

The Barachois Project – A Baseline Study – Alien Species – Terrestrial Plants

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Study Area: Coastal forest adjacent to the barachois of Residences la Chaux, Mahébourg



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Foreword:

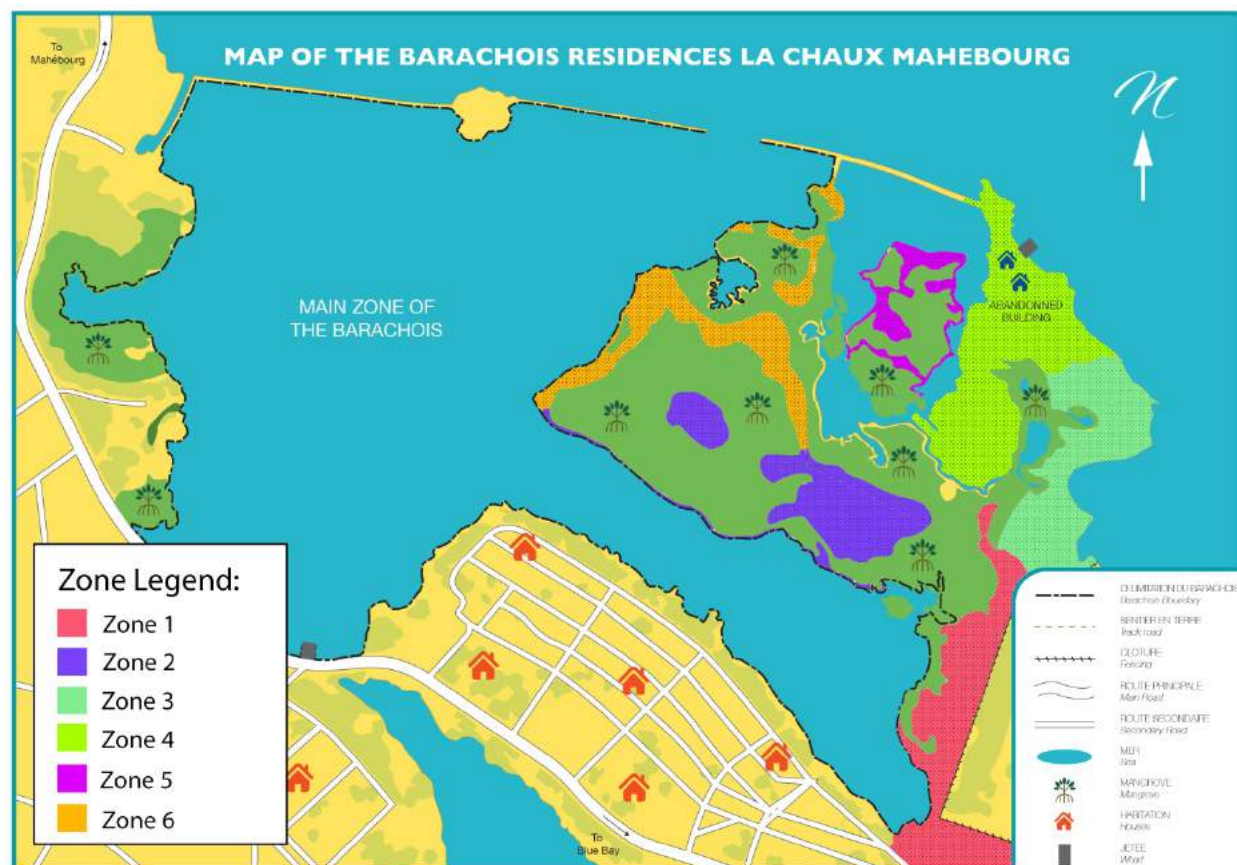
This document forms part of a baseline study carried out for the Barachois Project (EPCO) in Residences la Chaux, Mauritius and contains a catalogue of terrestrial plants (embrophytes) which are currently present in the site or will be introduced in subsequent project phases. The document is split into two parts: alien and native/endemic species.

A map of the project site has been provided alongside the report to divide it into zones (1-6). These are intended to break up the study area into sections to which the distributions of plants included in the study are assigned for ease of locating them in the field. These are referenced in the descriptions for each species. Zones are not intended to document complete distributions but show areas where individual species are most likely to be found based on the authors personal experience at the time of the study.

For endemic and native species, where possible, descriptions have been provided containing morphological, ecological and ethnobotanical information. This information will be used for the creation of interpretative panels which are to be constructed in the project site for educational purposes. For the second catalogue, of all exotic plants it was not possible to create full descriptions for each species given the length of time available and number of exotic species within the study area. Furthermore, it was not deemed necessary as interpretative panels will not be erected for these species. For exotic plants the study instead focusses on documenting local usage to inform future management of the project area and to bolster understanding on the connection between the community and the local environment.

Pre-existing information in scientific literature has been referenced, however any unreferenced information on local usage has been gathered firsthand through interviews with the local people of Residences la Chaux. Information other than ethnobotanical usage, for example scientific studies based on medicinal properties or other trivial information is provided for interest and educational purposes. Scientific information is also included where applicable to support ethnomedicinal usage.

Site map



A larger version of the map can be found on a separate PDF file.

