



# MONTGOMERY BOTANICAL CENTER

*Advancing research, conservation, and education  
through scientific plant collections.*

## EXPEDITION REPORT

### MBC Palm Conservation Expedition Trinidad & Tobago | April 2-21, 2007

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#### SUMMARY

The Montgomery Botanical Center 2007 Trinidad and Tobago Palm Conservation Expedition successfully met its objectives.

#### COLLECTIONS

Of 22 species of native palm in Trinidad and Tobago, population collections of 14 taxa were obtained within three weeks. Montgomery Botanical Center (MBC) staff made 69 separate seed collections from those 14 species, for a total of 4,884 seed collected. Fourteen herbarium vouchers (one for each species) were made, and duplicates of all specimens were deposited at the National Herbarium of Trinidad and Tobago (TRIN).

#### COLLABORATION

This project was accomplished through close collaboration with the National Herbarium of Trinidad and Tobago at the University of the West Indies in St. Augustine, which provided logistical support, guidance, and expertise. The Herbarium, University staff, and Trinidad and Tobago Forestry Department participated in fieldwork. Both Dr. Griffith and Dr. Noblick presented MBC research through seminars to the Life Sciences Department at UWI. The crucial funding partnership of the South Florida Palm Society enabled the project.

# Palm Conservation Expedition

The 2007 MBC Trinidad and Tobago Expedition, funded by the South Florida Palm Society, sent Dr. Larry Noblick and Dr. Patrick Griffith to Trinidad and Tobago from April 2 through April 21.

Trinidad and Tobago have a number of unique habitat types which support an interesting palm flora. The island nation is at a biogeographic crossroads; being the southernmost islands of the Caribbean, and seven miles off the coast of Venezuela, the flora is influenced by both South American and Caribbean phytogeography, and this is borne out in the palms.

*Coccothrinax*, a prominent palm genus of the Caribbean, has its southernmost distribution in Trinidad. Trinidad is also home to the southernmost distribution of *Euterpe broadwayi*, and is the only Antillean site of many more typically South American palms such as *Astrocaryum aculeatum*, *Attalea maripa*, *Euterpe oleracea*, *Mauritia flexuosa*, *Manicaria saccifera*, and *Oenocarpus bataua*. *Attalea butryacea*, distributed also in Central and South America, finds its easternmost distribution in Trinidad and Tobago. Therefore, population collections of these palms are crucial for biogeographic study, and germplasm from these populations may have horticultural potential more suited for south Florida, owing to the marginal ranges of these taxa in Trinidad and Tobago.

Arriving on April 2, Dr. Griffith and Dr. Noblick made contact with botanists Dr. Paul Comeau and

Mrs. Yasmin Baksh-Comeau, lead authors of “The Palm Book of Trinidad and Tobago”, to discuss MBC’s collecting plans. Collecting permits were obtained on April 3 through the Wildlife Division and the National Herbarium of Trinidad and Tobago (TRIN), and collecting began on April 4.



Dr. Larry Noblick measures an 18-foot long leaf of *Manicaria saccifera*.  
Aripo Savannas Scientific Reserve, Trinidad

From April 4 through April 11, MBC collected palm seed and vouchers in Trinidad from the Aripo Savannas Scientific Reserve, the Nariva Swamp, Radix Point, the Northern Range, St. Patrick’s County, and the mountains above St. Augustine. April 12, Dr. Griffith and Dr. Noblick travelled to Tobago, and collected in the Central Tobago Forest Reserve and above Bloody Bay.

As part of MBC’s collaboration with The University of the West Indies, MBC staff offered seminars on their research. April 13, Dr. Griffith presented a seminar to the Life Sciences Department at UWI, titled “Cultivating Discoveries: Integrating Collections and Research,” and on April 20, Dr. Noblick presented a seminar titled “Unraveling the *Butia* Palm Puzzle.”

