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# JOTTINGS

FIELD TRIP TO JOHN CROW MOUNTAINS, ECCLESDOWN,  
PORTLAND  
SEARCH FOR *GARCINIA DECUSSATA* AND *CLUSIA PORTLANDIA*  
(GUTTIFERAE)

NATURAL HISTORY SOCIETY OF JAMAICA

TEXT BY RUTH LOEWE

DESIGN & LAYOUT BY KAI MENG LUI



John Crow Mountains in the background *photo: Kai Meng Lui*

**Both *Garcinia decussata* and *Clusia portlandiana* are endemic to Jamaica and the *Clusia portlandiana* is actually endemic to only that part of Jamaica. This adds a special feature to both plants. They are found nowhere else in the world.**

*Garcinia decussata*, also known as the “hat stand tree” because of its peculiar growth habit; is being researched at UWI for possible pharmaceutical uses in the treatment of HIV /AIDS. It is a small tree, less than 3m in height. The taller *Clusia portlandiana*, grows to a height of 7m and also has a distinctive growth characteristic – leaves that are sessile, attached without stalks directly to the stem.

Those that made the trip:

Helen Jacobs	UWI Chemistry	Trip Guide, and 2 of her graduate students
Patrick Lewis	UWI Herbarium	Trip Guide
Trevor Yee	NHSJ Acting President	Trip Guide
Lisa Gordon	NHSJ Executive Committee	
Jill Byles	NHSJ Executive Committee	
Hermann Tobisch	NHSJ Treasurer	

Carl Chin; Kai Meng Lui; Ruth Loewe; Cicely Tobish; Basil Burke;  
Allison Miller, Lance Miller and 3 Sons; Clyve Bowen: Alexandra Rodkina, Uri Rodkina and 3  
Friends:

Bimson Frater	Local Guide
Elizabeth	Local Guide
Trevor	Local Guide

In convoy, we travelled along the coastline of St Thomas crossing over into Portland at Hector’s River. At about 11:15am just before the town of Manchioneal in Portland, we crossed the Drivers River and turned off the main road heading inland towards the John Crow Mountains. We then drove past the turn-off to the Reach Falls attraction, and headed along the road to the rural district settlement of Ecclesdown. There, we collected our 3 local guides. – Bimson, Elizabeth and Trevor - who have worked consistently with UWI researchers from the 1970’s, when Drs. G. Proctor and C D Adams were doing field research in the area.



(L) Shoving a car up the bridle track (R) Dr. Helen Jacobs talking to the group photos: Kai Meng Lui

Ecclesdown is a linear rural settlement in a moist and fertile valley in the upper reaches of the Driver’s River drainage basin. Nestled in a switchback of the adjacent John Crow Mountains, this small farming community benefits from the high rainfall and the run-off from the mountains. The residents grow economically important tree crops like the nutmeg, and food trees such as the june plum, ackee, mango, naseberry and breadfruit .

With the local guides in tow, the cars left the district and set off along a slippery stone paved bridle track towards the foothills of the John Crow Mountains. After a couple of skids, and helpful shoves over the bad patches, the cars arrived at a fern sprinkled wooded parking spot shaded by introduced Blue Mahoes and mangoes. This was the starting point for the slippery and muddy climb up the north eastern foothills of the John Crow Mountains.



Patrick Lewis explaining the morphology of the leaves of *Garcinia Decussata* & *Clusia Portlandia* before departure. Photos: Kai Meng Lui

Unlike the Blue Mountain forest which is a wet forest on volcanic rock, this area is a wet forest with clay in many areas on limestone. The rainfall in the rain forest area is 151” per annum at 2000 ft above sea level compared to 110”per annum on the coastal sites. The area is thought to have at least 15% to 20% of endemics.

The start of the trail was gentle, passing through fern and coleus ground cover sparsely dotted with introduced trees. Trees and understorey growth increased closer to the foothills, with understorey growth fiercely competing with the diverse and dense forest cover well into the steep climb.

At the lower elevations, on the gentler slopes approximately 350m above sea level, there were lots of epiphytic tree huggers and climbers taking advantage of space and fairly good light conditions.

