



THE

BEGONIAN

March/April 2013

The Begonian

Publication of the American Begonia Society

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 that will be mailed to all members of the society.

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

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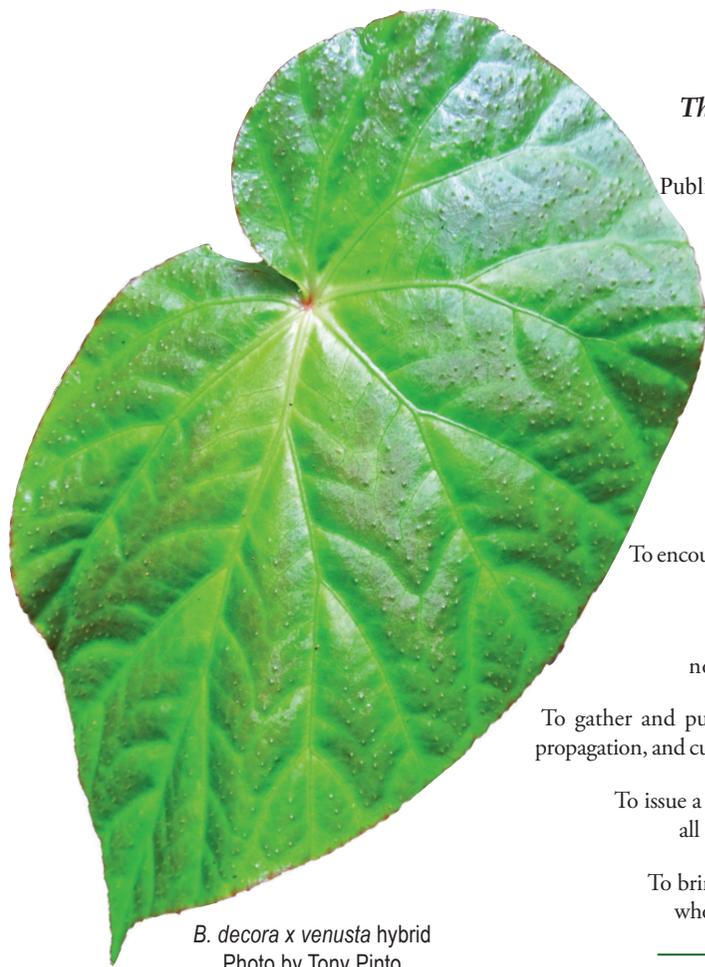
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B. decora x venusta hybrid
Photo by Tony Pinto

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American Begonia Society

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Front cover: Winter flowers of *B. 'Iris Shepherd'*. The tale of a hybrid and its hybridizer. See page 50.
Photo by Kingsley Langenberg

Back cover: On a trip to Malaysia Tony Pinto shot this photo of a spotted variety of *Begonia phoeiogramma*. See more from his journey on page 6.

President's Message

Well pretty soon spring will be here and the trees will be budding out. This is a really pretty time as well for begonias as many of the rhizomatous are in their full glory of flowering. It's a wonderful reminder that spring is almost here.

As I write this President's Message we have had a very mild winter. Here in Florida we are not supposed to grow *B. grandis* tuberous varieties with the exception of the semi-tuberous



B. grandis -happy in Florida!

types. I must be the exception to the rule. About 3 years ago I purchased a *B. grandis* (photo at left) from a nursery (Mahony's Nursery) in the Cambridge, Massachusetts area. It was \$5 and I thought for that price I could experiment some. Well this *B. grandis* was a happy plant in my environment. It went dormant and in late winter (here in Florida) it started to sprout out again. Around April I potted it up to a 6" pot and it continued to thrive and even bloom. How excited I was. I thought it was a fluke. Well, again it went dormant and, again, it sprouted out, then it got placed in an 8" pot. It's

now in a 10" pot and as of late January it is starting to sprout growth already. An interesting observation is that here in Central Florida this *B. grandis* starts to go into its dormant period around late August and September and sprouts much earlier than in most parts of the U.S. - usually around late January - early February. Flowers also come much earlier, as well, usually in April. I guess the moral of all this rambling is to experiment with growing. You will see some fun and amazing results. I haven't tried any other tuberous varieties yet but think it would be fun.

You should have received your registration packet for the 2013 ABS Convention which is going to be held in Austin, Texas May 29th - June 1. It is being sponsored by the Austin Branch and the SW Region. Don't delay in making your hotel reservation or in sending in your registration. The Austin members are working very hard to make this a memorable experience. Let's attend and not disappoint them.

We have a wonderful website that is being very underutilized and that is the National Directors website; the website is on Yahoo. In the past we have had many National Directors complain that they don't have a forum to voice their opinions or find out more information from other branches. This website is the perfect opportunity for National Directors to do that. Johanna Zinn has set up this website so please contact her so that you can join. Johanna's email is jazinn@cox.net. Your Branch Relations Director is Tom Keepin, he is on the website as well. Remember to send your Branch Newsletter to Tom, the ABS President and ABS Secretary.

Well I hope to see many, many of you at the ABS Convention in Austin; until then -

Good Begonia Growing.

Charles Jaros, President

Attention Branch National Directors

From Tom Keepin, Branch Relations Director

Let me take a moment to explain the duties of a National Director of the American Begonia Society. When you were elected to be National Director of your branch, you became the representative (spokesman) for your branch.

When there is a General Board Meeting at a National Convention, or a General Board Meeting hosted by a Branch (with no convention involved) it is your job to attend these Board Meetings to represent your Branch and vote for your Branch when votes are taken. If you cannot attend these board meetings it is your duty to give your proxy (in writing) to someone in your Branch that is attending. Anyone can attend but only National Directors or their proxy vote can vote for your branch. If you cannot attend a Board Meeting you will be able to read the minutes in the *Begonian*. The minutes of the General Board Meetings are printed in the *Begonian* in their entirety. They are no longer mailed to the National Director. This was done for several reasons. 1) Branches

were not letting the Membership Chair, Secretary, Branch Director and Treasurer know when elections were held and officers changed. Result, minutes mailed to wrong person who never passed them on. 2) Information in the minutes was not being passed on to the membership at branch meetings. Printing the minutes in the *Begonian* makes it so everyone can read them.

I am sorry but the National Board is not going to contact you directly. Every year you are required to submit a Branch Report for the Annual Meeting. We can discuss this later.

The above are your primary duties. While you are National Director of your Branch questions may arise. This happens from time to time. If you have a question please contact me first and I will answer your question if I can or I will direct you to the Board member that would best help you in resolving your problem. My E-mail is thefrogman@earthlink.net and my telephone number is 713-686-8539. I am here to help you.

