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The BEGONIAN

The BEGONIAN

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AMERICAN BEGONIA SOCIETY

Founded January 1932 by Herbert P. Dyckman

Aims and purposes

TO stimulate and promote interest in begonias and other shade-loving plants.

TO encourage the introduction and development of new types of these plants.

TO standardize the nomenclature of begonias.

TO gather and publish information in regard to kinds, propagation and culture of begonias and companion plants.

TO issue a bulletin which will be mailed to all members of the society.

TO bring into friendly contact all who love and grow begonias.

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See inside back cover

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THE COVER: *B. 'Calico Kew'*, judged the best new introduction by a commercial nursery at the 1979 ABS convention in New York. One of its parents, the spectacular *B. species ex Kew*, is considered difficult to grow. Bob Haussler conducted an informal survey to find what techniques are being used to successfully grow the parent. Cover photo by Tovah Martin. See page 240.

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NOTES/From the editors

This is your chance to help put ABS on a firm, permanent financial footing. And all it will cost you is a 15-cent stamp.

We're asking for your ideas on how to increase society income, control spending, and generally make all ABS activities more cost-effective.

Your observations and suggestions will help the new ABS Special Task Force on Long-Range Financial Planning come up with recommendations to avoid anything like last year's serious cash flow shortage.

Which activities, including publication of *The Begonian*, do you think most important? Could any be re-organized to serve more members and either provide more income or spend less money? What should the society be doing that it isn't?

Please write to your co-editor, who ABS directors named to chair the task force, by mid-October:

Chuck Anderson
Financial Planning Task Force
826 Santa Rita Ave.
Los Altos, CA 94022

Just in case you think the society is merely a trivial pastime for some plant

people, allow us to share a recent letter from a member:

"Without the dedicated people whose articles appear in *The Begonian*, I could never have achieved as much success as I have.

"I am in my 78th year, am deaf and arthritic, have an ailing husband, and am consequently housebound. My begonias are my greatest joy, giving me something to divert my mind into pleasant channels.

"I love and read every word printed."

It's for needful people like this that the society does some of its most important work. That's why it is so important to have a creative, forceful, financially healthy ABS—and to share its benefits with as many begonia enthusiasts as possible.

In keeping with this notion, the board also named your selfsame co-editor to head up a major membership campaign—and we'd be interested in any ideas on how to conduct it, too.

ABS now has about 2,400 members. It once had 4,300 members. Can we get back up to that level again? How?

—C.A. & K.B.



B. species ex Kew

Startling B. species ex Kew and its new legacy

Bob Haussler

In the forested lowlands which surround Kuching, Sarawak, J. A. R. Anderson in 1965 collected a plant presently known to growers as *Begonia* species ex Kew. Sarawak is a region on the island of Borneo, and is part of the federation of Malaysia. Rivers of the region (only a few degrees from the equator) are swollen by monsoon rains which average 120 inches per year.

In these warm, humid conditions, *B. species ex Kew* can be found growing in areas of lush jungle shaded by an overlying canopy of trees. Temperatures rarely, if ever, fall below 70 de-

grees F. Chances are that if you can provide a similar natural environment with moist humusy soil, high humidity, 70 degrees minimum temperatures, and some filtered sun and shade, this species will thrive for you.

Our family has been growing begonias for only a few years, but we now have quite a large collection, due primarily to the guidance and generosity of Sacramento Branch members. We received our *B. species ex Kew* from Joan Coulat, and it has become one of our favorites, growing to a height of 18 inches in the warm, humid conditions of our greenhouse.

Upon receiving our plant, we looked for information concerning its culture, and found an article by J. Doorenbos in the September 1976 *Begonian*. The article provides a good description of *B. species ex Kew*, history and growth habit, as well as information on other

Bob Haussler, a California state biologist, belongs to Sacramento Branch and lives at 6067 Inn Ct., Citrus Heights, CA 95610. Portions of this article first appeared in Sacramento Branch's Begonia Leaf.

species from Borneo. *The Thompson Begonia Guide* lists this plant as "shrub-like, distinctive foliage, unusual surface and/or unusual coloring." There is a photograph on the cover of the January 1973 *Begonian*, which depicts the beauty of this plant, even without the use of color.

We were told by a number of branch members of difficulties in growing *B. species ex Kew*, so we began to take a little more care in the cultivation of our own specimen, and experimented with various methods of propagation. Our initial success in growing the plant—despite our inexperience—was probably due to ideal conditions for growth in our greenhouse and the use of a good begonia soil mix recommended to us by past ABS president and Sacramento Branch member Clarence Hall.

To gather information, we sent questionnaires to well-known growers. One interesting response came from begonia specialist Rudolf Ziesenhenné, who wrote that *B. ex Kew* means "out of Kew" or "from Kew," and is, therefore, not a designation given to any particular species, but to those species which may be distributed by the Royal Botanic Gardens at Kew, England. For our purposes, though, I hope your *B. species ex Kew* looks like the one on the cover of the January 1973 *Begonian*.

Other respondents included Mabel Corwin, Joan Coulat, Elda Haring, Lynn Luckett, Mildred Thompson, and Shirley Wilson. All responded that *B. species ex Kew* is difficult to grow. Information in the following discussion is the result of our own experience as well as the responses in the questionnaires.

The most critical culture requirement of *B. species ex Kew* is warm,

moist, porous soil. This last winter, our soil heating cable failed where we keep our *B. species ex Kew* plants. Shortly thereafter, we noticed a decrease in the active growth of the plants. When the cable was replaced, active growth resumed. It appears that this plant cannot tolerate dormancy. It either grows actively, or it begins to die. Even though we keep the greenhouse at 60 degrees F. during the winter, it is not high enough for *B. species ex Kew* to maintain growth. This is not unexpected, given that the plant comes from an area that rarely, if ever, experiences temperatures below 70 degrees F. and enjoys a year-round growing season. *B. species ex Kew* is similar in requirements to some of the creeping unidentified Brazilian species collectors are growing now.

