

## ABOUT THE PROJECT

### Digitizing Jamaica's Botanical Natural History Collections (The Creation of a Jamaican Virtual Herbarium)

The term *Virtual Herbarium* refers to a physical collection/catalogue of arranged, dried, pressed plants which has its entire collection in digital, indexed form integrated with other digital resources such as an online, queryable, biodiversity database. Such a system cannot replace a physical collection. However, it can dynamically facilitate the easy and efficient retrieval of textual and imagery data, while ensuring the posterity and increasing the longevity of the physical samples. Between 2005 and 2008 the first virtual herbarium in Jamaica was created. It represents a collaborative effort between the Institute of Jamaica's and the University of the West Indies' Botany and Life Sciences Departments, respectively, with generous funding made possible by the Environmental Foundation of Jamaica and invaluable logistic assistance from Farichild Tropical Botanic Gardens (Florida, USA).

Selected specimens (which included specimens from ten of the most commonly occurring, tropical plant families) were those collected by William Harris and George Proctor of the University of the West Indies - Mona and Institute of Jamaica herbaria respectively. The Jamaican Virtual Herbarium is based on the WAMP webpage/database software application stack that integrates the Windows operating system, Apache web server, MySQL database server and PHP Hypertext Pre-processor into presenting a web-based interface that handles both back-end data entry and end-user database queries.

The most significant of the benefits offered by the virtual herbarium are the accessibility of identified and confirmed field specimens from geographically removed locations; the reduced physical handling of the specimens (some of which are arguably priceless at over 100 years old); and the greatly increased efficiency with which searches can be conducted (reducing a 10 minute physical search to seconds).

The incorporation of a queryable database with digitized herbarium collections will make a paradigm shift in plant taxonomy and research while conserving Jamaica's botanical natural history treasures.

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