

THE

# BEGONIAN

September/October 2015



# *The* Begonian

Publication of the American Begonia Society

**American Begonia Society**

**Founded January 1932**

**by Herbert P. Dyckman**

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## **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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*B. "Majesty"*

*photo by Charles Henthorne*

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**Front cover:** Close up of the male (above) and female (below) flowers of *B. thyrsoides*. The distinctive column, to which the stamens are attached, can be seen in the male flower. See full article on page 171.

**Back cover:** Look out for "racing" stallions in the Singapore Flower Dome! In fact, these are dead pieces of driftwood assembled to stunning life-sized sculptures by James Doran Webb, a British sculptor who lives in Cebu, Philippines. Read more about Singapore's Garden by the Bay on page 178.

# Proceedings of the American Begonia Society Annual Business Meeting Natick, MA August 1, 2015

**P**resident Virginia Jens called the meeting to order.  
Members recited the Pledge of Allegiance.  
The Aims and Purposes of the American Begonia Society (ABS) were read by Margaret Fisher.

National Directors (ND) representing twenty ABS branches were introduced by President Jens. Annual branch activity reports were submitted by 16 branches. Submitted Annual Branch Reports will be posted on the ND website.

The proceedings of the May 2015 ABS Board Meeting in Houston, Texas were approved as published in the July/August 2015 *The Begonian*, and thus were upgraded to minutes.

Treasurer, Carol Notaras, presented the financial report for May 1, 2015 to July 28, 2015. The beginning balance in the checking account was \$4,004.12 and ended with \$8,609.73. During this period, income was \$19,952.84. Expenditures totaled \$15,347.32. In May 2015, \$12,000 was transferred from the Money Market fund. Contributions from SWR matching funds totaled \$2,860.00. The official fiscal year-end date was July 31, 2015 and Carol requested that those requiring a complete year-end financial report to contact her by email. Upon completion, this report will be submitted for fiscal review.

## Report of the Executive Board

1st Vice President, Mike Flaherty reported that Malcolm McCorquodale, ABS member from the Houston Astros Branch, succeeded Julie Vanderwilt, who was webmaster for almost 10 years.

2nd Vice President, Martin Delgado, reported that the Executive Board approved a recommendation from the Grants and Research Committee to approve a \$2,000 research grant from the Morris Mueller Endowment Fund for Jacky Duruisseau's planned expedition to Colombia in January-February 2016.

## Motions presented on behalf of the Executive Board:

The Board recommends approval of the 2015 Vote Results and Rule Changes to Article IV - Committees Section 6.

The Board moves to accept the Seed Fund postage increase proposed by Michael Ludwig, Seed Fund Chair.

The Board moves that a Certificate of Registration be included in the hybrid registration packet.

Recommendations were approved.

continued on next page→



## President's Message

It is with honor and pleasure that I greet all of you as your new President of our American Begonia Society (ABS). In the relatively short six years that I have been a member of the ABS, I have learned so much from this diverse, special, and multigenerational group. In this new capacity it will be no different, and I will do my best to keep up the high standards of the office and be available for all that my position requires. I expect to not only support the great work our organization has done to stimulate and promote interest in begonias, but to help nurture that interest from our most esteemed members as well as anyone new to growing begonias.

Another personal goal is to ensure that we all remember that a primary purpose for our Society is to bring into friendly contact all who love and grow begonias – that is, friendship and respect for all, and between all. To further this goal we need the ongoing support of each and every member. Each of us bring something unique to the Society, and we are all the richer

for it. I know that our ABS Board members feel exactly the same way. We want membership in the ABS to be both an educational and an eminently pleasant experience for everyone involved.

The above points easily lead me into offering a heartfelt thank you and recognition to the entire planning committee for the 2015 National Convention, the “Begonia Revolution.” Thanks to their contributions and very hard work, we had a most exciting and happy week in beautiful New England, culminating in the fascinating and very successful Show. Surely the highpoint of every Convention participant’s summer!

Looking forward to a positively great year with all of you,

Martin E. Delgado, President  
American Begonia Society

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ABS Business Meeting continued

## Reports of Officers and Branch Directors

### Unidentified Species:

U Number Co-Directors, Charles Jaros and Mary Bucholtz, reported that during 2015 four new “U” numbers (U632-U635) were assigned to begonias collected by Mary Sizemore in Mexico and in the Philippines. They reported that *B. U555*, collected by Mary Sizemore in Vietnam, has been identified as *B. caobangensis*. They also reported that U560 and U149 were identified by Dr. Mark Tebbitt at the Convention as *B. maurandiae*.

Convention Chair, Mary Sakamoto, announced that the 2016 Convention will be held at the Ayres Hotel in Hawthorne, CA. on September 6–10, 2016.

Don Miller presented an update on the Begonia Species Bank housed at Ft. Worth Botanic Gardens (FWBG). He thanked the ABS for their support of the Begonia Species Bank. There are now 1100 begonias and 215 species begonias in this important collec-

continued on next page→

tion. He stated that the Begonia Species Bank recently received accreditation by the North American Plant Collection Consortium (NAPCC).