From April 14 through April 20, seeds were cleaned and plant materials prepared for transport, including obtaining phytosanitary certificates. April 15, Dr. Griffith returned with a great deal of seed, and Dr. Noblick returned on April 21 with additional seed and all voucher specimens.



## COLLECTIONS

MBC located 21 of 22 native species of palm in Trinidad and Tobago, and was able to collect seed of 14 species over the three week period (see chart this page). MBC collected a total of 14 voucher specimens and 69 seed collections for a total of 4,884 seed. One species not definitively observed was *Euterpe oleracea*, which was not readily distinguishable from *E. precatoria* at the field sites visited. The eight species not collected did not have ripe fruits or available seed.

### COLLABORATION

The very significant help and support of the botanical and forestry community in Trinidad and Tobago enabled the success of this expedition. Important links between the botanical community of Trinidad and Tobago and MBC, developed through this project, will lead to further collaborative achievement of the missions of both.

Dr. Paul Comeau's expert advice on coordinating and planning site visits enabled the most efficient use of MBC's time in Trinidad and Tobago.

Paul accompanied MBC on a great many collecting days, and his expert botanical guidance made this project a successful endeavor.

Mrs. Yasmin Baksh-Comeau, director of the National Herbarium of Trinidad and Tobago at the University of the West Indies, provided crucial advice and guidance on doing fieldwork in Trinidad and Tobago. Yasmin coordinated MBC's permitting processes, and her gracious hosting of MBC's herbarium work in the very well-equipped facilities at TRIN made the work

much easier. Yasmin also collected with MBC in the Nariva Swamp. MBC also appreciates being able to conserve voucher specimens from this project at TRIN.

The guidance of Trinidad and Tobago foresters, Edmund Charles and Mervyn Atkinson, saved valuable time owing to their expertise and extensive knowledge

of local palm populations. Victor Quesnel and Anthony James graciously offered permission and assistance to collect on their property. Jaumark Pierre and Camille Comeau helped collect in the Nariva Swamp and Radix Point areas. Renson Jack and Shoba Maharaj offered important advice on collecting on Tobago and Trinidad, respectively. Gerard and Oda Ramsawak helped with many logistical details and provided extensive knowledge of natural history. Yudishtir Maharajh offered important practical advice.

### CONCLUSION

The goals of this expedition were to document biogeography and collect

germplasm of native Trinibagonian palms. This was to be accomplished through close collaboration with the botanical community of Trinidad and Tobago. Both goals were robustly accomplished.

The generous funding and encouragement of the South Florida Palm Society is deeply appreciated. As partners in this project, the MBC team gratefully acknowledges the shared mission, goals, and interests of the South Florida Palm Society in palm research and conservation.

SPECIES	OBSERVED	COLLECTED
<i>Acrocomia aculeata</i>	✓	✓
<i>Astrocaryum aculeatum</i>	✓	✓
<i>Attalea butyracea</i>	✓	✓
<i>Attalea maripa</i>	✓	
<i>Bactris campestris</i>	✓	
<i>Bactris major</i>	✓	✓
<i>Bactris setulosa</i>	✓	
<i>Bactris simplicifrons</i>	✓	
<i>Coccothrinax barbadensis</i>	✓	✓
<i>Desmoncus orthocanthos</i>	✓	
<i>Desmoncus polyacanthos</i>	✓	
<i>Euterpe broadwayi</i>	✓	✓
<i>Euterpe oleracea</i>	?	
<i>Euterpe precatoria</i>	✓	✓
<i>Geonoma interrupta</i>	✓	✓
<i>Manicaria saccifera</i>	✓	✓
<i>Mauritia flexuosa</i>	✓	✓
<i>Oenocarpus bataua</i>	✓	
<i>Prestoea acuminata</i>	✓	✓
<i>Prestoea pubigera</i>	✓	✓
<i>Roystonea oleracea</i>	✓	✓
<i>Sabal mauritiformis</i>	✓	✓