. 285 — *Begonia* (*masoniana* x *versicolor*) 'Wanda'

This rhizomatous plant, whose texture and silvery appearance is distinctive, is covered with red hairs like *versicolor*. Developed in 1968 by Leo W. Porter, 19151 Lomita Ave., Orange, Ca. 92669, the plant first bloomed in 1971 and will be distributed after the 1971 National Begonia Show by the originator. Leaves are widely unequal heart-shaped, 8 1/2 x 6 1/4 inches; margin wavy, finely dentate, ciliate; texture medium pimpled; veins dark green, petioles 5 to 6 inches long, pinkish, red hairy; leaves green on nerves and secondary nerves, rest overlaid with

silver. Flowers pinkish, 6 inch stem, few flowered. Registered March 22, 1971.



B. 'Wanda' No. 285

Photo by Gene Daniels, Black Star

No. 286 — *Begonia* (*masoniana* x *evansiana*) 'Nanima' var. 'Ruby'

This cane type *Begonia* was developed in 1968 and first bloomed in 1970 by Mr. C. R. Sharrad, 11 Lumsden Ave., Bridgehaven, South Australia, who expects to distribute it in 1972. Freely branching at base, new shoots form a tuberous rhizome similar to *B. deliciosa*. Leaves are oblique cordate, 11 1/2 x 8 1/2 inches, white haired above with serrulate, red-haired margin; firm textured; veins red below and above at center, red haired below; petioles red at both ends, green between, white haired, 10 inches; stipules green, cymbiforme, keeled, red spine 3/16 inch long; lavender green, (Royal Hort. Chart No. 007 61), metallic overlay at outer half, red below. Flowers phlox pink (Royal Hort. Chart 6 25), 1/2 inch long, 3/4 inch wide sepals; 1/4 x 1/4 inch petals; female: bell-shaped; male open: blooms in Autumn on 6 to 8 inch stems in branching clusters from upper axils. Registered July 6, 1971.

No. 287 — Begonia (masoniana x evansiana) 'Nanima' var. 'Gillian'

A rather bushy plant, this intermediate cane-type has attractive silver-plated foliage and is quite hardy, growing under varied conditions, even in open garden in Ridgetown, South Australia, where it was developed by Mr. C. R. Sharrad, 11 Lumsden Ave. in 1968 and first bloomed in 1970. Leaves are oblique cordate, with a long point and wide sinus, $7\frac{1}{2} \times 6$ inches, margin toothed, angled where veins meet edge, ivy green (00010 60/3 Royal Hort. Chart) with silver overlay. Flowers rhodomine pink 5 27 (Royal Hort. Chart), red haired, sepals $5/8 \times 5/8$ inch; petals $7/16 \times 1/4$, hermaphrodite, all male-like, open, no ovary, arranged as long-branching clusters on 10 inch red flower stem with red hairs in Autumn. Registered July 6, 1971.

No. 288 — Begonia (dichotoma x epipsila) 'Diepea'

This thick stemmed, not jointed, intermediate plant was developed by F. O. Michelson in 1950 and first bloomed in 1951 and will soon be available through the originator at 1820 N. W. 112 Ter., Miami, Florida 33167. Leaves are shaped like *B. dichotoma* with a short blunt lobe, are 4×5 inches, margins serrate, short haired, upperside raised between veins, petioles light pink, 4 inches; stipules light brown, 1 inch; top of leaf green, underside plum red. Flowers white with light pink cast, $3/4$ inch wide; petals: male 4, females 5, on top of $5\frac{1}{2}$ to 6 inch dark pink stem, blooming from January to July. Registered July 26, 1971.

IN MEMORIAM

Earnest E. Martin of Logee Greenhouses in Danielson, Connecticut passed away in May, 1971. A member of the Buxton Branch for many years. All who visited Logee's appreciated his helpful quiet ways.

Faith M. Logee, wife of Richard Logee of Logee's Greenhouses passed away in August, 1971. Those who knew her shall miss her.

TRY HOYAS

To most people there is only one *Hoya*, *Hoya carnosa*, a member of the milkweed family or *Asclepiadaceae*. Their native habitat is China, India, Malaya and Queensland. They are lovely climbing or trailing plants with thick (sometimes thin) leathery leaves which produce clusters of waxy flowers in shades of white, white and pink, pink and rose, cream with a red-purple center, silver pink and maroon, and maroon. The *Hoyas* are lovely companion plants for *Begonias* in their varied leaf shapes and forms. They were named in commemoration for Thomas Hoy, onetime gardener to the Duke of Northumberland.

The *Hoyas* will grow in greenhouses or window gardens and require the same conditions as *Begonias*. Avoid direct sun but give them ample light to bloom. A minimum temperature of 45° and a loose, quick draining soil mixture is a must; allow the soil mixture to dry out a little between waterings.

The climbing types are trained by shoots affixed to trellises or wires fixed to greenhouse walls. The trailing types may be grown in moss lined wire baskets or in pots suspended in pot hangers affixed to walls or posts in the greenhouse or in containers set on elevated window shelves where they will trail down over the edge of the shelf.

The most important rule to follow in the culture of *Hoyas* is not to remove the stem or "spur" after the flowers have faded. This is the place from which the next seasons flowers will appear. Propagate by layering shoots or by cuttings taken in spring or summer in sharp sand or in your regular propagating mix. They should flower the second year after rooting. The cuttings should be about 3 inches in length; remove 3 or 4 of the lower leaves to make good contact with the rooting medium.

In addition to *Hoya carnosa* and its creamy leaved variety there are: *Hoyas australis*, *carnosa exotica*, *cinnamomifolia*, *coronaria*, *keysii*, *lacunosa*, *moteskoi*, *darwini*, etc. There are two very striking cultivars: *Hoya* 'Hindu Rope' and variegated 'Hindu Rope'* with their heavy twisted and curled foliage, very odd and elegant varieties.