### **Conservation Report:**

Conservation Chair, Johanna Zinn, reported that at least four students have received grants from the Morris Mueller Scholarship Fund during the past years. Two branches have adopted a species. She requested that members send her a species list of what they are growing. For the sake of privacy, personal information will not be shared or used. She also made a special request for additional donations to support ongoing conservation and research programs.

### **2015 Registrar Report:**

Priscilla Purinton reported that Walter Dworkin registered five of his hybrids. These are: *B.* 'My Special Angel', *B.* 'Dream Lover', *B.* 'Satin Doll', *B.* 'Matchmaker', and *B.* 'Teen Angel'. *Begonia* 'Bobbie Price' was registered by Bobbie Price, hybridizer and volunteer at FWBG, on March 5, 2015 and was approved on May 21, 2015.

Bookstore Chair, Janet Brown reported that Dr. Ruth Kiew's book "*Begonias of Borneo*" sold out at the 2015 Convention. She hopes to soon add new begonia books by Brad Thompson, Samuel Kennedy, and Rehka Morris to the bookstore inventory.

Incoming 1st VP Carol Orozco will serve on the Publication Committee. Dr. Freda Holley will chair the Publication Committee. Mary Early, will be the new Public Relations Director and will coordinate and disseminate ABS information.

### **General Business:**

Buxton Branch Convention Co-chair, Linda Kammerer, presented the interim report on the 2015 Convention.

### **New Business:**

Margaret (Peggy) Sporer of the Begonia Society of Tampa Bay regretfully reported that Bob Koehler, a hybridizer and a charter member of the Tampa Bay branch, had passed away recently. Ms. Sporer also spoke on difficulties encountered as a result of hosting the 2014 Convention in Tampa. Discussion followed on procedures to follow when hosting a convention.

David Messer from the Delaware Valley Branch had a question about ABS operating expenses. Referred to Treasurer Notaras for response.

### **Holiday Ad:**

Frances Drescher's report stated that she has collected \$2,911 so far for the Holiday ad.

### **Installation of incoming ABS Officers:**

Parliamentarian, Linda Lawson recognized all Past ABS Presidents and the outgoing ABS Board members. Ms. Lawson then installed the newly elected ABS officers. They include President, Martin Delgado; 1st Vice-President, Carol Orozco; 2nd Vice-President, Sally Savelle; Treasurer, Carol Notaras; and Secretary, Connie Saenz.

### **Adjournment:**

There being no further business, the August 1, 2015 Annual Business Meeting of the American Begonia Society stands adjourned.

Respectfully submitted,  
Connie Saenz, Secretary

## 2015 Holiday Greetings Reminder

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**T**here is still time to send in your 2015 Holiday Greetings donation, but the September 15th deadline is quickly approaching. Don't get left out!

The money raised helps with the expense of printing *The Begonian* and in turn helps to keep the cost of dues down.

Donation categories are: **Bronze, \$1-\$50; Silver, \$51-100; Gold, \$101-\$150; and Platinum, \$151, plus.** The list of donors will be in the November/December issue.

The contributions, which are tax-deductible, should be made out to **ABS Holiday Greetings**. Please send to **Frances Drescher, 11529 Riverchase Run, West Palm Beach, FL 33412.**

If you have any questions, or need to let Frances know that the "check is in the mail", you may contact her by email at [fkdrescher1@comcast.net](mailto:fkdrescher1@comcast.net). Thank you.



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### SWR "Challenge" Fund Drive Update

**A**lthough it's only been a short time since you learned about the Fund Drive in the last *The Begonian*, the donations are pouring in. Carol Notaras has reported that she has already received monies from a number of people. We'll recognize the people and branches that have made donations in the next *The Begonian*. So get your donation mailed to Carol so you'll see your name on the list. Remember to challenge others to get their donation in.

Let's do it for the begonias!

-Doug Byrom

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1

Researching *locule* on the internet led me to photos of beautiful, even voluptuous tomatoes, cut in half to illustrate *locules*. Since tomatoes are in season as I write, and I love fresh tomatoes of any shape or color, I stopped to study the pictures. An “ah ha” moment. Tomatoes can be bi-locular, and multi-locular. So can begonia seeds. What is a *locule* you ask? It’s a small cavity or chamber/compartment within an organ. In botany, any of the chambers of an ovary (or seed capsule), or anther. They can be *uni-locular*, *bi-locular*, *tri-locular*, and *multi-locular*. The *locules* contain the seeds.

In Latin, per Cassell’s, *loculus* is a little place, diminutive of *locus*, a place, especially a coffin, a box or chest containing many divisions, a coffer, a casket. Mr. Webster says a *locule* is a *loculus*. So, we go down the page to *loculus*, *loculi*, (1) a small space or place. A little chamber or cell; specifically any small

## A Word With You: Locule

By Claudia Goodridge, New Haven, CT

cavity, cell, or chamber in plant or animal tissue. (2) in ancient tombs, a recess or small chamber for the reception of an urn or body. Nearby in his dictionary is *loculose* – full of small compartments. Now, could that describe ice cube trays or possibly cruise ships? Pronunciation is *loc-*, as in *lock* or *block*, and *-ule* as in *miniscule* (another *-ule* ending) or *Yuletide*. The accent is on *loc-*.

