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Back Cover: *Guzmania multiflora.* Photo by Bruce Dunstan. Story on pg. 148

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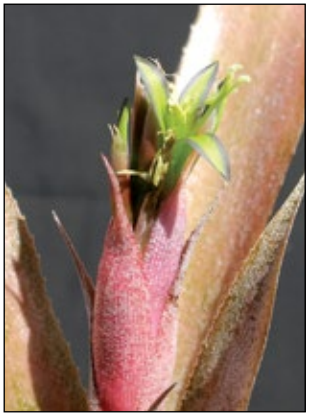

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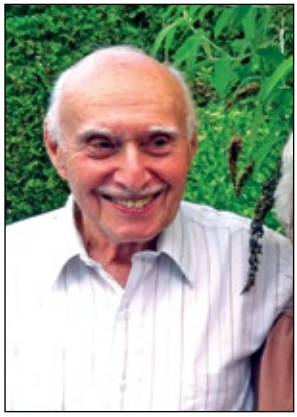

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Colombia Revisited

Bruce Dunstan

Figure 1. The author collecting *Tillandsia aff. schultzii* seed. Photo by Steve Villiers

Figure 2. *Tillandsia myriantha*

Heliconias took me back to Colombia this year. With the Heliconia Society International conference being held in El Valle de Anton in Panama in August the opportunity to spend another couple of weeks in Colombia on the road was too great to miss. Once again I had the pleasure of travelling with Emilio Constantino, a native Colombian from Cali who specialises in taking people into the bush in Colombia to see plants, birds, cultural activities, etc and ensuring they return to tell the story. Emilio's facebook page (http://www.facebook.com/emilio.constantino) is essential viewing for anyone who has an interest in what grows or happens in Colombia, with thousands of amazing images ready for viewing. I've even joined facebook, to my horror, to help Emilio get some names to some of his images. I'd suggest you give yourself a couple of hours to scroll through them. Travelling with me this year were two old friends of mine, Dave Quigley who went to high school with me and has always wanted to come along on one of my plant trips, as well as Steve Villiers who came to Panama and the Caribbean with me in 2007.

With lots of planning and studying, I spent many a weekend locked onto my computer looking at herbarium specimens, plant descriptions, maps, Google Earth, with the app From Missouri Botanical Gardens attached, showing collections, etc., in preparation, also at the same time driving my partner mad with my obsession. It payed off in spades as we spent less time driving around not seeing what we were looking for and more time seeing what we were after.

Arriving in Bogota, Emilio picked us up at the airport and we were off, in his new

4WD, ready for action. As we travelled in the higher elevations around Bogota, we saw *Vriesea tequendamae* growing in trees along the side of the road, with their red, pendent inflorescences hanging down. I was keen to lose elevation and find my first *Heliconia* so away we went towards the Rio Magdalena and down the western slope of the Cordillera Oriental, towards Sasaima.

Stopping for a late lunch allowed me to eat quickly and disappear along the road to see what was growing around our restaurant, while my travelling companions finished lunch at a leisurely rate and then discussed how truly crazy I was. Large flowering *Tillandsia fendleri* with pink bracts were growing in the trees close by and were stunning! After seeing the red-and-yellow bracted plants in Peru, seeing bright pink ones on day 1 was very exciting. The inflorescences were easily 1 m tall and flowering in all their glory. Also growing in the trees were *Tillandsia myriantha* forming large stoloniferous colonies.

We headed further down the range, losing elevation and arrived at Guaduas just on sunset. Thinking wisely, we elected to stay in a hotel out of town and were assured a good night's sleep, without the nocturnal noise of some Colombian towns (more on this to follow). The next day we were off, back up the hill to explore around the Villeta region. Growing in the trees were some large *Aechmeas* with large upright inflorescences that I assumed were *A. mexicana* but could be *A. latifolia*. Also growing in the same trees were a plants of a tall upright *Racinaea* species, *R. michelii*, with flower spikes that were over 60 cm tall. I had assumed it was *R. spiculosa*, a very wide-spread species that I'd seen previously in Panama and it just goes to show I know nothing about *Racinaeas*. After finding the particular *Heliconia* species I was after at that locality, *H. estiletioides*, we found another couple of species, with one potentially new. Colombia is the home of the red pendent *Heliconia* so another one is hardly earth shattering and previous collectors have joked about these red pendants to the point a tee shirt was even produced mocking them.

Further along the road, back up the hill, we came across a beautiful *Tillandsia* in spike, up a tree alongside the road, but just not at flowering stage. It had pendent spikes with colourful salmon bracts. Even better was another plant of the same species further along with seed happily blowing away in the breeze. This necessitated me climbing the tree! After seeing the image of Eric Gouda in a tree and exuding the Zen-like calm of a master of martial arts, I'd have to say my technique is more that of an enthusiastic scrambler. I had to climb a few trees on this trip to get either seed or images of plants without coming to grief. The steep climbs up banks and slopes are much scarier as one slip and you are headed towards a hard surface with no control. I lost count of the number of plants that I just couldn't clamour up to, or even get close enough to, to take a good photo. I find that a lot of the plants I am really interested in getting up close and personal to document and photograph seem to grow on inaccessible slopes -highly frustrating - but it just makes for even more anticipation of 'doing it' again.

Having secured what I was after we were off along the road down to the Rio Magdalena. Once we were down at the river the heat was noticeable, as we had lost the modifying influence of elevation. We were approximately 5^0 north of the equator and really in the lowlands so the temperature rose, not a bad thing though, as we had left the Brisbane winter behind. Growing alongside the road just north of La Dorada, we spotted a flowering *Pitcairnia* and I am still uncertain of its true identity but suspect it may be *P. fluvialis*. We saw lots and lots of *Pitcairnias* but July doesn't seem to be a good time to see them flowering in the lowlands. We drove past lots of different colonies in varying locations with hardly any

Figure 3. *Racinaea michellii*

in flower. Further along the river, in the large roadside trees, we saw colonies of flowering *Aechmea nivea* or *nallyii* as well as *Tillandsia fasiculata*. Last year, along the Rio Cauca, I saw thousands of *Tillandsia mima* but they don't seem to cross the central range, as we saw none along the Rio Magdalena valley this year.

Our next stop was the Agua Clara Nature Reserve. This protected reserve is a very steep valley of marble, through which flows a beautiful clear river. On a quick morning walk along the river before breakfast, just after dawn, I discovered a cat track in the mud which, judging by the size, I thought may have been an Ocelot, but I have since discovered the shape of the pads suggest it was made by a young puma, very exciting, but I'm glad they tend to be nocturnal. Growing in the trees were many flowering *Guzmania lingulata* that were being visited by hummingbirds at that early hour as well. After an amazing raft ride down through the gorge, under tall trees laden in bromeliads, mainly *Werauhia sanguinolenta* and *W. gladioliflora* with a few *Aechmea tillandsioides*, we jumped back in the car and headed further along the Rio Magdalena up into Santander State.