*Send stamped, self addressed envelope to Editor for source of this variety or others.

A YELLOW GEM

by Thelma O'Reilly, *Research Committee*

Begonia prismatocarpa is the loveliest and most fascinating small plant I have had the pleasure and "luck" (due to the generous sharing of Jay Neal, England) to grow.

I must take exception to the author of the description and discussion in the *Curtis Botanical Magazine*. He refers to this species as interesting but "wanting in floral beauty . . . insignificant looking".

In June 1971, growing in a 6 inch fishbowl, my plant was a mound of adorable,

like, leafless rhizome I received in June, 1969. Accompanying note from Jay said, "a specimen of my tinnest species. It came from the Shan Hills of upper Burma. It requires closed terrarium conditions all its life, and no more than a shallow ½ inch of pure peat to grow in. Never more than 2 inches high, it has thread-like rhizomes and stems, and 2 small two-petalled yellow flowers. Neither Mac McIntyre nor I have been able to get seed set."

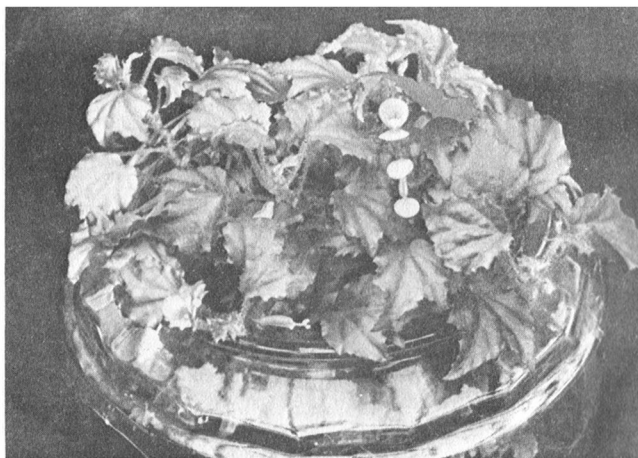
What a challenge for a hybridizer! I went to work when the first female bloom opened in November, 1970. It appeared successful and when Gene Daniels visited in late January, he photographed the drying, swollen ovary. The pedicel started to show some rot in late March. I removed the still slightly green ovary and placed it on top of the light cover. Within three days it was completely brown and dry. With much trepidation, I opened the capsule and was excited to see tiny seeds roll out. Efforts

to hybridize with other *Begonias* proved unsuccessful.

On the way to Bermuda in May, I presented an herbarium specimen and Mr. Daniels' colored slide to Dr. L. B. Smith for the Smithsonian Herbarium.

On my return, I planted the seed. One hundred percent germination was evident within 6 days. In August, 1971, I have 40 tiny seedlings thriving in their second home. The original liner is a solid bed of green babies, desperately in need of transplanting.

It is thrilling that so many miles from its home port, this little gem has proven its fertility and fortitude. Again, our thanks and gratitude to one of our European members for making it possible to share another "goodie".



B. prismatocarpa

Growing in a six inch fishbowl.

(Note drying ovary at edge of bowl in front center.)

Photo by Gene Daniels

crisp, small and unusually shaped green leaves. The pedicles proudly held the bright yellow blooms (large for such a small plant). One of the tepals of each male and female bloom was adorned with partial streaks of brilliant orange-red. The stamens of the male flowers were laden with sifting pollen that settled on the tepals. The pale green ovary was narrow, elongated, and four celled. To top off all this beauty, the entire plant sent up wee buds just everywhere. Each bud showed, on one side, the brilliant coloring of the streaks on the tepals. I counted 120 open flowers when *B. prismatocarpa* was at its blooming peak.

It is difficult to believe this perfect "gem" developed from the 1 inch, thread-

CLAYTON M. KELLY SEED FUND

No. 1 — *B. sutherlandii* Africa

Slender; stems and branches drooping, green or purplish-green; leaves lance-shaped, toothed, bright green, sometimes red-petioled and red veined; flowers yellow to orange. Graceful and suitable for suspended containers. Price \$1.00 per pkt.

No. 2 — *B. crispula* Brade

Produces a short rhizome and the short stalked, round leaves 5 to 6 inches in diameter spread out more or less flat on the surface of the soil. New leaves spread out over the older ones, almost touching or even resting on them. In consequence, moisture easily stays between them and the rough surfaces increases still further the danger of leaf rot to which this species is subject. *B. crispula*, therefore, must never be sprayed and water must be applied strictly to the soil, never splashed on the plant. Keep moderately moist. The inflorescence is reddish, peduncle appressed, hairy, 6 inches high; male flowers white inside, pinkish outside, are slightly more than ½ inch in diameter; female flowers are still smaller. The floral display, therefore, is insignificant, but the deeply crisped shiny green foliage is very attractive and this species certainly represents an interesting addition to the great multitude of different shapes the genus *Begonia* is able to produce. Price \$1.00 per pkt.

We are now approaching the season for sowing seed of the beautiful and exotic tuberous type *Begonias*. The following are extra double giants, practically 100% double. Sow seed from November to February in good porous medium, 65° to 75° temperature in early stages, later to 60°.

B. tuberhybrida — Extra double dark red. Price 50¢ per pkt.

B. tuberhybrida — Extra double golden salmon. Price 50¢ per pkt.

B. tuberhybrida — Extra double rose. Price 50¢ per pkt.

B. tuberhybrida — Extra double yellow. Price 50¢ per pkt.

For our *semperflorens* growing friends we offer the following.

B. sc 'Bridget'

Six inches; large pure white blooms; very compact, free flowering with green foliage. An outstanding variety. Price 50¢ per pkt.