The extra heat in winter drives off moisture given to the plants and, therefore, more frequent watering is necessary so they don't dry out. Frequent watering can cause a buildup of salts in the soil unless you have soft water (low in dissolved salts, but *not* from a water softener). The water in the Sacramento area isn't too bad (about 100 parts per million total dissolved solids) and seems to be satisfactory as long as the water is allowed to flow all the way through the soil and run out the bottom hole of the pot. To make up for leaching of nutrients, we add half-strength fish emulsion fertilizer every third watering. Other growers successfully use Osmocote, Liquinox House Plant Fertilizer, Constant Feed Hyponex, Schultz, and MagAmp. We repot when the soil begins to become less porous and tight with roots. This ensures fresh, loose soil, more free of potentially harmful salts. Since this plant comes from an area that receives high rainfall each

year, the plant is not used to coping with a salt build-up problem.

If you're interested in terrarium culture, *B. species ex Kew* is a good choice. Be careful not to allow the plant to dry out, and use water low in salts (preferably distilled or spring water). A number of people we know have had good luck with this plant in a terrarium initially, only to have it fizzle six months to a year later. Don't be afraid to repot to keep fresh soil around the roots. A terrarium under fluorescent lights normally receives warmth, light, and humidity needed by this plant. Keep it moist but not soggy, and change the soil if you suspect a problem.

For terrarium culture we use a 3:2:1 mix of long-fiber sphagnum moss, perlite, and vermiculite, respectively. Some growers successfully use the following: 3:1 long-fiber sphagnum moss and perlite; a mix of Jungle Growth

potting soil and a little No. 2 perlite; 2:1:1 bagged topsoil, Canadian peat, and builder's sand, plus dolomite and Mag Amp or bonemeal, the former lightened by adding one part propagation mix (2:1:1 vermiculite, milled sphagnum, and perlite) to two parts soil; some also use their regular begonia potting mix for terrarium culture. Most growers add some charcoal and/or perlite to the bottom of the terrarium before planting. One grower adds a little "rose dust" to the mix to kill fungus gnats.

B. species ex Kew propagates like other shrub-like begonias. However, two critical factors are humidity and warmth. To provide warmth in winter, we use a bottom heating cable in our greenhouse prop box (74 degrees F.); a 2-foot by 4-foot by 6-inch box is filled with 50/50 coarse perlite/vermiculite. Some growers use the same ingredients plus sphagnum peat in a 1:1:1 mix, others use 3:1 perlite to sand, and most propagate this plant in an enclosed atmosphere.

Next, the leaf or stem cutting is placed in the box along with any cuttings from other plants. The medium is kept moist; the box is lighted by two 4-foot fluorescent bulbs about 12 inches overhead 14 hours a day. The cuttings and leaves generally root within two to four weeks any time of year. Once a good solid ball of roots has grown from a stem cutting, or new leaves are seen sprouting from the leaf (I partially bury the entire leaf with the petiole attached, rather than cut the leaf up), it's time to put the new plant into either a terrarium or a pot of light, porous mix. We use the following soil mix for clay pots:

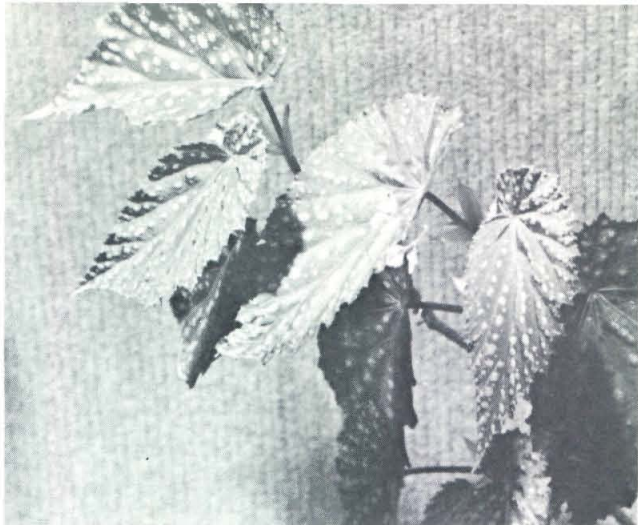
1 cubic foot oak leaf mold

1 cubic foot commercial potting soil mix

B. 'Calico Kew'



***B. incarnata* x
B. species ex Kew**



Photo/Bob Haussler

- 3 gallons coarse perlite
- 2 gallons coarse vermiculite
- 3 gallons sphagnum peat
- 1 cup hoof and horn meal
- 1 cup bone meal
- ½ cup superphosphate
- ½ cup agricultural lime

I suspect most mixes that work for the rest of your begonias will be fine, but if they don't work, try the above mix. Your next challenge is to provide an adequate amount of warmth and moisture. Some growers reported they occasionally allow their plants to get as cool as 55 degrees F. in winter with no significant adverse effects.

Begonia species ex Kew is the parent of several hybrids. The beauty of this plant is worthy of passing on to progeny, as evidenced by the winning commercial new introduction at the 1979 ABS show, *B. 'Calico Kew'* (see cover). It is described in the November 1979 *Begonian* (page 271) as a "stunning hybrid of *B. goegoensis* and *B. ex Kew species*, (which) swept the ABS 1979 Convention's top two awards for new introductions from a commercial nursery." This plant was developed by Byron Martin of Logee's Greenhouses in Connecticut. Although this plant is attractive, the specimen I have is not

as striking as *B. species* ex Kew itself. Experience to date does indicate it is easier to grow. It has myriads of bright pink flowers, as compared to the white flowers of *B. species* ex Kew, and has green, bronze, and pink foliage.

On a trip to McKinleyville, Calif., last winter, I visited Leslie, Ruth, and Winkey Woodriff's Fairyland Begonia Gardens. While walking down the rows of plants, I spotted what I considered to be an unusual plant with ex Kew-type makings under a bench. It was a hybrid labeled "*B. incarnata* x *B. ex Kew*." This inquiry resulted in a purchase and it is now doing quite well alongside *B. species* ex Kew and *B. 'Calico Kew'* in my greenhouse. It has the leaf shape of *B. incarnata*, but the leaf markings and color of *B. species* ex Kew predominate. The plant flowered for the first time in July with light pink blossoms. It is not a terribly vigorous grower, and yet has not presented any particular problems. Both *B. incarnata* x *B. species* ex Kew and *B. 'Calico Kew'* have shrub-like growth habits.