Document legend:

Species name – identity confirmed

Species name – previously reported onsite by Vishwakalyan & Nadeem (2017) or folk source however not confirmed by author

Species name – identity queried and confirmed by University of Mauritius Herbarium

Acalypha indica



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Acalypha indica:

Abundance in study area: Common

Distribution in study area: Clustered - mainly in Zones 1 and 4 – open areas

English Name: Indian Nettle

Local Name: Herbe chatte

IUCN conservation status: Least Concern

Local use (Residences la Chaux): A poultice made from the leaves and salt is used to treat scabies and other skin diseases.

Local use: (Mauritius) From Gurib-Fakim & Gueho (1997): A poultice is also made by combining the leaves with those of *C. halicacabum* to treat skin diseases. The juice from the leaves is added to coffee to stimulate vomiting. A decoction made from the roots acts as a laxative and is also used to treat ear infections. For tambave, a bath is filled with a decoction of the whole plant and *Cuscuta reflexa* (Grosse cuscute). It is also used to treat bronchitis (Daruty 1886).

Notes: *A. Indica* is used in ethnoveterinary practice (Seebaluck et al. 2015). The plant is used by indigenous people from Africa, Central America, North America, Southern China, India, Bangladesh, Papua New Guinea and Mascarene islands (Seebaluck et al. 2015).

Allamanda cathartica



Allamanda cathartica:

Abundance in study area: Common

Distribution in study area: Zones 3, 4 & 5 – coastal forest

English Name: Golden Trumpet

Local Name: Unknown

IUCN conservation status: Least Concern

Local use (Mauritius): Used in traditional medicines and plant extracts exhibit antibiotic, antifungal and antidiabetic effects in studies (Sarker et al. 2012) (Chaithra et al. 2017) (Rajamanikam & Sudha 2013). Flowers are plucked and are used in Hindu religious practices (Vishwakalyan & Nadeem 2017).

N.B. It belongs to the family Apocynaceae which are characterised by exuding (toxic) latex when cut – some consider plant to be poisonous.

Amaranthus dubius



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Amaranthus dubius:

Abundance in study area: Common

Distribution in study area: Mainly Zone 1- near entrance to site

English Name: Amaranth

Local Name: Brede Malbar

IUCN conservation status: Least Concern

Local use (Mauritius): Leaves can be cooked and eaten or sold at markets (it is also known as Red spinach) (Vishwakalyan & Nadeem 2017).

Annona reticulata



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Annona reticulata:

Abundance in study area: Uncommon

Distribution in study area: Zones 2 & 6

English Name: Custard Apple

Local Name: Coeur de Boeuf

IUCN conservation status: Least Concern

Local use (Residences la Chaux): The fruit is edible and sold at markets.

Annona squamosa



"Annona squamosa" by Ji-Elle / Licensed under CC BY-SA 2.0

Annona squamosa:

Abundance in study area: Rare

Distribution in study area: One plant in Zone 5

English Name: Sugar Apple

Local Name: Coeur de Boeuf

IUCN conservation status: Least Concern

Local use (Residences la Chaux): The fruit is eaten.

Notes: In the Indian Ocean *A. squamosa* is used to treat diarrhoea and dystentry (Jain & Srivastava 2005).

Argemone mexicana



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Argemone mexicana:

Abundance in study area: Uncommon

Distribution in study area: Zone 1 only – growing on track at entrance to site

English Name: Mexican Prickly Poppy

Local Name: Chardon

IUCN conservation status: Least Concern

Local use (Mauritius): From Gurib Fakim & Gueho (1997): The stem is made into a decoction for use as a diuretic, the seeds are used to induce vomiting and the seed oil is a strong laxative. The roots are steeped in water, which is then taken orally to treat fevers. A decoction of the roots is used as a lotion to treat hair loss.

N.B. Bright yellow flowers.

Asparagus racemosus



Asparagus racemosus:

Abundance in study area: Common

Distribution in study area: Principally Zones 3 & 4 – crowded vegetation

English Name: N/A

Local Name: Unknown

IUCN conservation status: Least Concern

Local use (Residences la Chaux): Decorative

Asystasia gangetica



Asystasia gangetica:

Abundance in study area: Very common

Distribution in study area: Principally Zones 3 &4 – open areas

English Name: Chinese violet

Local Name: Herbe pistache

IUCN conservation status: Least Concern

Local use: Unknown

N.B. In Africa it is eaten as a vegetable (Adetula 2004). It contains higher concentrations of nutritional minerals than conventional leafy vegetables (Odhav et al. 2007). Extracts from the leaves have anti-asthmatic properties (Akah et al. 2003)

Breynia retusa



"Cupped coral berry tree" by Valke D. / licensed under CC BY-SA 2.0

Breynia retusa:

Abundance in study area: Common

Distribution in study area: Not evaluated – Zone 2 confirmed

English Name: Cupped coral berry tree

Local Name: Unknown

IUCN conservation status: Least Concern

Local use: Unknown

Cajanus scarabaeoides



Cajanus scarabaeoides (L.) Thouars by Jacquot M. / licensed under
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Cajanus scaraboides:

Abundance in study area: Uncommon

Distribution in study area: Zone 1 only - Seedlings on main track

English Name: Showy pigeonpea

Local Name: Pistache marronne

IUCN conservation status: Least Concern

Local use (Mauritius): A decoction of the whole plant is administered to treat rheumatism and fever (Gurib-Fakim & Gueho 1997)

Callistemon citrinus



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Callistemon citrinus:

Abundance in study area: Uncommon

Distribution in study area: Zone 1- by main track, Zone 3

English Name: Bottle Brush

Local Name: Unknown

IUCN conservation status: Least Concern

Local use: Unknown

Notes: In the Indian Ocean the roots are used to treat eczema, indigestion, rheumatism and diabetes (Jain & Srivastava 2005).