B. sc 'Matador'

Six inches; dazzling scarlet flowers in extraordinary profusion above small green leaves. Very resistant. Longest flowering period. Price 50¢ per pkt.

***B. sc 'Aristo'* mixture**

Six inches; a blended mixture combining the best color range of both green, bronzy-green and dark bronze foliage. Price 50¢ per pkt.

Greenhouse plants:

Anthurium clarinervium Mexico

"*Hoja de corazon*"; dwarf ornamental species found growing in the clay of the Chiapas mist forest; dark green, velvety, heart-shaped leaves with clear silvery-grey veins, spathe brownish. Produces large clusters of oblong, brilliant red berries. Plenty of seed. Price 50c per pkt.

Note:

The following list is to answer the numerous requests for special sales as has been offered on various occasions in the past.

AUTUMN SALE:

***B. 'Maphil'* syn. 'Cleopatra'**

See September issue for full history and description.

B. egregia* syn. *quadrelocularis

Long pointed leaves and large clusters of fragrant white flowers in winter.

B. solananthera

Trailing stems, smooth oval leaves, very floriferous in winter. White flowers with crimson center.

(Please Turn Page)

Manettia bi-color

Small climbing plant with many tubular red and yellow flowers.

"Jarilla"

Cactus like plant from Mexico. See April "Begonian".

B. palmaris

Large fingered, spotted leaf, pink flowers.

B. maddougallii

Rhizomatous type with large leaf; used as a specimen type or in greenhouse.

Sinningia 'Doll Baby'

Smallest of the *sinningias*.

B. coccinea

Favorite cane type with large clusters of coral pink flowers.

B. maculata

Sometimes produces spotted leaves; pinkish flowers.

Price of special seed: 10 pkts for \$5.00 or 50¢ per single pkts.

Please note! We still have *stephanotis floribunda* seed; if you missed the offer recently, you can still get them. 25¢ each seed.

Please send request for seed to:

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



**AMERICAN BEGONIA
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Begonias \$1.25

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of Begonias for Show Purposes \$1.50

ORDER FROM: Ruth Pease
8101 Vicksburg Ave.
Los Angeles, Calif. 90045

**Dr. Alexander Curt Brade
IN MEMORIAM**

Dr. Brade was born in Germany and received his degree of Doctor of Philosophy at Marburg, Germany. When Dr. Brade was twenty-seven years old he and his wife left Germany and went to Costa Rica where they lived for two years and then moved to Brazil. Dr. Brade worked in Brazil as an architect and then went into the interior where he prepared the housing for Japanese immigrants to enable them to grow food for the Brazilians.

Dr. Brade fell in love with the flora of Brazil and decided to make this his life work. He had never received a diploma in Botany. Dr. Brade made trips collecting material and his wife prepared the specimens.

A list of the *Begonias* Dr. Brade described appears elsewhere in this issue.

Many of the *Begonias* Dr. Brade and described are grown today in ABS members' collections and in Botanical Gardens around the world. Some of the species were distributed through the ABS Seed Fund. *Begonia Brade* was named in his honor by Dr. Edgar Irmscher.

Dr. Brade received the distinguished medal of Merito D. Joas VI for the most valuable and greatest number of works presented by one person, his classification of Brazilian Flora. This medal was created on the 150th anniversary of the founding of the Botanical Garden in Rio de Janeiro.

His invaluable contribution to the lore of *Begonias* is a living testimonial to his love of the beautiful in the flora of our neighbor, Brazil.

Dr. Alexander Curt Brade passed away July 17, 1971 at the age of 90.

CORRECTION

Please correct line 8 on page 197 of the August issue to read B. G. Schubert. (For Bernice G. Schubert.)

BEGONIA BASICS

for Beginners

by Elda Haring, *Greenwich, Connecticut*

Photos by Walter J. Haring

Companion plants, Gesneriads:

Because most *Begonia* enthusiasts also grow other "shade loving" plants and as a change of pace, your Editor has asked me to write on the subject of gesneriads this month. This article will be devoted to those that I have found relatively easy to grow. All of them are easily grown from seed and growing them this way is exciting and most gratifying.

In order to grow and bloom on window sills, most gesneriads need at least 2 or 3 hours of sun each day, preferably in the morning. East windows give excellent light but sun in south and west windows could be too strong except in mid-winter in northerly areas. A sheer curtain in between plant and window sill will suffice to prevent burning. Like *Begonias*, if gesneriads start to grow tall and spindly they are not getting adequate light. Under fluorescent light members of this family bloom most satisfactorily. Lights can be placed as far as 12 to 15 inches above the growing bench and kept burning 12 to 15 hours a day. In the greenhouse in northerly areas they can take light shading in winter but can tolerate morning or afternoon sun. In summer the greenhouse unless shaded by large trees should be covered with shading paste and if leaves become pale, added shading can be provided by a cheesecloth or muslin canopy.

There is always great disagreement as to the amount of water gesneriads need. My own method is to check every 2 or 3 days. If the soil in top of the pot feels at all dry, I water. No gesneriad should be allowed to dry out to the point of wilting for this is definitely injurious to the plant. On the other hand, it is important not to permit water to remain in the saucer for more than 15 minutes. Some experts always water from below. I pour water into the top of the pot being very careful not to get water on leaves or crown of the plant. Even if you prefer bottom watering, it is good to water from

the top occasionally to flush out fertilizer salts.

As with my *Begonias*, I have never found it necessary to provide additional humidity for gesneriads but as so many people do have this problem, I would suggest placing pots on top of pebbles or grit in trays containing ½ to 1 inch of water but the bottom of the pots should never come in contact with the moisture in the tray. Fluorescent light stands can be enclosed with plastic and those gesneriads with smooth and shiny leaves can be misted daily. In a great many dry areas these plants are also grown in terrariums and glass bowls and I know we will be hearing more and more about this method in the future for plants that cannot thrive in a dry atmosphere.