In the lowlands the heat of the day was punishing. We were off to a nature reserve that Emilio had heard about and we spent more than an hour travelling along a flat bumpy road hoping to get closer to the forest that we could see in the distance. Along the way we spotted a chestnut-rumped toucan, small green parrots and plenty of other bird species that would keep twitchers busy. The morning seemed a waste of time until we spotted a tree just beginning to flower. We stopped and wandered out into the cattle paddock where it was growing, for a closer look. It had blue flowers obviously from the *Caesalpinnaceae* family but it was nothing that I have seen in all my years of hanging around botanical gardens, nurseries and private gardens. The tree was literally loaded in racemes of buds up to 1m long, with as many as 60 buds per raceme. We had luckily come along just as it was starting to flower; had we been the week earlier we would have driven past without even noticing the tree. The tree turned out to be *Brachycylix vegeleri*, a monotypic species and one of a number of endemics that only grow in the Magdalena Medio. It was described in the '70s from near where we found our tree and, from what I can gather, it has never made it out of the region, let alone into cultivation. To me it is one of the most ornamental flowering trees I've ever seen, giving *Amherstia* a run for its money as the most ornamental flowering tree in the world.

From the lowlands we headed up the slope towards Velez as this particular road had 8 *Heliconia* species described along it in the early '80s. We could see the Serrania de San Lucas in the distance. This small range appears as an outlier from the Cordillera Oriental and has been a stronghold for guerrillas over the years so definitely hasn't been visited by botanists and remains largely intact with no roads or deforestation spoiling its beauty. As we gained altitude we noticed more bromeliads with *Tillandsia juncea* and *T. andreana* growing on trees at mid elevation. I noticed that the cocoa trees being cultivated alongside the road were loaded in *T. andreana*. Towards the top of the range the trees were heavy with epiphytes including more *Tillandsia fendleri*, this time with reddish foliage, pink spikes and yellowish paddles.

After achieving most of what I'd wanted to do along this route, we headed back down the slope again, towards the Rio Magdalena and started to climb the central cordillera heading to the northern slopes. As we began our climb we saw plenty of *Tillandsia fasiculata* again, growing in roadside trees. In a patch of forest remnant, *Vriesea heliconioides* was spotted growing in the shade, happily flowering. It wasn't until we had gotten up onto the central range that we saw more diversity in broms. At one stop, high on the range, the stunted trees were loaded iwith *Tillandsia* and *Racinaea*. Notable was what may be *T. somnians* or *T. denudata* glowing wine-red due to the UV exposure I imagine. These plants had tall, thin inflorescences, taller than 1m, with arching branches. They were not yet in flower so I imagine they would also later produce the typical viviparous offsets so common

Figure 4. *Brachycylix vegeleri* – a spectacular flowering tree

in these species elsewhere. Growing in more shaded positions were *Tillandsia biflora* and *T. complanata*. Thankfully I knew what I was looking at with these two species. Not far away we saw a nice flowering clump of *Tillandsia compacta*, with its pendent orangey-pink inflorescences hanging down 30-40cm.

Back in the car, we headed to Yarumal for the night. As we sped along, a bright orange flower spike brought us to a quick stop; *Guzmania multiflora* growing on a tree at the side of the road was at its peak, just beginning to flower. The long spike was over 1 m and a glowing fluorescent-orange with the small white flowers just starting to emerge from the bracts. As we arrived in Yarumal a very strange sight greeted us. A red biplane, minus its wings, was being or trying to be lifted up into a first floor window. It certainly stopped traffic as everyone stood and watched, open-mouthed. After a few photographs and a few different attempts were made, the plane hung by its wheels from the railing on the first floor. When we arrived back in town the next afternoon, they had obviously succeeded as they had bricked in the hole in the wall with just the tail sticking out. We decided it must be the Red Barron Disco with the protruding tail a sign for party goers. Yarumal is built on the side of a mountain and I'm betting some of its streets are steeper than San Francisco's.

The next morning we ventured down onto the northern slopes of the central cordillera. Coming up the slope were truck-after-truck loaded with goods that would have arrived in Colombia in the northern ports of Barranquilla or Cartagena. First stop was for a couple of red pendent *Heliconias*. The second and third were probably new species, unfortunately the second was growing on an unclimbable slope so we will never be totally sure although we were able to take images. Growing happily in the shade of the forest was *Guzmania hollinensis* with its plicate foliage and branched green inflorescences. Not too far down the road we were treated to see another two species in full flower and luckily they were in old trees next to the road. *Vriesea elata* was in full bloom and the individuals here were red with yellow tips to the bracts, something I hadn't seen before; all the ones I'd seen previously were solid red. Growing in other trees was a huge *Guzmania* that we had seen up on the hill in Santander in bud, but thankfully on the Yarumal – Valdivia road they were flowering. I only needed to climb another tree to get close enough for a decent image - we were looking at *Guzmania betancurii*. This plant was big, with leaves well over 1m long and the pink and yellow, branched inflorescence was getting towards 1.5m tall. This was yet another plant of which I had seen the description, line drawing and herbarium specimen but had never seen an image before. So, with the words of Uncle Derek ringing in my ears, I tried to take images that were in focus, a difficult thing to do when you are breathing heavily with excitement, exertion, altitude, adrenalin, etc.

We had hoped to travel across the range to Amalfi, a known bird watching area with intact forest, but unfortunately we were stopped west of Yarumal by the Police and told we were headed for an area where safety couldn't be guaranteed, so we turned around and missed lunch in Campamento. I lost track of the number of times we were stopped and searched either by the Police or the Military. After a while it just became part of the trip and wasn't anything to worry about. Emilio told us the stops were to look for weapons, drugs or even foodstuffs for resupplying guerrillas who live in forested inaccessible areas. We all figured it was an easy thing to put up with in return for a safe trip.

The next area on my wish list was the slope from the top of the western cordillera down to the Pacific, in the Chocó Province. In last year's trip we just got into the southern Chocó and travelled down the slope to the lowlands, experiencing the amazing diversity that is

Figure 5. Bromeliads galore including *Tillandsia fendleri* at the top of the Cimitarra - Velez Rd. Photo by Emilio Constantino

caused by changes of elevation and some of the heaviest rainfall in the world. El Llano has the distinction of being one of the wettest places on earth with an average rainfall of 13.3m per year. To get there we needed to start in El Carmen del Atrato and drive down a steep dirt road, a 7 hour drive to get to the Provincial capital of Quibdo. We arrived at El Carmen in the afternoon of Colombia's National Day and found accommodation at a very spartan hotel, but luckily for us in a street lined with restaurants and a bar with the obligatory loud music. Military patrolled the street regularly and we discovered we were actually staying outside of El Carmen where all the buses stop on their way out of the Chocó. The amazed looks we got, as people got out of the buses for a break after 7 hours and saw us three westerners sitting around drinking beers at the bar in the middle of nowhere, were priceless.

The next morning we headed down the slope and stopped for plenty of exciting *Heliconias*. Growing along the way was *Racinaea schumanniana* with very upright inflorescences and another *Guzmania* that may have some affinity to *G. triangularis*; no one so far has ventured an opinion on the FloraPix site. Once again Emilio decided we had gone as far as he was comfortable with on this road. In the previous weeks a vehicle had been stopped and robbed, as well as spray painted with messages, before it was allowed to get away, back up the hill. A safe return home is most important but I was still unhappy to be so close but so far away from an area I know contains some amazing plants; there's always next time, I consoled myself.

After being disappointed by the Mid Chocó, we decided to do the southern area again as Dave and Steve hadn't been with Emilio and I last year. Back into the car and off we went, south along the Rio Cauca river valley to the town of Ansermonueva. This is yet another beautiful Colombian town where tourists don't seem to venture, so we were a bit of a novelty again. We discovered Ansermonueva had a sense of humour when, at 5 in the morning, someone lets off fireworks that sounded like cannons, evidently to draw the faithful to morning prayers. As the fireworks went off there were three frightened Australians woken from their peaceful slumbers lying in their beds thinking, 'Who is attacking?' When we joined each other at 6:30 for breakfast it was the first topic for discussion: 'What the hell was that all about?'