Canavalia rosea



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Canavalia rosea:

Abundance in study area: Uncommon

Distribution in study area: Zones 3 & 4 –shoreline

English Name: Baybean

Local Name: Patate cochon

IUCN conservation status: Least Concern

Local use: None documented

N.B. Very similar morphology to *I. pes-caprae* but *C. rosea* leaves are trifoliolate whereas the former's are not.

Casuarina equisetifolia



Casuarina equisetifolia:

Abundance in study area: Uncommon

Distribution in study area: Zone 2, 3, 4

English Name: Australian/Whistling Pine

Local Name: Filao

IUCN conservation status: Least Concern

Local use (Residences la Chaux): It is used medicinally to treat diarrhea and as a tropical alternative to Christmas trees.

Local use (Mauritius): Bark used to make decoction with *Scutia myrtina* (Bois Senti) to treat diarrhea (Gurib-Fakim & Gueho 1997).

N.B. Its other common name, Whistling Pine refers to the sound the branches produce in the wind. *Casuarina* comes from a Malay word likening the foliage to the plumage of a cassowary bird (Orwa et al. 2009).

Cardiospermum halicacabum var. *microcarpum*



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Cardiospermum halicacabum var. microcarpum:

Abundance in study area: Uncommon

Distribution in study area: Zone 1 - by side of main track

English Name: Balloon vine

Local Name: Poc poc sauvage

IUCN conservation status: N/A

Local use (Mauritius): From Gurib-Fakim & Gueho (1997): In Mauritius a mixed decoction of the roots and stems is used to treat chronic cystitis and catarrhs. To treat rheumatism a bath is filled a decoction of the whole plant to treat tambave and scabies.

Carica papaya



"*Carica papaya* L." by Pirat C. / Licensed under CC BY-SA 2.0

Carica papaya:

Abundance in study area: Adult plants are rare – young plants are more common

Distribution in study area: One plant in Zone 1, young plants in Zone 1 & 3

English Name: Papaya

Local Name: Papayer

IUCN conservation status: Data Deficient

Local use (Residences la Chaux): The fruit is edible and has commercial value.

Local use (Mauritius): The roots are made into a decoction combined with leaves and roots of *P. oleracea* to treat parasitic worms (Gurib-Fakim & Gueho 1997).

Notes: It is also used in ethnomedicine as a diuretic on Reunion Island, a property supported in a study by Adsersen & Adsersen (1997).

N.B. A compound derived from papaya leaves 'papain' acts as an anti-inflammatory drug and also has industrial uses. (Gurib-Fakim 2006). Another substance present in Papaya leaves, carpain can be used as a cardiac depressant drug.

Chloris barbata



Chloris barbata:

Abundance in study area: Common

Distribution in study area: Mainly zone 1 – thick grassy areas

English Name: Purpletop chloris

Local Name: Unknown

IUCN conservation status: N/A

Local use: Unknown

Clerodendrum speciosissimum



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Clerodendrum speciosissimum:

Abundance in study area: Uncommon

Distribution in study area: Zones 2 & 6

English Name: Java Glory Bower

Local Name: Unknown

IUCN conservation status: N/A

Local use: None documented

Colubrina asiatica



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Colubrina asiatica:

Abundance in study area: Uncommon

Distribution in study area: Clustered group in Zone 4

English Name: Latherleaf

Local Name: Unknown

IUCN conservation status: N/A

Local use (Residences la Chaux): When seeds are dry and hard they are used for musical instruments or necklaces.

Commelina benghalensis



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Commelina benghalensis:

Abundance in study area: Uncommon

Distribution in study area: Zone 1 & 3

English Name: Wandering jew

Local Name: Unknown

IUCN conservation status: Least Concern

Local use: None documented

Cuscuta platyloba

Cuscuta platyloba:

Abundance in study area: Common

Distribution in study area: Zone 3 & 4

English Name: N/A

Local Name: Unknown

IUCN conservation status: N/A

Local use (Residences la Chaux): Rubbed on skin to treat surface wounds/itch

Cynodon dactylon



"Cynodon dactylon (L.) Pers." by Menand M. /Licensed under CC BY-SA 2.0

Cynodon dactylon:

Abundance in study area:

Distribution in study area:

English Name: Bermuda Grass

Local Name: Chien Dents

IUCN conservation status: N/A

Local use: None documented

Datura metel



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[Datura metel](#)

Abundance in study area: Uncommon

Distribution in study area: Zone 1

English Name: Downy thorn apple

Local Name: Fleur trompette, Herbe diable

IUCN conservation status: N/A

Local use (Mauritius): A poultice of the leaves is used to treat rheumatism (Gurib-Fakim & Gueho 1997). The dry leaves can be rolled into a cigarette which is used to treat Parkinson's (Fakim 1990).

Desmanthus virgatus



Desmanthus virgatus:

Abundance in study area: Very common

Distribution in study area: No zonation – found throughout site

English Name: N/A

Local Name: Petit Acacia

IUCN conservation status: N/A

Local use: None documented

N.B. Very similar to *L. leucocephala* (Local name: Acacia) but *D. virgatus* grows much smaller (shrub) and seed pods are smaller and thinner.