The Begonians on DVD

The fourth installment of The Begonians on DVD is now available. This DVD includes the years 2006 through 2011, and Jan/Feb., 2012 with the 2011 Index. You will find "searching" very easy and efficient on this new DVD. Price is \$25.00 including shipping. Order at begonias.org by PayPal or send a check to Carol Notaras, 2567 Green St., San Francisco, CA 94123. A complete listing of the Book Store items will be found online and in the next issue of The Begonian, May/June, 2013.

2013 ABS Awards - Call for Nominations

Anna Salisbury, Awards Chairman

They are the American Begonia Society's "Magnificent Seven". You have an opportunity to make seven nominations for 2013. Note that the Ziesenhenn Award criterion has changed from its original form.

Join us in 2013 in Austin, Texas and we will present the most prestigious and honored awards that the society hands out to members. All of these awards recognize the outstanding service and achievements by ABS members. You, the membership, are responsible for making the nominations. Please take the time now to write your nominations. The nomination must contain the name of the award, the recipient's name, and reasons that make them or the plant eligible for the award.

If you have nominated someone in the past and they have not won, please nominate them again. The committee may present only one of each of the awards each year. Note the new criteria for the Rudolf Ziesenhenn Award.

I must receive the nominations by April 8, 2013. Remember the Board has approved e-mail nominations, however, by mail or e-mail, only one nomination per page.

Please mail all nominations to:

Anna Salisbury
P. O. Box 452

Tonkawa, Ok. 74653

E-mail: geneann@sbcglobal.net

Award Criteria

The **Herbert P. Dyckman for Service** is presented to a member who has rendered long-term or very outstanding service for the American Begonia Society above and beyond the normal duties of a member or an officer.

The **Eva Kenworthy Gray Award** is given for contributing original ma-

terial toward helping the rank and file members further their study of begonias.

The **Alfred D. Robinson Medal of Honor** is for a begonia cultivar that has been released for at least five years and no more than fifteen.

This hybrid must be registered with the Nomenclature Department, be widely distributed, and the originator of the begonia must be a member of the American Begonia Society.

The **Rudolph Ziesenhenn Award** is presented to an editor who collects and edits the works of others for a publication either U.S. or international, and:

- who encourages a broad array of writers both scientific and practical to write and contribute articles and,
- who issues a publication on begonias that is both excellent in design and content and which contributes to our knowledge and appreciation of begonias.

The **Tim O'Reilly Award** is given to a spouse who contributes so much to our society and does not grow begonias.

The **Marge Lee Award** is given to a person who contributes something of a spiritual value toward cementing goodwill and harmony among members.

The **Gene Salisbury Award** is given to a grower who exemplifies the very best in cultural practice, but also brings to us by their careful work the new species and hybrids. These are growers who contribute to our society simply through their excellence in growing begonias.

These awards may be received only once.

The **Alfred D. Robinson Medal of Honor** is presented to a cultivar and may be won more than once by a hybridizer.

ABS Membership Renewals

Paul Rothstein, ABS Membership email: paroan2001@yahoo.com

Each month I send out email reminders for those members whose ABS membership has recently expired or will be expiring shortly. I also send out reminder post cards to those members I do not have a record of an email address.

I receive many calls, emails, and letters from members stating they had no idea their membership had expired. This always surprises me since membership expiration dates are on the front of the envelope in which *The Begonian* is mailed (see below). I would ask all members to check this date on the next *Begonian* they receive.

It seems like many members and local branches think we still handle membership by the calendar year. This is not correct. Membership starts on the day I receive payment whether it be directly from the member or from a branch. Renewals run for one year from the current expiration date that I have on file.

I ask that all local branches keep track of all membership expiration dates for their member's instead of assuming they are all at year-end. I currently receive a large volume of renewals from branches for their members. Many of these are timely as the memberships expire at year-end but many of them do not. Many of them do not expire for anywhere from 3 months to 8 months from now. Why are we collecting money in December for a renewal in April or May

2013? I have some memberships now not due for 2 or 3 years because the branch keeps collecting from the member.

Any branch that needs a list of their member's renewal dates can simply let me know and I will send it to them. Please include a list of all your members, as I may not know that a certain ABS member is also a member of a branch.

I would also ask that all branches include email addresses for all their members. For those members not in a branch that does have an email address, and has never received an email from me, please send a quick email to me so I can record your email address. Email is a much faster and certainly cheaper way to send out renewal notices.

I do receive many requests to mail the latest *Begonian* because a member's issue must have been lost. In some cases this is true but the majority are because the membership expired and was not renewed. If that was the case then you will need to pay \$2.50 in order to receive the missed issue. If you are not sure if your membership expired just email me and I can let you know.

I also receive a lot of requests to pay back dues for memberships that expired months or even a year earlier. There is no point in doing this. If you simply want to get the missed *Begonians*, again they are \$2.50 each.

Thank you for all your help in keeping this working and happy growing!

American Begonia Society
Paul Rothstein
33 Kintyre Lane
Bella Vista, AR 72715

****AUTO**ALL For ADC 640

Renewal Date 00/00/00

YOUR NAME

YOUR ADDRESS

YOUR CITY & STATE ZIP CODE

Begonias Deep In The Heart Of Texas

ABS/SWR Convention 2013

May 29Th – June 1St

Austin, Texas

The convention will be held at the Holiday Inn Austin. The hotel is located on the shores of Lady Bird Lake (formerly Town Lake) and along Austin's green belt and Hike and Bike trail. The hotel is blocks from the downtown and entertainment district. Room rates will be \$114.00 per night, which is good for single and up to four persons. Lake view or Executive Room upgrades are available for an additional \$20.00 per night charge. They do offer free parking and complimentary shuttle to and from the airport. The shuttle will also take you to the downtown area when available. To make reservations, call the hotel reservation department at 1-888-615-0509 and tell them you are with the American Begonia Society and the code "ABS" to receive the group rate. Deadline for reservations is May 5th. The website for the hotel is www.hiaustintownlake.pacificahost.com.

The tours are still being finalized but will include the Lady Bird Johnson Wildflower Center, a trip to Fredericksburg for shopping and sightseeing with a stop at the Wildflower Seed Farm. There will be a little something new at the plant sale and we have plans to add what we think will be a refreshing change to the fund raising part of the convention. How would you like the chance to have the entire amount of your registration refunded?

We hope to have the registration forms ready by the end of February. I'm trying to decide if you, like me, have a problem with procrastination or only three of you have a computer. ABS will save a lot of money if we can just email you the registration form. Please send an email today to absswr2013@yahoo.com if you prefer to receive the registration form via email, if not we'll kill a tree and mail it to you.