My begonia references don’t disagree. Golding says, “The ovary of *Begonia* is divided into *locules* [the compartments holding the ovules]. Most ovaries have 3 *locules*, but there are some with only 1 or 2, a few may have 4 to 8.” Tebbitt’s glossary defines it as “a compartment of the ovary.” His illustration has three *locules*. The Thompsons say it’s a compartment or a cell, usually referring to ovary, fruit, or anther.

I’m still looking for the derivation of *-cule*, but find instead more that end in *-cule*... molecule, majuscule (a large letter as a capital), minuscule (tiny, minute, diminutive), crepuscule (twilight, dusk), poeticule (a petty or insignificant poet; never met one). Scrabble players or word collectors make note.

Small space indeed. Cut across a begonia seed capsule to see just how small. Or more graphically, slice a tomato between stem and blossom ends. Shall I admit to not slicing through any begonia seed pods until now? I will admit to never slicing a tomato with the same ignorance again.



Cross-section of a dried *Begonia* "Flamingo" seedpod (Fig 1), showing seeds pulled away from the sides of the locules. Photo by Jem Wiseman

*Begonia fischeri* unripe seedpod (Fig 2). Immature seeds pack the tri-locular chambers.  
Two types of "cherry" tomatoes (Fig. 3) with variable ovaries. Photos by Linda Tamblyn

# The Begonian

Nov/Dec 2015

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# The enigmatic *Begonia thyrsoides*

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

A major goal of my expedition to Peru this past January was to try to relocate *Begonia thyrsoides*. This tuberous species had not been seen alive since its discovery on March 11<sup>th</sup> 1929. Examination of the dried herbarium specimens collected that day show this species to be quite different from any other tuberous begonias from the Andes. It is smaller in stature with unusual, sprawling stems and very different flowers. But of greatest interest are its flower clusters. Each plant has just two or three flowers and they are arranged in a distinct asymmetrical cyme (Figure 1).

When begonia taxonomist Edgar Irmischer described *B. thyrsoides* in 1949 he was unable to place it in the classification system. He noted that the species had several unusual features including leaf stalks of varying lengths, few-flowered cymes, and a particularly long column to which the stamens were attached. The name he gave this plant, *thyrsoides*, refers to the resemblance of this stamen column to a thyrsus (Figure 2). A thyrsus is a wand made from a fennel stem topped with a pine cone. In Greek mythology this type of wand is asso-

ciated with Dionysus and is a symbol of fertility. Later taxonomists appear to have mistakenly thought that this name signified that the species had a thyrs (Figure 3), a type of flower arrangement rarely seen in begonias. Among the tuberous begonias of the Americas, a thyrs has only been seen in species native to Mexico. Probably as a result of this misunderstanding, *B. thyrsoides* is currently classified in *Begonia* section *Quadriperigonina* along with 19 Mexican species that are tuberous and have a thyrs.

It appears that *B. thyrsoides* does not belong in *Begonia* section *Quadriperigonina* since it does not have a thyrs, and it is geographically widely separated from the other members of this section. However, it is not obvious in which botanical section it would be more appropriately classified. This species is more similar to other Andean begonias than to the Mexican begonias, but its morphological characteristics are so distinct they offer few clues regarding its evolutionary relationship among the Andean begonias. This might be because either this species' close relatives are extinct, have yet to be discovered, and/ or evolution has occurred at a more rapid pace in this species than in its relatives.

DNA sequence comparison can help determine what a species' closest known

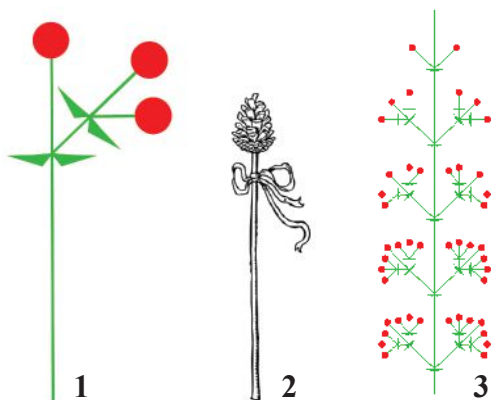


Figure 1. Plan of the distinct asymmetrical cyme of *B. thyrsoides*, with red circles representing flowers.

Figure 2. A thyrsus or wand associated in Greek mythology with Dionysus and his followers.

Figure 3. Plan of the branching pattern of a thyrs, with red circles representing flowers.



Figure 4. The Lares Valley.

relatives are and hence assist in classifying problematic species like this. Certain parts of a plant's DNA evolve independently from the species' morphological features. These regions of the DNA can be compared among species and will indicate how they are likely related to one another. This type of research requires that the DNA be extracted from living plants. So, in order to discover the secrets of this enigmatic plant, I first had to relocate it in the wild. I suspected that finding *B. thyrsoidea* was going to be a challenge since it had only been seen on one oc-

casión, and that over 85 years ago.