We drove out of the Cauca river valley and up towards the ridge of the Cordillera Occidental or western range. Along the way we spotted large *Tillandsia fendleri* with orange bracts and spikes, some getting well over 1.5m tall; they were enormous. Also growing in the trees was another *Racinaea* with tall straight spikes and a *Vriesea* or *Tillandsia* of indeterminate identity due to their upright spikes being well and truly past their flowering best. As we continued to gain altitude the area got substantially wetter due to the moisture that blows over the ridge from the wet Chocó region. We took the San Jose del Palmar road again and were treated to the amazing plants that grow at the top of the ridge.

It is not just broms that show amazing diversity along this road: *Ericaceae, Araceae* and *Orchidaceae* also show themselves in many varying forms in this unique habitat. *Guzmania diffusa* in flower were spotted growing on a steep rocky bank. It took a couple of attempts to get close enough to take some photos but getting to the plants themselves was impossible. The flower spikes were well over 1m tall with bright red stems and yellow branches. Growing just along the road were large colonies of *Guzmania oligantha* and luckily for us were in flower this year. This plant appears like a small sedge with its

Figure 6. *Racinaea schumanniana*

thin wispy leaves and caulescent habit, but the canary yellow flowers on red stems give it away. We saw a related plant that was 2-3 times bigger and much more caulescent, but we had just missed its massed flowering. It may have some affinity to *Guzmania caricifolia* but has some distinguishing features of its own. Also growing alongside were *G. sieffiana* and *G. schezeriana*, both in full flower. Up in the trees were *Guzmania kressii*, which we saw last year well past their best, but this year they had seed exploding out of their old infructescences. Part of my motivation to return to this road was that last year I had taken a couple of photos of something I thought was different to the *Pitcairnia multiflora* we had seen further south; unfortunately my images weren't particularly clear and they didn't show the plant's foliage. The plant in question is *Pitcairnia bicolor*, a plant collected in 1977 by the same group who collected *Guzmania rugosa* that we had seen and photographed last year, the first time that plant had been photographed. So this time I was very careful to get good clear images of all parts of the plant to try to document a plant that hadn't seen a bromeliad enthusiast for a few decades. Growing along the same roadside was the biggest *Pitcairnia* I have ever seen. Its leaves are between 2-3 m tall with red edges and a very upright growth habit. I found old inflorescences this year with seed, so hopefully it could be flowered in cultivation to see what species it is. Two other undescribed species we saw last last year were also found as well. The most ornamental was sent back with Emilio to try to get it growing in cultivation.

Truth be known, the real reason I was on this road was to search for a particular *Heliconia* that was described there in 1980 but unfortunately the forest it grew in is no longer there along the road from San Jose del Palmar, being cleared decades ago by the look of it. As we made our way back up the hill to the ridge at the end of an amazing day we discovered yet another two *Guzmania* species in flower. The first had thin pink bracts and I thought I might have found *Guzmania nidularioides* that we had found in a mature but not quite flowering state last year. This pink-tipped plant turned out to be something potentially new and to me looks to be related to *G. circinnata*, while Harry Luther has suggested it is closer to *G. wittmackii* and if you look carefully you can see the similar habit of the emerging flowers. The second plant was still in bud but looked different from the common *Guzmania rosea*. I'll post it on the FloraPix website and see what suggestions I get as to its identity.

We returned to Ansermonuevo tired but elated with what we had found in just one day. We wandered around town discovering that all the different restaurants we had seen during the day had closed so we ended up at the lovely family run one we had eaten at the night before, opposite our hotel. The pork schnitzel was superb, washed down with a few cold Pokers, Colombian cerveza. Tired after a big day and a great dinner we retired for the night, to be woken again by the cannons at 5 in the morning. Dave counted and with misfires there were 22 explosions to wake the faithful… And not so faithful. Our rooms were pretty small and pokey and Ansermonuevo was dubbed the 'side-saddle toilet town', as you couldn't sit on the toilet without your knees ending up in your face due to the lack of space.

Our next drive was to take us over the central range again, this time near Manizales and over to Honda, down next to the Rio Magdalena again. As we headed up and gained elevation *Tillandsias* became common again in the trees along the roadside. *Tillandsia clavigera*, with its tall grey and black inflorescences, was easily spotted growing alongside the pendent *Tillandsia ionochroma*, *T. carrierei* and *Racinaea tetrantha*. Also growing in the

Figure 7. *Tillandsia buseri* – a higher elevation species

Figure 8. *Tillandsia compacta* growing at high altitude

Figure 9. Undescribed Guzmania species along the San Jose del Palmar Rd.

Figure 10. A field of *Guzmania lychnis* at the peak of the Manzinales- Honda Rd.

trees was *Guzmania gloriosa* with its green and red tipped inflorescences visible from the road. *Vriesea (Tillandsia) tequendamae* was also quite common along this road. We quickly gained more altitude and at the ridge line more species were visible; *Guzmania lychnis* with its red maroon spikes was very common, flowering away in large colonies. It has a caulescent growth habit and its foliage is a metallic grey colour. Also growing high on the exposed rock faces at the ridge were *Racinaea gilmartinae* or forms of *R. tetrantha* as well as *Guzmania diffusa*. As we headed down the other side and towards the Rio Magdalena valley we spotted *Guzmania multiflora* with its bright orange spikes flowering alongside the road.

Once we were down alongside the Magdalena River we had to climb the Cordillera Oriental again as the eastern slope was our next target. We decided to take the Cimatarra-Landuzuri-Velez road again as it was such a great road for *Heliconia* but not quite as good for bromeliads. I'm sure if you were looking you would find great plants but the *Heliconia* tunnel vision had me. A quick drive through the higher regions of Boyaca got us to a lake near Sogamoso. We stayed in a little villa right on the lake front, with an open fire to ward off the cool air of being close to 3000m elevation.

The next day we began the drive down the slope towards the Llanos region where all the rivers drain towards the Orinoco/ Amazon. We started by driving through a Paramo, which are high altitude grasslands where Puyas are the dominant bromeliads. We saw 3 species as we made our way to the start of the descent down towards the enormous grass plains that make up the Llanos. From the top of the hill, once we got below the tree line, we started to see *Tillandsia buseri*, another large showy species, this time with bright red spikes to 1m tall. Also spotted growing in the trees were large red and yellow *Guzmania squarrosa* as well as another *Tillandsia* species with very tall, pink, multibranched inflorescences that could have been *T. maculata* or *T. tovarensis*. Next time I might try to climb the tree to get better close ups.

As we came around one corner the sight of a truck accident greeted us. One of the large trucks had rolled with the truck cab precariously clinging to the roadside and its trailer hanging over the side. There was another truck stopped and two truck drivers wandering around holding their hands to their heads, no doubt amazed at their luck in surviving. As we could offer no real help and there were no injuries we set off on our way. Further down we were stopped again with roadworks and sat by the side of the road for an hour as concrete was poured to stabilise the road from falling down the mountainside. After our long wait it was time to get going again and right in front of us we watched in horror as a bus tried to overtake a truck that wasn't going to let the bus pass it; no doubt both were 1 hour behind their schedules. With neither driver giving an inch they proceeded to run into each other and a window was smashed in the bus. Out everyone got and it looked like it was going to come to blows. With 1 hour's worth of traffic going nowhere we then had to wait for the police to arrive and do an insurance report. Steve and I set off walking downhill to try and find some plants rather than enduring another long wait at the side of the road. We ended up walking to a small town and were able to buy some icy cold beers that we happily drank in the shade.