A Word with You: *Dehiscent/Indehiscent*

By Claudia Goodridge, New Haven, CT

It happened again. While reading about begonias in Mexico ("The Genus Begonia in Mexico," by the Burt-Utleys, *The Begonian*, January/February 2013) I ran into words I've seen before, but needed to look up... *dehiscent* and *indehiscent*. It turns out these two words describe seed dispersal strategies. In botany, if a seed capsule *dehisces* (Fig. 1), it dries at maturity, then gapes or splits open along predetermined seam lines, as in seed capsules like peas and beans, and apparently in most begonias like *B. boliviensis* – see Fig. 2 – and *B. loranthoides* (Figs. 3 & 4, see another example *B. eminii* in Figs. 5 & 6). *Dehiscence* can sometimes be explosive, tossing seeds away from the parent plant – *B. baccata* falls in this category and I'll bet you have something in your garden that disperses seed this way too. This *dehiscent* survival strategy keeps the babies pretty close to the parents and is the dominant strategy among begonias. Of course, once dropped from the dried capsule, wind or water can move the seeds elsewhere.

Mr. Webster says *dehisce* comes

Fig. 1 Dehiscent begonia capsule
Photo by Dr. Ching-I Peng

Fig. 2 *B. boliviensis* dehiscent seed capsules.

Fig. 3 *B. loranthoides*' ripening ovary.

Fig. 4 The open capsule of *B. loranthoides*
exposing seeds

Photos by Johanna Zinn



Fig 6. *B. eminii* showing ovary split and curled back with more ripening capsules on the stem.
 Fig. 7 An example of an indehiscent begonia fruit, *B. ampla*.
 Photos by Jacky Duruisseau

from the Latin *dehiscere*, to gape open; *de-*, off, from, and *hiscere*, to gape, yawn. [dehisce (v.), dehiscence (n.), indehiscence (n.)]. That first ‘e’ is a long ‘e’ for those who want to use these in conversation, and the accent is on the *-his*. *Indehiscent*, according to Mr. Webster, means “not dehiscent; not opening at maturity to discharge its seeds; as, the apple is an indehiscent fruit.” For its seeds to be released, the *indehiscent* capsule needs to be eaten by an animal and deposited after a trip through its digestive system; or the capsule needs to rot away in situ, thus releasing the seed. That animal consumption strategy can put the baby plant at some distance from the parents.

Among New World begonias, *B. oaxacana* A.DC and *B. yunckeri* Irmsch are indehiscent per the article that inspired this research; their seed capsules don’t burst open at maturity. Per http://www.ggcg.st/botany/begonias_stp.htm the

African *B. ampla* Hook is also indehiscent. Its fruit looks enticingly edible in Figure 7.

Applications beyond botany abound in my way of thinking, the fun part of these two words. I started reading the root word meanings and couldn’t help envisioning uses both practical and ephemeral. Perhaps that closed minded relative could be categorized as *indehiscent*, neither revealing those pearls of wisdom gathered over the years, (nor allowing newer pearls to enter) – or maybe he’s *dehiscent* and can’t keep them to himself. Maybe that slack jawed snoring could be politely termed audible *dehiscence*. Politically correct conversation might allow that those skin tight pants look like they’ll *dehisce* at any moment. Sadly some countries *dehisce* and a portion of their people emigrates. And on and on.

More word fun for me, and hopefully, for you.





South America's Yellow-flowered Begonias

Article and photos by Dr. Mark C. Tebbitt, California University of Pennsylvania

Among us begonia enthusiasts, Africa is known for its yellow-flowered species with about 30 of the roughly 100 African species having yellow or orange-yellow flowers. Outside of Africa begonias with yellow flowers are rarely encountered. Nevertheless there are a handful of yellow-flowered begonias from both Asia and South America. The most garden worthy of the Asian species is *B. xanthina*, a species that Rekha Morris recently reintroduced into cultivation. The other Asian species with yellow flowers mostly belong to the same botanical group in which *B. xanthina* is classified (section *Platycentrum*) but all lack the striking foliage that makes *B. xanthina* such a standout horticultural plant. In the Americas there are currently three species that have been described as having yellow flowers. These are *B. pearcei*, *B. krystofii*, and *B. lutea*, all of which are native to Andean South America. These and other related tuberous begonias have been the focus of two ABS sponsored expeditions that I have recently undertaken to the Andes.

Begonia pearcei is a tuberous species that is apparently rare in the wild, having only been collected on a few occasions and only from a small mountainous region of southern Bolivia. Sadly it is not common in gardens either. It is a strikingly beautiful plant with attractive two-toned leaves and canary yellow flowers. Richard Pearce

first discovered the species in 1864, while working for the now disbanded Veitch Nursery in England. The first commercial begonia hybridizers who worked at this nursery used his collections of *B. pearcei* as a parent of the early tuberous begonia hybrids. Modern hybridizers have followed suite and as a result the species' yellow flower color has been passed on to all of the commercial yellow-flowered tuberous begonia hybrids (\times tuberhybrida) grown in gardens today.

Begonia krystofii (Figure 1) is a little known plant that was described in 2007 by Czech rock-gardener Josef Halda from a single small population in Bolivia's Chuquisaca Department. Shortly after its publication botanists treated the name as a synonym of *B. pearcei*. However, after examining the original publication I can state that the two are quite distinct. My fieldwork has also turned up several additional populations of this tuberous species, both in Chuquisaca Department and also in neighboring Santa Cruz Department. In fact the species is particularly widely distributed and common in the hills surrounding the town of Vallegrande, in Santa Cruz Department. I saw it in January 2012 whenever I traveled between 1600 and 2300 meters above sea level. At that time, not having seen the obscure publication in which this species was described, I thought that it was a new species.

Begonia krystofii typically grows on open sunny cliffs among pastureland and small remnant patches of tropical forest

Fig. 1 *Begonia krystofii* Halda (collected as Tebbitt 701) growing in the wild next to invasive *Aloe vera*.



(Figure 2). Its steep cliff habitat likely affords it with excellent drainage. The species probably even endures periodic drought since its frequent companions include a range of cacti and bromeliad species. It is very distinct and quite different from other yellow-flowered species. For example, it has a dense covering of white hairs on the undersurfaces of its leaves (Figure 3) and on its stem. These reflective hairs protect it from the intense solar radiation of the Andean mountains. The upper surfaces of this species' leaves also have a curious bluish-green appearance caused by a thick coating of wax that provides a natural sunscreen and reduces moisture loss from the leaves. The leaf

margins have distinct short, red teeth and the flower stalks are the same color, both providing a beautiful contrast with the clear yellow flowers.

The third yellow-flowered South American species, *Begonia lutea*, is a native of Colombia. Only a very few people have seen this plant in the wild and as far as I know it has never been cultivated. This is a shame since examination of dried herbarium material, as well as black and white photographs, taken in the 1940's by ethnobotanist Richard Schultes, show that it is an exquisite species. Plants have a short swollen rhizome from which one to three leaves arise along with a flower stalk that bears up to 12 yellow flowers. It is obvious that this species would make a wonderful subject for terrarium cultivation. Unfortunately *B. lutea* is only known from two moss covered, sandstone cliffs in the Meta and Vaupes regions of Colombia, sites that are currently too dangerous for botanists to visit.