In 1929, *B. thyrsoidea* was discovered in the Lares Valley of southern Peru, which is close to the city of Cusco. So upon arriving in Peru's main airport in Lima I met up with local botanist Mr. Aniceto Daza Yomona and together we flew to Cusco. Flying from the coastal city of Lima to Cusco high in the Andes can be quite a shock to the body. Instantly upon landing I felt the effects of the sudden gain of 11,000 ft. Even walking up steps was difficult and, with a backpack full of fieldwork equipment, I found myself





Figure 5. Patches of pristine rainforest can still be found in the Lares Valley but are largely restricted to the more inaccessible slopes. Figure 6. Botanist Mr. Aniceto Daza Yomona (left) and our driver standing next to a cliff covered in a new species of begonia. Figure 7. Close up of a new begonia species.

constantly gasping for breath. Soon I also developed the dull headache commonly associated with a sudden gain of altitude. This headache was to persist for the entire time I was in Cusco and didn't go away until hours later when I had descended in altitude. From Cusco the drive to the Lares Valley takes roughly two hours, the latter part through a spectacular high mountain pass lined by snow capped mountains.







8

Figure 8. Hundreds of white-flowered *Begonia thyrsoides* growing on moss covered rocks.





Figure 9. *Begonia thyrsoides* is a diminutive species with oddly bent stems and unusual inflorescences.

Because much of the Lares Valley (Figure 4) lies well below 7000 ft it has a subtropical to tropical climate. Plant life abounds there but sadly much of the valley's native vegetation has been destroyed in the past 15 years. Numerous small patches of forest have been cleared and planted with coffee. Planting of this valuable cash crop is leading to the native forest steadily becoming restricted to the more inaccessible hillsides away from the road (Figure 5). However, in these ever shrinking patches of rainforest the diversity of native plants is extremely rich. We spent two days driving along the valley road, stopping each time we found a patch of forest so that we could explore it on foot. We found four begonia species but eventually decided that *B. thyrsoides* had probably been driven to extinction by the recent habitat destruction. One of the begonias we found was a new species (Figures 6 and 7), but even its discovery did little to dispel my disappointment as I left the Lares Valley.

Three days later my luck turned, and I unexpectedly found *B. thyrsoides*. We were driving along a different valley 150 miles to the south hunting for another rarely collected species, the beautiful red-flowered *B. herrenae*. From the car I spotted a patch of white on the roadside cliffs. So small were these plants that from 30 ft away in a slowly moving vehicle I wasn't even sure that they were begonias but the habitat hinted that they might be. Only after we stopped our truck and I had jumped out to check, did I realize that we had rediscovered *B. thyrsoides*. It was growing in a new location but one very similar in habitat characteristics to the species' original

collection site in the Lares Valley. A search of this new location showed *B. thyrsoides* to be common; hundreds of plants grew on huge slabs of moss-covered rocks at the forest's edge (Figures 8 to 11 [see front cover for Figure 11]). With great excitement I set about collecting herbarium specimens, as well as silica dried leaf samples that would preserve the species' DNA for future analysis. Now, at last, we can determine where in the botanical classification this unusual species really belongs and learn why it looks so different to other begonias.

#### Acknowledgments:

This expedition was made possible by the generous financial support of the American Begonia Society, as well as several ABS members. I also wish to thank Dr. Carlos Reynel and Mr. Aniceto Daza Yomona of the Universidad Nacional Agraria La Molina, Lima, Peru and Mr. Peter Moonlight of the Royal Botanic Garden, Edinburgh, Scotland for collaborating with me on this project.



Figure 10. *Begonia thyrsoides* removed from the moss in which it was growing to show its tubers and reddish leaf undersurfaces.



# Bullate v. Foveolate



Bullate and foveolate both refer to leaf texture. *Begonia ferox* (pictured) represents one of these terms. This begonia, which gets its name from the Latin word for “fierce,” was discovered in the limestone hills in Guangxi, China.

Is *Begonia ferox* bullate or foveolate?

Photo by Dr. Ching-I Peng

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**Watch for the answer in your next *The Begonian*  
brought to you by A Word With You!**

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**Last month's answer to Picture Quiz**

July/August issue, page 105

**Cuneate v. Cordate?**

**ANSWER:** Cordate, or heart shaped, where the leaf blade joins the petiole. Cuneate is wedge shaped. Cordate discussed in Vol. 82, March/April 2015, p. 54.



