How begonias get their names

Slide 2

of begonias, Michael Begon, Father Plumier

- Once upon a time, in 1700, a French botanist named Charles Plumier named and illustrated six new plant species.
- Begonias in France date back to the 17th century.
- At that time France had almost no marine fleet.
- The Governor of the French Antilles, Micheal Begon was put in charge of the creation of Rochefort: the city and the harbor.
- King Louis XIV wanted to make Rochefort the most beautiful arsenal of the times, including seeking exotic plants.
- Michel Bégon, recommended botanist, Father Charles Plumier, to King Louis XIV for the honorable position of Plant Collector to the French Caribbean and to study the local flora.
- In 1689, Father Plumier described a little plant with succulent leaves and round flowers that he named "Begonia rosea flore, folio orbiculate" in honor of his renowned protector, Michel Begon.
- It was adopted by Linnaeus in 1753.
- Begonia species are native to moist subtropical and tropical climates in South and Central America, Africa, and Asia.

Begonia was named for Micheal Bégon. When King Louis XIV of France founded the 17th century ‘new town’ arsenal of Rochefort, he determined to make it the most beautiful arsenal in the world. Bégon was put in charge of the creation of the city and its harbour. Seeking exotic plants, he wrote to collectors and scientists of the entire world, especially the French colonies of the West Indies and French islands of the Americas, where he had served as a diplomat in 1682. He also sent two scientists, the Franciscan friar Charles Plumier and Josephe Donat Surian, a physician, to the French Antilles (Martinique, Guadeloupe and Haiti) in 1689 and 1690 to study the local flora. In 1689 Father Plumier described a little plant which he named Begonia rosea flore, folio orbiculate†. Rochefort still honours Bégon and the flower named after him at the Conservatory of Begonia, which houses the largest Begonia collection in Europe.

Slide 3

ABS Conservation program

- Support propagation of vulnerable and less vulnerable species
- Keep it / them growing in cultivation, and, by propagation, share them with others so that we do not lose species begonias altogether.
- So many species including begonia species are no longer to be found in the wild, and the loss continues at an alarmingly rapid rate due to human events such as deforestation or natural catastrophes such as landslides.

Research & Conservation Fund

- Morris Mueller
  - From Sacramento.
  - An ABS president
  - Was a math teacher.
  - When passed away: 40% to ABS, 10% to Sacramento branch, rest went to animal humane organizations.
- To ABS, Morris’ endowment is designated per his will for:
  - Scholarship
  - Collecting begonias
  - Paying for expeditions

Conservation Committee

- Johanna Zinn
- Stephen Maciejewski
- Projects include
- Adopt-a-species,
- supporting FWBG financially and with species,
- hopefully a new initiative that focuses on vulnerable species, collecting seeds and donating to the ABS Seed Fund, which is an important tool for conservation.

**Grants Program**
- Support researchers and collectors who travel world-wide to study species
- Conservation & Research Fund-donations by ABS branches and members
- Finite funds

**Slide 4**

**Begonia researchers – all members of ABS**
- What I know about them, and that is consistent across all, is their lively and passionate interest in studying begonias and in conservation.
- I am very interested in how botanists choose names for species, and have contacted a few of them to describe how they do this.
  - **Dr. Mark Tebbitt**, California University of Pennsylvania (attachment)
  - **Mark Hughes**, Botanist at Royal Botanic Garden, Edinburgh
  - **Wisnu Ardi**, Conducted an ABS-supported expedition to North Sulawesi, Indonesia. Pursuing his master’s degree in Plant Biology at Bogor Agricultural University
  - **Jacky**, begonia researcher and explorer extraordinaire, traveling the world to study begonias, loss to begoniacs around the world
  - **Dr. Ching-I Peng**, more publications on begonias than I can count, and a loss due to his battle with cancer. Ph.D. in botany at Washington University in St. Louis, Missouri
  - **Ludovic Kollmann**, Master’s degree in Tropical Biology, Brazil. Originally from France, living for past 30 years in Brazil.
  - **Muddy boots** – Wisnu Ardi on very recent expedition

**Slide 5**

**Latin Names relating to:**
- **Attribute**
- **Person**
- **Place**

**Beautiful description from Dr. Peng, about the process he used when naming species**

**Slide 6**

- Following species have Latin names relating to attribute
- Quick example of *B. montaniformis*
- slides are organized in alphabetical order by name of species

**amidalae**
- Described in 2014
- Endemic to Batang Ai, Sarawak, Borneo
- Known only from valley terrains or stream banks, on sunlit steep slopes in very web dipterocarp forest, associated with scrubby vegetation
- Refers to Padmae Amidala, a pretty fictional character in Star Wars movies.
- The publication: With embellished silvery spots on dark sheen green foliage, the appearance of this species was found reminiscent of the starry sky. “We have, therefore, ventured to choose a beautiful role of Star Wars as the epithet.”