Yellow-flowered individuals of *Begonia micranthera* have also been collected from southern Bolivia and neighboring Argentina but exactly how these plants should be classified is not certain. This past summer I spent an enjoyable morning at the KOLZ *Begonia* Research Center in San Diego reading dozens of letters written over a span of 30 years by Carrie Karegeannes, Thelma O'Reilly and others discussing just this very problem. It is likely that a

new variety will need to be described to accommodate these distinct plants.

My expedition to Bolivia in January 2012 added a new South American species with yellow flowers. This will be published shortly in New York Botanical Garden's scientific journal. It is a tuberous plant with upright stems and thick, almost leathery leaves. It shares with *B. krystofii* a tendency to not fully open its flowers but instead has somewhat forward projecting petals reminiscent of those of *B. bolivien-sis*. Ongoing DNA analysis is seeking to determine if this shared characteristic of their flowers underlies a particularly close relationship between all three of these Bolivian species or if it originated separately in different plants.

I saw the new species (Figure 4) on just a single roadside cliff south of Vallegrande at around 2000 meters above sea level (Figure 5). While this plant is most similar to *B. krystofii* it's stem and leaves are green and lack the characteristic white hairs, red margin or bluish coloration of that species. The leaves also differ noticeably in shape, tapering more towards their tips than do those of the previous species. Its flowers are a slightly paler shade of yellow. The species' cliff habitat also appears to be relatively moist since no cacti or bromeliads were seen in this location. Perhaps, however, I have a slightly biased perception of its habitat being damp because as I sat by the roadside measuring various plants for the scientific description of this

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Fig. 2 White hairs on the undersurface of the leaf of *Begonia krystofii*.

Fig. 3 General habitat of *Begonia krystofii*



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new species a storm passed over thoroughly drenching both the plants and me!

This past January I once again returned to Bolivia and this time travelled much further west and south in the country. One of the plants that I encountered on this expedition was an exquisite species with golden-yellow flowers and striking purple leaf undersurfaces. It also is new to science. I plan to write a separate article in a future edition of the Begonian telling the story of its discovery.

Acknowledgement:

These expeditions were made possible by the generous financial support of the ABS, as well as several ABS members and branches. I also wish to thank Mr. Luis Huaylla Limachi, Mr. Alexander Parada (USZ) and Dr. Michael Nee (NY) for sharing these wonderful yellow-flowered species with me in the wild.

Fig. 4 A new yellow-flowered species (collected as *Tebbitt 709*)
Fig. 5 Vertical cliff habitat of the new yellow-flowered species



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Journey to the Malaysian Peninsula

Article and photos by Tony Pinto, Brighton, MA

During Nov. 2012, I traveled to the Malaysian peninsula as I have done many times over the years for fishing and exploring for new habitats. However, this time, I planned to also look at some begonia habitats as I have found that many suitable habitats have disappeared in the past 10 years due to rapid development and the associated deforestation. It's not only plants like the begonias and



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Fig. 1 Wooded area in the Cameron Highlands Fig. 2 *Ridleyandra* sp. Fig. 3 *B. decora* Fig. 4 *Begonia phoeniogramma* on tree roots Fig. 5 *Begonia phoeniogramma* dark form Fig. 6 *Begonia phoeniogramma* with white blotches Fig. 7 *Begonia* sp at Rimba Fig. 8 *Begonia pavonina* Fig. 9 Flowering epiphyte in Cameron Fig. 10 Rare plants conservatory at Rimba Fig. 11 *B. venusta* and *B. decora*



gesneriads, but also a lot of wildlife that has also disappeared or, is rarely seen on the peninsula, with the possible exception of the ever-diminishing forest reserves. On this occasion, I planned to visit some localities where friends of mine had seen begonias. One place I intended to visit was the Cameron Highlands since this is the locality for *Begonia decora*, *Begonia venusta* and even the beautiful *Begonia pavonina*.

My friend, Dennis Yong who, in my opinion, is one of Malaysia's best naturalists was kind enough to offer take me around for a couple of days to explore possible habitats despite his busy schedule, and I accepted his kind offer. Our first habitat was located west of Kuala Lumpur (KL) in the Puchong area. Here there was a magnificent waterfall and on the sides of the rocks were growing ferns (*Selaginella uncinata*), aroids and lots of *Begonia phoeniogramma*. The begonia plants were quite amazing in that they showed a lot of variation in the leaves - some were solid green, others were dark brown and yet others were flecked with white. This species appears to be closely related to *Begonia variabilis* which I found in 2010 at the base of a limestone cliff on the peninsula. Many of these plants had small blooms and seedpods. After taking my photos we set off in the direction of the national park, Taman Negara to look for *Begonia ignorata*. After a long drive across the peninsula, we found them near the base of a limestone cliff. They were not as spectacularly colored as in Ruth Kiew's book. We then returned back to KL at 8:30 pm after a long drive.

The following morning we set off for Cameron Highlands at 8:00 am and arrived there in three hours using the expressway. The place had changed a lot in that large swathes of the forested mountain were cleared to make way for condos, hotels, and plant

greenhouses. Yet, as you drive through, you cannot help but feel you are back in a time when this was once a favorite destination of British expatriates initially and then Malaysians seeking to escape the heat and humidity of the peninsula. Nowadays, buses and taxis come here from KL regularly. The air was cool (19°C [66°F]) and damp and was a refreshing change. But the unchecked development indicated a few problems, namely landslides occurring when heavy rains came through. A lot of the forest which used to support the begonias has disappeared and it was apparent that the forest is being cleared rapidly and without permission. We found a forested area by the road where there were a lot of mosses and ferns and, sure enough, we found begonias. Initially it was *decora* but as I ventured a short distance into the forested area, I found *Begonia venusta* and also the natural hybrid of these two species. After an hour of wandering around we went into the Cameron Highlands town square and got lost! But we eventually found the way out to another waterfall where we found very young plants of *Begonia pavonina* close to the waterfall. A few were even starting to bloom with their white flowers. We decided to call it a day and then go back to KL via the expressway. We arrived back at around 8:00 pm.

