

# Coccothrinax Challenge

## New palms for our gardens



The flora of the island of Hispaniola, of which the Dominican Republic comprises two thirds, is very rich and includes over 2,000 endemic species. Like South Florida it is part of the Caribbean region, so many Dominican plants will thrive under our conditions. Our 2012 Dominican Republic expedition was a great success, building on longstanding collaborations among botanical gardens. In 2013, thanks to ongoing support by Dr. Lin Lougheed, a second expedition was mounted to further explore the botanical treasures of this beautiful country. MBC once again teamed up with the Jardín Botánico Nacional Dr. Rafael Ma. Moscoso of the Dominican Republic (JBSD) and Fairchild Tropical Botanic Garden (FTBG) to collect a wide diversity of plants in the Dominican Republic to advance conservation, science and horticulture.

A major focus of the expedition was to collect a beautiful new palm for MBC's collections, *Coccothrinax boschiana*. This palm grows near the sea coast on the jagged limestone slopes of the Sierra Martin Garcia. Adapted to life near the sea and buffeted by storms, heat, humidity and drought, this palm




**Top:** *Coccothrinax boschiana* in the Sierra Martin Garcia.

**Center:** Chad Husby surveying a population of *Coccothrinax boschiana*.

**Bottom:** The beautiful silver hue of *Coccothrinax boschiana* leaves.





will be perfectly adapted to growing at Montgomery in all seasons. It is a very ornamental species with leaves of gold and silver hue atop tall thin stems adapted to bending with strong onshore winds and even hurricanes, which regularly strike the Dominican Republic.

Reaching *Coccothrinax boschiana* was the first challenge of our expedition. It grows in a hot, dry forest region southwest of the capital, Santo Domingo, where we were staying. Before embarking, we picked up Alberto Veloz, the curator of the herbarium at JBSD, who guided us to the site. After several hours of driving, we reached the vicinity of the Sierra Martin Garcia. In a village we hired a local guide to assist us with navigating and collecting. Roads to the site were unpaved and often overgrown with very spiny vegetation, including unusual cacti. When the roads became impassible, even with our guide walking in front of the truck and cutting away the impeding branches and saplings, we continued on foot. A major concern was taking in sufficient water for the long hot climb to the palms. The palms grow on steep slopes and ridges of often jagged dogtooth limestone. Thus, great care was needed to reach them. The white limestone also reflected and radiated heat and sunlight, making us feel as though we were in an oven. We also needed to carry all our collecting gear and protective clothing against the prickly vegetation and sun.

Fortunately, the dramatic beauty of the landscape and palms compensated for the physical challenges. When we reached the palms, we were at first disappointed to find that most of the fruiting stalks were barren of seeds. Some of the seeds that remained on the stalks had been partly eaten away or dried out. After much diligent searching, we did find what looked like viable seeds on a few individuals. The heights of the palms proved a challenge, but fortunately we had along an extendable pruner

that allowed us to detach the fruiting stalks gently so as not to dislodge the seeds. After the initial collecting, we explored the site further looking for more seeds and assessing the population. We also collected herbarium specimens, took many photos and collected a few other plants of interest growing in the vicinity. However, despite our careful provisioning, we started to run out of water as the day wore on, so we decided to return. It was a successful beginning to what was a very successful expedition.

Later in the trip, our team collected the first documented wild-origin seed of the emblematic *Zombia antillarum* to be grown in South Florida's major botanic gardens. Other notable palm collections were *Copernicia berteriana* and *Sabal domingensis*, a giant palm first introduced by the the 2012 expedition. Other important collections included the spikey-leaved endangered conifer *Podocarpus hispaniolensis* and the very rare large evergreen *Plumeria magna*, both of which are completely new introductions to horticulture. The more than 100 species collected during this expedition will enrich the botanical collections of Florida and the Dominican Republic for years to come. Already, many of these collections, including those described above, are happily growing, and we expect them to make beautiful and scientifically important additions to our collections. All of this was made possible by the collaborative spirit, enthusiasm and hard work of the participants, the support of our parent institutions and the generosity of our benefactor Dr. Lin Lougheed. We hope to return to the Dominican Republic again one day to explore and collect more of the amazing plants that call the beautiful country home.

Chad Husby, Ph.D.  
Collections Manager and Botanist  
chad@montgomerybotanical.org