Down on the flat lands below the range the trees were loaded in *Werauhia gladioliflora* and occasionally we spotted the orange spikes of *Vriesea rubra*. I had hoped to try to get to the type locality of *Vriesea ospinae var. gruberi*, which would have meant taking another road back up the eastern range, but Emilio told me the area was still a little hot and we

Figure 11. A beautiful pink-bracted form of *Tillandsia fendleri*

had to continue along the flat road to Villavenceio. It is always the changes of elevation where diversity occurs and unfortunately the flat lands were very much the same in plants. From Villavenceio it was back up the range to Bogota and the bulk of this route was through tunnels, which didn't make for great plant spotting.

We had travelled more than 3000 km in our 12 days, which is absolutely ludicrous unless you are possessed by plants. I'm sure Emilio was glad to see the back of us after so much driving. I'm sure Dave and Steve have had their fill of plant hunting with me to last a lifetime, while I'm already thinking about my next trip.

Figure 12. *Pitcairnia susannae*

Figure 13. *Tillandsia schultzei*

Figure 14. *Vriesea rubra*

The Use Of Epiphytic Bromeliads In Easter Festivities In Zaachila, Oaxaca, Mexico

*Elia Ma. del Carmen Méndez García & Demetria Mondragón**

Figure 1. Ornamented hats (Tillandsia fasiculata T. deppeana, and T. usneoides)

The use of plants in religious activities reflects an important link between man and nature. Man is part of nature, which has supplied him with the means for life. In several cultures, man has created deities to explain natural phenomena and has used various elements of nature as offerings to such gods. Among other things, the presence of plants in religious events represents the landscape. The processes of transculturation and acculturation have produced a cosmopolitan cultural mix, and this culture has included vascular plants in popular and traditional practices related to religion (Rublúo 1972). In Mexico, religious syncretism among Catholicism and various pre-Hispanic religions has given rise to religious practices with rich local variations.

In Mexico, epiphytic bromeliads (plants that live on trees but do not directly feed off them [Benzing 1990]) are associated with religious holidays. For example, as many as 21

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species are used to ornament the "Nacimientos" (Nativity Scene) in Oaxaca for Christmas parties (Rees 1976, Mondragón & Villa 2008). Bromeliads decorate flowered arches that celebrate the day of La Virgen de Guadalupe in the state of Veracruz, where Haeckel (2008) reported the use of eight species. In San Francisco Yucucundo, Oaxaca, bromeliads, as well as flowers, are used to decorate the church altar every Sunday (Méndez-García *et al*. 2011).

In Mexico Easter is widely celebrated and commemorates the passion, death and resurrection of Jesus of Nazareth. It begins on Palm Sunday and ends on Easter Saturday. A previous period of preparation, known as Lent, begins on Ash Wednesday. From the first Friday after Lent five weeks pass until Palm Sunday, which marks the entry of Jesus into Jerusalem, and the beginning of the religious ceremonies of Holy Week.

During these celebrations, in the town of Zaachila, Oaxaca state, Mexico, a large number of plants (Solano *et al*. 2010) is used to decorate church altars. To document the bromeliad species used during these festivities, where and how they are collected, and the social environment in which they are collected, we performed an ethnobotanical study at the site in April 2012. We used qualitative-ethnographic tools such as interviews, surveys and direct observations.

A total of 18 species of epiphytic bromeliads was used to decorate altars (Table 1). According to interviews, bromeliads were collected from pine-oak and holm oak trees in

Figure 2. "Manteado" the main church (T. deppeana and utriculata)

Figure 3. Rugs in the chapels (*T. punctulata, oaxacana* and *gymnobotrya*)

the state of Puebla: Chilchotla and Cuetzalan towns, and the state of Oaxaca: Huahutlade Jimenez, San Juan and San Francisco, Sola de Vega, el Vado Juchatengo, Teotitlan de Flores Magon, San Bernardino Acaputitla, Puerto Soledad, Talea de Castro, Mendez Calpulalpam, Nativity, Yacui, Iron Bridge, San Pedro el Alto and Albarradas towns.

One year before Holy Week, the community chooses a committee for the collection of these species. The committee consists of a president, secretary, treasurer and other members who meet to organize the trip, agree on the dates and locations where they will collect, and in some cases, request financing for these activities.

Regularly on the fourth Friday of Lent, the groups of collectors from each of the seven districts and the main church of Zaachila begin the quest. They go to the fields for two to three days at a time to collect flowers, foliage and other items to decorate the altars: "disciplina (*Huperzia* sp.), monjitas (*Prosthechea karwinskii)*, junco (*Disocactus ackermannii*,) and maguellitos (Bromeliads)". During these days they hunt squirrels, skunks and other game. The skins from these animals are filled with pasle (*Tillandsia usneoides* L.) and are used to decorate altars. On the return journey, the pasle is also used to line the baskets used to carry the collected plants. This added lining protects the plants on the return journey.

The collectors keep the plants in their homes until Easter Monday when they will use

Figure 4. *Tillandsia bourgaei* and *T. utriculata*

them for the religious festivities. This group of collectors, called "concheros" after the shells used on Easter Monday night to summon them, assembles in an area known as La Regadera. There they eat a traditional dinner consisting of tortillas, eggs and cooked turkey. The turkey is carried entirely within a few baskets and is dressed with a cigar in its beak.

On the morning of Holy Tuesday, the welcome of the "concheros" continues. The town is summoned again by the sound of the shells. On the outskirts of town, the collectors and district populations gather and exchange flowers and fruits to trim the bases of the hats worn by participants with pasle (Figure 1. Ornamented hats). With the ornamented hats and collected plants, animals and branches, the group (accompanied by band music) tours the principal streets of Zaachila. As they visit houses, participants receive the "first and second gourd of tejate" (tejate is a refreshing traditional drink made with cocoa and corn). This procession ends at the main church where the collected plants are delivered to chapels and church managers who arrange for the assembly of the altar on Thursday morning. Of the eight groups of collectors organized for this activity, four made the procession on Holy Tuesday, and the other four on Holy Wednesday. Thus, by Thursday all

plants were in the chapels and in the main church of Zaachila for decoration.

During Catholic festivities on Holy Thursday people visit the altars of the different neighborhoods in the town, known as "the visit of the Seven Houses". A "manteado" is constructed at the entrances of the main church and the chapels in the neighborhoods. A "manteado" provides shade to the image of the Holy Name of Jesus on the Cross procession on Holy Friday. The "manteado" is decorated with plants from the field, including bromeliads, which are tied and hung from the structure. (Figure 2. "Manteado" the main church). Similarly, bromeliads are used within the church to garnish the main altar and are hung from the ceiling in cords. Also present are rugs made from various plants, including orchids, agave inflorescences, fruits (especially watermelons that bear the surnames of families who have served previously), sprouted corn and furs from animals such as squirrels and wolves. (Figure 3 and 4. Rugs in the chapels). Bromeliads also decorate wooden poles, fashioned from branches brought back by the "concheros" on their return trip. The poles evoke the carrying of the cross by Jesus and are called "la cruz de ocote." They are positioned conspicuously in the atria of chapels.