A couple of days later, a friend of mine contacted me to try and locate the Rimba Ilmu (Botanical) Garden at the University of Malaya in Petaling Jaya. There is a web site which provides directions on how to get to this place but it was certainly not easy to find when we navigated in the car! We finally found the place but the rare plants greenhouse was locked. Upon asking

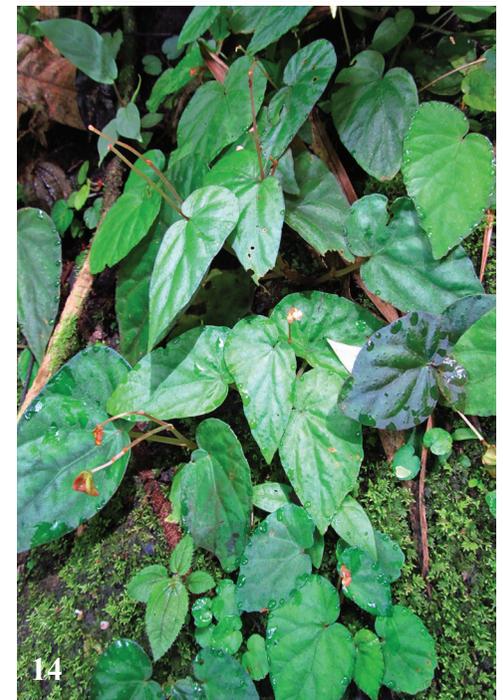
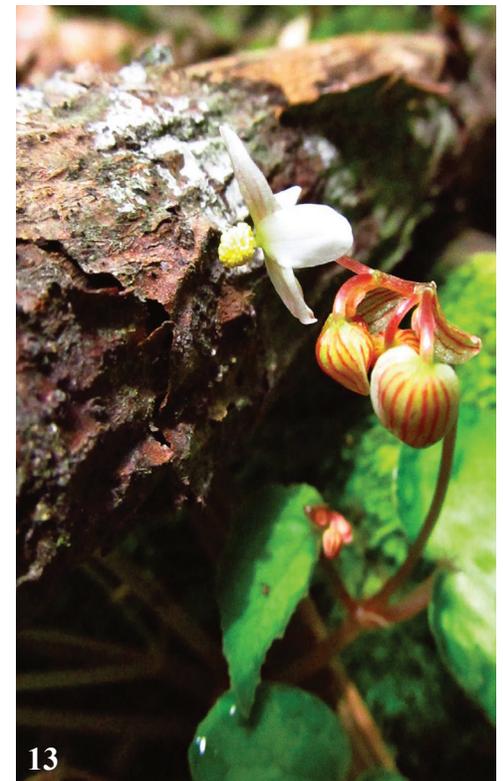


Fig. 12 *B. rajah*
 Fig. 13 *B. phoeniogramma* in bloom
 Fig. 14 *B. phoeniogramma* green variety

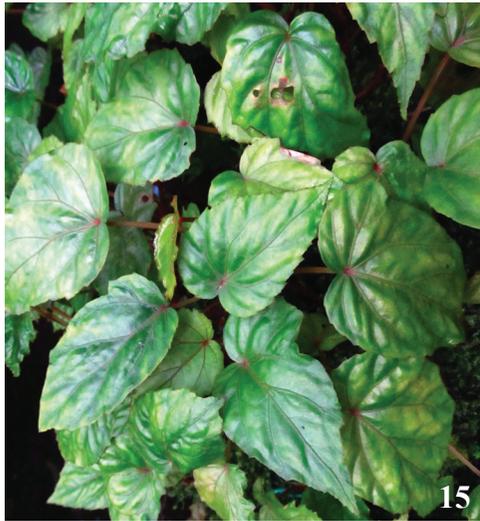


Fig 14. An unusual flower in the Cameron
Fig. 15 Another unidentified Begonia species
Fig. 16 *Macodes peteola*

to the garden at Rimba Ilmu. This garden is filled with plants and trees that do well in the tropics. It is a pity that the place is not better publicized to the Malaysian public because the plants are thriving and small information placards serve to increase knowledge!

Sadly, this was yet another short visit to Malaysia but I hope to visit again, learn more and make a few more discoveries and have more time for fishing.

Acknowledgments: My thanks to both Dennis Yong and Collin Sequerah for their assistance while travelling in Malaysia.

Links:

1. <http://rimba.um.edu.my/index.html>
2. <http://www.tfbc.frim.gov.my/subscribe46.html>

This site takes you to the Malaysia Biodiversity Clearing house site and a good many Begonia pictures are between pages 324 and 338 at this site

eg <http://www.chm.frim.gov.my/Gallery.aspx?t=/Flora&page=338>



A Trip to NW Argentina

October 26–November 10, 2012

Guillermo Rivera led the trip with 10 participants traveling from Cordoba north as far as the border town La Quiaca (11,770 ft) and the Bolivian border then back to Cordoba (1,400 ft). The morning of November 4, 2012, while driving along Route 9 in the Southern Province of Jujuy (elevation 4,145 ft), we pulled over to see several blooming specimens of the terrestrial bromeliad *Bromelia serra* (Fig. 1) with fountains of narrow, spiny leaves and a central brilliant red inflorescence with white and purple flowers in the center. The rocky hillside had lots of widely spaced white-flowered amaryllis (Fig. 2) all over it and some blooming aroids, *Synandropadix vermitoxicus* (Fig. 3), with big light green hoods surrounding darker green spadixes. The emerging buds were speckled darker green and quite interesting.

Photos and information by Judy Pigue, Cactus and Succulent Society of America



Photo: Kingsley Langenberg



Typical summer blooms of *B. 'Iris Shepherd'* (top and middle). Spotted leaves appear during dreary winter lighting, the flowers then are pinkish white (bottom).

Begonia 'Iris Shepherd'

Article and photos
by Kingsley Langenberg,
Waukegan, Illinois

In 1980 I realized a dream by adding a greenhouse onto my home. A generous ABS Round Robin member, Iris Shepherd of Port Arthur, Texas, sent me many cane-like cuttings to populate my newly created environment. I had read a well-written article by Belva Kustler about how she hybridized begonias. Inspired by her beautiful plants, I started my own efforts in the spring of 1981. I dusted female flowers of *B. 'Flamingo'* Hunter (*B. dichroa* x *B. undulata*) with pollen from *B. 'Lenore Olivier'* Kusler (*B. dichroa* x *B. 'Elaine'*.) I harvested seed on July 6, 1981 and planted some of it the same day. It germinated on July 17, 1981. One of the most attractive seedlings had beautifully speckled leaves, but as it matured, it lost its spots. But then it flowered - large pendulous bunches of pale-pink, sweet-scented flowers.

I thought it might be good enough to register with ABS, so on November 18, 1985, I sent cuttings to growers, including Iris Shepherd for their evaluation. Iris wrote back that she liked the cultivar especially because it was a compact cane, her favorite type.

But there's a sad part of this story: we moved in 1982 and I had no greenhouse. So wintering all those canes down in a basement room under lights was "a learning situation." In 1984, I became a parent for the first time and my priorities changed. I lost my only *B. 'Iris Shepherd'* in February, 1986. By 1991 I had pretty much stopped growing begonias seriously.

Now [2002], seventeen or so years later, my daughter doesn't require as much of my time, and I've recently retired. So the search was on for a hobby. I had been receiving *The Begonian* all these years, so I dug out some recent issues and read them from cover to cover.

I learned that begonias had gone onto the Internet, and while surfing the 'net, I came across the excellent website of the Astro Branch. I was looking at the great pictures of George Macias' gorgeous collection when all of a sudden I saw a listing of *B. 'Iris Shepherd'*! I said to myself: "No, it couldn't be." But then I looked at the picture. Then I ran and got out my pictures. Then I really went nuts. My begonia was still alive!

