

BOTANISCHER GARTEN UND BOTANISCHES MUSEUM BERLIN & JARDÍN BOTÁNICO JOSÉ CELESTINO MUTIS

Germany 8 – 26.04.2024

Mauricio Bernal (JBB)
Jairo Velásquez (JBB)



From 8 to 26 of April 2024 Jairo Velasquez and Mauricio Bernal were hosted by Dr. Nils Köster and colleagues in BGBM Berlin and made short visits to Botanischer Garten der Universität Potsdam, Botanischer Garten der TU Dresden and Botanischer Garten der Universität Hamburg. The BGBM and JBB had a cooperation agreement signed in 2013 and had been working on common interests since. The focus of this exchange was to strengthen the horticultural and general management knowledge of the Colombian partners and to explore future collaborative projects linked to the living collections of both Gardens.

The first week we visited the seed bank, worked with the Subtropical Collection and the Bromeliad/Orchid/Araceae collection gardeners' team. Thomas Dürbye explained us the objectives and organization of the seed bank and the living collection database (**Fig. 1**). In the JBB we are starting the development of a new living collection database, in this sense it was especially important for us to understand the information gathered for every living plant and the logical framework behind the accession number.



Figure 1. Jairo Velásquez and Mauricio Bernal (JBB) visiting the Dahlem Seed Bank

One of the hardest tasks the Subtropical collection team deals with, is the movement of plants on big pots in and out of the nurseries every year. This task needs to be done with right equipment and logistics in order to keep the plants in good conditions and the personnel safe during the movement. We then discovered many unknown tools for us like trolleys for pot movement, mechanical crane for changing pots of big trees and a lift truck accessory for big pot lifting (**Fig 2**).



Figure 2. Different tools for safe big pot lifting at BGBM.

We discovered how to fertilize with the Dosatron, how to print and make Name tags with a Zebra printer, how to disinfect substrates with vapour and how to use acari and insect predators for pest control (**Fig. 3**). These were all new management information for us.



Figure 3. Installing a hose on a Dosatron, checking a portable disinfection trolley and a terrarium for parasitic wasp reproduction.

At the end of the first week, we worked with the team in charge of the Bromeliads and Orchids. During this session we learned about epiphytic plant nutrition, exhibition tricks and pest control with environmentally friendly products as paraffin (**Fig.4**).



Figure 4. Exhibition of orchids and bromeliads on beds and trunks, nailing a Bromeliad to a trunk and learning with our colleagues in the bromeliad exhibition

During the weekend we visited the center of Berlin, the Neues Museum, the DDR Museum and Humboldt Forum. In the second week we concentrate our attention on the outdoors collections. This time we worked with the Arboretum team, learning new tips on how to give a tree a good nutrition during the plantation, these were cold days and we had a nice experience working in a temperate climate far from our tropical conditions back home. One of our surprises was all the different tools they can use for weeding at BGBM, we counted more than 5 different ones! A contrasting and inspiring condition from how we work in JBB at Bogotá. Another interesting work we could appreciate was how they decide the species and location of a plant at BGBM, that exercise helped us to understand how all the team organizes their work in a long-term project (**Fig. 5**).



Figure 5. Planting the *Vitis* collection, discovering a very slim hand shovel for removing tap roots and deciding the plants and their position in the collection with the head curator Dr. Gerald Parolly.

During the second weekend we visited the Natural History Museum and Potsdam Gardens, including Potsdam Botanical Garden. This visit let us see how they integrate architecture and landscape in the past, through many different garden styles. We

dedicated our last week to visit Dresden Botanical Garden and Loki Schmidt Botanical Garden at Hamburg. At Dresden we learned how to manage a highly diverse garden in a reduced space. The garden has a delightful landscaping in a complex topography, this visit inspired us on alternative ways of presenting plants and of taking advantages of the terrain. Our visit to Hamburg was very profitable, we learned how the living collection team works and organizes, we learned new tricks for growing high Andean plants and Tillandsias (**Fig. 6**). The alpine exhibition at HBG is a good example of how the paramo collection at JBB can be organized and exhibited. During this time, we discuss with Tobias Torse and Timm Stolten about possible future horticultural collaborations.



Figure 6. Alpine landscape in Dresden Botanical Garden, *Espeletia* collection in charge of Tobias Torse at Loki Schmidt Botanical Garden and Timm Stolten.

Conclusions

Now a days, it's not always evident that gardeners from different Botanical Gardens interact, especially in Central and South America, this grant is then essential to keep improving gardening knowledge for the benefit of people, cities and natural habitats. This gardener's exchange experience will certainly contribute to have more clear objectives and better methods in Bogotá Botanical Garden living collections. Some collaboration projects have emerged from this event and future interactions will benefit both botanical gardens in the long term.

Acknowledgment

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