## Exploring Plants Around the World in Gardens by the Bay

**R**ecently I traveled to Singapore and thoroughly enjoyed my day in a relatively new horticultural attraction, the Gardens by the Bay. The Garden was officially opened on June 29, 2012. It is a modern garden where environmental sustainability is a key element for its operations by the implementation of new environmental technologies, eco-friendly construction material and designs. More than 1 million plants belonging to over 5000 species from all over the world are growing there, meanwhile at least six plant displays per year change following seasons and festivals, so there is always something new to see.

continued on page 182

*Article and photos by Joanne Tan Pei Chih  
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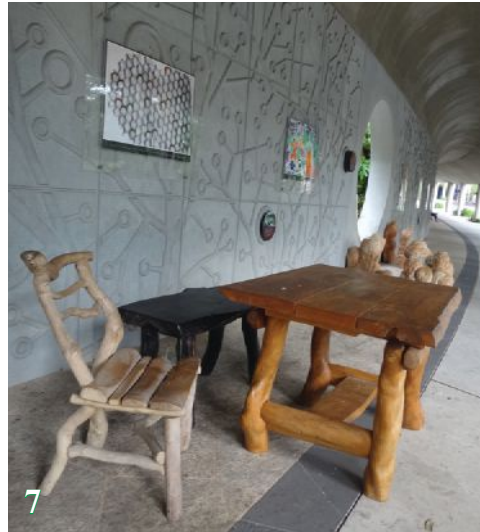
View of the Super Trees and Flower Dome (Fig 1). There are a few elevated bridges and raised walkways around Gardens by the Bay, do climb them for the best overviews of the Garden's landscape layout.

The Flower Dome exhibits many plants and trees from Mediterranean climates (Figs 2–4).

Many artistic and lifelike sculptures (Figs 5 and back cover) are scattered around the Gardens by the Bay matching the planted flora to present different themes.

Chairs and benches (Figs 6–7), rich in natural texture, are surprisingly comfortable and adequately available in the Gardens to rest your feet before further walking.









8



9

It is an exquisite pleasure to come face to face with the diverse plants growing densely and gracefully in the Cloud Forest (Figs 8–9).

Some of begonias and other flora in the Cloud Forest Dome (Figs 10–11 multiplates and Fig 12).

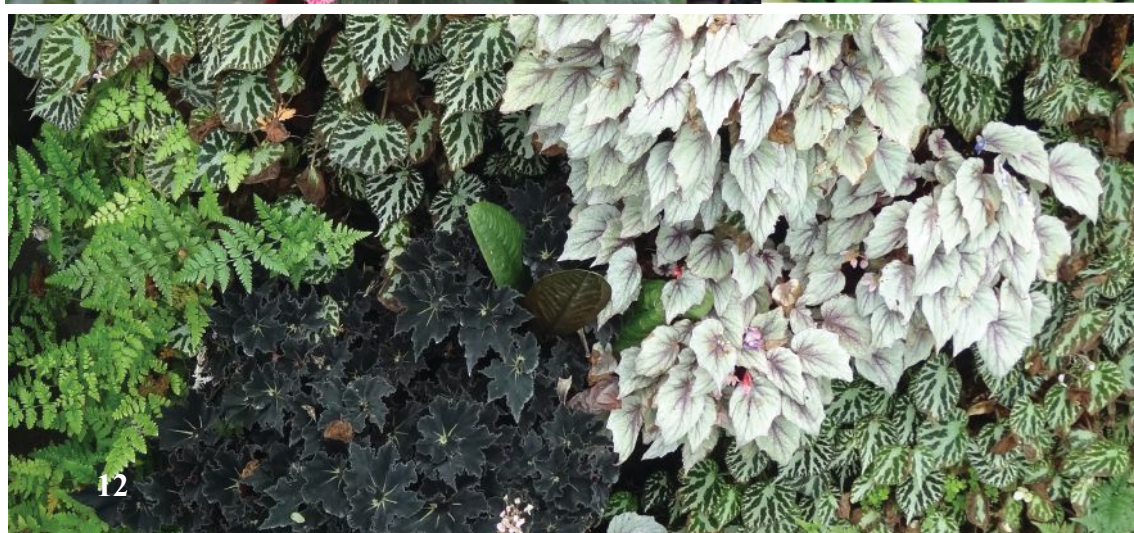


10





11



12





*Nepenthes jamban* (Fig 13), a tropical pitcher plant endemic to northern Sumatra, Indonesia. The species name 'jamban' is an Indonesian word for toilet! Visitors on the Cloud Walk (Figs 14–15) enjoy the scenically attractive surroundings inside and outside the Cloud Forest.

There are two iconic glasshouses in the Gardens: the Flower Dome and the Cloud Forest. They are definitely worth the ticket price as numerous unique plants and great plant diversity are showcased.