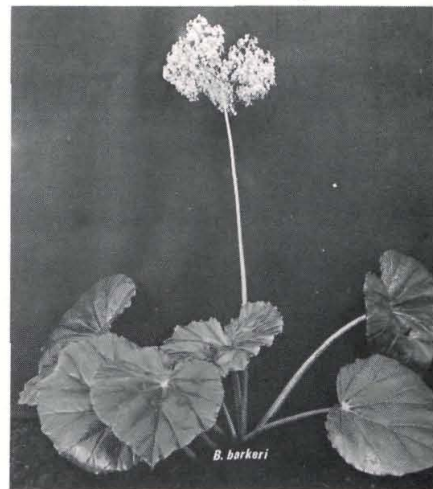
I have heard of at least one additional *B. species* ex Kew hybrid due for introduction soon. Let's hope more are on the way.



B. lindleyana, the form known as *B. sparsipila* Baker, which is very close to the type. Note peltate leaves.

B. barkeri
Knowles &
Westcott, very
different from
B. lindleyana

Photos/Reyer Jansen



B. lindleyana: straightening out the confusion

J. Doorenbos

In 1842 John Lindley described a new plant, sent by Hartweg from Guatemala, as *Begonia vitifolia*. Unfortunately, the name had been used previously by Schott for a Brazilian species so its use for another plant was illegitimate. In 1843 Walpers changed the name of the new species to *Begonia lindleyana*. I wish I could add "and so it has been known ever since," but this was not to be.

Lindley's plant survived to the present day, but it seems to have lost its label, as other names became attached to it. Specific names given to more or less distinct forms of this variable spe-

cies added to the confusion. As material of *B. lindleyana* has reached us from various sources in recent years, it seemed worthwhile to summarize our knowledge of this species and to make an inventory of the cultivated material.

First, let's have a look at Lindley's plant. After a nice bit of sleuthing, Rudolf Ziesenhenné unearthed the type specimen, which is reproduced in *The Begonian* of February 1972 together with Lindley's description. We see a plant with a thick stem, rhizome-like but upright, long petioles, peltate leaves obliquely oval in outline with pointed shallow lobes and teeth, and a long-stemmed inflorescence with fairly large white flowers, the male and the female both with two tepals. From the description we learn that stem, petioles, underside of the leaves and

Dr. Jan Doorenbos, renowned international Begonia authority, is a professor in the Department of Horticulture, Agricultural University, P.O. Box 30, 6700 AA, Wageningen, The Netherlands.

B. lindleyana from Costa Rica
(ABS Seed Fund August 1977)

B. lindleyana from
the Irmischer collection



peduncles are covered with reddish, curved, matted hairs.

Although the species is duly listed in *Nicholson's Dictionary of Gardening* (1884) it does not seem to have been very popular. This is shown indirectly by the curious fact that in 1873 Baker describes a very similar plant as a new species which he calls *Begonia sparsipila*. He states that it is closely related to *B. pruinata*, which is true, but does not compare it to *B. lindleyana*. If he had done so, we probably would have one name less to consider.

The name *B. sparsipila* did not catch on, and the name *B. lindleyana* seemed to have been forgotten. For a while we lose track of our species. When it surfaces again in L. H. Bailey's *Cyclopedia of Horticulture* (1917) it is surprisingly called *Begonia barkeri* Knowles and Westcott. This is an



B. lindleyana from Mexico (ABS Seed
Fund September 1977)

amazing error in an otherwise admirable treatment of the genus, and it is difficult to see how it could have been made. Anyhow, the damage was done.

Backed as they were by Bailey's authority (and by Charles Chevalier, who also uses the epithet *barkeri* instead of *lindleyana*), one cannot blame Bessie Buxton and Helen Krauss for using this erroneous name in their respective books, nor is Alice Clark to blame for using it in an article with a magnificent drawing published in *The Begonian* of May 1947.

Of course, the effect of this erroneous use of the name *B. barkeri* in authoritative works took some time to wear off. It must have helped greatly that about 1947 the true *B. barkeri* (a huge rhizomatous species with leaves 2 ft. across and long-stemmed inflorescences with myriads of small white flowers) was rediscovered. It is mentioned in *The Begonian* of 1948. Subsequently, when *B. barkeri* is mentioned it usually is the true species, although as recently as April 1979 the ABS Seed Fund still distributed seed of *B. lindleyana* as *B. barkeri*. The *B. barkeri* of *Hortus Third* (1977) is also *B. lindleyana*, a gloomy situation not brightened by the fact that the epithet is misspelled *bakeri*. There are a few similar errors in contemporary books on *Begonia*, but I won't cavil any longer. After Ziesenhenné's article in *The Begonian* of 1972 the situation should be clear. Moreover, the photographs here show both the typical *B. lindleyana* and the true *B. barkeri*.

We now come to the much more difficult problem of the divergent forms of *B. lindleyana* which have been described as different species. In "The Begoniaceae of Colombia" (Caldasia 4, 1946) Smith and Schubert

give no less than eight heterotypic synonyms of *B. lindleyana* (heterotypic means based on different materials): *B. sarchophylla* Liebm. 1852 from Mexico, *B. cardiophylla* Liebm. 1852, *B. nicaraguensis* Standley 1929 and *B. sericoneura* Liebm. 1852 from Nicaragua, *B. biolleyi* C.DC. 1896 from Costa Rica, *Gireoudia fibrillosa* and *G. pilifera* Klotzsch 1855 from Panama and *B. lanuginosa* A.DC. 1859 from Colombia. Perhaps we should add *B. sparsipila*, provenance unknown, although it may simply have been a seedling of the typical *B. lindleyana* which, as we saw, came from Guatemala.

If one agrees with Smith and Schubert that these plants are all forms of one species (and I for one am inclined to agree with them), then this species is very variable. The rhizome may be creeping, ascendent or upright, the petioles may be attached to the middle of the leaf blade (peltate leaves, only in the type and in *B. sparsipila*) or to the edge, the leaves may be lobed, dentate or nearly entire, the pubescence dense or almost absent, felty or woolly, the flowers pink or white, and so on. Much of this variation is represented in the cultivated material.

The first member of this group which I could add to the Wageningen collection was the typical *B. lindleyana* although I did not realize this at the time (1966), as I got it from a botanic garden in Europe under the erroneous name *B. involucrata*. Three years later I received the same plant from the collection of the late Dr. Edgar Irmscher as *B. sparsipila* which was much closer to the mark, but it took Ziesenhenné's article to reveal the true status of our plant.