**amphioxus**

*B. amphioxus* (am-phy-OX-us)
- means sharp at both ends
- Shrub-like
- Limestone outcrops, Sabeh, Malaysia,
- leaves are pointed at both ends, and beautifully marked with red spots and rimmed with a thin line of the same color.
• One of the most unusual begonias.
• Introduced into cultivation in 1984 by Kew botanist Martin Sands
• Propagation is usually from stem cuttings, but can be propagated from leaf cuttings.
• Grows in a terrarium
• There is also a primitive, fish-like marine animal, lancelets, sometimes known as amphioxus. Lancelets are typically (2.0 in) long, have a translucent, somewhat fish-like body, but without any paired fins or other limbs.
• A relatively poorly developed tail fin is present, so they are not especially good swimmers.

**B. baik**
- Rhizomatous
- It’s name is not Latin, but is in Malay
- Found in Malaysia. Borneo, Sarawak, Kuching Disdtrict, Padawan
- Growing on earth slopes or at base of sandstone cliffs in dipterocarp forest
- The specific epithet is after Mr Jui-Chin Hung, a plant enthusiast (nicknamed ‘budak baik’ in Malay, meaning good (‘baik’) boy (‘budak’)), who accompanied the first author and discovered this new species. The epithet also highlights the attractive appearance of this new species.
- Here is a photo of Mr. Jui-Chin Hung with Dr. Ching Peng, holding B. baik
- Begonia specialists Che-Wai Lin (left) and Dr Ching-I Peng of Academia Sinica holding a gorgeous new species of Begonia they recently described from Padawan in Sarawak. They named it Begonia baik after Mr Jui-Chin Hung (nicknamed ‘Budak Baik’ meaning ‘Good Boy’ in Malay) who accompanied the senior author on his expedition to Borneo.
- December 2014.

**chloroneura**

<table>
<thead>
<tr>
<th>chloroneura</th>
<th>From the Greek chloros, (green) and neuron (vein)</th>
<th>klor-oh-NOOR-a</th>
</tr>
</thead>
</table>

- Rhizomatous
- Instantly recognizable by virtue of its attractively colored leaf blades which are covered with stout dark red hairs.
- Sierra Madre mountains of Luzon Island in the Philippines
- First introduced in 1997.
- Tebbitt says: has thick, fleshy, creeping rhizomes that grasp the fissures in the rocky riverbanks, allowing it to survive periodic flooding even though its large leaves may be broken off

**darthvaderiana**
- Described in 2014
- Rhizomatous
- Refers to the resemblance of the unique dark appearance of this species to that of warrior Darth Vader, a fictional character in the movies ‘Star Wars’.
- Endemic to Batang Ai, Sarawak, Borneo, near the border of Indonesia.
- Known only from valleys in a very wet dipterocarp forest, on lower to upper soil slopes, or in deeply shaded soil at the base of cliffs.
- Dipterocarp trees are a family of hardwood, tropical trees, found on Borneo. They can grow very tall and large, and form a large proportion of the rainforest canopy.
- Leaves are dark reddish brown to olive black on the upper surface, and dark red beneath, with a narrow ring of silvery white at the margin.
- This contrast makes this species particularly handsome.
- Grows on very shady slopes along small streams in a valley.
- Difficult to spot in the wild, as it blends well with abundant leaf litter on the slope.
- Very difficult to grow and even keep alive, even for the most experienced and talented growers.

**ferox**
- Rhizomatous
- Ferox = fierce,
  FER-oks
• The specific epithet is derived from the fierce-looking leaves with very prominent bullae.
• It is native to China, Longzhou County, Chunxiu Headwater Forest Nature Reserve, Known only from the locality in southwestern Guangxi, China.
• On limestone rocks with abundant leaf litter or on bare rocky slopes in evergreen broadleaf forest, very rare.
• Described in 2013, by Dr. C-I Peng.

**foliosa**
- *B. foliosa* (fo-lee-OH-suh)
- Latin for leafy
- 1868 Columbia, Ecuador and Venezuela
- Grows to over 12 ft
- Frequently eaten as a “common weed,” by roadside passers-by
- Begonia foliosa is a shrub type Begonia species from South America. The leaves are very small and line the arching branches. The tiny flowers are white and are sprinkled throughout the foliage in spring and early summer. This freely branching charmer makes an elegant hanging basket.
- The leaves of *B. foliosa* are the smallest of any shrub-like begonia with leaves of one-half inch or less. It has been described by many people as having a ‘fern-like’ appearance because the leaves have almost no petiole and are close together on the stem. The leaves are bare. The new stems are erect/semierect, but droop with age. Because of this habit, it is a good subject for hanging baskets.