Euphorbia heterophylla



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Euphorbia heterophylla:

Abundance in study area: Uncommon

Distribution in study area: Zone 3 - Near shore facing Ile aux Aigrettes

English Name: Fiddler's spurge

Local Name: Unknown

IUCN status: N/A

Local use (Mauritius): A bath is filled with a decoction of the plant for treating scabies (Gurib-Fakim & Gueho 1997).

N.B. Toxicity – contains a latex which irritates skin, but which can also be used to counteract the irritant latex of other members of the *Euphorbia* genus (Mosango 2008).

Euphorbia hirta



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Euphorbia hirta:

Abundance in study area: Common

Distribution in study area: Zone 1 – by tracks, Zone 5 - derelict area

English Name: Asthma weed

Local Name: Jean Robert

IUCN conservation status: N/A

Local use (Mauritius): From Gurib-Fakim & Gueho (1997): A decoction of the leaves and stems is used to treat diarrhea, dysentery and rheumatism. To treat asthma the leaved stems are placed to boil in a glass of water, to which a spoon of honey is added. Children with asthma are given a spoon of this medicine and adults take a cupful.

Notes: Effective in treating ciguatera fish poisoning (Kumar-Roiné et al. 2009).

Ficus benghalensis



Ficus benghalensis:

Abundance in study area: One large adult plant

Distribution in study area: Zone 4

English Name: Banyan

Local Name: Banyan, Multipliant, Laffouche

IUCN conservation status: N/A

Local use (Residences la Chaux): *F. benghalensis* has adventitious roots that, when young, thin and coloured are cut from the tree and made into a cord. This is then made into a necklace which is given to children who are experiencing teething pains. This can be symbolically decorated with zako (monkey) teeth to strengthen the folk medicinal function.

Local use (Mauritius): An infusion of the fruits provides a refreshing drink and tonic – it is used to treat diabetes (Fakim 1990). The roots, when long and thin, are used in a mixed decoction to treat diarrhea and dysentery. The latex from the plant is applied directly to tooth pains for immediate effect (Gurib-Fakim & Gueho 1997).

Flacourtia indica



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Flacourtia indica:

Abundance in study area: Common

Distribution in study area: Zones 3,4 & 6 - coastal forest

English Name: Governer's plum

Local Name: Prune Malgache

IUCN conservation status: Least Concern

Local use (Mauritius): A poultice of the leaves and roots is used to treat eczema and fever (Gurib-Fakim & Gueho 1997). A root decoction is used to treat digestive problems and diabetes (Fakim 1990).

Notes: The fruits are edible and can be used to make wine or a jelly (Vishwakalyan & Nadeem 2017).

Gliricidia sepium



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Gliricidia sepium:

Abundance in study area: Uncommon

Distribution in study area: Zone 3 only - clustered

English Name: Madrecacao

Local Name: Bois noire

IUCN conservation status: N/A

Local use: None documented

Ipomoea nil



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Ipomoea nil:

Abundance in study area: Common

Distribution in study area: Zones 3 &4 - coastal forest

English Name: Ivy Morning Glory

Local Name: Liane Cochon

IUCN conservation status: Least Concern

Local use (Residences la Chaux): The leaves can be pressed and placed on cuts to aid in healing and wound closing.

Notes: Flowers bloom in shades varying from blue to pink that blend into white (Vishwakalyan & Nadeem 2017).

N.B. Leaves very similar to *I. obscura* – flowers best to differentiate between the two species.

Ipomoea obscura



Ipomoea obscura:

Abundance in study area: Common

Distribution in study area: Zones 3, 4, 5 - coastal forest

English Name: Obscure morning glory

Local Name: Feuille Coeur

IUCN conservation status: Least Concern

Local use (Residences la Chaux): The leaves are crushed and applied to external wounds.

Notes: The leaves are eaten as a vegetable in parts of Africa and the sap can be collected and is used in traditional medicines to treat insanity (Vishwakalyan & Nadeem 2017). Its medicinal properties are supported in studies, such as by Hamsa & Kuttan (2011) where extracts from *I. obscura* were found to have anti-inflammatory and anti-tumour effects.

N.B. Leaves very similar to *I. nil* – flowers ideal for differentiating between the two species

Leucaena leucocephala



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Leucaena leucocephala

Abundance in study area: Very common

Distribution in study area: All zones

English Name: White leadtree

Local Name: Acacia

IUCN conservation status: Least Concern

Local use (Residences la Chaux): Cattle fodder

Leucas lavandulifolia



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Leucas lavandulifolia:

Abundance in study area: Common

Distribution in study area: Zone 1 - main track

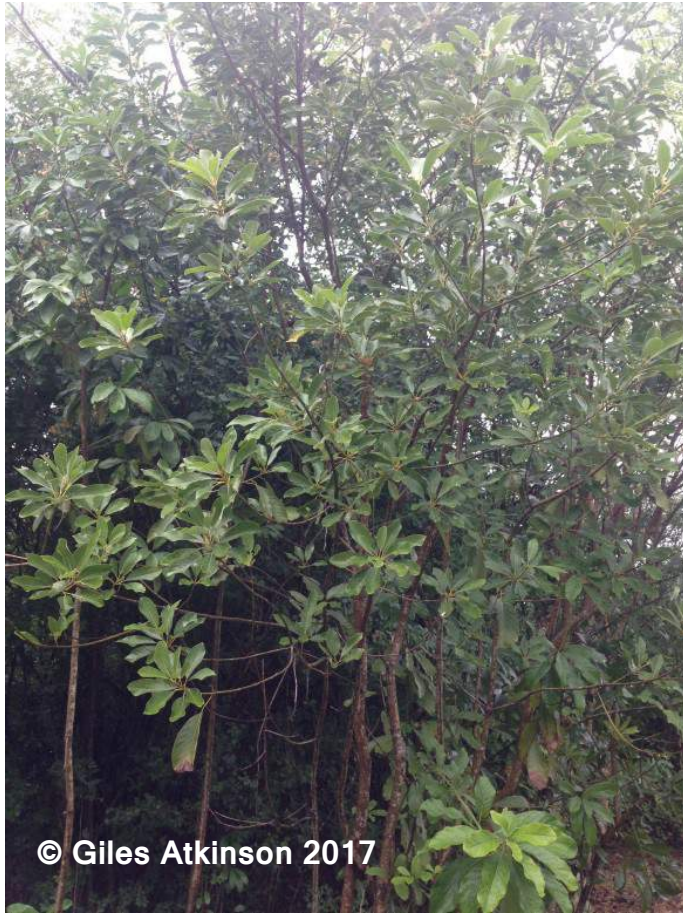
English Name: N/A

Local Name: Unknown

IUCN conservation status: N/A

Local use: None documented

Litsea glutinosa



Litsea glutinosa:

Abundance in study area: Common

Distribution in study area: Zones 2 (near shore), 3, 4, 5, 6 - Forested areas

English Name: Indian Laurel

Local Name: Bois d'Oiseau

IUCN conservation status: Least Concern

Local use (Residences la Chaux): A leaf decoction has a wide range of applications and is regarded as having the ability to cleanse the body and treat intestinal problems. The decoction is left until it turns red before drinking.

Notes: In Indian medicine a paste made from the roots can be used as a poultice for sprains and bruises (Vishwakalyan & Nadeem 2017). A decoction is also used traditionally for nervous attacks and externally as an emollient and antispasmodic (Jain & Srivastava 2005)

Lycopersicon esculentum



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Lycopersicon esculentum:

Abundance in study area: Uncommon

Distribution in study area: Zone 1 – beside main track

English Name: Tomato

Local Name: Pomme d'amour

IUCN conservation status: N/A

Local use (Mauritius): A decoction of the leaves can be used to prevent vomiting and treat dysentery (Fakim 1990) (Guri-Fakim & Geuho 1997).

Mangifera indica



Mangifera indica:

Abundance in study area: Rare

Distribution in study area: Zone 4 only – One young tree

English Name: Mango

Local Name: Mangué

IUCN conservation status: Data Deficient

Local use (Residences la Chaux): Fruit production.

Melinis repens



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Melinis repens:

Abundance in study area: Common

Distribution in study area: Zone 1 - Thick grassy areas

English Name: Natal grass, Natal redtop

Local Name: Unknown

IUCN conservation status: N/A

Local use: None documented

Millettia pinnata



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Millettia pinnata:

Abundance in study area: Very Common

Distribution in study area: All zones

English Name: Pongam Oiltree

Local Name: La coqueluche

IUCN conservation status: Least Concern

Local use (Residences la Chaux): Traditionally it is planted in gardens due to the belief that it wards off evil spirits. In folk medicine the seeds are plucked from the plant when brown and dry and made into a necklace which is then placed around the necks of children who have cough symptoms for healing purposes.

Mimosa pudica



Mimosa pudica L. by Nemcova S. / Licensed under CC BY-NC 2.0



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Mimosa pudica:

Abundance in study area: Uncommon

Distribution in study area: Zone 2

English Name: Shameplant

Local Name: Senssissive

IUCN conservation status: Least Concern

Local use (Residences la Chaux): An infusion is given to children which are excitable in the evening to make them sleep.

Notes: Leaves will curl up when touched (hence common names)

Passiflora foetida



Passiflora foetida:

Abundance in study area: Common

Distribution in study area: Principally Zones 3 & 4 - Near-shore coastal forest

English Name: Goat-scented passionflower

Local Name: Liane poc-poc

IUCN conservation status: Least Concern

Local use (Residences la Chaux): The fruit is edible and eaten locally but not sold at markets).

Local use (Mauritius): A decoction of the leaves is used to treat nervous attacks and to control late periods (Baumer 1979).

Passiflora suberosa



"Passiflora suberosa L." by Roubaudi L. / Licensed under C BY-SA 2.0



"Passiflora suberosa L." by Santacreu H. / Licensed under C BY-SA 2.0

Passiflora suberosa:

Abundance in study area: Common

Distribution in study area: Zones 2, 3, 4 - Coastal forest

English Name: N/A

Local Name: Liane poc-poc

IUCN conservation status: Least Concern

Local use (Mauritius): A leaf decoction, used externally is used to treat urticaria (hives) and pruritus (itch) (Fakim 1990). A root decoction treats hysteria (Gurib-Fakim et al. 1993).