Taking plants to sink or tub and carefully washing foliage with warm water at least every other week will help combat dry air and is beneficial in keeping the plant dust and insect free. Be sure to allow leaves to dry before placing plants back into the sunny window or under lights. If soft-leaved kinds like African Violets have excess moisture on leaves or crown, gently mop with cleansing tissue to prevent spotting foliage.

Most gesneriads will thrive best at 70° to 80° temperatures with a 5° to 10° drop at night.

Proper soil mixes for gesneriads is the subject of great controversy. For years mine have been grown in the potting soil which I have mentioned from time to time in these pages. In recent years I have been experimenting with the soilless mixes. Some of my plants are growing in 1/3 perlite, 1/3 vermiculite and 1/3 milled sphagnum with a tablespoon of Mag-Amp, a slow acting fertilizer, added to each 2 quarts of the mix. Lately I have found that this mix gives best results for gesneriads if 1 or 2 cups of crushed charcoal is added to each 2 quarts of

(Please Turn Page)

mix as well. The packaged potting mixes are also excellent but my personal preference is to add to these 1 pint of vermiculite and 1 of sand to each 2 quart bag of the mix. In any event, the mix should be porous and drain quickly.

Fertilizer should be used when plants are in active growth. Many growers like to use "constant feeding" i.e. $\frac{1}{4}$ teaspoon of water soluble fertilizer to 1 gallon of water using this each time the plant is watered. If you are a beginner or somewhat inexperienced you might prefer, as I do, to feed every other week being careful to follow instructions on the fertilizer package. Rapid-Gro and Plant marvel are my favorites with a once in awhile feeding of fish emulsion or fish meal. During winter most gesneriads should be watered with warm water from the tap.

When gesneriad plants are received through the mail they should be allowed to become used to their new quarters for about a week then repotted if on examination the root system seems crowded. If not, let the plant grow on for some time, feeding it regularly to encourage good growth. For gesneriads I like the bulb or azalea pots but they are also grown in standard size pots. Clay pots are best for me for I have a tendency to overwater a plant. If you are a busy person and have little time to care for your plants you may prefer plastic pots.

Of the pests that attack gesneriads cyclamen mite is probably the most dreaded and baffling. So tiny it is difficult to see except with the strongest of magnifying glass. The mite causes leaves in the center of the crown to bunch and turn white. Cyclamen mite can be combatted by picking out the bunched leaves and spraying with Kelthane. As for my own collection, I quickly throw away any that appear to be infected for they can destroy a whole collection in a short time. Mealy bugs can be killed by malathion spray which I am most reluctant to use indoors. However, the plant should be isolated immediately upon detection. My advice again to beginners is not to harbor a plant with mealy bug but dispose of it immediately. Aphids are easily killed by washing off leaves daily for a week to ten days or by using

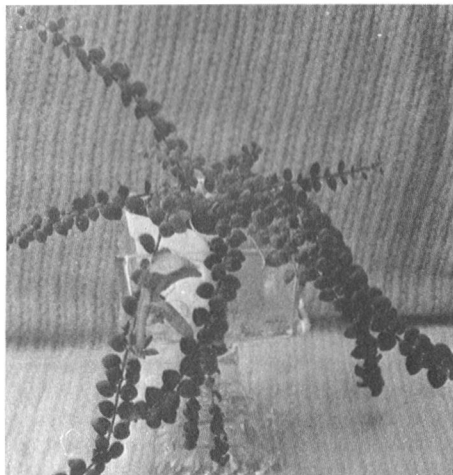
the African Violet insect bomb which contains pyrethrum and rotenone both non-toxic to humans and pets.

Some gesneriads are bulbous plants; some grow from scaly rhizomes and some have fibrous roots. As these need to be treated differently we will take up their needs separately.

Achimenes sometimes called "Cupid's Bower" grows from rhizomes. Their natural bloom time is summer. They do well on sunporches, in the sunny window or in the shaded greenhouse and also are satisfactory under lights. Plant 3 to 5 rhizomes in a 5 inch pot barely covering them, keep warm, never permit soil to become completely dry. After blooming gradually withhold water and store dormant rhizomes in their own pots at 55° to 60° for 3 or 4 months. In spring they may be shaken from the soil and repotted for another season.

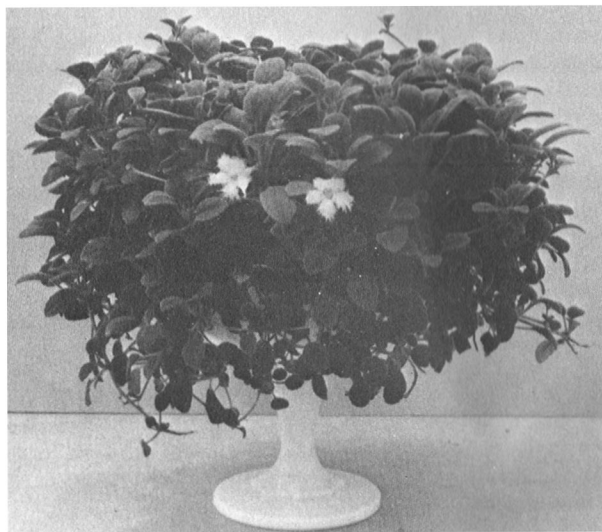
Aeschyanthus ("Lipstick" vine) is fibrous rooted and trailing with shiny leaves and tubular flowers. Excellent basket plants but also can be kept more compact for window sill growing by pinching growing tips frequently. These can take temperatures of 55° to 75°.