**fulgurata**
- Fulgurata – lightning
- Derived from the fine, silvery-white venation on the upper surface of the leaf, which resembles lightning.
- Endemic to Chiang Ma, northern Thailand
- *B. fulgurata* is a small, endemic species, known only from this area.
- Very attractive, much interest in Planet Begonia, even before described/named
- Has been collected and cultivated in and outside of Thailand.
- Found in recreation wilderness areas that may receive many tourists during high season, and fears that it will be collected or tramped upon by hiking tourists.
- Consider a IUCN category of vulnerable, for these reasons

**ignita**
- The specific name refers to the flame-colored tepals
- Very attractive orange-flowered begonia, claimed to be of likely Sulawesi origin by some growers.
- Described as one of the most distinct and most beautiful Indonesian species in cultivation because of its colorful leaves adorned with a silvery green band or running inside the margin, and the showy flowers make it very attractive.
- Is the only known orange-flowered Begonia in Sulawesi
- Origin of the cultivated plants is not clear; enquiries indicate that most acquired the plants from material cultivated by other growers; some growers point to a market in Sulawesi as original source of the plants.

**Leprosa**
- Rhizomatous
- Leprosa is Latin for “leprous’and refers to the crust coating often found on the species’ lower leaf surfaces after the plant has been pressed and dried. Scaly
- Humid terrarium or greenhouse
- First discovered by Englishman B. C. Henry in 1881 near the southern Chinese port city of Gangzhou, then known as Canton.
- Seems to have been introduced into cultivation in the U.S. in early 1980s when it was imported from a Japanese garden and distributed in the U.S. by Rudy Ziesenhenne
- Easy to grow
- In the wild, it grows in moist shady areas among rocks or on moist cliffs in dense tropical forests.

**lichenora**
- Trailing scandent
- Described 2017
• Name refers to the small leaves that have a lichen-like appearance.
• Endemic to Borneo, known only from Bau to Padawan areas that are at border with West Kalimantan Province of Indonesia.
• Plants usually climb up the steep, slightly shaded soil slopes in wet dipterocarp forest

**imperialis**
- *B. imperialis* (im-peer-ee-AL-is) showy, regal or imperial-like, referring to the beautifully variegated leaves.
- Rhizomatous
- Native to Mexico and introduced into cultivation in 1859
- Introduced into cultivation in 1859 by M. Ghiesbreght who had found it growing wild in Mexico while on a collecting trip for Ambroise Verschaffelt’s Nursery in Ghent.
- In the wild, occurs in limestone areas in the montane rain forests of the states of Oaxaca and Chiapas. Mexico favoring limestone outcroppings
- Grows easily in a terrarium at 85% humidity
- Used as a parent for over cultivars, including Emerald Jewel, Brown Jewel, Silver Jewel

**Metachroa**
- Met-ah-cor’w-ah
- Means: with changing color
- Rhizomatous
- Described in 1933
- Native to: Brazil
- *Begonia metachroa* is an absolutely stunning species!
- This species has beautiful, iridescent, dark red leaves attached to bright red petioles.
- This plant really stands out in a terrarium due to its deep, rich colors. Under lower light, the leaves will get to be a dark iridescent color.
- Under brighter light, they will stay a deep red color.

**metalcolor**
- Used to be referred to as ‘Metallic Blue’
- Etymology: Name derived from the strongly metallic blue color on upper surface of leaf
- Described 2017
- Shrub-like
- Beautiful species with iridescent blue leaves
- Endemic to Padawan, Sarawak, Borneo, near the border of Indonesia.
- Found on deeply shaded soil slopes in dipterocarp forest

**B. pavonina***

<table>
<thead>
<tr>
<th>pavonina</th>
<th>Like a peacock</th>
<th>pav-ON-ee-nuh</th>
</tr>
</thead>
</table>
- Rhizomatous
- Native to Cameron Highlands of Malaysia
- Just like peacock feathers, its leaves change color from an iridescent blue to bright green depending on the angle of the light
- The iridescence is caused by refraction of light.
- Leaves look like a shimmering metallic blue when grown in deep shade, almost like the wings of the dramatic blue Morpho butterflies.
- Leaves have been studied by scientists for their unusual iridescence. It is believed that it is an adaptation to the low light levels of the forest floor.
- Blooms throughout the year with pink and white flowers.

**B. promethea (previously known as beccarii)***

*Begonia promethea* Ridl. is an attractive species described by Ridley (1906), who suggested that among the species he had described it ‘perhaps the most worthy of cultivation’ among the Bornean species.