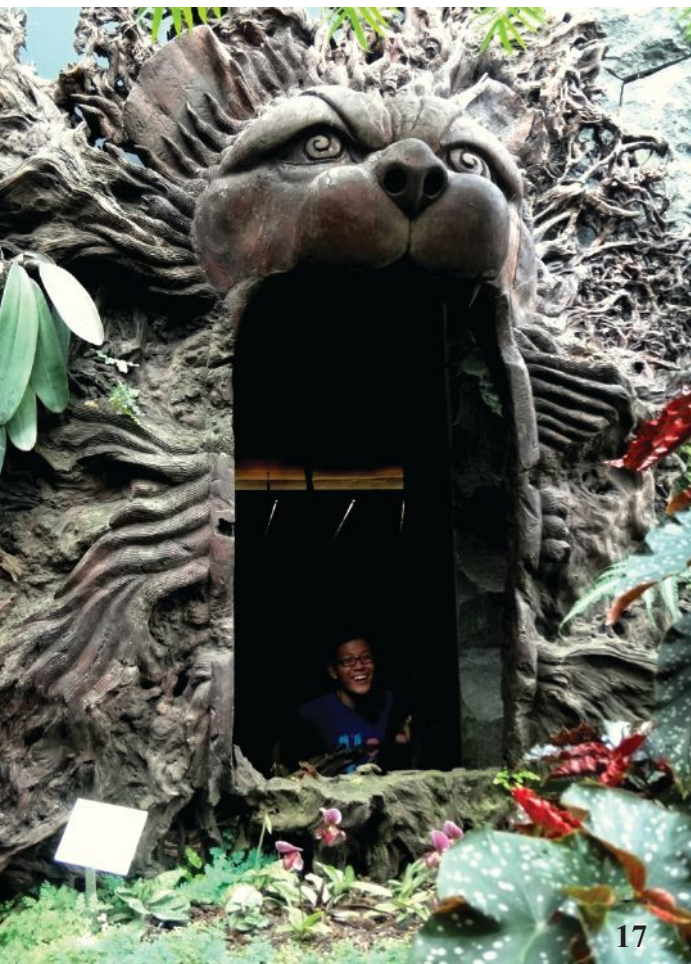
The Flower Dome replicates cool-dry Mediterranean climate and accommodates about 500 plant species from regions like South Africa, California, parts of Spain, Italy, South-west Australia and South America. The Flower Dome covers 1.2 hectares (about 2.5 acres) and is featured in Guinness World Record 2015 as the Largest Glasshouse in the world. It is delightful to see lots of unique and unfamiliar plants from totally different climate and regions growing within the dome. I was enraptured by Boabab trees' bottle-shaped trunk for water storage and by the array of succulent plants with diverse modified characters for adaptation to cool-dry climates, like thickened succulent leaves or stems covered with varied thorns, dense hair or wool. Easy-to-read or attention-grabbing signage explains the purpose of these naturally modified characters in relation to its adaptation to harsh conditions and the plant's natural habitat.

The Cloud Forest is a must-see attraction for people enthusiastic about begonias, orchids, gesneriads, carnivorous plants, bromeliads, aroids and ferns. Different from the Flower Dome, the Cloud Forest is maintained in cool-moist conditions and has a totally dif-









The giant snail sculpture (Fig 16) “slides” through the begonias in the shady-humid Secret Garden in the Cloud Forest Dome depicting the common defoliator that favors such microhabitats.

*Daniel in the lion’s den*, my brother, Daniel Tan, poses at this outstanding photography spot before he exits the Cloud Forest (Fig 17). There are two Lion Doors carved from old Lychee tree stumps and roots.

ferent landscape layout. The Cloud Forest is well designed to exhibit tropical montane vegetation and furthermore promotes environmental awareness. The man-made mountain is the focal point in the conservatory. It provides vertical space for tropical epiphytic vegetation and stuns the visitor by the great, crashing downpour from the world’s tallest indoor waterfall up to six stories tall, that makes for a fantastic welcoming entryway. The mountain summit is planted with cloud forest vegetation that in the tropics only occurs naturally at 2000 m above sea level; while inside the mountain are a few natural science and environment awareness inspiring labs.

The wide range of begonias species and hybrids are mostly grown in the Cloud Forest, like the inevitable ‘Rex’ begonias hybrids, ‘Iron Cross’ Begonia, *B. goegoen-sis*, *B. rajah*, *B. brevirimosa*, *B. heracleifolia*, numerous rhizomatous hybrids and so on. Highly recommend for begonia lovers are the Cloud Walk and Treetop Walk, bridges installed surrounding the hill. These bridges provide a breathtaking aerial view of hillside vegetation and the few steep areas



where only begonia can flourish.

There are two main theme gardens in outdoor – Heritage Garden and World of Plants and are all free access. They are extensive and a one day’s walk in Gardens by the Bay might not be enough. I only had time for a quick passing glance. My visit ended by enjoying the Garden Rhapsody, which is a night time light and music show run twice daily at 7:45 pm and 8:45 pm, presented by the Supertrees, the multifunction funnel like man-made trees. If you are traveling to Singapore, simply browse on the internet [www.gardensbythebay.com.sg](http://www.gardensbythebay.com.sg) for more details to plan your visit and get prepared with your camera or smart phone for shooting a gazillion of photos.

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Super Trees (Figs 18–19) come to life when they glow and perform light shows at night time. Besides being iconic “trees”, they also have built-in solar, rainwater catchment, and ventilation systems that support the Gardens’ operation.