Codonanthe with fibrous roots is also a trailing plant with shiny small green leaves, red dotted, and pale cream colored flowers with red berries. Slow growing, it likes adequate moisture at all times and good light. A small plant, it is excellent for window or under lights or in hanging baskets in the greenhouse.



Columnnea macraphylla

Columnnea a vine type with fibrous roots is a gorgeous plant lovely in leaf and flower which are trumpet shaped, usually orange and red, sometimes pink. Mr. favorites are 'Early Bird' and 'Mary Ann' for their everblooming qualities and 'Snake Charmer' with small leaves. There are many new hybrids available that can be kept in bloom much of the time. *Columnneas* are excellent basket plants and will grow to enormous size in sunporch or greenhouse. In window or under lights a compact plant can be had by constantly picking off the growing tip of the new growth when they have reached a suitable length. *Columnneas* bloom best when slightly rootbound and can be permitted to become quite dry between waterings. They do well at indoor temperatures but some of the older species and hybrids like *C. microphylla* and *C. 'Stavenger'* bloom best when given temperatures of 50° to 60°.



Episcia dianthaflora

Episcias are usually grown for the gorgeous coloring of their leaves. Fibrous rooted, flowers are red or scarlet, yellow or lavender. These need warmth and constant moisture. Temperatures under 60° are definitely injurious and they "freeze" at 55° or under. As trailing plants they are excellent for baskets, can be trained to totem poles and by keeping most of the new stolens cut as they grow may be kept compact enough for window

sill. Two species *E. dianthaflora* and *E. punctata* differ in that leaves are small, pale green and velvety and the flowers are white with fringed edges. These can take considerably cooler temperatures and stronger light than the others and can be permitted to dry out between waterings.

Gloxinia of the large velvety leaves and bell-shaped flowers in breath-taking colors is very easy to grow. Plant the tuber in a pot 2 inches larger than the circumference of the bulb, covering it with ½ inch of soil. Excellent under lights, they need more sunlight than African Violets if grown in the window. After blooming keep *gloxinias* growing until leaves begin to turn brown at the edges then store in their pots, withholding water. Cut off top of plant and store dry for 6 weeks or until new green shoots are showing. They can be repotted with fresh soil or grown in the same pots for a second season. Well grown tubers increase in size for a number of years.

Rechsteineria is also tuberous. Often called "Cardinal Flower" for its bright scarlet flowers, leaves are pale green and fuzzy. It can be grown like the *Gloxinia* and given a rest after blooming or it can be cut back after flowering, repotted and allowed to grow new shoots. Especially good for growing under fluorescent lights.

Smithiantha or "Temple Bells" with pretty mottled red and green leaves and flowers of yellow, orange and red grow well under lights and on window sill as well as in the warm greenhouse. Grown

from rhizomes planted 1 to a 4 or 5 inch pot covered by ½ inch of soil. *Smithiantha* must have a 6 to 8 week rest after blooming like the *Gloxiana*.

Streptocarpus or "Cape Primrose" is a gorgeous plant with straplike leaves and bell-shaped flowers. Fibrous rooted, some of them are rarely without flowers. Large-flowered *S. rexi* hybrids are good for sunny window, lights and greenhouse.

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Streptocarpus 'Constant Nymph'

'Constant Nymph' with lovely light blue flowers is an easily grown one and nearly always in bloom. *S. saxorum* has small succulent green leaves and pale lavender

flowers but needs a larger root system than others. *Streptocarpus* need to be repotted often to encourage good growth.

ROUND ROBIN NOTES

Kusler hybrids:

Hazel Harmon of Kansas thinks all of the Kusler hybrids (she has all of them) do branch (some under pressure) except two and they are not about to branch for the most part. B. 'Jeanne Fleetham' and B. 'Peggy Stevens' do not branch for her. The plant she now has of B. 'Rosalie Wahl' is an oddity; it has followed a twisted horizontal path and she is letting it, blooming all the time. It has huge leaves. In August Hazel reported her lovely B. 'Nancy Gail' was full of bloom. It has the different type of bloom . . . female bloom coming off of female bloom, this has been reported at other times. B. 'Nancy Gail' went completely dormant and came out of it quickly to become a lush and beautiful plant ever since.

Mae Blanton of Texas agrees that B. 'Dorothy Barton' is one *Begonia* that will spruce up without any trimming . . . except she is so brittle that she takes care of that chore for Mae . . . she always has a number of cuttings of it coming on without intending to! Mae says she never ceases to be amazed at how those long

bare stems can put out new leaves so rapidly.

Begonia tubers:

Beth Sackman of California gives her method of caring for *Begonia* tubers after they are finished blooming. When September comes, give your tubers a good watering, then a good fertilizing . . . then water as little as possible. The plants will turn yellow and drop the branches and look bad. She keeps all dead leaves away from the plant and the plant on the dry side. Next she notices the large stalk will be gone. Let the plant dry out, then take the tuber up and wash it off (leaving the roots) in warm water with a disinfectant in it. Now turn the tuber upside down (that is so the little center will not hold the moisture). Examine the tuber when it has dried out. If there is any part of the stem in the concave part of the tuber (even a ½ inch), cut it out with a sharp knife. Between the tuber and old stem is where the rot starts. (Notice all new tubers you buy have the stem removed.) Put sulphur on the cut and allow to dry. Beth's weather in

September would not get tubers dry, their sun is pale with very little warmth. It is important that if they are to keep until the next season, they must be well dried. To insure this, she puts them upside down in flats on top of a heat cable that is warm. After she is sure they are dry, she stores the tubers in dry sand in a cool place.