More than a century after its description, *Begonia promethea* was recently rediscovered in Sarawak by Michael Lo, a local naturalist
Determined that the begonia described as *Begonia beccarii* Warb. is synonymous with *B. promethea*

- **Etymology.** The meaning of the specific epithet is obscure. Prometheus was the Greek god who fashioned clay to create the first people, and who was chained to a rock to have his liver pecked out by an eagle for all eternity as a punishment for stealing fire from the gods and giving it to humanity.
- Ridley gives no hint as to the connection between him and this begonia, but we speculate it may be due to the isolated sandstone rocks on which the species grows, where Ridley noted he ‘could reach but few plants of it’.
- Endemic to Borneo, and known from only three sites; endangered
- Odoardo Beccari, for whom it was previously named
  - Italian naturalist, best known for discovering titan arum in Sumatra 1878
  - An orphan from Florence, Italy
  - Spent 13 years exploring Sarawak, Brunei, Indonesia, Borneo, Malaysia, and Papua New Guinea.
  - William Hooker wrote his obituary, describing him as “the greatest botanist every to study in Malesia”

**quadrialata**
- *B. quadrialata* (kwad-RAY-a-LAY-tuh)
- four winged (the seed pod)
- Rhizomatous
- Small yellow-flowered begonias growing in wetter parts of East Africa’s lowland rain forest.
- Does best in a terrarium
- 1980(?) Africa
- needs acid soils (pH 4.2 to 4.5)

**rajah**
- rhizomatous
- king or prince
- Endemic in Peninsular Malaysia.
- Habitat: clinging to rocks along streams.
- First collected Malay Peninsula in Terengganu State and introduced into cultivation at Singapore Botanic Garden in 1892.
- In cultivation, but no longer found in the wild. Much of its forest habitat has been destroyed, so it may no longer exist as a natural plant.
- Needs a terrarium and a cool temperature. I keep mine on a bottom shelf.

**rex Putzey**
- *B. rex* (reks) means the King
- Rhizomatous
- 1850, India
- Attractive plant with large, velvety, gray-brown leaves that are ringed with a silver-gray band.
- Rare in cultivation, but important because it has played a prominent role in the development of the Rex-hybrids, a large and diverse group of hybrids whose members are famed for their beautiful foliage.
- Commercialized in 1858 by Belgian horticulturist Jean Linden.

**roseopunctata**
- Roseopunctata is native to Borneo.
- All Bornean Begonia are endemic and found nowhere else in the world, the great majority being narrowly endemic and found in just one or two localities.
- *B. roseopunctata* is usually an erect begonia 6 to 12 inches tall, but if its stem contacts a vertical surface such as a vertical rock, it produces roots there and begins to climb.
- Leaves of young plants are pale green with candy pink spots between the veins, hence its name.
  - Roseo: rose-like, or pink
  - Punctata: spotted
- Grows on rocky sandstone slopes in deeply shaded areas in lowland mixed dipterocarp forest below 500 meter elevation

**Michael Lo**
- There are many form of roseopunctata....some got white spots, some got pink stripes.....etc
- Once mature, it is pale green....no more pattern on leaf
**Subnummularifolia**
- Described in 1926, by Elmer Drew Merrill
- Having foliage like "nummularia"
- From nummus: Latin term meaning coin, money
- Collected in Sabah Banguay Island, Borneo
- Begonias of Borneo: this species is not in cultivation in Borneo
- Rhizomatous
- **Elmer Drew Merrill** (October 15, 1876 – February 25, 1956) was an American botanist. He spent more than twenty years in the Philippines where he became a recognized authority on the flora of the Asia-Pacific region. Through the course of his career he authored nearly 500 publications, described approximately 3,000 new plant species, and amassed over one million herbarium specimens. In addition to his scientific work he was an accomplished administrator, college dean, university professor and editor of scientific journals.

**versicolor**
- *B. versicolor* (VER-suh-kuh-lor)
- variously colored
- Rhizomatous
- Versicolor is a reference to its stunning leaves, which are pale green with white high-lights and purplish brown borders to the veins. The leaf margins have red ciliate hairs, and the upper surfaces are covered with soft white hairs, giving them a velvet-like texture.
- Introduced to the U.S. late 1940’s, via nursery of talented hybridizer Leslie Woodriff.
- Enclosed container, low temps, on my lowest shelf.
- southwestern China, and in the wild is reasonably common in Yunnan Province’s damp forests.
- 6 in leaves—pale green, white highlights with white hairs, purplish-brown border with red hairs that extend down the stem too, giving the whole plant a plush look!
- Has been widely hybridized, including B. ‘China Curl’, B. ‘Millie Thompson’, and B. ‘Wanda’