*Blakea trinervia* (Melastomataceae), “Jamaica Rose”, was resplendent understory growth in full bloom, blanketing many of the trees. The leaves have 3 parallel veins in a pattern typical of the Metastomataceae. A profusion of small green buds open into small pink flowers with a single whorl of petals.



(L) Fern and *coleus* ground cover (R) “Jamaica Rose” *Blakea trinervia* (Melastomataceae) Photos: Kai Meng Lui

A nibbled “Water Mahoe” shrub, *Hernandia catalpifolia* (Hernandiaceae), the food source for Giant Swallowtail butterflies, was spotted near the trail. Unfortunately there were no butterflies to be seen.

Other clingers included a hanging Gesneriad, *Columnnea sp.* related to the violet; a tiny orchid, *Lepanthopsis sp.* (Orchidaceae); and a striped bromeliad, *Hohenbergia sp.* (Bromeliaceae). Growing from moist moss covered tree trunks in the less densely vegetated flatter part of the foothills were pendant epiphytic ferns, *Lycopodium sp.* (Lycopodiaceae).



(L) *Lepanthopsis* (R) *Columnnea* (African Violet family)

Photos: Kai Meng Lui



(L) Pendant ferns *Lycopodium* sp. Photo: Kai Meng Lui (R) Striped Bromeliad Photo: Ruth Loewe

A group of stragglers slowly climbed the muddy slippery slopes, left behind by the more sure footed lead group in search of the *Clusia portlandiana* and *Garcinia decussata*. Vegetation got denser with elevation. Lower light conditions encouraged an undergrowth of ferns. A variety of mosses clinging to tree barks and rocks were indicative of the moist growing conditions. Palms poked through the shrub layer and were joined by tree ferns at higher elevations. Hardwood trees grew past them all to reach the light.



Kai Meng with the “hat stand tree” *Garcinia decussata* Photo: Ruth Loewe

Noted within the damp shaded shrub layer were *Psychotria uliginosa* (Rubiaceae) with bright red berry clusters; the herbaceous *Arthrostema fragile* a Melastome; and the pendant flowers of a *Passiflora* sp. (Passifloraceae). At this level our guide Trevor spied a Partridge sitting stubbornly on its nest. It finally escaped the prying eyes to reveal a young baby and an unhatched egg.



(L) *Psychotria uliginosa* (Rubiaceae) (R) A Partridge chick in the nest Photos: Kai Meng Lui



(L) *Arthrostema fragile* (Melastomaceae) (R) *Passiflora* sp. (Passifloraceae)

Photos: Kai Meng Lui

The middle storey was occupied by two species of palms *Thrinax* sp. – used for thatching - and the endemic *Calyptronoma occidentalis*, with a trunk resembling the coconut. At 500m above sea level, the tree ferns started to appear and added to the variety of the middle storey dispersed between the large forest trees of the overstorey



(L) Thatch Palm (R) Hardwoods pushing through to light

Photos: Ruth Loewe

Towering above the middle storey, growing tall and straight to reach the light, were the hardwoods like the Santa Maria, *Calophyllum calaba* (Guttiferae); and the endemic Popnut or Breadnut with reportedly edible seeds, *Ompalea triandra* (Euphorbiaceae).

... Then the phone rang. Prof. Jacob's student, Stacy Ann Parker of the lead group had found the *Clusia portlandiana* at a higher elevation than originally expected. The timing was right, since especially if the rains had started to fall, the lead group may have abandoned the search. Instead of the species being sought, only the related *Clusia havetioides*, which had a leaf stalk, was being found. Helen Jacobs instructed the local guide to bring her cuttings. One objective having been met, weariness set in and the stragglers started their descent only to be overtaken by the muddled lead group and their cuttings, all of which were duly photographed for the expedition's records. Fortunately too, the guides found a large specimen of the other plant being sought, *Garcinia decussata* in the lower elevations.



Trevor Yee, Lisa, Carl and Elizabeth (guide) with *Clusia portlandiana* .

Photo: Kai Meng Lui