So I contacted George with my tale. He emailed back how he enjoyed my story. He also wrote: "I acquired the plant as 'Irish Shepherd,' but a visitor set me straight and told me she knew Iris Shepherd."

From my observation, it is not at all unusual to find misspelled or misnamed begonias. However it may happen, I am thankful that I can use the begonia chat list on the Internet to correct the name change that happened to this plant.

UPDATE

This was the end of the article as written

back in 2002 or so. Since then I have registered my cultivar with the American Begonia Society and it was published in the September/October 2007 issue as #996.

In the meantime, I have continued to grow and study the plant. I have learned that it does have a tendency to bolt, meaning that it will send up sturdy vertical shoots with long internodes (3-4") and narrower leaves that are often spotted when young. This development should be controlled by aggressive pruning of such shoots once recognized. I cut them back to two to four nodes and then keep an eye on the new branches as they develop and pinch out terminal growth on those every other node or so to maintain a well-shaped plant.

I have also observed that the flower color, leaf pattern, and leaf color are strongly affected by the amount of light afforded to each plant. When grown in full sun for several hours each day the flowers are the orangish pink of its parent *B. 'Flamingo'* and the leaves are not spotted but have a reddish tinge at the margins. The petioles and peduncles also take on a reddish color as well under such conditions.

Given less light, such as the fluorescents in my garage wintering facility, only the tepals of the flowers are pinkish, while the ovaries are green-white and new leaves are speckled with white spots. The growth habit under such conditions is more lax and suited to hanging containers.

From a cutting in spring to a 8" pot in fall, *B. 'Iris Shepherd'* grows quickly. Then I bring some plants into the house for winter here in Illinois. I put them next to a south window and they bloom all the time. Right now one is situated beneath our Christmas tree, adding cheer to the season.

Clayton M. Kelly Seed Fund

The Margaret Lee Branch
San Diego County, CA

The seed fund is a service to members only. It is a privilege of your membership. Please self-pollinate your species begonias, collect the seeds and send them to the seed fund. We depend on your contributions of seeds to make a wider variety of species available to the members.

The Seed Fund now offers a PayPal option. This option is available through the ABS Website. Go to the Seed Fund Page and select the link "Current Seed Listing pay with PayPal". There is a small "PayPal" fee plus the "shipping and handling" fee to cover the cost of using PayPal. Choose the fee amount in the drop down menu at the bottom of the page as with the shipping and handling drop down menus. By policy, new seed additions are made after they are first published in *The Begonian* and updated as supplies vary while filling orders. This is the best source for the current available seed list. By policy, new seed additions are made after they are first published in *The Begonian* and updated as supplies vary while filling orders. This is the best source for the current available seed list. Packets of seeds are \$2.00. Very rare seeds and newly collected seeds will be \$3.00 or more per packet when noted. California residents please add 8.75% sales tax. All orders must be accompanied by check or money order, payable in US funds ONLY to the Clayton M. Kelly Seed Fund.

**American Begonia Society,
Clayton M. Kelly Seed Fund,
Dean Turney, 467 Fulvia Street,
Encinitas, CA 92024.**

E-address: dean @deansmail.us

Cost of mailing: US only: 1-12 packets \$1; 13-24, \$1.35; 25-36, \$1.71; 37-48 (2 cans), \$2.30; 49-60, \$2.66. Canada only: 1-12 packets, \$1.10; 13-24, \$1.46; 25-36, \$1.82; 37-48 (2 cans) \$2.35; 49-60, \$2.71.

New Seeds from Joan Campbell (Limited \$3.00):
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B. gehrtii

New Seeds from Rekha Morris (\$2.00 per packet):
B. dipetala RM-SI-890

New Seeds from Beatrice Huckriede (\$2.00 per packet):
B. karwinskyana
B. sericoneura x unknown
B. sericoneura x 'Oabeherd'
B. peltata

New Seeds from Dean Turney (Limited \$3.00):
B. maynensis x rex hybrid

Mexico only: 1-12 packets, \$1.15; 13-24, \$1.51; 25-36, \$1.87; 37-48 (2 cans), \$2.50; 49-60, \$2.81. All other international mail: 1-12 packets, \$1.85; 13-24, \$2.68; 25-36, \$3.68; 37-48, \$4.68; 49-60, \$5.68.

continued on next page



B. rex hybrid plantlet in community tray. Photo from Jem Wiseman



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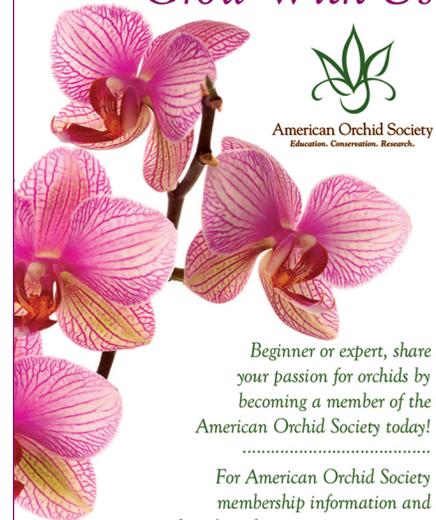
Seed Fund continued

DISCLAIMER: The seeds distributed by the seed fund are identified as received from the donors. The species names (in italics) reported here are correct based on the latest information from *BEGONIA-CEAE, Ed. 2*; Golding, and Wasshausen. Hybrid names are made consistent with the *ABS Check List of Begonia Hybrids* edited by Howard Berg dated 9/13/2005.

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The Begonias of Ecuador - Part 1

2012 March 7 / 2012 April 2

Article & photos by Jacky Duruisseau, Bois France

After some travels in Africa and Madagascar, we meet South America for the first time. Why Ecuador? Colette would like to see the Andes Mountains. Most of the begonias (and orchids) of Ecuador grow in the mountains, so, it was a good idea! Let's go to Ecuador...

A comfortable trip compared with the ones to Gabon! A 4x4 with a driver/guide and interpreter for us, Colette, myself and two friends, and all the nights booked beforehand! That represented an important

saving of time.

The documentation I had received talked about fifty begonias species in Ecuador. Unfortunately, no details on locations, only the name of the provinces where we can find them. So, we improvised, not the travel program (which was established by the tour operator) but the begonia search. We had asked David, the first guide (then Sebastian, the second one after a week) to stop the car when we saw a favorable place for begonias and when we saw an orchid

in blossom! In Ecuador, we can find 4,000 orchids! Luckily, they were not all in blossom. Many stops during our travel on the Pan-American Highway but on this road there are no refuges for begonia and orchid lovers...