18



19



## Three U Numbers That Beat the Heat!

*by Greg Sytch, Horticultural Correspondent; Photos courtesy of StevesLeaves*

**L**iving in Tampa Bay, we have long, hot, humid summers that often have big storms dumping a lot of rain in a short amount of time. Being further south, our sun is also very strong, so on days that are sunny, the

strong sunlight heats up the air quickly, and often at night, it stays very warm. Not all begonias can tolerate this kind of climate. I have tried some of the new

*In the Mailbox*

U numbers and found three that do particularly well.

*B. U508* is a spectacular, large rhizomatous begonia with metallic silver leaves and a beautiful, red underside. Mature leaves reach a foot across. Blooming can occur anytime, but summer is the season of heaviest bloom. The white and pink flowers arise from spikes







*B. U508* (Fig 1), a rhizomatous plant that takes the heat and bears long lasting blooms (Fig. 2). Though *B. U400* (Fig 3) has large leaves it remains a bit more compact making it a nice basket plant.

from the center of the upright rhizome and last for weeks. My specimen has reached three feet across and nearly as high. While it is a suspect species (not sure if this U number is actually a species or not), it thrives in our hottest weather with a brief winter rest. It is during winter's rest when I hack back the rhizomes to nubs so it can re-grow for spring and look fresh. While it prefers to dry out some, U508 also handles our downpours

like a trooper. While I have yet to try it in the landscape due to a lack of shade, it does indeed look like a good candidate for the yard. I grow mine in bright shade under shade cloth, and it thrives!

*B. U400* is one of my favorite begonias of all. This moderate sized rhizomatous features rich green leaves liberally striped in silver. While each leaf can reach nearly a foot, it remains a little more compact than U508 and does bloom off and on during



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the year with pink and white flowers. Lending it to baskets, U400 can spread rather than grow upright, and it keeps the overall size a little more manageable.

The last U number that thrives here is U309. Resembling more of an elephant leaf, the large silver leaves are liberally splashed in whitish-silver and a reddish pink cast colors up some of the main veining. This one grows large, too, filling a huge basket or spreading in a lower bowl to three feet. Each leaf can reach 15 inches at maturity, and may even get larger. The constant blooming of pink and white flowers is an added bonus.

All three of these U numbers propagate easily from the large leaves, and can do so quickly. They all prefer general rhizomatous potting mix that drains well, and are standouts in my shade-houses. U508 has produced a beautiful

*Begonia* U508 (Fig 4) propagates easily from the large leaves.

hybrid, ‘Oteka’ by Dorothy Caviness which combines the color of a *rex* with the rigor of U508. I suspect the other two would make wonderful parents. Give them a try, for if you have the room, they are worthy of any collection.

If you have any questions, always feel free to email me at [gsytch@cs.com](mailto:gsytch@cs.com). Good growing!

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# Expedition to Madagascar 2015

March 22 / April 20 - Part 1

Article by Jacky Duruisseau, Bois France; Photos by C. Bridon, E. Bouquet, and J. Duruisseau

**L**et's go! We are going to Madagascar for the third time.

There are three of us this time: Evelyne Bouquet (in charge of the begonia greenhouse at the Lyon Botanical Garden), Colette, and I. The schedule is ambitious (too much?): the Ankarana massif in the north, the Marojejy massif in the east, the Makira forest on the west side of the Antongil Bay and the Masoala peninsula on the east side of that bay. We had already

visited these areas in 2009 and 2013, except the Marojejy.

Why April? In northeast Madagascar the rainy season is usually finished in late March or April, then the dry season begins and begonia fruit, which develop just before, dry and empty seeds. Moreover, the dry season allows us to go up the streams because of less water.

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*Begonia nossibeae* in bloom (baobab site) (Fig 1)





The market on the street edge (Fig 2); Two passengers on the roof...(Fig 3); Full! (Fig 4); *Begonia humbertii* as an epiphyte on a tree (Fig 5); An unknown species (Fig 6)

Unfortunately, the elements have joined forces against us and this great schedule will be very affected by them!

### North area: The Ankarana massif and Ambre Mountain

Eugène Goulam, our regular guide in this area, is waiting for us at the Diego Suarez (Antsirana) airport. The weather is fine with 27°C (81°F).

Stopping first for begonias, before Ankarana, in the “baobab site” between the river and a ditch brimming with water. This beautiful baobab tree had fallen and we wove our way through the branches to reach the spot where *Begonia nossibea* grows (Fig 1); it takes over the slope just after the ditch (in 2009, we wrongly thought this species was *B. francoisii*). It was blooming and we saw the deep pink flowers from a distance. Lower down, on the vertical bank of the river, we saw many others but they were totally inaccessible because of too much water.

The following day we went north toward Ambre Mountain. This large volcanic massif is still covered by forests. Then, a problem with the 4x4: two flat tires! Two hours lost for repairs! So, we had time to watch Malagasy people in their daily activities: the market (Fig 2), a taxi departure, a little overloaded...(Figs 3/4). Many smiles, no animosity.