**Latin names relating to a person**
**Blancii ***
- **Patric Blanc**, born1953, Paris
- French botanist
- Working at French National Centre for Scientific Research, specializing in plants from tropical forests.
- Modern innovator of “green wall” altho recent scholarship suggests the vertical garden was invented by Dr. Stanley White at U of Illinios.
- Has had a quest to erect green walls across planet for past 25 years
- blancii-described in 2011 by Mark Hughes and Ching-I Peng; discovered in 2011 by Patrick Blanc
- B. blancii is from Palawan Philippines
- Trailing scandent
- Endemic-known only from one locality, altho it is common there
- Grows on sides of small boulders in shade of primary forest
- Rocks are almost bare of soil and moss, with plant roots growing directly on surface.
- Creeping, several forms (light green, mottled, dark green)

**B. bogneri**
- Madagascar
- named by ABS member Rudy Ziesenhenne, California nurseryman and gifted hybridizer, for **Josef Bogner** (Curator of Munich botanical Gardens).
- In 1969, Bogner had discovered the species growing in a remote, mountainous part of Madagascar, and Tebbitt writes that he may be the only person ever to have seen this species growing in the wild. It grows in deep shade on moss-covered granite cliffs.
- Semi-tuberous, with very non-begonia character
• linear leaves
• Usually grown in an enclosed container in a cool location.

Josef Bogner, botanist
• Born in 1939 and passed only recently, on April 24, 2020
• Extensively published, widely traveled, well-regarded and much loved by his colleagues who described him as unpretentious and modest, and unfailingly supportive.

breedlovei
• Dennis E. Breedlove
• Born in Oakland, CA 1938, passed away in 2012
• an American botanist working extensively in Mexico.
• 1968 obtained a Ph.D. from Stanford
• Co-author of more than 40 botanical names and scientific botanical articles.
• At 6 feet 6, Breedlove towered over the local Mayans, and spoke their several languages fluently. Mahoney, who worked with him in Oaxaca in 1991, remembers Breedlove as driven: up at dawn to collect, cataloging plants until midnight, fortified by home-brewed Tequila. He talked shop with shamans and healers, faced down police and always carried a machete.
• B. breedlovei described by Dr. Kathleen Burt-Utley in 1986
• Rhizomatious
• From Chiapas, Mexico
• Leaf surface has a pretty iridescent sheen

Burkillii
• Rhizomatous
• Named for Isaac Henry Burkill, 1870-1965
• The plant was originally collected by Isaac Henry Burkill, an English botanist working at the time in Calcutta who joined a botanical expedition to northeastern India in the Himalayas (Arunachal Pradesh) in 1911. He noted that the plant is frequently found on rocks near streams, at an elevation of 300 to 1000 meters.
• An English botanist who worked in India and in present day Singapore.
• In 1912, he succeeded H. N. Ridley as Director of the botanic Gardens, Singapore.
• Are many beautiful forms of burkillii
• His son, Humphrey Morrison Burkill, was also a distinguished botanist and also served as Director of the Singapore Botanic

B. charlesjarosiana
• Recently described and named by Ludovic Kollman, Brazil
• Charles Jaros
  o An ABS member since he was a young teenager
  o Two terms as ABS President
  o Attended all conventions, co-chaired the ABS Show as well as ABS Unidentified Species Listing and Judging.
  o LOL, not CIA but do still work for Customs & Border Protection in their communications/intelligence center here in Orlando; this past May I have 40 years with the Federal Government.
  o Read what the awards are given for
  o Info on new award named for Charles, lifetime achievement award
• Charles' president's message, beginning of his second term: Charles wrote “...through branch meetings, get-togethers and conventions I have made wonderful, life-long friends. That, and the love of begonias, is what this organization is all about.”
• Passed away at age of 64, due to heart disease

dregei
• B. dregei (DRAY-gee-eye)
• semi-tuberous
• unusual as a swollen caudex species; only African species with a swollen stem base. makes it a great candidate for a bonsai pot.
• 1st African species into cultivation
• German plant collector F. J. Drege first discovered B. dregei in 1836 in South Africa near the coastal town of Port St. Johns, and from there introduced it into cultivation in Europe, making it the first African begonia to be cultivated there.
• In the wild, grows on deeply shaded south-facing slopes from the coast up to about 600 m in altitude.

**hemsleyana**

- *B. hemsleyana* (hems-lee-AH-na)
- Rhizomatous
- Palmate, compound leaves and fragrant flowers
- Distributed in the wild from northern Burma to the Chinese province of Yunnan.
- Grows in moist upland forests.
- Ernest Henry first introduced it to Kew Gardens in 1800 from seed he had collected. Joseph Hooker, then the garden’s director, named the species in honor of William Hemsley, 1843-1924, who worked on the Chinese plants at Kew.