In Ecuador, there are two cordilleras: the eastern one, overlooking Amazonia, and the western one, near the Pacific Ocean. They are separated by a plateau at an altitude of about 2,000 m and called "Allée des Volcans" (Volcano Alley). It is actually bordered by many volcanoes, such as Cotopaxi, Cayambe, Imbabura, Chimborazo (6,310 m the highest point of Ecuador), some snow-covered, others active (e.g., Tungurahua.) The two cordilleras trap moisture coming from the Pacific and from Amazonia so the humidity is high at the base of these mountains. Unfortunately, it was the same at altitude because, this year, in March, there was still too much rain. We even had snow at 4,800 m on the foot of Chimborazo. It was, of course, very difficult to see the mountains tops! All these mountains are covered with forests up to 2,500 m. As everywhere, deforestation is prevalent but many national parks were created and so limit it.

Quito, the capital, is on Volcano Alley at an altitude of 2,850 m and in the beginning of the stay, we have some difficulty breathing.

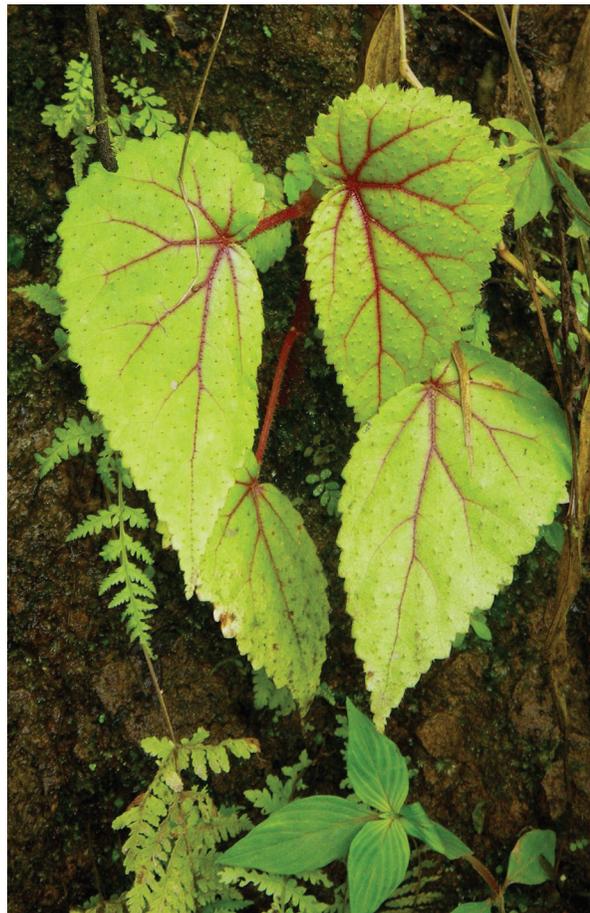
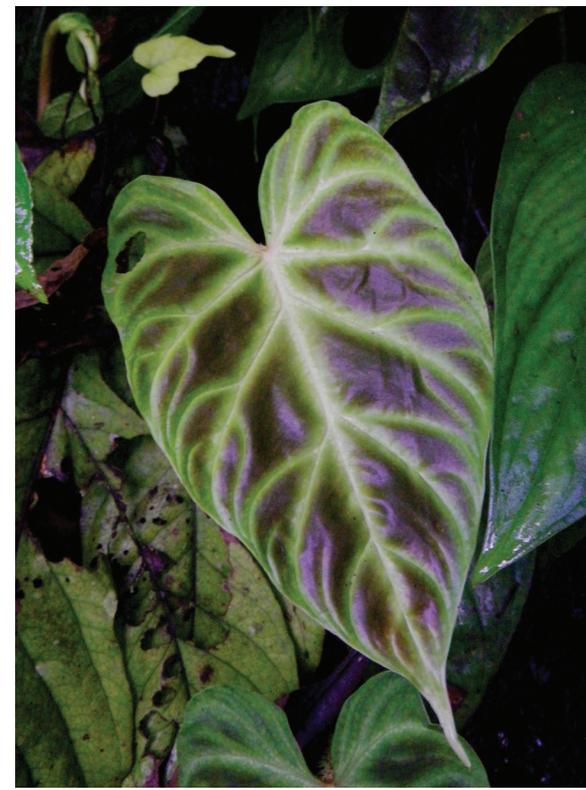


Fig. 1 *B. parviflora*
Fig. 2 A plantlet of *B. parviflora*!
Fig. 3 *Philodendron* sp. and many butterflies
Fig. 4 *B. glabra*

The first begonia search is in the Lita area, in North Quito. I knew from *The Begonian* that some were found here (e.g. *B. U560*, maybe *B. maurandiae*): a scene of waterfalls and rocks in a forest, at an altitude of about 1,300 m, in the western cordillera. Bingo!



Fig. 5 *B. foliosa*
Fig. 6 *B. maurandiae* (?)

The first one, *B. parviflora* (photo 1), a giant of the genus *Begonia*, sometimes 4 m high! We'll meet this species very often in all of Ecuador. Near a waterfall, around the edges, is a small begonia with red nerves (photo 2); I thought it was another species and we have often seen it. I ended by understanding that it is always *B. parviflora*: in reality, it is a plantlet of *B. parviflora*!

This environment reminds us of Gabon: warm and humid, and we can see many plants like the ones we saw in the Cristal Mountains, such as a wonderful *Philodendron sp.* (photo 3) and many butterflies.

The next day, we still are in the western cordillera and we go into the Mindo Reserve, which is more southern but at the same altitude as the day before. *B. parviflora*, on the edge of the path, mingles with *B. glabra* (photo 4) which grows epiphytically on the trees, and with *B. foliosa* on the slopes (photo 5). We go into the private "Maison Jaune" (Yellow House) reserve and we meet another epiphytic species on the mossy trunks (photo 6) that is maybe *B. maurandiae*, already met yesterday. Unfortunately, this species is not in blossom and we'll never see flowers on it during this trip!

The next two days bring us to the eastern cordillera, near the Amazon. It is warm and it rains! We leave Baeza eastward, by the petroleum road (we go along a pipe-line) towards San Rafael waterfalls. We stop near El Chaco, a village by the river: *B. glabra* is in blossom on the trees (with some dry fruits and...seeds!) in the company of an epiphytic species that could be *B. sodiroi*

(section *Gobenia*) (photo 7): some buds but not any fruit! The road goes through a very rich tropical forest but we cannot stop the car! We end by finding a trail that goes to the left along a luxuriant slope. I'm sure we can see begonias here and we find *B. tillifolia* (photo 8). It rains too much and we give up visiting the San Rafael waterfalls. Turn around! David drives us to Antisana National Park, by the Amazon. We find again all the species we have seen at the Maison Jaune reserve and another one, with wonderful red flowers, *B. longirostris* (photo 9) with a completely unusual ovary, with a rostrum (the remains of the pistil) which gives its name. This park, often in clouds, is called "mist forest".