We drove in the Ambre Mountain park to Joffreville which was

a garrison town during the colonial period. Here, the French soldiers came for resting high up and cool. A landslide didn't let us reach the west part of the park (I had two GPS search points there...for two begonia species!). We walked on the botanical path and found *B. humbertii* as an epiphyte on a tree (Fig 5), and another one, a saxicolous rhizomatous species with green pale and entire leaves (Fig 6), near a waterfall (Fig 7). The rain starts when you begin the picnic (of course)!

We remained at Ankarana the next day. The goal was to find again *Begonia razafinjohany* (Fig 8). This very nice and rare species was discovered by Henri Laporte in 1998. The Keraudren-Aymonin flora (*The Madagascar Flora/Begoniaceae*) indicates it grows in “Ankarana du Nord.” I knew of Ankarana massif, but not “Ankarana du Nord.”

I thought maybe there was another Ankarana massif? I consulted a friend, Lucile Allorge, a botanist who knows Madagascar very well and works at the Paris Na-







Nice waterfall (Fig 7);  
*Begonia razafinjohanyii* in cultivation. (Fig 8);  
 You can't even get quiet at home any more!... (Fig 9);  
*Fucifer pardalis*, Mrs... (Fig 10);  
*Begonia ankaranensis* on the bat cave cliff (Fig 11)

tional Museum: no, “Ankarana du Nord” is the part of Ankarana massif on the left of the Diego-Suarez road, and Ankarana, strictly speaking, is on the right of the road! Easy!

Eugène takes three men from his lodge with us to look after the 4x4 because of bandits - people look for gold and sapphires here - so, it is dangerous, apparently...

*B. razafinjohanyii* is a small begonia (dedicated to A. Razafinjohany, a Malagasy artist who illustrated many plants growing at the Tsimbazaza Botanical Garden at Antananarivo). It is endemic to “Ankarana du nord,” where it grows near streams in tropophilic forest below 350 m. It disappears in the dry season and keeps only its tuber root in the soil. We search for it, but in vain. The Ankarana massif is a limestone plateau (very difficult to walk) in a hilly area with high limestone peaks called tsingy [Ed: a Malagasy word meaning “walking on tiptoes”]. I have a GPS point, but we find nothing. Gone? Dormant? Anyway, no begonias, and no bandits. On the other hand, there is a splendid snake, a boa (Fig 9), totally in-offensive and placid. This nocturnal one sleeps all the day on a tree fork at one meter from the ground. And don't forget the chameleons (Fig 10) are everywhere! Madagascar is really the



land of chameleons.

We are sorry about not staying longer in this area. The problem is always the same: we stay several days in an interesting place, or we visit several sites, but too quickly.

In the afternoon, we enter the Ankarana (the true one) to go to the “Bat Cave” dug into limestone. On the adjacent cliff grows *Begonia ankaranensis* (Fig 11), a small endemic tuberous species from Anakarana. A very nice place! It was in full bloom and we harvested seeds. In 2013, I thought this begonia was *B. sambiranensis* (from the Sambirano area where the Sambirano River flows in the northwest of Madagascar) but this one







is one-leaved, which is not the case with *B. ankaranensis*.

I hope a GPS point from the Tropicos site will lead us to *Begonia mananjebensis* (Fig 12) (from the Mananjeba River that runs into the Mozambique Channel after crossing the north of Madagascar) near the course of the “Perte de rivière,” a big sink-hole, where the water in the rainy season disappears. This time, the information was good and we found this nice tuberous begonia, with palmatiform leaves, on lava that had covered the limestone tsingy during recent eruptions. It is still an endemic species of this area. It was going into dormancy then and in the blossom end had many fruits. We harvested many seeds.

The next day we again looked for *B. razafinjohanyi* near Ambilobe, towards the south, near the Mahavay River, along a small stream already visited in 2013. The place was now built up, with people, houses, and sewage. The stream was very polluted. No begonias there!



*Begonia mananjebensis* (Fig 12);  
*Begonia nossibeana* near the Mahavavy River Fig 13)

Again, we saw *Begonia nossibeana* (Fig 13) on slopes and rocks along the river bank with flowers and some seeds (the name *nossibeana* comes from the Nosy Be island, a very touristy place on the west coast of Madagascar).

We are now ready for adventure, the famous Vohemar track – the impossible road...

**To be continued...**



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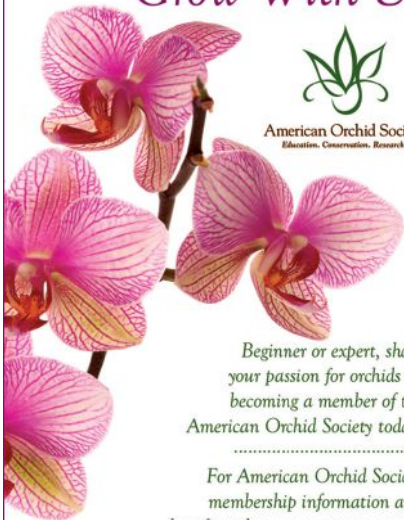
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