**henryi**

- Native to China
- Tuberous
- Found on rocks or in fissures, shaded moist environments.
- Mountain Orchids: It is very compact/petite, is tuberous (small tubers), bears beautifully marked/patterned foliage, and sizeable soft pink flowers. It is free flowering and the sizeable flowers compliment the patterned foliage.
  This species bears variably but dramatically patterned foliage - green with marbling of dark green-black! The “black” patches are iridescent and vary from black to silvery-grey - depending upon angle of light!
- First described by Hemsley in 1887
- While at Yichang and in other parts of China he collected plants and seeds, many of which had not been known until then.
- In 1888 he published a list of Chinese plants for the Journal of the Royal Asiatic Society. At that time the flora and fauna of China was not well known.

**hughesi and rubiteae**

- Named for (and by) Mark Hughes, England, and Rosario Rubite, Philippines
- B. rubiteae and B. hughesii illustrate the benefit of having botanists as colleagues and friends!
- B. hughesii is rhizomatous and found in the Philippines.
- It was collected near the entrance to the Underground River and on limestone outcrops at the base of Mt. St. Paul.
  Hughesii grows on eroded limestone in semi-shade under broadleaf forest.
- It was named after Mark Hughes, of the Royal Botanical Garden Edinburgh, who studies extensively Southeast Asian begonias, including Philippine begonia.
- IUCN is least concern.
- B. rubiteae described by Mark Hughes and named for Rosario Rubite in recognition of her dedication to the study of Begonia.
- B. rubiteae is rhizomatous, and endemic to the Philippines, Busuanga Island, at stream sides.
- Proposed IUCN category is Endangered. While it is found in a protected area, the park is being encroached by small settlements which are impacting the habitat of these species.

**lyallii**

- David Lyall
- 1817-1895
- Named for Dr. David Lyall, 19th century Scottish naturalist and surgeon with the Royal Navy, who accompanied several early expeditions and surveys
- Scottish botanist who explored Antarctica, New Zealand, the Arctic and North American, and was a lifelong friend of Sir Joseph Hooker.
- Hooker wrote his obituary in 1895
• Graduated in medicine.
• Entered Royal Navy in 1839
• Lyall has rare distinction of having a whole genus, Lyallia, named after him, by Hooker. Lyallia are larch (the larch)

Koksunii
• Kok-Sun’s begonia
• Named in honor of its collector, Mr. Yap Kok-Sun.
• Photo of Yap Kok Sun, 70-years old, described as a retired civil servant. Avid trekker and nature photographer for over 15 years.
• When renowned botanist Dr Ruth Kiew contracted him as the photographer for her book on begonias, little did Yap Kok Sun realise that the assignment would stretch over four years.
• “I thought it would be no big deal and could be done over a weekend,” recalled the active Malaysian Nature Society (MNS) member.
• Rhizomatous
• Grows on earth or rocky river banks
• Endemic to Peninsular Malaysia, known only from one area, Sungai Mangga, Upper Perak.
• Kiew: Logging is a threat to the long-term survival of this species.
• Kiew describes it as one of the most beautiful Malaysian begonias, with its silver variegated leaves and rosette habit.

Kui
• B. kui, Vietnam
• Described by Ching-I Peng, 2007
• Etymology. The specific epithet commemorates Mr. Shin-Ming Ku, a keen student, who contributed much to our understanding of the taxonomy of begonias in the karst region of southern China during the last several years.
• We report a handsome Begonia that has been commonly propagated for sale in the flower markets in northern Taiwan since 2006, but without a scientific name. The owner of the flower shop from whom we purchased the plants and made the type specimen indicated that this highly ornamental species was a contaminant of other horticultural plants imported from Vietnam.
• Since species of Begonia in sect. Coelocentrum are adapted to limestone and are highly restricted in distribution, we believe that this handsome new species is endemic to northern Vietnam. The conservation status of this species is not known.
• rhizomatous, handsome with beautiful red hairs and flowers.
• Flowering May to December in cultivation.
• Exact locality unknown

B. langenbergiana
Recently described and published by Ludovic Kollmann
• Kingsley Langenberg
  o Passed away December 12, 2017, cancer
  o He was a lifelong scientist and received his B.S. and M.S. degree in microbiology from the University of Illinois at Urbana-Champaign in 1965 and 1967, before going on to a 32-year-long career at Abbott Laboratories.
  o Posted puzzles on the Begonia Yahoo listserv
  o Nomenclature Editor of The Begonian
  o Kingsley was an avid begoniaic and hybridized his own begonias.
  o Before he got sick he was working on a searchable system for all of Rudy Z's work. He was very fond of Rudy. He was intelligent, thoughtful, and a champion for the accuracy of the information we were publishing.
  o Distribution, habitat and phenology. Begonia langenbergiana is known from the South of Sao Paulo State, Brazil, growing on limestone rock covered by dense rain forest. Etymology.—The name of the new species pays a posthumous homage to Kingsley Frederick Langenberg, who made an important contribution to the American Begonia Society (ABS) and has long helped me in the correction of my
English papers. **Conservation status.**—Although part of the range of the new species is in a protected area, due to the apparent endemic distribution of *B. langenbergiana* and, the low number of specimen collected, it would seem prudent to include this species on the IUCN Endangered Locii