The next day our guide, David, leaves and Sebastian takes over. Our two kind guides will now know what a begonia is! They had never seen one! Sebastian will even find some! Now, no begonias but a grey and cold area at an altitude of about 3,500 m. In the evening, a fire in the grate and a whisky are a great comfort to us.

On Saturday, March 16th, we go towards Baños, a very touristic place near the Amazon. We explore the right bank of the Pasraza River and find again the begonias we have already



Fig. 7 *B. sodiroi*
Fig. 8 *B. tillifolia*

met. Many orchids are on the steep slopes by the road when we come back. The next day, we search on the left bank of the Pastaza River. We must cross it on a very rudimentary aerial cableway 100 m above the gorge! Colette, who is scared of heights, will keep an unforgettable impression! More - we stop midway to admire the Agoyan waterfall!! What are the safety rules here? But we must use this way if we want to go to the right bank of the river! Many orchids are on this side and some begonias such as *B. parviflora* and *B. foliosa* that we find often, in blossom, at an altitude of about 1,600 m. We go down and the forest is more and more present. For the return trip, we cross over the river on another aerial tram at a

still more impressive height, about 300 m above the river. And this time, there are not four people, but ten people! Colette: "HELP!"

No begonias on the Chimborazo Volcano sides between 4,000 and 5,000 m. It is cold and it snows! Clouds hide the snow-covered top. On the other hand, many Andean cushion-shaped plants, gentiana and asteraceae in blossom, true jewels in this place at the end of the earth! We see some houses with straw roofs and women who are keeping llamas. About 4,000 m [13,000 ft], a school where are all the children in the area are walking to it! They smile and the red of their cheeks means we are near the sun...

to be continued...



Fig. 9 *B. longirostris*



Begonia ludwigii

*Information and photos
by Michael Kartuz, Vista, CA*



Here are a few pictures of thick-stemmed *Begonia ludwigii*, mentioned in Mark Tebbitt's book (*Begonias: Cultivation, Identification, and Natural History*, 2005, pgs. 63, 77) as endangered in its native habitat. Note the interesting caudex. At my nursery visitors are drawn to this begonia and I have to take it out of their hands as I only have two left. I don't have much information available on *B. ludwigii*. This one I grew from seed originally at least three or four years ago. Don't remember where I got the seed, perhaps from Mauro Peixoto at Brazil Plants, www.brazilplants.com/.

Kew's Millennium Seed Bank Partnership

Article and photos courtesy of Kew Gardens

<http://www.kew.org/about-kew/press-media/press-releases-wakehurst/index.htm>

Kew's Millennium Seed Bank partnership is the world's most ambitious plant conservation initiative. Kew's Millennium Seed Bank, based at the Royal Botanic Gardens, Kew's country site Wakehurst Place, is the largest wild plant seed bank and will eventually hold the seeds of at least half of all known plants.

On 15 October 2009 Kew's Millennium Seed Bank partnership celebrated collecting, banking and conserving 10% of the world's wild plant species. These include

the rarest, most threatened and most useful species

known. It also holds 96% of UK native plant life, including more than 75% of threatened UK plant species.

Collecting and conserving wild

plant seeds provides an insurance policy against extinction

and provides options for their future use. Since its launch, the project has supplied thousands of seeds and information for research in areas such as water, energy, health and agriculture. Examples of how seed is currently being used include:

- counteracting salination of agricultural lands in Australia
- developing drought-resistant forage plants in Pakistan and Egypt
- developing crops with improved yields

in the USA

- culturing threatened medicinal plant species in Pakistan
- improving and controlling the quality of essential oils in Brazil
- understanding the poisoning of livestock by 'locoweeds' (Astragalus) in Canada
- developing new food plants in Mexico.

Kew's Millennium Seed Bank partnership has developed a global network of 123 institutions in 54 countries, making it unique in its capacity to collect, conserve, and research a major proportion of the world's flora. Seeds preserved in Kew's Millennium Seed Bank are also stored in their country of origin, and assistance to support this through facilities, advice and training is as important as the seed collecting itself.

The next phase of Kew's Millennium Seed Bank partnership runs from 2010 to 2020 and focuses on threats to human wellbeing – food security, sustainable energy, loss of biodiversity and climate change – by safeguarding wild plant diversity and enabling its use. This includes:

- A collection program to conserve a further 15% of the world's plant species by 2020, storing a total of 25% of known plant life (75,000 species);
- Making seeds, scientific information and expertise available to organizations involved in researching and delivering the sustainable use of plants (for example, drought resistant crop and forage species, medicinal species and energy-rich species) and the restoration of

damaged vegetation. Restoration efforts will help combat the deforestation of temperate and tropical forests that currently accounts for 20% of global carbon emissions.

Kew's Millennium Seed Bank partnership will continue to focus on those parts of the world which are home to some of the world's poorest people and where plant diversity is tightly bound to people's livelihoods. It will also continue to work with mega-diverse countries such as Madagascar, South Africa, Mexico and China. Collection projects will prioritize species from alpine, dryland, coastal and island ecosystems, which research show, are most vulnerable to climate change.

Why now? Plants are the basis of all life on earth. They capture energy from the sun and convert it into food for both humans and animals. They are used for medicine, building materials and fuel. They regulate the climate, regenerate and maintain soil fertility, provide pest and flood control, purification of water and air, and crop pollination. They are important in counteracting global warming by acting as carbon sinks, extracting carbon dioxide from the atmosphere. Without them, we could not survive.

It is estimated that almost a third of known plants – 60,000 to 100,000 species – are under threat due to habitat degradation, invasive alien species and over-exploitation.

The current rate of species loss is thought to be at least 100 times the rate shown in the fossil record and climate change is likely to increase the threats. Once extinct, the genetic diversity of a species is lost for ever – there is no scope for reintroducing it to the wild or exploring potential uses. Losing up



Seeds of *Medicago polymorpha* (opposite page). The seeds must pass a series of stringent tests before being stored at the Kew's Millennium Seed Bank (above).

to a third of known species would be catastrophic for our future, severely restricting our opportunities for adaptation, innovation and development.

Beyond Kew's Millennium Seed Bank partnership, worldwide seed conservation concentrates on a tiny proportion of plant diversity, driven by agriculture. Currently, eighty percent of our plant-based calorie intake comes from just 12 crop species – eight grain species and four tuber species. This is despite the fact that over 30,000 species of plants are regularly eaten by people. Similarly, three quarters of the world's population use wild plants in traditional medicine, and yet these species are not banked in seed banks nor fully researched. Continuing to rely on such a narrow range of plants for all our future needs puts us in a precarious position for adapting to the challenges climate change will pose.

Kew's Millennium Seed Bank partnership will ensure that all of the world's rare, threatened and useful plants are safely conserved and available for use by current and future generations.

For more information www.kew.org/msbp

The Begonian May/June 2013

Deadline March 28

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B. longimaculata blooms Photo by Jacky Duruisseau

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