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# FLICKER

DEPARTMENT OF ENVIRONMENT TERRESTRIAL ECOLOGY UNIT

### Pepper Invasion...

Yet another green invader has reached our shores, the South American Pepper Schinus terebinthifolius. The species was likely brought to Cayman Brac as an ornamental, at a time when its invasive nature was not realised. Similarly this plant has been introduced to Florida and other Caribbean islands, where it has firmly taken hold. Such is the invasive nature of this plant, the selling, transport or planting of this species is now prohibited within Florida, USA.

Like our familiar Maiden Plum Comocladia dentata, it also has an aromatic sap which can cause skin irritations. Pollen is known to cause respiratory irritation, leading to sinus congestion, headaches and sneezing. Therefore one must exercise appropriate caution, when removing this species. The DoE and Public Works Department have begun the process of clearing the offending plants within an old quarry. Further sites have since been discovered, in the wetland





to the south of the airport. The preferred wetland habit is restricted to the south western portion of Cayman Brac. It is hoped that limited suitable habitat, may help contain the plants, aiding its eradication.

#### References

Godbeer et al. (2009) Brazilian Pepper Management Plan for the Cayman Islands, July 2009. Cayman Islands Department of Environment. www.doe.ky

Pepper Invasion

If you see this plant in the Cayman Islands, please note its location and notify the Department of Environment.

TEL: (345) 949-8469 or E-mail: doe@gov.ky



# Editors Kristan D. Godbeer Mat DaCosta-Cottam

**PHOTOS** Kristan D. Godbeer ©





## Born free, living free...

In September 2008, the Department of Environment (DoE) investigated reports of deaths mysterious endangered<sup>1</sup> Cayman Brac Parrots Amazona leucocephala hesterna. A Department of Agriculture veterinary pathology report concluded, that the birds exhibited large areas of haemorrhaging and internal tissue damage, consistent with rodenticide poisoning. Two live but very sick juvenile parrots were flown back to Grand Cayman for veterinary treatment at Island Veterinary Services, where they began to recover quickly. The birds commenced the process of rehabilitation with avicultural staff at Boatswain's Beach, and were later moved to a facility at the DoE, prior to their intended release.

These events were closely followed by Hurricane Paloma, which left little available food in the forest <sup>2</sup> & <sup>3</sup>, forcing postponement of a prompt release. Therefore these young, inexperienced birds remained in rehab until

the forest had recovered adequately.

Despite still recovering from Paloma's wake, George and Lynn Walton kindly offered an area on the grounds of Walton's Mango Manor, for the construction of a release pen. In July 2009, liberation finally came. The two parrots wasted little time, swiftly making their exit. They flew in opposite directions, and found perches near by. This was the furthest apart they have been for some time. They sat in sight of each other, for a short while, probably surveying the After a couple of squawks, the younger of the two joined its companion, and immediately began feeding on wild fruits. The young parrots have since left the grounds of Mango Manor, to restart their lives in their forest home.



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Department of Environment PO BOX 486, 580 North Sound Rd. GRAND CAYMAN KY1-1106 TEL: (345) 949-8469 www.DoE.ky www.CaymanBiodiversity.com



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# Threatened Plants of the Cayman Islands

F. J. Burton

A new colourful and informative book, detailing our threatened plants.









#### **Essays and Notes**

### Tea Banker Pectis caymanensis

P. Ann van B. Stafford CaymANNature, P.O. Box: 1771, Grand Cayman KY1-1109, Cayman Islands

**Tea Banker**, Mint *Pectis caymanensis* (Urb.) Rydb. 1916

Synonyms: *Pectis cubensis* of Hitchcock, 1893, not Griseb., 1866 *Pectis cubensis* var. *caymanensis* Urb.,1907

Family: ASTERACEAE (COMPOSITAE)

P. c. var. caymanensis Cuba and the Cayman Islands
P. c. var. robusta Grand Cayman endemic [1].

Tea Banker, a small mat-like herb with a woody taproot, leaves with a distinctive, lovely lemony smell and little yellow flowers. It has traditionally been used in Cayman, to make a refreshing tea [1].

#### History

It was first recorded in the botanical literature of Grand Cayman in 1900 by Charles F. Millspaugh M.D. Department of Botany Curator, Field Columbian Museum, Chicago, Illinois [2]. Millspaugh was a guest of Allison V. Armour, the Chicago meat-packing millionaire, on a West Indian cruise on the yacht 'Utowana'; they visited the Cayman Islands during February, 1899. The chief set of Millspaugh's specimens is in the



Tea Banker *Pectis caymanensis*. Image: Kristan D. Godbeer ©2009

herbarium of the Field Museum of Natural History in Chicago. Millspaugh published lists of his collection.

On February 8, 1899, the 'Utowana' stopped at The Creek ,'Cayman Brae' (Cayman Brac) A Norther sprang up in the night, so they had to leave for a point further west, where they anchored. They did some more collecting and then sailed

on to Little Cayman, but found no safe harbour. They reached Georgetown (sic), Grand Cayman after dark on Feb. 9. The Health Officer forbade them to land as their last port (Port Antonio, Jamaica) was reported to be infected with measles. They were, however, given permission to go ashore elsewhere as long as they kept away from any other person or dwelling. Because of the Norther, they anchored at 'Spot Bay' (Spotts).