B. morelii:

Yvonne Wells of Texas rooted leaves of this scarce and sometimes hard to grow *Begonia* and had plantlets within three weeks. This *Begonia* blooms almost constantly with pink flowers. The flowers are large for such a small plant with leaves about the size of a dime. The flowers are sparsely hirsute with two males and one female to each peduncle.

B. spotted herbacea:

Yvonne had plantlets up from spotted *herbacea* in two months. She has two *Begonias* with this name. They are different in leaf shape and especially in the silver splotches. On one the silver splotches never disappear with light changes. The other one has lighter green leaves with faint silver spots that sometimes disappear completely.

B. masoniana:

Yvonne reports she had both male and female bloom on this *Begonia* during the summer and was shocked when she noticed the ovary of the female was bright blood red and it stayed that color after it had fallen off.

Yvonne received leaves of *B. Quadrialata* in September 1970 and the following July she replanted them and in August she had buds on this rare and hard to grow *Begonia*. She was growing them in a fish bowl in fertilized long sphagnum moss. Yvonne also reported bloom the size of a 50¢ piece on her *B. versicolor* with five bloom stalks. Texas size!

If you would like to be part of these flights, write:

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

BRADE'S SPECIES

Grateful acknowledgment is extended to Dr. Lyman B. Smith of the Smithsonian Institute, by the American Begonia Society for permission to publish the complete list of Dr. A. C. Brade's *Begonia* species. Editor.

1. — *B. admirabilis* Brade n. sp.
2. — *B. albidula* Brade n. sp.
3. — *B. alemanii* Brade n. sp.
4. — *B. angraensis* Brade n. sp.
B. angulata Vell.
var. *campos-portoi* Brade n. var.
var. *serrana* Brade n. var.
5. — *B. altamiroi* Brade n. sp.
6. — *B. antonietae* Brade hybr. nov.
7. — *B. apparicioi* Brade n. sp.
8. — *B. bauensis* Brade n. sp.
9. — *B. besleriaefolia* Schott
var. *stubbiana* Brade n. var.
10. — *B. bonitoensis* Brade n. sp.
11. — *B. burle-marxii* Brade n. sp.
12. — *B. campos-portoana* Brade n. sp.
13. — *B. canaliculata* Brade n. sp.
14. — *B. campanemae* Brade n. sp.
15. — *B. caraguatatubensis* Brade n. sp.
16. — *B. catharinensis* Brade n. sp.
17. — *B. chapecoensis* Brade n. sp.
18. — *B. collaris* Brade n. sp.
19. — *B. crispula* Brade n. sp.
20. — *B. dusenii* Brade n. sp.
21. — *B. edmundoi* Brade n. sp.
22. — *B. egleri* Brade n. sp.
23. — *B. epipsila* Brade n. sp.
24. — *B. fluminensis* Brade n. sp.
25. — *B. friburgensis* Brade n. sp.
26. — *B. fritz-muelleri* (= *limmingheiana* Morr. obs.)
27. — *B. fulvosetulosa* Brade n. sp.
28. — *B. fuscicaulis* Brade n. sp.
29. — *B. handroi* Brade n. sp.
30. — *B. heineri* Brade n. sp.
31. — *B. heloisana* Brade n. sp.
32. — *B. heringeri* Brade n. sp.
33. — *B. inconspicua* Brade n. sp.
34. — *B. insularis* Brade n. sp.
35. — *B. itaguassuensis* Brade n. sp.
36. — *B. itajaiensis* Brade n. sp.
37. — *B. itatiaensis* Brade n. sp.
38. — *B. itupavensis* Brade n. sp.

(Please Turn Page)

39. — *B. itatinensis* Irmscher ex Brade n. sp.
 40. — *B. jairii* Brade n. sp.
 41. — *B. jocelinoi* Brade n. sp.
 42. — *B. kuhlmannii* Brade n. sp.
 43. — *B. lanstyakii* Brade n. sp.
 44. — *B. lealii* Brade n. sp.
 45. — *B. lindmanii* Brade n. sp.
 46. — *B. lineolata* Brade n. sp.
 47. — *B. longibarbata* Brade n. sp.
 B. luxurians Scheidw.
 var. *sampaioana* Brade n. var.
 48. — *B. magdalenensis* Brade n. sp.
 49. — *B. moysesii* Brade n. sp.
 50. — *B. obscura* Brade n. sp.
 51. — *B. occhinoidii* Brade n. sp.
 52. — *B. organensis* Brade n. sp.
 53. — *B. paranaensis* Brade n. sp.
 54. — *B. per-dusenii* Brade n. sp.
 55. — *B. pernambucensis* Brade n. sp.
 56. — *B. pseudolubbersii* Brade n. sp.
 57. — *B. petasitifolia* Brade n. sp.
 58. — *B. quadrilocularis* Brade n. sp.
 (= *egregia*)
 59. — *B. reitzii* Brade n. sp.
 60. — *B. santos-limae* Brade n. sp.
 61. — *B. semidigitata* Brade n. sp.
 62. — *B. serafinensis* Brade n. sp.
 63. — *B. similis* Brade (= *pulchella* Raddi)
 64. — *B. solitudinis* Brade n. sp.
 65. — *B. velata* Brade n. sp.
 (= *curtii* L. B. Smith *nom. nov.*
 non. B. velata L. B. Smith)
 66. — *B. vellozoana* Brade n. sp.
 (= *B. olsoniae* Smith and Schubert)

NEW SECTIONS

Sectio **TETRACHIA** Brade *sect. nov.*
Ovarium quadriculare. Placentae bipartitae undique ovuliferae.

Sectio. **PEREIRIA** Brade *sect. nov.*
Stigmatae late-bilobatae (non bifurcatae), marginis papillis cincta.

Sectio. **ENITA** Brade *sect. nov.* *Fruticosa scandens, foliis, symmetricis, seminis galeatae corona cellulae maiora.*

Published in *Bradea*, Vol. 1, No. 6, February 28, 1971.