- *Begonia locii* is named in honor of Professor Phan Ke Loc for his contribution to Vietnamese botany.
- Dr. Loc is a botanist from the Vietnam National University, a specialist in ferns. He is conversant in Vietnamese, Thai, French, English, and Russian.
- Rhizomatous
- *Begonia locii* is endemic to Huu Lung Protected Area, Huu Lien District, Lang Son Province, Vietnam (Figure 3), occurring on semi-shaded limestone rock face, elevation 125–165 m.

**lyman-smithii**

- A world authority on Begoniaceae.
- Was a curator in the Smithsonian Institution’s Department of Botany from 1947 until his retirement in 1974.
- Published extensively on Begonian from 1941 to 1993.
- Was mostly home-schooled during childhood.
- Rhizomatous
- Described by Kathleen Burt-Utley and John Utley in 1987.
- Dense, rust-colored, wooly hairs, with red-brown border of hairs
- Grows wild only in a small area of limestone hills in northern Oaxaca, Mexico.
- Occupies an unusual habitat; it grows in crevices in the limestone, beneath the cover of seasonally deciduous forest.

**lyniceorum**

- Named for Lyman Smith and Bernice Schubert; they worked and collaborated together for many years.

**Bernice Schubert**

- 1913-2000
- Botanist, editor, and friend of the Arnold Arboretum, whose career at Harvard lasted 53 years.
- She made many collecting trips to Mexico
- In 1939, "Plantae Mexicanae 1", containing descriptions of new species of *Cassia* and *Begonia*, was published in The Contributions of the Gray Herbarium, with Schubert and Lyman B. Smith as co-authors.
- Although there were no further papers in this proposed series, it was the beginning of their collaborative work on the genus *Begonia*, which continued until 1985.
- Rhizomatous
- Endemic to Veracruz along with *B. multistaminea*
- may be the rarest of the Mexican species
- Found growing in a highly-shaded environment such as shaded ledges of cave entrances, in association with *B. imperialis* at low elevations.
- also found plants on very shallow soil pockets at entrance to a cave within low semi-evergreen tropical forest.
- Plants form colonies by thin creeping rhizomes
- Leaves are very thick and succulent.

**pengii**

- Rhizomatous
- Habitat and Ecology. *Begonia pengii* was found in small populations on vertical, usually sheltered, rock faces in evergreen forests on jagged limestone hills.
- Endemic to western Guangxi, China (Figure 5); rare.
- Described in 2008
We dedicate this new, handsome species of Begonia to Dr. Ching-I Peng, and recognizes his emphatic interest and substantial contribution to the study of Asiatic Begonia. Heretofore, Dr. Peng and his associates have described 27 new species of Begonia

- Dr. Peng, from Taiwan, received his Ph.D. from Washington University, St. Louis.
- With the Department of Botany, Biodiversity Research Center, Academia Sinica, Taiwan
- Co-edited a recent book on Asian Begonia: 300 portraits (with Mark Hughes)
- When asked how he became interested in begonias: *Initially, I thought of learning about all plants of Taiwan, but later focused on Begonia by accident.*
- Fate took me to find a deciduous Begonia that was not recorded in the Flora of Taiwan.
- I finally concluded that it is a new species endemic to Taiwan. I named it Begonia ravenii in honor of Prof. Peter H. Raven, my mentor in Washington Univ.
- He then encouraged me to keep studying Taiwan's Begonia in depth (9 out of the 18 known species were published by me and associates), and
- later got me involved in the writing of English account of Begoniaceae in China (nearly 200 species!).
- My eyes were wide open and sparkling when I saw such a fancy and delightful array of diversity in a single genus in China.
- That's the beginning of my addition to Begonia. Begonia is something that once you fall in love with, the bond will be forever -- impossible to divorce...