On Holy Thursday night, according to Catholic tradition, Jesus was imprisoned. On display in the Children's District chapel is an image of a Nazarene (Jesus of Nazareth) behind bars, which has been garnished with bromeliads (*Tillandsia deppeana*, *T. macdougallii*, *T. bourgaei* and *T. gymnobotrya*). (Figure 11. Picture of the Nazarene in the chapel of Barrio del Niño, Children´s District).

The altar remains ornamented until Easter Sunday, when people gather in their respective chapels, share watermelons and return home after the festivities. Most bromeliads are discarded after these celebrations and most individuals have little chance of survival, mainly because of the stress experienced during their collection and transport. Further, when plants were placed on an altar or a branch, their leaves were mostly removed, leaving essentially the inflorescence and a few blades. During this display, these plants are never watered.

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Table 1. Bromeliad species used in Holy Week in Zaachila, Oaxaca, Mexico.

Tillandsia spp.
Tillandsia bourgaei Baker
Tillandsia carlos-hankii Matuda
Tillandsia calothyrsus Mez
Tillandsa deppeana Steud.
Tillandsia gymnobotrya Baker
Tillandsia fasciculata Sw.
Tillandsia imperialis e. Morren ex Mez
Tillandsia macdougallii L.B. Sm.
Tillandsia makoyana Baker
Tillandsia multicaulis Steud.
Tillandsia oaxacana L.B. Sm.
Tillandsia prodigiosa (Lem.) Baker
Tillandsia punctulata Schltdl. &Cham.
Tillandsia usneoides (L.) L.
Tillandsia utriculata L.
Tillandsia violacea Baker
Viridantha plumosa (Baker) Espejo

This journal now has an editorial steering committee. This means that articles can be submitted directly to the committee who can help you with photo size and format requirements, as well as providing feedback as to whether your submission is ready for publication or requires further editing or research.

Articles can be submitted to the Steering Committee at:
Peter Tristram - ptristra@bigpond.net.au
Alan Herndon - Alanherndon@aol.com
Jay Thurrott - cajat@aol.com

x *Biltanthus*

Derek Butcher

Figure 1. x *Biltanthus* 'Beucker' photo by Don Beard

Figure 2. x *Biltanthus* 'Beucker' photo by Don Beard

Some may say they have never heard of this nothogenus and yet it has been around since 1947 but nobody alerted the Bromeliad Cultivar Registrar. Recently Alan Herndon of Florida and myself have been discussing the advantage of having many of the old catalogues in digital form and perhaps be part of the BSI archives. These days it is easy to do via a scanner and pdf. Ever since the Bromeliad Cultivar Register was published in 1998 I have pondered over the references quoted because I never believed I would ever be able to actually see these when they were old catalogues. When they referred to botanical publications I was able to research and translate many only to find in some cases wrong information had been interpreted and in others it only referred to a plant being in a certain exhibition and thus worthless!

Figure 3. x *Cryptbergia* 'Mead'. Photo JBS 27(5): 217 - 1977

My contribution to the cause was mainly catalogues from Australia whereas Alan was able to supply some of Roehrs Catalogues from New Jersey, USA. We have grown *Neoregelia* 'Roehr's Best' for many years in Australia so I was curious to find out something about its origins. We did not find this plant but did find out that its spelling should be 'Roehrs's Best'.

Anyway, my wife, Margaret, was looking over my shoulder and said "What is a Biltanthus?"

First I contacted Jason Grant who was one of the authors of 'An Annotated catalogue of generic names of the Bromeliaceae' in Selbyana 19(1): 1998 and he said 'Argh'. I contacted the IPNI (International Plant Names Index) and they said 'Valid'!

This was what all the fuss was about, because under ICBN (International Code of Botanical Nomenclature) Rules, the first validly-published new bigeneric genus name must be accepted.

"Biltanthus beuckeri (Billbergia and Cryptanthus hybrid) green mottled bronze, narrow pointed foliage. $1.00 to 1.50"
This means that the following disappears:
x*Cryptbergia* Anon., Bull. Bromeliad Soc. 2: 72. 1952.
Parent genera: *Cryptanthus* Otto & A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836 and *Billbergia* Thunb., Pl. bras. 3: 30. 5 Jun 1821.
To be replaced by
x*Biltanthus* Exotics, Catalogue of Julius Roehrs Company, March 1, 1947
Parent genera: *Billbergia* Thunb., Pl. bras. 3: 30. 5 Jun 1821.and *Cryptanthus* Otto & A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836.

Now for the name changes that will affect you when writing labels or writing articles. The first one is undoubtedly x*Cryptbergia* 'Mead' which will become x*Biltanthus* 'Beucker' because 'beuckeri' was the first name used! Are we talking about the same plant? I think so, because by the name it would suggest one of the parents was *Cryptanthus beuckeri* and

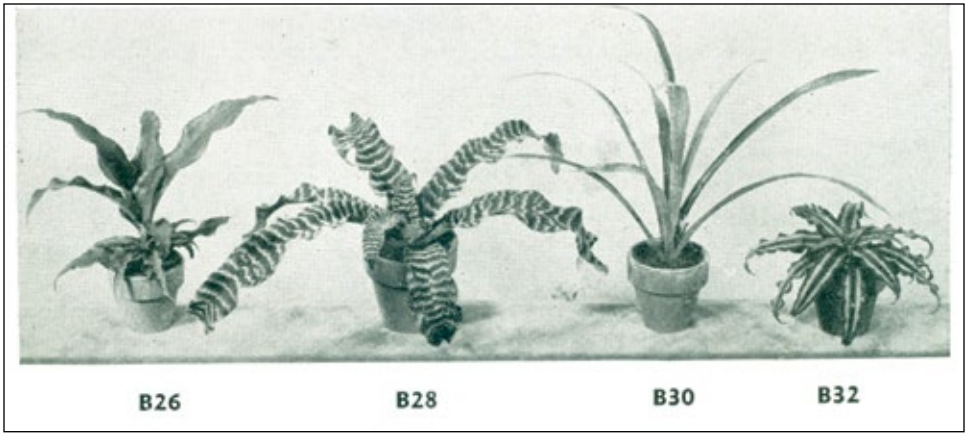

Figure 4. x *Biltanthus* 'Beucker' B30 Julius Roehrs Co 1947

the favourite *Billbergia* of Theodore Mead was *Billbergia nutans*. There is a very long article in Phytologia 30(5): 292-295. 1975 by L B Smith and R W Read where they discussed the nothogenus x*Cryptbergia*. To me it is a very surprising article to be in Phytologia because it was correcting misnomers in the Bromeliad Society Bulletin and was directed at bromeliad growers, not botanists. If you are interested in what was said this is on the Bromeliad Cultivar Register (http://registry.bsi.org/) under x *Cryptbergia* Notes.

What is interesting is that in the book 'Bromeliads in Cultivation' by R G and C Wilson (1963) we see "Billtanthus" (sic) mentioned, but nothing more. Perhaps they were aware that an opposition nursery, Roehrs Company, were using this name but did not disclose it. In any event L B Smith and R W Read did not follow up on this reference. As for identity, I leave you to decide whether the photo of x*Cryptbergia* 'Mead' in J Brom Soc.27(5): 217. 1977 is correct. To give an idea of shape and size I show a copy taken from the Exotics catalogue 1947 – see B30. Thanks to Donald Beard, of New South Wales, Australia we are able to show, for the first time, what this bigeneric looks like.