A.B.S. LIBRARY BOOKSTORE

The following selection of books are FOR SALE

* *Gesneriads And How To Grow Them.* \$7.95
 by Peggy Schulz

* *Rex Begonias As House Plants* \$1.00
 by Virginia Withee

* *So Say The Experts* \$2.00
 by Ruth Pease

Classification Guide Compiled by . . . \$1.25
 the Westchester Branch, A.B.S.

* *Ferns We Grow* by Sylvia \$3.85
 Leatherman and Dorothy Behrends

* *Begonias Slanted Toward the* \$3.00
Beginner by Dorothy Behrends

* *Platynerium Fern Facts* \$4.95
 by Wendy Franks

* *The Tuberous Begonia* \$10.80
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 Merry Merry
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4th Sunday of each month
Mrs. Priscella Beck, Secy.
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Mystic, Conn. 06355

DALLAS COUNTY, TEXAS BRANCH

3rd Monday, 10 a.m., Members' Homes
Mrs. George W. Hopkins, Secy.
1619 S. Beckley Ave., Dallas, Texas 75224

EAST BAY BRANCH

2nd Thursday, 7:45 p.m., Willard School
Telegraph at Stuart, Berkeley, Calif.
Charles Badcock, Secy.
2325 Esmond, Richmond, Calif. 94804

EASTSIDE BRANCH

4th Wednesday, 7:30 p.m.
590 116th Avenue N.E., Bellevue, Washington
Grace Fisher, Secy.
770 Monroe Ave. N.E., Renton, Wash. 98055

EL MONTE COMMUNITY BRANCH

3rd Friday, Members' Homes
Mrs. Gladys Mattuket, Secy.
1801 Azalea Drive, Alhambra, Calif. 91801

FOOTHILL BRANCH

3rd Friday, 8:00 p.m.
First Methodist Church, Marshall Hall
3205 D Street, La Verne, Calif.
Mr. Robert I. Wilson, Secy.
544 Fountain Ave., Mira Loma, Calif. 91752

FORT, ELSA BRANCH

1st Saturday, 1:00 p.m.
Miss Lola Price, Secy.
628 Beach Ave., Laurel Springs, N.J. 08044

GLENDALE BRANCH

2nd Tuesday, 8:00 p.m.
Glendale Federal Savings, 401 N. Brand
Mrs. Frances Perkins, Secy.
3712 Revere Ave., Los Angeles, Calif. 90039

GREATER BATON ROUGE BRANCH

Mrs. Charles H. Smith, Secy.
4177 Flannery Rd., Baton Rouge, La. 70814

HOUSTON TEXAS BRANCH

2nd Friday, 10:00 a.m.
Garden Center, 1500 Herman Drive
Mrs. B. A. Russell, Secy.
5926 Jackwood, Houston, Texas 77036

KNICKERBOCKER BRANCH

2nd Tuesday, 7:30 p.m., Horticultural Society Bldg.
128 W. 58th Street, New York, N.Y. 10019
Miss Margaret Huger, Secy.
505 E. 82nd St., New York, N.Y. 10028

LONG BEACH PARENT CHAPTER

3rd Sunday, 1:30 p.m.
Great Western Savings and Loan Bldg.
6300 East Spring St., Long Beach, Calif.
Mrs. Paul E. Powell, Secy.
3031 Shakespear Dr., Los Alamitos, Calif. 90720

LOUISIANA CAPITAL BRANCH

1st Friday, Sear's Garden Center
6201 Florida St., Baton Rouge
Mrs. John Blythe, Secy.
1823 Madras Drive, Baton Rouge, La. 70815

MESQUITE BRANCH

Mrs. Billie Lyles, Secy.
928 Calle Reale, Mesquite, Texas 75149

MIAMI BRANCH

4th Tuesday, 8:00 p.m.
Simpson Memorial Garden Center
Miss Elizabeth Davis, Secy.
310 S. W. 63rd Avd., Miami, Florida 33144

MISSOURI BRANCH

3rd Tuesday, 11 a.m., Members' Homes
Kansas City, Mo.
Mrs. Lynne K. Wood, Secy.
626 W. Charles, Independence, Missouri 64055

MONTEREY BAY AREA BRANCH

4th Wednesday, 8:00 p.m.
Lighthouse and Dickman Sts., New Monterey, California
Frederick Bell, Jr., Secy.
P.O. Box 527, Pebble Beach, Calif. 93953

NORTH LONG BEACH BRANCH

1st Tuesday, 7:30 p.m.
525 Ocean Blvd., Long Beach
Barbara Welty, Secy.
4741 Hazelbrook
Long Beach, Calif. 90808

ORANGE COUNTY BRANCH

2nd Thursday, 7:30 p.m.
Lions Club, Walnut St. and Garden Grove Blvd
Garden Grove, Calif.
Mrs. R. L. Nevins, Secy.
1913 Aspen Circle, Fullerton, Calif. 92631

PHILOBEGONIA BRANCH

2nd Friday, Members' Homes
Mrs. Anne Stiles, Secy.
East Delaware Trail, R.D. No. 2, Medford, N.J. 08055

PORTLAND BRANCH

Mrs. Lavene Jenkins, Secy.
9920 S. W. 53rd Ave., Portland, Oregon 97219

REDONDO AREA BRANCH

4th Friday, 7:30 p.m.
R. H. Dana School Cafetorium
135th St. and Aviation Blvd., Hawthorne, Calif.
Mrs. Juanita Spunaugle, Secy.
4248 Mentone Ave., Culver City, Calif. 90230

RHODE ISLAND BRANCH

1st Saturday, Homes of Members
Miss Marcella Flynn, Secy.
7 Fairfield Ave., East Providence, Rhode Island 02914