**scharffii**

- scharffiana
- *B. scharffii*
- 1884 Brazil and named for its discoverer Scharff (who was collecting for Kew Gardens?). Also the *B. scharffiana*, which is a very similar species.
- Easy to grow and still cultivated
- Parent of 'San Miguel'; grand-parent (2nd generation to) 'Zuensis'

**sizemoreae**

- Named for Mary Sizemore (BUT NAME HAS CHANGED; ASK JOHANNA)
- ABS member, Florida, expeditions with Charles Jaros
- Travels, collects species, and share them with ABS (FWBG, Harmony)
- Rhizomatous
- Endemic in North Vietnam
- Locally common on earth banks beside the road
- First discovered by Mary Sizemore on November 6, 1966, in a national park west of Hanoi, Vietnam
- Because of its beautiful leaves, was widely circulated among ABS members.
- Described by Ruth Kiew in 2004
- From Mary: Here is a little background about my interest in begonias. My serious fieldwork actually began in 1995 with research into new species of Amorphophallus in Southeast Asia. I hate to think I may have missed begonias during that time, but I was rather singularly focused. My interest changed to begonias due to the influence of my friend Tan Jiew Hoe (John Tan) of Singapore, who has been a generous supporter to the American Begonia Society in the past. John supported the work of Ruth Kiew on the begonias of Southeast Asia and accompanied her on a number of field trips. When he and I would travel together, his interest in begonias was contagious, and soon we were both on the lookout for them. We have been in Laos, Philippines, Cambodia, Vietnam, Indonesia, Malaysia and Thailand investigating begonias. He was instrumental in getting Begonia sizemoreae named for me after I found it in Vietnam. He has done much for the cause of begonia awareness.

**Latin names relating to a place**

**cathayana**

- *B. cathayana* (kat-ay-YAH-nuh)
- 1904 China (“Cathay” is the old name for China)
- Cathay, name by which North China was known in medieval Europe.
- rhizomatous
- velvety-leaf and orange flowered
• stems are green, becoming purple tinged at maturity.
• Dr. Augustine Henry, an Irish medical officer and plant collector, discovered this distinct velvety-leaved, orange-flowered species in 1904 in “begonia-rich forests” close to the hill town of Mengtse in southwestern China.
• described by Hemsley in 1908
• likes terrarium growing environment.

Cleopatrae
• rhizomatous
• Described in 2010 by Mark Hughes
• Endemic to Cleopatra’s Needle, Palawan, at an altitude of about 1300 feet
• Habitat is described as: flattened against vertical rocks, and the long stems indicate a creeping habit as compared with shorter rhizomes of most other species found in this area. Forms a more compact habit when grown in a pot.
• Somewhat protected, as it grows in a protected area. Cleopatra’s Needle Forest Reserve is described as one of the oldest and most diverse forests in the country and home to countless endemic species, so has received additional protection and was declared a critical habitat.
• Proposed IUCN category is: Vulnerable as it is only known from one locality which is at relatively low altitudes.

Luzonensis
• Luzon, Philippines
• rhizomatous
• The leaves are small and it makes an ideal terrarium plant. It is constantly blooming with small white flowers.
• Leaf blades that are green with silvery gray markings between the veins and flowers that are white with a pink tinge.
• Luzon is the largest and most populous island in the Philippines
• it is the economic and political center of the nation, being home to the country’s capital city, Manila.
• With a population of 52.99 million as of 2015, it is the fourth most populous island in the world (after Java, Honshu, and Great Britain), containing about 53% of the country’s total population.

B. montis-elephantis
• training scandent
• Begonia montis-elephantis is endemic to Cameroon.
• It is known from a small location, Mt. Elephant in the Campo Ma’an National Park, thus its name montis-elephantis.
• It is a creeping yellow-flowered begonia growing on vertical wet rock faces.
• Because Mt. Elephant is reputed to be threatened by iron ore mining, the IUCN Red List of Threatened Species has assessed this species as Critically Endangered since it is known from a single site (area of occupancy 4 km²).

ningmingensis var. bella
• Described in 2004
• Found on limestone hills in broadleaved forests in southwestern Guangxi, China
• Described as very rare
• Name is derived from locality, Ningming Xian (Ningming County)
• There are several forms of B. ningmingensis
• “Bella” depicts the beautiful leaves with white maculation along the major veins on the upper surface with contrasting red lower surface
• flowers from September to October

B. quadrialata ssp. Nimbaensis ***
Was described in 1994, but long cultivated in Europe and North America. subspecies nimbaensis has dark veins (-ensis means from...so from Mt. Nimba)
Mount Nimba
• Mount Nimba Strict Nature Reserve
• Located on the borders of Guinea, Liberia and Côte d’Ivoire, Mount Nimba rises above the surrounding savannah. Its slopes are covered by dense forest at the foot of grassy mountain pastures. They harbour an
especially rich flora and fauna, with endemic species such as the viviparous toad and chimpanzees that use stones as tools.

- Is a UNESCO World Heritage Site

**B. quadrialata ssp. Nimbaensis**

- Mark Tebbit's favorite of yellow-flowered species
- Mark Yosef, an expert on the yellow-flowered begonias of Africa, reports that it often grows in drier forest conditions than the other yellow-flowered African species and is always found on rocks or cliff walls in semi-shaded to shaded locations.
- Beautiful patterned leaves
- In the wild, grows in acidic soils and for this reason needs a soil mix containing sphagnum moss or peat.