Tea Banker was originally called *Pectis cubensis*, it had been found in Cuba. Millspaugh found it on Grand Cayman on Feb.14, 1899: 'Fine full masses of this species were found in the sand of the roadside at Spot Bay, Grand Cayman (1279), but not seen elsewhere on the island. It is called "Flat-weed," and is used in infusion as a stomachic tonic' [2].

#### **Culturally Significant**

In a two page article entitled 'Bush Medicine', published in the February 1973 issue of the *Nor'wester* magazine, Ena Watler wrote: "It has fine green leaves, grows real close to the ground, and has tiny yellow flowers. Stick a bunch of it in boiling water and add some sugar and you'll have a nice cup of tea to improve your appetite" [3].

#### Critically Endangered

Tea Banker occurs in two varieties *P. c.* var. *caymanensis*, Cuba, Grand Cayman, Little Cayman and Cayman Brac, near endemic, and *P. c.* var. *robusta*, Grand Cayman endemic. Both are Critically Endangered [4].



*P. c. var. robusta* on the sand of South Sound Cemetery, Grand Cayman.

Image: P. Ann van B. Stafford©2006

#### **Observations**

Grand Cayman cemeteries and beach ridges

In recent years it has been found growing in some beach-ridge cemeteries. Do the plants die naturally in a prolonged dry season and sprout during the rainy season? Might it be an annual? This is a challenge to monitor, because it grows amongst Zoysia grass, Donkey Weed *Stylosanthes hamata* and other ground covers.

It may have been pulled up and used for making tea. Cemeteries are weeded and raked. Specimens of the plants I have found from four different locations on Grand Cayman all key out to *P. c. var. robusta*, the Grand Cayman endemic.

#### Sister Islands

Has anybody found Tea Banker on the Brac or Little Cayman in recent years? var .caymanesis occurs in sandy clearings or soil-filled pockets of exposed limestone.

#### Conservation

(P.c. var. robusta)

It is difficult to transplant. Although it can be grown from seed, it seems to require salt, such as at a beach ridge habitat, and fresh water, (when rain falls after the dry season), for the seeds to germinate.

#### **Botanical description**

From Proctor, George R. *FLORA of the Cayman Islands*, 1984, and second edition (in press).

Matlike perennial herb, subwoody at the base and with a woody taproot, the stems often pinkish; leaves oblong-linear or very narrowly lanceolate, 4-12 mm long, minutely scabrid toward the apex and sharply mucronate, and with 4-6 pairs of long cilia near the base. Peduncles mostly 5-10 mm long; ligules yellow, more or less longitudinally nerved. Achenes dark brown, minutely striate [5 & 6].

Occurs in two varieties which can be distinguished as follows:

#### • P. c. var. caymanensis

Stems glabrous, seldom more than 12cm long; phyllaries ciliolate, c. 3mm long; ligules c. 3mm long; achenes 2 - 2.5mm long, strigose with reddish hairs.

Grand Cayman, Little Cayman, Cayman Brac and Cuba. Occurs in sandy clearings or soil-filled pockets of exposed limestone. Frequently used to make a pleasantly aromatic tea.



Mat-like patches of *P. c. var. robusta* growing on sand, Oct 30<sup>th</sup> 2002. Image: P. Ann van B. Stafford©2002

•*P. c.* var. *robusta* (Proctor, 1977).

Stems sparingly hispidulous in lines, up to 25cm long or more; phyllaries glabrous, c.6mm long; ligules c. 5 mm long; achene 3 – 3.2mm long, glabrous or minutely white-strigillose toward the base (**Fig 1.**).

Grand Cayman endemic. Found growing in gravelly sand near the sea. This variety is generally larger and coarser in appearance than var. *caymanensis*.

Please report observations to the Department of Environment.

Pectis caymanensis is listed in the Cayman Islands National Biodiversity Action Plan.



**Fig 1.** *P. c. robusta*, collected  $2^{nd}$  Dec 2006. **a** – achene (small, dry, indehiscent 1-seeded fruit); **df** - disk floret; **l** – ligule (strap-shaped corolla lobe of ray-floret); **lf** – leaf; **p** – pappus (bristles for wind dispersal); **st** – stem; **ph** – phyllary (involucral bract subtending the flower-head).

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# **Bookshelf**

# Threatened Plants of the Cayman Islands – the Red List

A new book by the local environmental specialist Frederic J. Burton.

"Undertaking the formal RedList conservation assessments for each of the Cayman Islands' 415 native plants was a daunting task," Fred Burton admits. "But it wasn't until I'd finished and started summarizing the results that I realized what a shocking conclusion we had on our hands. Forty-seven percent of all our native plants are now threatened with extinction, mainly because of the tide of deforestation that is accompanying the growth runaway our human population."

The main content of the book is written in non-technical language for all readers. The author devotes a full page to each of the 28 plant species and varieties considered unique to the Cayman Islands, with colour photographs accompanying the description for each. A further 14 plants the Cayman Islands shares with only one neighbouring island, are also included. Furthermore, the book includes

This work also doubles as a professional reference, giving the formal conservation status of the entire Cayman native flora in extensive tables at the back of the book, and a scientific paper detailing a new vegetation classification system for the islands, on a CD attached inside the back cover.

Published by the Royal Botanic Gardens, Kew, London, in association with the Cayman Islands Department of Environment, the book contains 105 full colour pages and is bound in reinforced softback. This book is available at local bookshops, and leading web-based book sellers.

#### Frederic J. Burton

Kew Publishing Royal Botanic Gardens, Kew

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