RIVERSIDE BRANCH

2nd Wednesday, 6:30 p.m.
Dales Recreation Center
3936 Chestnut Street, Riverside, Calif.
Mrs. Margaret K. Elmore, Secy.
3935 McKenzie, Riverside, Calif. 92503

ROBINSON, ALFRED D. BRANCH

3rd Friday, 12 noon, Homes of Members
Constance D. Bower, Corr. Secy.
1609 W. Lewis St., San Diego, Calif. 92103

SACRAMENTO BRANCH

3rd Tuesday, 8:00 p.m., Garden Center
3300 McKinley Blvd., Sacramento, Calif.
Mrs. Annette M. Winston, Secy.
2519 Aramon Drive, Rancho Cordova, Calif. 95670

SALINE COUNTY BRANCH OF KANSAS

4th Monday, 2:00 p.m., Homes of Members
Mrs. Jesse Harper, Secy.
Route 3, Salina, Kansas 67401

SAN FRANCISCO BRANCH

1st Wednesday, 8:00 p.m., Garden Center,
Golden Gate Park, 9th Avenue and Lincoln Way
Mrs. Louise Eby, Secy.
1137 Hillside Blvd., South San Francisco, Calif. 94080

SAN GABRIEL VALLEY BRANCH

2nd Friday, 8:00 p.m.
Los Angeles State and County Arboretum
501 N. Baldwin Ave., Arcadia, Calif.
Marie McCooley, Secy.
3043 Center Ave., Arcadia, Calif. 91006

SAN MIGUEL BRANCH

2nd Wednesday, Porter Hall, 7:30 p.m.
University & La Mesa Blvd., La Mesa
Mrs. Freda Basye, Secy.
2347 Langmuir St., San Diego, Calif. 92111

SANTA BARBARA BRANCH

2nd Thursday, 7:30 p.m.
Santa Barbara Museum of Natural History
2559 Puesta Del Sol
Mrs. Helen Yost, Secy.
888 La Milpita Rd., Santa Barbara, Calif. 93105

SEATTLE BRANCH

3rd Tuesday, 7:45 p.m., Loyal Heights Field House
21st Ave., N.W. and N.W. 77th Street
Virginia Level, Secy.
13770 1st Avenue N.E., Seattle, Wash. 98125

SHEPHERD, THEODOSIA BURR BRANCH

1st Tuesday, 7:30 p.m.
Y.M.C.A. Bldg., 5200 Telegraph Rd., Ventura, Calif.
Mrs. Oakley Murphy, Secy.
119 E. Simpson, Ventura, Calif. 93001

SMOKY VALLEY BRANCH

4th Thursday, 7:30 p.m., Members' Homes
Mrs. Henry Flaherty
606 South Third, Salina, Kansas 67401

SOUTH CAROLINA BRANCH

Mr. E. B. Garrigues, Secy.
2907 Blossom St., Columbia, South Carolina 29205

SOUTH SEATTLE BRANCH

4th Tuesday, 7:30 p.m., Wm. Moshier Field House
430 South 156th Burien
Sally Harding, Secy.
11632 1st Ave. S., Seattle, Washington 98168

TARRANT COUNTY BRANCH

2nd Monday, 10:00 a.m., Members' Homes
Mrs. R. M. Bennisson, Secy.
3509 Modlin Ave., Fort Worth, Texas 76107

TEXAS STATE BRANCH

4th Thursday, Sabine National Bank Bldg.
Port Arthur, Texas
Mrs. R. J. Wilson, Secy.
4620 Evergreen St., Port Arthur, Texas 77640

TEXASTAR BRANCH

3rd Thursday, 10 a.m., Garden Center
1500 Herman Dr., Houston, Texas
Mrs. V. O. Harman, Secy.
306 Cody, Houston, Texas 77009

WESTCHESTER BRANCH

1st Thursday, 7:30 p.m., Westchester Women's Club
8020 Alverstone St., Los Angeles, Calif.
Barbara Mack, Secy.
424 Oregon St., El Segundo, Calif. 90245

WESTERN PENNSYLVANIA BRANCH

2nd Wednesday, 11:00 a.m. every other month
Pittsburg Garden Ct., 1059 Shady Ave., Pittsburg, Pa.
Mrs. Irene Fediaczko, Secy.
125 Arlington Ave., Butler, Pa. 16001

WHITTIER BRANCH

1st Thursday, 7:30 p.m.
Palm Park Community Center
5703 South Palm Avenue, Whittier
Miss Anne Rose, Secy.
14036 Ramona Drive, Whittier, Calif. 90605

WILLIAM PENN BRANCH

4th Tuesday, Noon Homes of Members
Mrs. Murdock Davis, Secy.
256 Broughton Lane, Villanova, Pa. 19085

CALENDAR

October 5 — North Long Beach Branch
7:00 p.m. Pot Luck Dinner; Speaker,
Joe Littlefield.

October 8 — San Gabriel Valley Branch
7:45 p.m. Speaker: Mr. George Spaulding will talk on his trip to Australia, illustrated with slides.

October 15 — Foothill Branch, 8:00 p.m.
Speaker: Alice Gans; "Rhodea and other Rare and Unusual Plants".

October 19 — Seattle Branch, 7:00 p.m.
Regular meeting. Loyal Heights Recreation Center.

October 22 — Redondo Area Branch.
Pot Luck 6:30 p.m. Past Presidents and Birthday Dinner.

October 25 — ABS Board; South Gate City Auditorium, 4900 Southern Ave., South Gate, California. Meetings are always open to members.

November 4 — Westchester Branch, 7:30 p.m. Speaker: Mrs. Sylvia Leatherman; "Holidays and Begonias".

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