There was also a *Begonia lindleyana* in Irmscher's collection, charac-



B. lindleyana as painted by Alice M. Clark in 1947 and published in the May 1947 *Begonian*. This is printed from the same printer's engraving used in 1947, imperfections and all. Mrs. Clark knew the plant at the time as *B. barkeri*. Look closely and you'll see she left breaks in the flower stalks and one leaf stalk to indicate these were considerably longer in the real plant than she had room to show on the page. The watercolor is reproduced in color in Mrs. Clark's book, *Begonia Portraits*. Copyright 1977 by Alice M. Clark.

terized by a creeping rhizome, leaves 6-8 inches across, undulate or very shallowly lobed, with pronounced veins (sunken on the upperside, red on the underside). The petioles and the back of the leaves are covered with a brown felt characteristic of the species, but the upperside is covered with stiff pink hairs. The flowers are large and bright pink. This plant, which I have distributed from November 1972 onwards through the Seed Fund, is the showiest of the cultivated forms. It is to be regretted that its provenance is not known.

Also in 1969 I received *B. sericoneura* from Mr. Ziesenhenné. This has a short upright rhizome, long petioles covered with a greyish felt and large leaves (up to 10 inches) which are slightly dentate or almost entire. It is not identical with Liebmann's plant which had leaves with larger teeth ("grosse sinuato-dentatis") and long brown hairs on their upper surface ("pilis longis fuscis adpersis") where the present plant has short appressed greyish hairs. The flowers are white (pink in Liebmann's plant).

In *The Begonian* of August 1977 the Seed Fund offered a species from Costa Rica which proved to be another form of *B. lindleyana* with upright stems 1-1½ feet high, leaves 5-10 inches long with numerous pointed lobes and teeth, and white flowers. The petioles and the back of the leaves are covered with a brown felt, the upperside is set with very short straight hairs. This form agrees very closely with *B. biolleyi* C.DC., except that this is described as having creeping rhizomes.

In *The Begonian* of September 1977 there is an offer accompanied by a photograph of a Mexican begonia, also a form of *B. lindleyana* with upright stems, but leaves only dentate,

not lobed, with a red dot at the place of attachment of the petiole. Another difference with the preceding is that the dense pubescence of petioles and back of the leaves is not appressed; in other words, it is woolly instead of felty.

There is other cultivated material that I have not yet seen. *Begonia pilifera* was offered by the Seed Fund in July 1963. It had been imported some years previously as *Begonia* 'Honduras' and is described in *The Begonian* of August 1961 as "rhizomatous, quite tall; leaves are pointed, red beneath, rough hairy above. The flowers are a pleasing pink tinge in the bud, borne in large clusters of white." Although it occurs in the October 1961 issue in a list of plants "good, popular and easy to grow," and is described in August 1961 as "a satisfactory plant in every sense of the word," it now seems to be rare. There is a picture of it in *The Thompson Begonia Guide*, however.

A second plant I have not seen is Scott Hoover's No. 44 from *The Begonian* of December 1976. There is nothing in his pictures and description that is against its identification with *B. lindleyana*, except that the female flowers have an extra tepal. This suggests *B. polygonata* Liebm. which also has 3 female tepals, and incidentally raises the question if this should also be incorporated with *B. lindleyana*.

I have at one time grown *B. polygonata*, but the material available (probably offspring of the plants grown by Liebmann in 1852) is now so infested with nematodes and virus that we could not even get it to flower.

From the above we see that at least six and perhaps even seven or eight forms of *Begonia lindleyana* are ac-

Please turn to page 253

Easy to grow: rhizomatous B. 'Walter Haring'

Elda Haring

B. 'Walter Haring' is a favorite begonia of mine for two reasons. Not only is it very easy to grow, but it was developed by our friend Paul Lowe of Florida, using a cross of B. 'Chumash' and B. 'Aries', and named for my photographer husband Walter.

The leaves are a somewhat elongated star shape with deeply cut edges and profuse hairs on the margins. A herringbone pattern of brown appears near the edge of the leaf, except in too much sun or bright light, when these markings tend to fade. It is very similar to B. 'Lacewing' and a seedling of Kit Jeans which she named B. 'Scruffy Jeans' for our little Welsh terrier "Scruffy."

This charming begonia is listed in *The Thompson Begonia Guide* as medium-leaved. However, since I keep my plant root pruned and never in a pot larger than 5 inches, the leaves could be considered on the small side. It is what I think of as a "hardy"

The inimitable Elda Haring is author of Begonias for Beginners and a frequent Begonian contributor. She lives at P.O. Box 236, Flat Rock, NC 28731.

Begonia
'Walter Haring'

Photo/Walter Haring



begonia because it can take chilly temperatures in winter with no damage, yet it seems perfectly happy in our greenhouse even in mid-summer when the temperature may go to 90 degrees.

It grows as well in the windows of the home or in an apartment. Pink flowers appear on stalks held well above the foliage in late winter or spring. However, the blooming period varies in different sections of the country.

When well grown, B. 'Walter Haring' becomes a well-rounded plant especially if tips of rhizomes are pinched back when new growth begins after a winter resting period. It is excellent to use in a basket, but grows just as happily in a pot, especially in a squat "azalea pot."

When the plant seems to have outgrown the pot and if protruding rhizomes have become curled or unsightly, cut them off and use for propagating new plants if desired. To rejuvenate the plant, when new growth starts in the spring cut off all old overlapping rhizomes, leaving only those on top of the soil. Top-dress between these with fresh potting mix. It will soon recover, grow new leaves and become a most attractive and bushy plant.

This begonia propagates easily from rhizomes, single leaves, or wedges and grows rapidly. Any propagation mix suits it, and it thrives in a variety of potting mixes. I consider it a very rugged plant for mine has been abused at times, overwatered and underwatered, over-fertilized or fertilized not at all, yet it remains attractive. This should give you an idea just how tough this charming begonia can be. I recommend it heartily.

Begonias (and other plants) that can heal?

W. Scott Hoover

During my 1977-1978 field expedition to Papua New Guinea, I worked for the Biochemical Research Division of Lilly Research Laboratories, collecting 2.5 kilograms of dried medicinal plant material and information on the use of the plants, preparation techniques, local names, and any other pertinent data. A limit of 20 species was set.

It is appropriate to describe what a medicinal plant is. A plant having medicinal properties is one which shows active properties—or is believed to possess a capacity—for healing some human ailment.

An enormous amount of spiritual or mystical belief is attached to the plants used by the New Guinea peoples. In many cases the plants do have active chemical properties which aid in the elimination of some physical problem, though other times the people just believe in a certain power of the plant.

