

# Montgomery Botanical NEWS

Advancing Research, Conservation, and Education  
through Scientific Plant Collections

Fall/Winter 2009

Volume 17, Number 2

## TEAMWORK FOR CYCADS IN THE DOMINICAN REPUBLIC

Teamwork is always the best work; cycad research is no exception.

MBC joined an international team focused on *Zamia pumila* in the Dominican Republic this June, along with experts from Jardín Botánico Nacional Dr. Rafael Ma. Moscoso de Santo Domingo (JBSD), Florida International University (FIU), and Fairchild Tropical Botanic Garden (FTBG).

The MBC and FTBG co-sponsored project collected DNA samples from *Z. pumila* to study evolution of Caribbean *Zamia*. Ongoing study led by Alan Meerow from the USDA is part of a broad collaboration including FIU, FTBG, MBC, The New York Botanical Garden (NYBG), and many other colleagues throughout the Caribbean. This latest fieldwork builds upon similar research in Puerto Rico and Jamaica (2003, 2005, and 2008) by Alan Meerow, Michael Calonje (MBC), and Andreas Oberli (Kingston). This ideal team leverages the skills and strengths of each institution.

### A CONSERVATION FOCUS

In addition to DNA collections, the team collected specimens for the herbaria at JBSD and FTBG. These specimens provide critical documentation for our study, and provide a snapshot in

time of wild *Zamia* populations in the Dominican Republic.

Documenting the *Zamia* is critical. Over the course of our travel, we learned that many plants known in the 1980s are now gone. Although *Z. pumila* was locally abundant in places, its range con-

data, their scientific and conservation value was limited.

### LOOKING AHEAD

Addition of living *Z. pumila* collections from the Dominican Republic—from seven distinct populations—is very valuable for *ex situ* research and conservation. These collections greatly strengthen MBC representation of Caribbean basin cycads. As the plants develop and mature, significantly augmenting existing MBC Caribbean cycad collections dating to the 1930s, they will contribute to this unique and important resource.

Research is currently underway on these Dominican collections. Planning, preparation, and fundraising for future Caribbean *Zamia* fieldwork are ongoing. Step by step, and plant by plant, together we are building a foundation for greater conservation and understanding of these living gems.

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Alberto Veloz, Javier Francisco-Ortega, Michael Calonje, and Francisco Jiménez Rodríguez with *Zamia pumila* at the Jardín Botánico Nacional, Santo Domingo.

tinues to shrink as the island continues to develop.

The most important conservation outcome was the collection of *Z. pumila* seeds from multiple populations. Prior to this fieldwork, MBC had only two living plants of *Z. pumila* from Dominican Republic, collected in 1981—both female. With no detailed provenance