N.B. Similar morphology to *P. foetida*

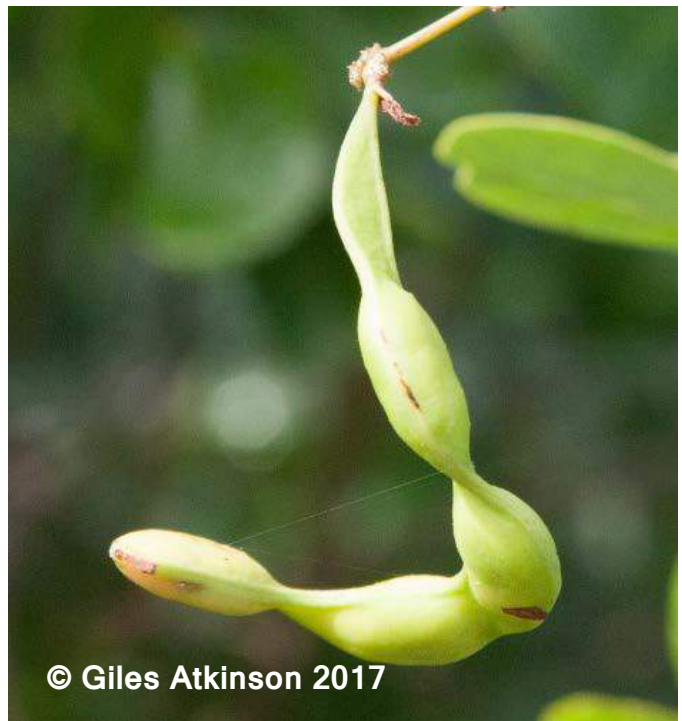
Pithecellobium dulce



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Pithecellobium dulce:

Abundance in study area: Very Common

Distribution in study area: All zones – coastal forest

English Name: Manila Tamarind

Local Name: (Recorded) Cassie de Manille/(In zone) "campeche "

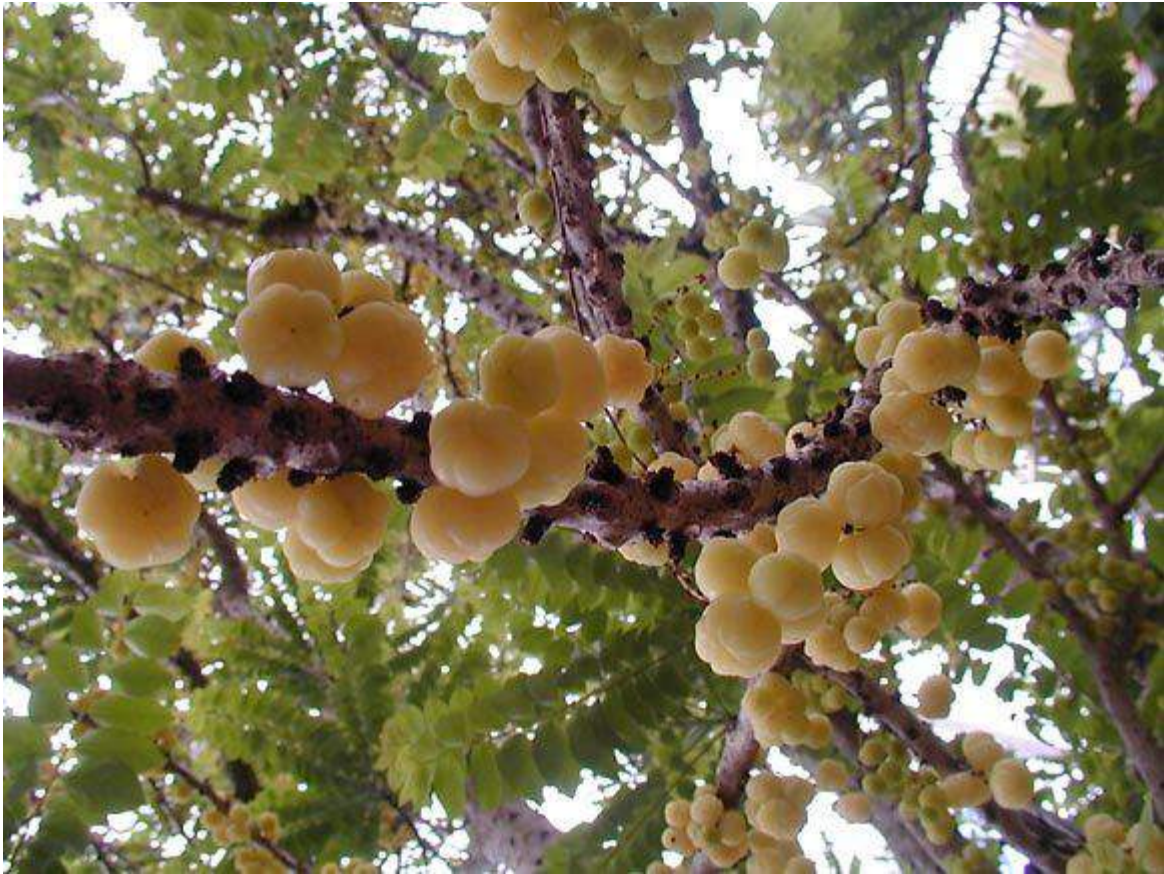
IUCN conservation status: Least Concern

Local use (Residences la Chaux): Materials

Notes: The name Pithecellobium refers to the fact that the pods look like ear lobes. It also has medicinal properties, for example, it is a source of natural antioxidants and found to reduce ulcers in studies on par with conventional drugs (Nagmoti et al. 2012) (Megala & Geetha 2012).

N.B. The local name 'campeche' likely refers to the very similar-looking species *Haematoxylum campechianum*

Phyllanthus acidus



Phyllanthus acidus (L.) Skeels by Meyer J-Y. / Licensed under C BY-NC-SA 2.0

Phyllanthus acidus:

Abundance in study area: Rare – one plant

Distribution in study area: Zone 1 - Garden on house beside main track

English Name: Otaheite gooseberry

Local Name: Bilimbi rond

IUCN conservation status: Least Concern

Local use (Residences la Chaux): Fruit used to make pickles.