What potential is locked within these peoples' knowledge of medicinal plants that could be of benefit to modern medicine? Only through the collection, identification, and phytochemical analysis of these plants will it ever be proved that a certain species is valuable.

On one occasion, while in the city of Lae, Morobe Province, I met a native man whose father was a village chief; he informed me of a plant having birth-control properties. My informant related that both the man and

his wife would eat the tip shoot from a certain tree and this single consumption would prevent pregnancy from ever occurring again. If the couple decided they wanted children, both would eat the tip shoot from another tree. If such plants are available and possess the described properties, a fantastic new method of birth control is potentially available.

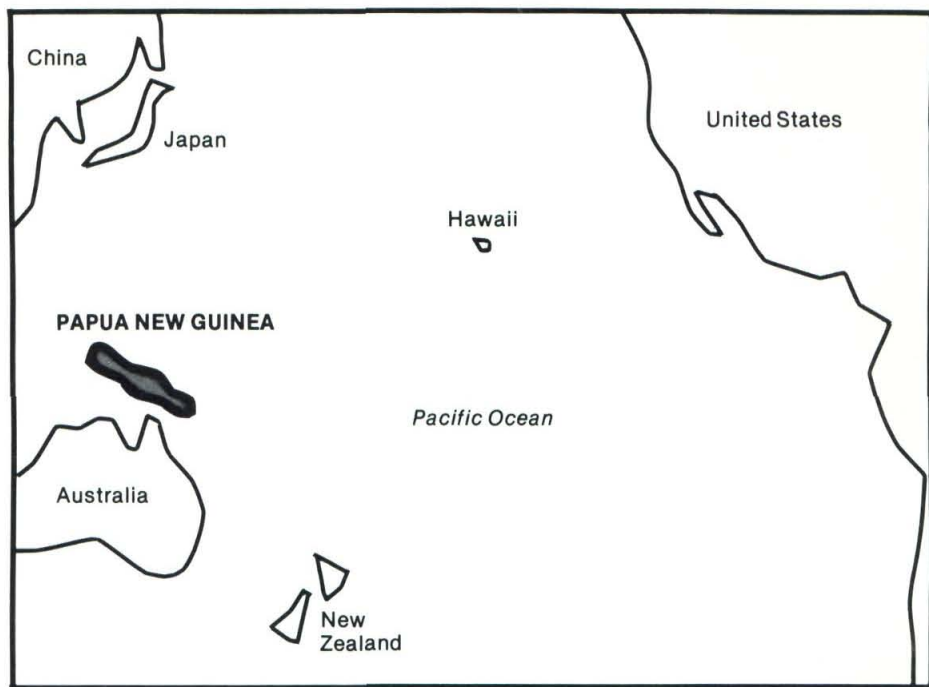
The location where we collected the medicinal plants was near the village Bomkane on the flank of Mt. Wilhelm, the highest mountain in Papua New Guinea, rising higher than 15,000 feet in the Chimbu Province. Bomkane was the home of my guide, Thomas Umba, who worked for the Department of Forests in Lae.

The department had Thomas assist me with *Begonia* collecting and medicinal plant work. Since his village was Bomkane, I thought it would be easiest to collect medicinal plants there, in a location familiar to a native person, rather than attempt going to an area unknown to both of us.

After a long jeep drive up a remarkable road cut into the side of huge uplifted limestone sediment beds, we arrived at Bomkane. Thomas introduced me to his parents and kin, and explained our purpose. It was soon after our arrival that Thomas' father decided he would hike around with us and point out those plants used for medicinal purposes.

The next day we all headed out to see what could be found to satisfy the 2.5-kilogram requirement of dried material. After making several collections of other medicinal plants, including a *Ficus* and an *Impatiens*, we observed our first begonia considered to have healing properties. The species was

Scott Hoover is a plant explorer with a special interest in begonias. ABS helps finance many of his expeditions. He lives at Coronation Farm, Williamstown, MA 01267.



Map/Begonian graphics

Symbegonia mooreana Irm., known locally as “Totogume.” The people of Bomkane boil the leaves in water and drink the juice to ease an upset stomach.

Symbegonia fulvo-villosa Warburg also is considered by native people in the Ramu sub-district, Madang Province, to have medicinal properties, though Thomas and I did not collect this species ourselves; I observed the label on a herbarium specimen in Lae. *S. fulvo-villosa* was used to treat white sores in the mouths of children and for treatment of colds—one squeezes the sap out of the stem and drinks the fluid.

The other *Begonia* we encountered having cultural significance but not medicinal presently is unknown to me, though I believe it is in cultivation. We collected this large, many-branched shrub near a field above the city of Goroka, Eastern Highlands Province. (Herbarium specimens of this species

are waiting for identification at the Arnold Arboretum of Harvard University as well as several other herbaria.)

The local name of this plant was “Colope”; the ground-up leaves were ingested by young men as part of their puberty rites. I’m sure with more investigation we could find additional begonias used for medicinal or cultural purposes.

The knowledge of plants involved in healing is no longer taught to young people growing up in the villages of the tropical rain forest because of the introduction of modern medicine. The only people who have a knowledge of these plants are older ones, those who grew up in villages before expansion of civilization into these remote areas.

The vast, untapped potential for discovery of unusual phytochemicals found in tropical plants is unlimited, and it will not be long before the knowledge held by the older people will disappear.

ROUND ROBINS/*Favorite ways to propagate begonias*

Jan Clark

Dorothy Coleman (Mississippi) finds the most inexpensive way to increase her begonia collection is by leaf cuttings, which she puts in a rooting box. She gets much more satisfaction out of growing her own than buying large plants. Her favorite way is the cone leaf method shown in *The Thompson Begonia Guide*.

Lena Bussard (Kansas) has three mini-greenhouses on trays with heating cables, and finds them excellent for seeds, cuttings, and plants that need extra warmth and humidity. Betty Davenport (Washington) is also pleased with the results of using bottom heat. She has her propagation boxes under lights on heating cables and usually has 100 percent success in rooting cuttings.



Iris Shepherd (Texas) has found a beautifully simple way to propagate begonia leaves: she puts a handful of sand, charcoal, and chopped moss in a ziploc bag, pops in her cuttings, zips it shut, and leaves it on the bench. After a few weeks the cuttings are rooted and ready to be hardened off.