Other changes are:
x*Cryptbergia* 'Curly Locks' now x*Biltanthus* 'Curly Locks'
x*Cryptbergia* 'Fantasy' now x*Biltanthus* 'Fantasy'
x*Cryptbergia* 'Goodale' now x*Biltanthus* 'Goodale'
x*Cryptbergia* 'Hazel Quilhot' now x*Biltanthus* 'Hazel Quihot'
x*Cryptbergia* 'Hombre' now x*Biltanthus* 'Hombre'
x*Cryptbergia* 'Pinkie' now x*Biltanthus* 'Pinkie'
x*Cryptbergia* 'Pinkinskie' now x*Biltanthus* 'Pinkinskie'
x*Cryptbergia* 'Red Burst' now x*Biltanthus* 'Red Burst'
x*Cryptbergia* 'Resplendent' now x*Biltanthus* 'Resplendent'
x*Cryptbergia* 'Tiger Eye' now x*Biltanthus* 'Tiger Eye'
x*Cryptbergia* 'Topaz' now x*Biltanthus* 'Topaz'

Billbergia 'Theodore L Mead' Revisited

Derek Butcher

Figure 1. *Billbergia* 'Theodore L Mead' from Foster 1940

You may recall that I wrote extensively about the problems associated with linking *Billbergia* 'Windii ' and *Billbergia* 'Theodore L Mead' in J. Brom. Soc. 48(6): 247-9. 1998.

14 years later we have more data and this means we have more things to discuss. This is what happened.

Paul Butler of Winter Park, Florida is writing a short biography of Theodore L. Mead (1852-1936). He pointed out that in this article I stated that "*Billbergia nutans* was one of Mead's favourite plants for hybridising, but he did not keep records, and only bequeathed problems". This statement is far from the truth. In the archives of the libraries of the University of Central Florida (UCF) and Rollins College, Winter Park, where his research has taken him, are hundreds of letters Mead wrote and received and records he kept of his horticultural work. In fact, Mead was obsessive about record keeping, retained everything, and kept a meticulous and detailed notebook of all his crosses. Paul even came across lists from the 1920's recording every single Xmas card and present that Mead and his wife Edith

received! However, much of the material is in disrepair. The horticultural notebook at UCF appears especially valuable, detailing thousands of orchid crosses as well as his other work. It appears that nobody with horticultural knowledge had bothered to go through this notebook.

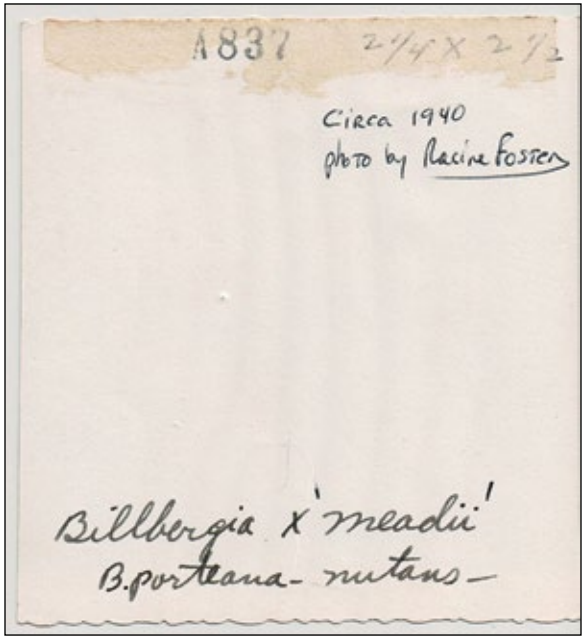

Figure 2. *Billbergia* 'Theodore L Mead' from Foster back

Paul has captured all the notes by Mead on Bromeliads from 1922 to near to his death in 1936. The 1920's are the more interesting because these were basically primary hybrids and possibly identifiable from the quoted parentage. Later references were of hybrids crossed with hybrids. The only ones worth investigating are where the plants had actually been sent to others and therefore spread around. There is a greater chance that these would be still growing in gardens by the time The Bromeliad Society was formed in 1950.

What revelations! We now know Mead was growing *Billbergia nutans* x *B. zebrina* which we assume was his own hybrid and that he had sent at least one specimen to the Brooklyn Botanic Garden in 1925. We know that in 1923 he also sent plants to Dr. Henry Nehrling, Plant Pioneer of Florida (1853-1929), in Naples Florida so we know there are two possible sources in Florida for this hybrid to be distributed. In 1926 he sent 3 plants of *B. nutans* x *B. Leopoldi (* now *B. brasiliensis)*to Nehrling. BUT THAT IS NOT ALL. In a letter from Mulford Foster to Bill Morris in Australia, "28 Oct. 1958 - The parentage of *Billbergia* xmeadii, I believe is *B. nutans* x *B. porteana*. However, I have seen more than one hybrid that was sold under this name.(Butcher's comment – This is feasible because of Mead's habit of calling his hybrids by a short-hand code like nu-ze, nu-spec, nu-sau etc) The plant has never been authentically named or described." This thought is confirmed by a B&W picture Paul found in Michael Spencer's collection of Foster's papers at the University of Central Florida. This shows xMeadii with the notation of *nutans* x *porteana* on the back according to Racine Foster, dated 1940. Foster does not give any reasoning why he thought *B. porteana* because one would guess that *B. Leopoldi* would also give bluish tones to the stigma/style, if this was his distinction.

From what Victoria Padilla writes about, plants called xmeadii and later 'Theodore L Mead' were in circulation in California in the 1950's. This suggests to me that they originated from Orpet. We now have four pollen parents from the subgenus *Helicodea* to contend with. Just what would be the differences between these crosses and that of the parents of Billbergia 'Windii' (*B. nutans* x *B.decora)*?

I will repeat here the description of *Billbergia windii*. You may recall that I had translated the description of *Billbergia* 'Windii' made in 1889 and this is as follows (All comments in brackets are based on my plant *of Billbergia* `Theodore L. Mead' for comparison purposes):

"**Leaves** strap shaped, very long to 85 cm [50 cm], narrow, 30-33mm wide in middle [4-4.5 cm], the sheath a little wider, gradually tapering to a long tip, edges very weak and very [minutely] spined [1 mm long], spines 1 cm apart [5 mm], stronger toward the tip, pointed toward the front. **Leaf blade** top side almost smooth, dark green, shiny, [lepidote with barring]; underneath very weakly scaled [lepidote in lines], scarcely indistinct, grey cross-banded [none evident], **Inflorescence** forming a hanging spike. **Scape** 70-75 cm long [30 cm]. **Scape bracts** numerous, inside light rose, outside carmine, longish, lance-like [lower ones green tipped, all heavily lepidote]. **Flowers** large, 75 mm long [65 mm] to the tip of the stigma. **Sepals** longish, lance-like, acuminate, to 20 mm long, 5.5 - 6 mm wide [7 mm], and 7 mm wide at base [5mm], green, edges rose, the tip sky-blue, white farinose. **Petals** 2 X times longer than the sepals; long-lineal, gradually narrowing to a point, 55 mm long, at anthesis wholly rolled back [not tightly], later straight, blade green, edges blue, 6 mm wide [7 mm], tip 2.5 mm wide. **Stamens** shorter than the petals, 55 mm long [40 mm], ribbon-like, stiff, parallel, yellow-green. **Filaments** 45 mm long [30 mm], linear, a little wide at base. **Anthers** 12 mm long, joined at the lower half in the middle of the back [2 mm from the bottom]. **Style** longer than the stamens, 62 mm long [46 mm], dark green with spreading, later spiraling, lobes 6.5 mm long [12 mm with a hint of blue]. **Ovary** thick, long or long-cylindric [oval], incised under the tip, shorter than the sepals, 7 mm diameter in the middle, 5 mm above, ribbed, green.