Psidium cattleianum



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Psidium cattleianum:

Abundance in study area: Rare

Distribution in study area: Zone 2, one also reported in Zone 5 – derelict area

English Name: Strawberry Guava

Local Name: Goyave de Chine

IUCN conservation status: Least Concern

Local use (Residences la Chaux): Materials.

Local use (Mauritius): The fruits are rich in vitamin C. In Mauritius a decoction of the tender fruit is an astringent and used to treat bloody diarrhea. A decoction of the leaves is used to treat dysentery (Gurib-Fakim & Gueho 1997).

Ricinus communis



Ricinus communis:

Abundance in study area: Common

Distribution in study area: Zone 1: open areas – on/beside track into Cot Nicol

English Name: Castorbean plant

Local Name: Ricin

IUCN conservation status: Least Concern

Local use (Mauritius): A decoction of the leaves is used to treat colic and wind. A poultice of the leaves is applied to breasts to regulate lactation (Gurib-Fakim & Gueho 1997). Furthermore the poultice is used to treat rheumatism and aches (Fakim 1990).

Notes: Ricinus refers to the arachnid parasites ticks (*Ixodes ricinus*) and describes the appearance of castor beans and refers to the toxic compound ricin – one of the most toxic naturally occurring substances which is present in the beans and is released as a by-product of castor oil production. Castor oil is used as a lubricant in motors (Vishwakalyan & Nadeem 2017)

Sansevieria zeylanica



Sansevieria zeylanica:

Abundance in study area: Uncommon

Distribution in study area: Clustered in Zones 3 & 4

English Name: Mother-in-law's tongue

Local Name: Unknown

IUCN conservation status: Least Concern

Local use: None documented

Santalum album



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Santalum album:

Abundance in study area: Common

Distribution in study area: Zones 2-6 - coastal forest

English Name: Indian Sandalwood

Local Name: Unknown

IUCN conservation status: Vulnerable

Local use: Often refined to produce an essential oil which can then be sold, In Mauritius the wood is sold in 'Pooja' shops. (Vishwakalyan & Nadeem 2017)

Notes: Cultivated as the source of sandalwood, which has fragrant and medicinal properties. Globally it is highly exploited as it is the second most expensive wood in the world. This, combined with its slow rate of growth has resulted in its vulnerable status.

Schinus terebinthifolius



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Schinus terebinthifolius:

Abundance in study area: Common

Distribution in study area: Zones 2-6 - coastal forest

English Name: Brazilian pepper tree

Local Name: Poivre marron

IUCN conservation status: Least Concern

Local use: None documented

Notes: The leaves smell of pepper when crushed. Effective in treating ciguatera fish poisoning (Kumar-Roiné et al. 2009)

Sonchus asper



"Sonchus asper (L) Hill" by Simpson C.M. / Licensed under CC BY-NC 2.0

Sonchus asper:

Abundance in study area: Uncommon

Distribution in study area: Zone 1

English Name: Spiny sowthistle

Local Name: Unknown

IUCN conservation status: Least Concern

Local use: None documented

Senna occidentalis



Senna occidentalis:

Abundance in study area: Uncommon

Distribution in study area: Clustered in Zone 4 only

English Name: Coffee senna

Local Name: Casse puante

IUCN conservation status: Least Concern

Local use (Residences la Chaux): The bitter roots are used in traditional medicine to treat fever.

Solanum americanum



Solanum americanum:

Abundance in study area: Common

Distribution in study area: Zone 1: beside main track

English Name: Black Nightshade

Local Name: Brede Martin

IUCN conservation status: Least Concern

Local use (Residences la Chaux): Treatment of mouth ulcers the leaves are pressed the release the juices and then applied to the inside of the mouth.

Stachytarpheta jamaicensis



Stachytarpheta jamaicensis:

Abundance in study area: Very common

Distribution in study area: Zones 3& 4: open areas with little vegetation near shore

English Name: Blue porterweed

Local Name: Queue de rat

IUCN status: Least Concern

Local use (Mauritius): A bath is filled with a decoction of the leaves to treat ailments of the skin. A poultice of the leaves is applied to boils, wounds and scabs. A leaf decoction can also be used to expel internal parasites (Fakim 1990). An infusion of the stems is used to treat insomnia and calm the nerves (Gurib-Fakim & Gueho 1997).

Syzygium cumini



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Syzygium cumini:

Abundance in study area: Rare

Distribution in study area: Zone 3 - One adult individual – coastal forest

English Name: Java Plum

Local Name: Jamblon

IUCN conservation status: Least Concern

Local use (Residences la Chaux): The plant produces edible fruits. In Mauritius it is commonly used to treat diabetes – a decoction of dried bark and leaves have hypoglycaemic effect (Gurib- Fakim 2006)

Tamarindus indica



Tamarindus indica:

Abundance in study area: Common

Distribution in study area: Large adult plants in Zones 4 & 5

English Name: Tamarind

Local Name: Tamarind

IUCN conservation status: Least Concern

Local use (Residences la Chaux): Fruit is eaten and used in cooking.

Local use (Mauritius): The leaves can be made into a decoction for diarrhoea and it is also used to treat pregnant women who experience swelling in their legs (Suroowan & Mahomoodally 2013).