Patti Mudge (New York), who operates a commercial greenhouse, has a more elaborate arrangement for propagation and seed-starting. She uses five 4-foot double fluorescent tube fixtures, set up in a spare room in the house. The temperature is usually about 70 degrees. This has proven to be suc-

cessful for philodendron, palms, gesneriads and bedding plants, as well as begonias.



One begonia that offers a challenge to many growers is *B. 'de Elegans'*. Most growers find this delicate beauty must be grown in a terrarium. However, Joan Conklin (South Dakota) discovered that *B. 'de Elegans'* flourishes for her when placed two feet under a 4-foot shoplight, crowded in with other plants.

Ruth Ihara (District of Columbia) has mastered the culture of *B. sharp-eana*, a finicky but lovely begonia from New Guinea. She says: "It is quite pretty as a mature plant, with large, maroon-streaked leaves. Its penchant for high humidity makes it necessary to grow it in a bowl. It likes to get rather dryish at the roots."

Ruth goes on to describe one of the special pleasures of those who grow species from seed. Among a batch of *B. venosa* seedlings there appeared one which was different. She calls it her "naked venosa." "It came up among *B. venosa* seed purchased from the Seed Fund some years ago. It is a *B. venosa*, but doesn't have any fuzz on it. Although it looks just like *B. venosa* it grows much stronger."



Good growers are ever on the alert for trouble, and try to stop it before it starts. Marge Doremus (New Jersey) added a thermometer and hy-

Jan Clark is round robin reporter.

Information about joining a robin—a packet of letters circulated among begonia lovers—is available from Mary Harbaugh, round robin director. Write to her at Rt. 4, Box 343, Shawano, WI 54166.

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grometer to her plant room. Thus she found the temperature was running too high and was able to correct it. Douglas Hahn (Ohio) passes on a good piece of advice: "I have learned the hard way to check my collection often for some little problem that could get out of hand."



Many of the old-favorite begonias are remarkable for their longevity. Pat Burdick (Minnesota) points out that the "beefsteak begonia" is a rhizomatous begonia named *B. 'Erythrophylla'*. It was hybridized in 1847 — which means that it has been grown from cuttings for 133 years!

If begonias are stubbornly persistent, devoted begonia growers are even more so. Arline Peck (Rhode Island) believes it always pays to try. She received a cutting of *B. rex*, and took wedges. The wedges rotted, but she planted the tiny leftover trimmings, each with a vein, and they made many plants. And surely this month's Grand Award in the Keep Trying Department has to go to Alta Soule (California), who asks fellow growers: "If you learn how to get *B. 'Gloire de Jouy'* to grow, pass your way along, as I have tried to grow it for years. I've lost about 20 plants." Hang in there, Alta!

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More *B. lindleyana*

Continued from page 248

tually grown. How should we call these various forms? They are not identical, and if we want to separate them by name, we need as many names as there are cultivated forms. The literature supplies us with a considerable number of specific epithets, but when we try to identify our cultivated plants with the forms that have been described as separate species we soon run into difficulties. There really seems to be no other way than to lump them all together. The characters in which these forms differ do not carry much weight taxonomically, moreover, they seem to vary independently of each other. Perhaps a character like whether or not the leaves are peltate might be sufficient to distinguish a variety, but that does not solve the practical problem.

A possible solution is to call them all *Begonia lindleyana* and to give fancy names to those forms that seem worthy to be grown as separate entities. Recently I discovered that *B. lindleyana* from Irmscher's collection is now known to some growers in the U.S. as *B. 'Kissing Cousin'*. I don't see any objection to this, but I think the name should be registered to prevent confusion.

The problem we run into here is by no means limited to *Begonia lindleyana*. All wild species show a certain amount of variation, and in some species (e.g., *B. foliosa*, *B. squamulosa*, *B. laciniata*) this variation is very great. As more material is imported we may expect to be confronted regularly with the problems arising from growing several or even many different forms of one species. I am indebted to Carrie Karegeannes for some valuable additions to the manuscript of this article.

NEW CULTIVARS/official international registrations

Carrie Karegeannes and Thelma O'Reilly, nomenclature co-directors

In the citations of cultivar parents, the female (seed) parent is listed first.

Begonia 'Tilt-a-whirl'

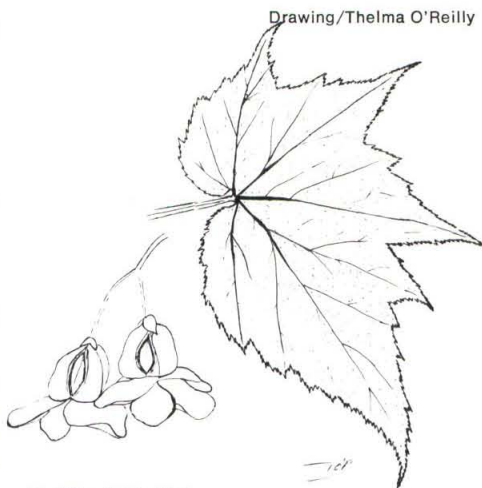
No. 769—*Begonia* 'Merry-Go-Round' sport 'Tilt-a-whirl'

Rhizomatous. Double-spiraled, round, $2\frac{1}{2}$ " x $2\frac{1}{2}$ " leaves are deep green with heavy brown strigose pattern, crenate and ruffled margin, glabrous upper surface, sparsely scurfy under surface, and 14-16 veins. Petioles are $\frac{1}{4}$ "- $\frac{3}{8}$ "; stipules fall off early. Flowers—arranged in a many-flowered cyme on a 5"-6" peduncle—are pink with pink-spotted ovaries and round tepals, $\frac{1}{2}$ " x $\frac{1}{2}$ ", with 4 male and 5 female tepals, blooming in winter. The double-spiraled leaves of this distinctive miniature, a sport of a cultivar from *B. bowerae* hybrid x *conchifolia* var. *rubrimacula*, are bunched together on short petioles and the internodes are foreshortened, causing leaves to cup in rose form. A blooming-size plant may measure less than 3" by 3" with up to 10 leaves. Originated by Patrick J. Worley, 1408 Sunset Drive, Vista, CA 92083; first bloomed in 1978; first distributed in 1980. Registered Oct. 16, 1979.