We did not know at that time the significance of the bluish stamens and style of my plant that are so prominent when the petals curl. Where does this colour come from? Colour is not that important to the taxonomist but is important to the cultonomist and gardener. Just what colour do you get in the stamens and stigma in *B. nutans*. Regrettably you have to check paintings and photographs and live plants. Check it out but these are yellow and green. Let us now look at *B. decora*. In Smith & Downs Monograph 1979 we read, "Stamens green or greenish yellow;" but when we look at the synonyms and what was written by others we find Morren in Belg Hort 221-2. 1875 indicating that style is violet at top. *B. zebrina* shows "Stamens elongate, anthers narrower than the filaments;" from the same source(Smith & Downs Monograph 1979) which meant looking elsewhere from the long list of synonyms where we find stamens as greenish except for *B. canterae* where not only are the stamens blue but also the stigma. This had me checking what photographs I had of the species *B. zebrina* and the blue colour of the stamens and stigma really stood out. This shows that the 'B. canterae' form has taken over in popularity (or is it vigour?) In Mead's days *B. canterae* would not have been known as *B. zebrina*. We know that *B. porteana* is known for its blue stamens/style which suggests the involvement of *B. porteana* in 'Theodore L Mead'. Check also *B. brasiliensis*.

As far as I am aware, no hybridist has pointed out relationships to colour of stamens and stigma in their creating hybrids and one of the few groups of Bromeliaceae that show off these sex-parts is the *Helicodea* subgenus of *Billbergia*.

We know that Mead was not growing *Billbergia decora* so he must have used another Helicodea species to achieve 'Theodore L Mead'. The main contender seems to be *B. porteana*.

I did wonder if the violet stigma lobes on plants called B. 'Windii' could really be B. 'Theodore L Mead' because of the 1889 description of B. Windii' but Morren's description of *B. decora* puts doubts on this. In other words I still do not know the differences between the two cultivars, but it was great fun looking at old records.

To show the Australian connection we include a photo of a botanical painting done for the Adelaide Botanical Gardens of a plant called *Billbergia* "meadii" sent to them in 1955 by Charles Hodgson of Melbourne, Australia. I thank the Adelaide Botanical Gardens for me being able to photograph the painting.

Further revelations in the notebook have meant that comments have been placed in the Bromeliad Cultivar Register of Mead's re-makes of B. 'Leodiensis' and B. 'Hoelscheriana'. Many of his recorded hybrids will, alas, never be traced.

Figure 3. *Billbergia* 'Theodore L Mead' paint Adelaide

Herbert Plever - Over 50 Years With The BSI

Peter Tristram

Figure 1. Herb and Sylvia Plever in 2008

Editor's Note: Congratulations to Herbert Plever! This article is honoring him as a 50 year member of the BSI.

Herb started growing bromeliads about 1960 when he bought a houseplant book for his wife, Silvia. It wasn't long before he joined the BSI, in 1961, then the addiction we all know so well had begun! Many of the first broms to adorn the young couple's apartment were purchased from Ed Hummel, the first being a *Vriesea splendens*, followed soon by incredible specimens of *Aechmea fasciata, A. miniata var. discolor, A. fulgens var. discolor, Nidularium innocentii var. lineatum, Guzmania lingulata* and more. With the addiction came the challenge of how to successfully grow tropical plants in their apartment. He was advised to contact George Milstein and the two soon made contact with quite a few other likewise bromeliad-crazy folk in the New York area. After a while, around 1962, it was decided to convene a meeting at George's Queens apartment with the aim of forming a New York bromeliad group. Mulford Foster attended too and the 28 attendees formed the soon-to-be-affiliated New York Bromeliad Society. Herb became editor of the group's newsletter, Bromeliana in 1970, a job he still holds!

With the society formed and regular meetings held, he met personalities like Mulford Foster and became friends with Lyman Smith whom he saw almost monthly at meetings for about 5 or 6 years. He was into broms in a big way now!

At one time Herb had about 250 pot plants, mostly *Guzmanias, Vrieseas* and *Aechmeas*, some *Billbergias*, a few *Cryptanthus, Neoregelias, Nidulariums* (many were to be renamed

Canistropsis), and other genera. He also had hundreds of Tillandsias, including about 2 dozen rare species such as *T. huebergeri, T. kautskyi, T. reclinata, T. venusta,* and *T. oaxacana* (I got one from Curtis MacDougal when I visited him in Oaxaca in 1972). He and Sylvia had lots of room with their children out of the apartment - 3 bedrooms, and a big living room to fill with broms, and a 14 foot terrace facing south for the spring through fall.

Inevitably, that led to problems with his marriage. He was running a law practice and all of his free time, weekends included, was spent taking care of and experimenting with broms. Sylvia was far more important to him than anything else, so he started cutting down substantially on the collection, especially *Tillandsias*. Soaking them alone filled the bathtub 4 or 5 times, and since the soaking was for an hour you can see that an entire Saturday or Sunday was spent on the soaking process. While the Tills were soaking he would water and/or fertilize the pot plants. This interfered with their many non-brom activities such as folkdancing, Scottish country dancing, attending the opera and the theatre. The collection was cut down to 100 pot plants and the *Tillandsias* were reduced by more than 50% reducing the soakings to only 1 or 2. He would also, more often than not, go for 10 to 14 days between soakings.

These days his collection numbers about 75 pot plants, but he is intent on keeping his lovely Tillandsias. His favorite pot plants that he has always kept at least one specimen of are: A. 'Morgana' (He reckons it is absolutely the best fasciata cultivar ever made; it grows fast but compactly on fertilizer, and it flowers every 18 to 22 months, with 4 inch wide leaves.), the true *Billbergia decora* (He got it from Don Beadle years ago when Don still

Figure 2. Herb Plever at 1996 WBC

Figure 3. Herb and Henry Turn setting up at Christmas party in 2006

lived in Corpus Christi), *Nidularium innocentii v. lineatum* and *Orthophytum navioides*.

He has recently gone back to growing some 'spinies': *Deutercohnia mezziana* is growing like a weed (loves fertilizer), *Dyckia* 'Silver Queen', 'Cherry Coke', 'Brittle Star' to name a few but with the *Tillandsias* he won't discriminate - he loves every one of his precious Tills.

He has been writing articles since 1966, and starting in 1970, had one in almost every issue of Bromeliana to date. The 50 year index for the BSI Journal lists 27 articles and he regards the most important as **'The Fertilizer Revolution'** (1996 V46(6) 252-260) as important and still significant. With (still) continuing experiments changing fertilizer formulas, strength and frequency, the 1996 proposals have been modified, but he regards the basic precepts stated as still valid.