Begonia 'Tim O'Reilly'

No. 770—*Begonia olbia* x *malabarica* 'Tim O'Reilly'

Thick-stemmed with woody 3' stems. Bronze-green leaves have golden highlights and a network of red veins on the upper surface, with a distinct red spot at leaf-stem joining and a network of golden veins on the red under surface. Measuring 4" x 7", the asymmetrical, ovate



B. 'Tim O'Reilly'

leaves are lobed with a serrate margin, thin parchment texture, sparsely hairy surface, and 6 veins. Petioles are 4", green flushed with red, channeled, and sparsely hairy; stipules are 1", pink, acute. Large, $2\frac{1}{4}$ " flowers—white flushed with pink, with 2 male and 5 female obovate tepals—are arranged in large hanging clusters on 4"-5" peduncles, nearly ever-blooming. *B. 'Tim O'Reilly'* grows like a tree or shrub, branching from a trunklike base. The reptilelike pattern on branch surfaces, the striking foliage, and the masses of large flower clusters produce an unusual begonia that propagates readily. Originated in 1976 by Goldie Frost, 10622 Teal Drive, Garden Grove, CA 92640; first bloomed in 1977; first distributed in 1979. Tested by Thelma O'Reilly. Registered Nov. 7, 1979.

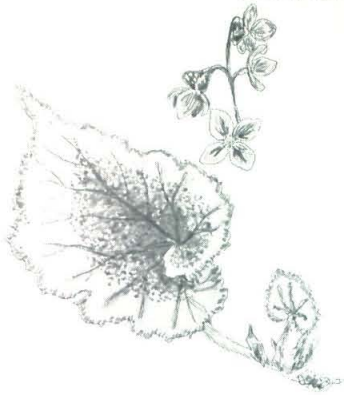
Begonia 'T'N T'

No. 771—*Begonia* 'Snow Queen' x unknown 'T'N T'

Rex Cultorum group. Double-spiraled, ovate, 5" x 8" leaves are green, white, and lavender, with ciliate margin, smooth and sparsely hairy surface, and 5-6 veins. Petioles are long, erect, and hairy; stipules are chartaceous (papery). Flowers are pale pink, almost creamy, of typical *B. rex* form, 1" across, with 4 male and 5 female

Applications to register Begonia cultivars may be obtained from Thelma O'Reilly, 10942 Sunray Place, La Mesa, CA 92041. Each must be typed or printed in ink.

A \$2 check or money order payable to the American Begonia Society must accompany each completed application. Photos, drawings, and/or dried specimens to accompany applications are encouraged. ABS is the International Registration Authority for Begonia cultivar names.



B. 'T'N T'

tepals, blooming in winter on 5"-8" peduncles. The originator named this large, showy cultivar in honor of Thelma and Tim O'Reilly. Its lavender leaves shading into green appear to be covered with snowflakes. Originated in 1977 by Kit Jeans, Rt. #1, New Johnsonville, TN 37134; first bloomed in 1979; first distributed in 1980. Registered Nov. 7, 1979.

Begonia 'Dove in Flight'

No. 772—*Begonia* unknown *rex* cultivar x unknown *rex* cultivar 'Dove in Flight'

Rex Cultorum group; rhizomatous. Predominantly silver leaves with mottled light-green spots and dark-green center veins are 8" x 10" and ruffled and lobed, with a full single spiral, serrate margin, rugose surface, and 12 veins. Petioles are 10" long; stipules, ¾". Flowers are light pink, 1½" x 1½", with 4 male and 5 female tepals and 7" peduncle, blooming in spring and summer. Originated in 1978 by Keith Mautino, 420 Calle Palo Colorado, Santa Barbara, CA 93105; first bloomed and distributed in 1979; first published and illustrated (leaf drawing) in the Plant Shop's Botanical Garden catalog, 1980. Registered Nov. 7, 1979.

Begonia 'Constitution'

No. 773—*Begonia* 'Lee's No. 9' x *hatacoa* 'Silver' 'Constitution'

Rex Cultorum group; rhizome jointed at or below the soil. Simple 5" x 7" leaves are black-green with silver markings, serrate margin, "bumpy" surface, and 6 veins. Petioles are 7" long; stipules, ½" x ¾". Flowers are white, with 4 male and

5 female tepals and 6½" peduncles, blooming summer and fall. Originated in 1976 by Bob Cole, 18007 Topham Street, Reseda, CA 91335; first bloomed in 1978 and first distributed in 1979; first published and illustrated (leaf drawing) in the Plant Shop's Botanical Garden catalog, 1980. Registered Nov. 7, 1979.

Begonia 'Dancer' (synonym 'Prancer')

No. 774—*Begonia* 'Green Frills' x 'Pam Sue' 'Dancer'

Rex Cultorum group; rhizomatous with upright stems. Lobed, dark-green 6" x 7" leaves, distinguished by small to tiny silvery-pink specks, have overlapping basal lobes, puckered surface, 7 veins, 8" petioles, and ½" x ¾" stipules. Originated in 1976 by Bob Cole (address above); first distributed in 1979; first published in the Plant Shop's Botanical Garden catalog, 1980. No bloom to date. Registered Nov. 7, 1979.

Begonia 'Darling Denise'

No. 775—*Begonia* 'Big Boy' x 'Big Red' 'Darling Denise'

Rex Cultorum group; rhizomatous. Spiraled, lobed, 10" x 14" leaves have a random pattern of silver inlay flushed purple with a maroon area speckled in green and a red edging. The margin is ruffled and the leaf surface smooth with 10 veins. Petioles are 8"-12" and stipules 1". The color spectrum of this cultivar is unusual. Originated in 1975 by Bob Cole (address above), first distributed in 1979; first published in the Plant Shop's Botanical Garden catalog, 1980. No bloom to date. Registered Nov. 7, 1979.

Begonia 'Dover Sole'

No. 776—*Begonia* 'Lamont Cranston' x 'Lee's No. 9' 'Dover Sole'

Rex Cultorum group; rhizomatous. Slightly spiraled 6" x 8" leaves are green and silver with purplish-silver splotches, an overlap at leaf base, ciliate margin,

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lightly puckered surface, and 12 veins. Hairy petioles are 8" long, and stipules $\frac{3}{4}$ " x $\frac{3}{4}$ ". Originated in 1976 by Bob Cole (address above); first distributed in 1979; first published and illustrated (leaf drawing) in the Plant Shop's Botanical Garden catalog, 1980. No bloom to date. Registered No. 7, 1979.

Begonia 'Drake'

No. 777—*Begonia* 'Big Boy' x 'Lee's No. 9' 'Drake'

Rex Cultorum group with erect stem.

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Lobed, nonspiraled 5" x 7" leaves are black-green with red teardrop markings around the veins and silvery-gray splotches overall. They have a smooth surface, 8 veins, 7" petioles, and $1\frac{1}{4}$ " stipules. Flowers, arranged in clusters on 6" peduncles, are pale pink with 5 male and 4 female tepals, blooming in summer. This cultivar develops a profusion of foliage. Originated in 1975 by Bob Cole (address above); first bloomed and distributed in 1979; first published in the Plant Shop's Botanical Garden catalog, 1980. Registered Nov. 7, 1979.

Begonia 'Golly Green'

No. 778—*Begonia* 'Lamont Cranston' x 'Lee's No. 9' 'Golly Green'

Rex Cultorum group; rhizomatous with erect stems. Lanceolate, nonspiraled, 4" x 8", dark-green leaves with a bronze cast are white-veined and edged in red. They have a crenate margin, smooth surface, 8 veins, 7"-10" petioles, and 1" stipules. Originated in 1975 by Bob Cole (address above); first distributed in 1979; first published in the Plant Shop's Botanical Garden catalog, 1980. No bloom to date. Registered Nov. 7, 1979.

Plant Shop's Botanical Gardens

New Begonia Catalog \$2.00 (incl. postage)—over 100 drawings and 600 plants listed—re-funded with first order. Staghorn Poster \$4.00 (incl. postage). Inquire about rare plant catalog. 18007 Topham, Reseda, CA 91335
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Photo/Kit Jeans



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B. versicolor

Doug Frost will become business manager and Ralph Corwin slide librarian, filling vacancies on the ABS board of directors. President Gil Estrada made the appointments and they were ratified by directors July 27.

Doug is a hybridizer and member of Garden Grove Branch. Ralph, a past by-laws revision committee chairman, lives in Vista, Calif.

Gil also named—and the board ratified—Chuck Anderson, *Begonian* co-editor, to head a major membership campaign and to chair a Special Task Force on Long-Range Financial Planning.

Robin director to receive fee

ABS directors ended several months of discussion on July 27 when they voted to establish a \$20 monthly fee to be paid the Round Robin director.

The amount, which matches fees paid the president, secretary and treasurer, is an interim one. A permanent fee will be

established when the board adopts a fiscal 1980-81 budget.

Records pass audit

Financial records for the 1979 annual convention and show in New York and the 1978 convention and show in Sacramento, Calif., have passed audit.

President Gil Estrada reported to directors July 27 that the audit committee had met to examine the books and determined they were accurate. The board accepted the committee's report.

ABS receives printed material

ABS has received a collection of books and printed material on begonias plus a full set of *Begonians* as a bequest from the late Sophie C. Filler.

Sophie was a longtime ABS member and former member of Alfred D. Robinson and San Miguel branches. Hybridizer Sylvia Leatherman named a rex begonia after her—*B. 'Lady Sophie Filler'*.

Michael Kartuz to speak

Michael Kartuz, who this year moved his Kartuz Greenhouses to Vista, Calif., will speak to the Rubidoux Branch Oct. 23 about begonias.

The meeting will be at 7:30 p.m. at West Riverside Memorial Hall, 4393 Riverview Dr., Rubidoux, Calif.

Elsa Fort's show

Elsa Fort Branch will hold its annual show of "Begonias and Shade-Loving Plants" the weekend of Sept. 12-13 on the lawns of Worthy and Helen Green, 2100 Hunter St., Cinnaminson, N.J.

Featured will be begonia table settings and a display of rare begonias. Hours are 1-5 p.m. Saturday and 11 a.m.-3 p.m. Sunday. A demonstration on propagation with cuttings will be given at 3 p.m. Saturday.

New York's house plant show

Begonias will be represented at the annual New York City House Plant Societies Show Oct. 18-19 at the Horticultural Society of New York, 128 W. 58th St. Admission is free and plants will be on sale.

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ABS SERVICES

These services are available to all ABS members. For names and addresses of department heads and other officers, see inside front cover.

AT-LARGE MEMBERS—Services for members who don't belong to branches are handled by the members-at-large director. Contact him for details. If you are interested in finding a branch or starting one in your area, contact the branch relations director for help.

THE BEGONIAN—The monthly journal of the society publishes how-to articles, scientific information, and ABS news. Articles on a member's personal experiences with begonias are welcomed, as are black-and-white photos of begonias and color slides suitable for use on the cover. Contact the editors. Individual copies of *The Begonian* more than a year old are available from the back issue sales chairman (75 cents). A full year is \$6.50 for any year in the 1940s, \$5 for any year from 1950 through 1978. Back issues less than a year old are ordered from the membership secretary for \$1 each.

BOOKSTORE—Books on begonias and related subjects can be purchased mail-order from the bookstore librarian. Contact him for a list of books available. Include a stamped, self-addressed envelope. The bookstore also sells reproductions of antique begonia prints.

JUDGING DEPARTMENT—The judging department offers a course by mail with which you can learn to become an accredited begonia show judge. Also available are a booklet on point scoring, information on fuchsia and fern judging, and other requirements to become a judge.

LIBRARY—Books about begonias and gardening may be borrowed by mail from the lending library. Contact the librarian for a list of books and the procedure.

NOMENCLATURE—The nomenclature department monitors newly published findings on begonia names as well as handling official international registration of new begonia cultivars. Registrations are published in *The Begonian*.

RESEARCH—The research department conducts a Grow and Study project in which members experiment with various begonias and compile their findings. The department also has other activities, including the review of requests for ABS backing of outside projects. For details, contact a co-director.

ROUND ROBINS—Members exchange information about begonias and their culture through a packet of letters which circulates among a small group of growers. There are dozens of these packets—called flights—on many specialized subjects. To join one or more, contact the round robin director.

SEED FUND—The Clayton M. Kelly Seed Fund offers seeds of begonia species and cultivars by mail. New offerings are listed in *The Begonian*. Donations of seed are encouraged. Please contact the Seed Fund Director.

SLIDE LIBRARY—A series of slide shows on begonias and begonia growing can be borrowed by mail for showing at meetings and seminars. New shows are under preparation. Contact the slide librarian for fee information.

SPEAKERS BUREAU—The speakers bureau maintains a directory of speakers on begonias and related subjects. Contact the director.

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