From the hundreds of other articles, the following stand out to him:

- **On Seeing Red** - Jan 2001, an educational but also politically provocative piece he could get away with in New York without complaints, but not anywhere else;
- **Success with Ethylene Pills – The End of a Long History using Chemicals to Induce Bloom** - Dec 2004;
- **Where have all the Vriesea Splendens Gone?** - May 2012;
- **Aechmea Mirlo – a Saga**
- **More on Vriesea Splendens** – draft of upcoming Sep 2012 article.

The challenge of growing broms year-round in a New York apartment took its toll with many hundreds of casualties in the beginning years. Herb and the NY team had to create all of their own literature, with the emphasis on quality, stimulating and provocative articles, duly published in Bromeliana and recognized globally. Racine Foster was an avid fan of Bromeliana, contributing in the form of praise, suggestions and advice following each issue. Bromeliana can still be subscribed to and a monthly electronic form (pdf) is available. (Email hplever@verizon.net for details.)

Herb was very much involved in the process which led to the formal 'internationalization' of the BSI, at the World Conference in Orlando in 1980. There the current system of Board representation by Regions was adopted, albeit narrowly, allowing a proportional distribution of BSI Directors around the world who would represent their Region and the best interests of the membership. This democratization of the BSI, with all of the benefits and problems that come with democracy, has, none-the-less, served well to this very day.

Herb has also attended all World Bromeliad Conferences since the first in 1972, a claim few, if any, can match.

Naturally 88 year old Herb is still enthusiastically growing bromeliads in his apartment, as well as still producing the very informative Bromeliana for the New York Bromeliad Society! He is a marvellous database of information, including BSI history and still keeps his pulse on the 'state of the society'.

Herb's formidable archive of bromeliad-related documents, especially catalogues and price lists, is also a testament to his love of these plants. Such a valuable historical collection must be preserved and would certainly be of interest to most brom-crazy folk.

Herb and Sylvia are not only still active in the bromeliad world but also literally dance up a storm 3 times a week (Scottish and folk that is) and frequently head to the theatre, cinema and opera. The two are so busy he almost forgot his 88th birthday in March, 2012!

So, a belated 'HAPPY BIRTHDAY' Herb and congratulations on the 50 years of membership milestone!

Figure 4. Herb and Sylvia Plever in June 2012

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The BSI Is On Facebook

Adam Bodzioch

In today's modern environment many plant societies and garden clubs are struggling to survive in the light of dwindling memberships.

The BSI Board has embraced the opportunity to not only stay relevant to its current members but is also seeking to attract new members by setting up a new facebook site for the organisation. If you are signed up, the BSI site can be accessed by keying in either 'Bromeliad Society International' or just 'BSI' (case is not important). To express your support and receive notifications press the 'like' button for the site. It is intended to post news on important events such as the World Bromeliad Conference as well as details on regional conferences, shows and sales by affiliate bromeliad societies. This will be in addition to the posting of articles and images of bromeliads.

The banner image of the new facebook site is of *Vriesea lutheriana* in honour of the late Harry Luther.

There is also a direct link to the current BSI web-site which will, in the near future, be replaced with a new vibrant web-site.

Events Calendar

A WARM WELCOME TO NEW MEMBERS!

GERALD BONNE	CREPY EN VALOIS	FRANCE
ANTOINETTE E BOWE	NASSAU	BAHAMAS
PETER MILES	SYDNEY	AUSTRALIA
JEFF HUTCHINSON	ROYAL PALM BEACH, FL	USA
JAY WOODWARD	NAPLES, FL	USA

Tillandsia edithae. Photo by Peter Tristram

The BSI Seed Fund has found a new chairman! Many thanks to Bryan Windham of Kenner, Louisiana for taking on this responsibility.

More information to follow soon!

The Bromeliad Society International

The purpose of this nonprofit corporation is to promote and maintain public and scientific interest in the research, development, preservation, and distribution of bromeliads, both natural and hybrid, throughout the world. You are invited to join.

OFFICERS

President..... Jay Thurrott, 713 Breckenridge Dr., Port Orange, FL 32127, USA. president@bsi.org
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Membership Secretary..... Annette Dominguez, BSI Membership Secretary, 8117 Shenandoah Dr., Austin, TX, USA 78753-5734. 502 619-2750.
Secretary..... Sara Donayre, 1240 Jefferson St., Hollywood, FL 33019-1807, USA. secretary@bsi.org.
Treasurer..... Edward Doherty, 4039 Herschel Ave., Dallas, TX 75219, USA. treasurer@bsi.org.

DIRECTORS

(To e-mail Directors, write "firstname@bsi.org," Not all Directors have e-mail)

2011-2014.....Australia: Greg Aizlewood, Adam Bodzioch. California: Nancy Groves. Central: Paul Wingert. Florida: Vicky Chirnside, Gary Lund, Steven C. Provost. International: Luiz Felipe Nevares de Carvalho. New Zealand: Peter Waters.
2009-2012.....Australia: Peter Tristram. California: Rodney Kline.
2010-2013..... Florida: Alan Herndon. Louisiana: Charlie Birdsong. Texas: Gene Powers. International: Lyn Wegner. Western: Hannelore Lenz.

STANDING COMMITTEES

Affiliated Shows.....Charles Birdsong, 13922 Eastridge Ave., Baton Rouge, LA 70817, USA. shows@bsi.org
Affiliated Societies.....Martha Goode, 826 Buckingham Ct., Crystal Lake, IL 60014, USA. affiliates@bsi.org
Archives and Historical.....Robert and Janet LaRoe, 401 Oakford Rd., Sarasota, FL 34240, USA.
Conservation.....Position vacant. conservation@bsi.org
Cultivar Registration.....Geoff Lawn, 31 Greenock Ave., Como, Perth WA 6152, Australia. cultivars@bsi.org
Finance & Audit.....Elizabeth Patterson, 4205 Gloster Rd., Dallas, TX 75220, USA.
Judges Certification.....Betty Ann Prevatt, 2902 2nd St., Ft. Myers, FL 33916, USA.
Mulford B. Foster Bromeliad Identification Center location under review bic@bsi.org.
Nominations.....Larry Giroux, 3836 Hidden Acres Circle N, North Fort Myers, FL 33903, USA. larry@bsi.org
Publications Sales.....Robert & Karen Kopfstein, 6903 Kellyn Ln., Vista, CA 92084, USA. publications@bsi.org
Research Grant.....Gregory K. Brown, University of Wyoming, P.O. Box 3165, Laramie, WY 82071-3165, USA. grants@bsi.org
Seed Bank.....Harvey C. Beltz, 6327 South Inwood Rd., Shreveport, LA 71119-7260, USA.
Media Library.....Keith Smith, 1330 Millerton Rd., Auburn CA 95603-1243, USA. slides@bsi.org
Web Site.....Nick Bethmann, 726 Forsyth St., Boca Raton, FL 33487-3204, USA. webmaster@bsi.org
World Headquarters.....Tom Wolfe, 5211 Lake Le Claire Rd., Lutz, FL 33549-4833, USA.

HONORARY TRUSTEES

David H. Benzing, *USA*
Nat DeLeon, *USA*
Grace M. Goode OAM, *Australia*
Peter Waters, *New Zealand*
Marcel LeCoufle, *France*
Elton M.C. Leme, *Brazil*
Elmer J. Lorenz, *USA*
Harry E. Luther, *USA*
William Morris, *Australia*
Herb Plever, *USA*
Derek Butcher, *Australia*

Members-only web site access: **username:** your bsi membership number (this is printed in the first line of your journal mailing label) **password:** bsi

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