Tephrosia noctiflora



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Tephrosia noctiflora (Tephrosia) by Leeratiwong C. / Licensed under CC BY 3.0

Tephrosia noctiflora:

Abundance in study area: Uncommon

Distribution in study area: Zone 2

English Name: N/A

Local Name: Unknown

IUCN conservation status: N/A

Local use: None documented

Terminalia catappa



Terminalia catappa:

Abundance in study area: Common

Distribution in study area: Zones 3&4 - adult plants close to shore facing Ile aux Aigrettes – saplings can be found elsewhere

English Name: Tropical Almond

Local Name: Badamier

IUCN status: Least Concern

Local use: None documented

Notes: Also known as Indian or Beach Almond tree. It produces green fruits which contain a nut similar to the almond. Used on Reunion Island as an antihypertensive and diuretic (Adsersen & Adsersen 1997).

Tradescantia spathacea



"Tradescantia spathacea Sw." by Santacreu H. / Licensed under CC BY-SA 2.0

Tradescantia spathacea:

Abundance in study area: Rare

Distribution in study area: Zone 1 only – entrance to site

English Name: Boatlily

Local Name: Unknown

IUCN status: Least Concern

Local use: None documented

Turnera angustifolia



Turnera angustifolia:

Abundance in study area: Common

Distribution in study area: Zones 3-5: open areas in coastal forest

English Name: Yellow Alder

Local Name: Fleur Jaune

IUCN conservation status: Least Concern

Local use: None documented

Notes: Yellow flowers open and close on the same day.

Vernonia cinerea



"Vernonia cinerea" by Valke D. / Licensed under CC BY-SA 2.0

Vernonia cinerea:

Abundance in study area: Uncommon

Distribution in study area: Zone 1 - Grassy area on eastern edge

English Name: Ash-coloured fleabane

Local Name: Unknown

IUCN conservation status: N/A

Local use: None documented

Wikstroemia indica



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Wikstroemia indica:

Abundance in study area: Rare

Distribution in study area: Zone 2-4 – coastal forest

English Name: Tie bush

Local Name: Herbe tourterelle

IUCN conservation status: N/A

Local use (Residences la Chaux): Leaves are cooked with lentils and then taken by pregnant women suffering from anaemia. They also take the leaves and crush them, then apply to cutaneous wounds.

Local use (Mauritius): The crushed fruit soaked in water is taken orally by pregnant women to treat anaemia (Fakim 1990). In Mauritius an infusion is also made with the leaves is used to treat poisoning from toxic fish. The leaves can be used with salt to make a poultice, applied to abscesses (Gurib-Fakim & Gueho 1997).

Ziziphus mauritiana



"Ponsigue (*Ziziphus mauritiana*)" by Orrh W. / Licensed under CC BY-NC-ND 2.0



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Ziziphus mauritiana:

Abundance in study area: Rare

Distribution in study area: Zone 4 & 5

English Name: Wild Jujube

Local Name: Masson

IUCN conservation status: N/A

Local use (Residences la Chaux): The fruits of *Z. mauritiana* are harvested and eaten or made into other delicacies.

Local use (Mauritius): From Gurib-Fakim & Gueho (1997). A decoction made from leaves can be taken for hypertension and used as a diuretic (Jain & Srivastava 2005). A decoction of the leaves is taken orally with sugar to treat coughing. A decoction is also used for asthma. A bark decoction is used to treat diarrhea. The powdered root bark is mixed with coconut oil and applied to ulcers.

References:

Bibliography:

Adetula O.A. 2004. *Asystasia gangetica* (L.) T.Anderson. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa). Available at: [http://uses.plantnet-project.org/en/Asystasia_gangetica_\(PROTA\)](http://uses.plantnet-project.org/en/Asystasia_gangetica_(PROTA)) Accessed 15/08/17.

Adersen A. Adersen H. 1997. Plants from Réunion Island with alleged antihypertensive and diuretic effects an experimental and ethnobotanical evaluation. *Journal of Ethnopharmacology*. 58. pp. 189-206

Akah P.A. Ezike A.C. Nwafor S.V. Okoli C.O. Enwerem N.M. 2003. Evaluation of the anti-asthmatic property of *Asystasia gangetica* leaf extracts. *Journal of Ethnopharmacology*. 89(1). pp. 25-36

Chaithra A.B. Satish S. Abhishkek N. Ajay K.K. 2017. An Investigation on Anti-Diabetic Activity in Aqueous Extract of Aerial Parts of *Allamanda cathartica* Linn in Streptozotocin Induced Diabetic Rats. *International Journal of Pharma and Chemical Research*. 3(2). pp. 242-247

Daruty D. C. 1886. *Plantes Medicinales de Maurice*

Fakim A.G. 1990. *International Journal of Crude Drug Research*. 28. pp. 297-308

Global Invasive Species Database. 2017. Species profile: *Colubrina asiatica*. Available at: <http://www.iucngisd.org/gisd/species.php?sc=371> . Accessed 15/08/17

Gurib-Fakim A. 2006. Medicinal plants: Traditions of yesterday and drugs of tomorrow. *Molecular Aspects of Medicine*. 27(1). pp. 1-93

Gurib-Fakim, A., Gueho, J. 1995-7. *Plantes médicinales de L'Ile Maurice*. Tomes 1, 2, 3. Editions de L'Océan Indien. University of Mauritius and Mauritius Sugar Industry Research Institute.

Gurib-Fakim A. Gueho J. Swraj M. D. Dulloo E. 1994. *Plantes Medicinales de l'Ile Rodrigues*. 1-588. Editions de l'Océan Indien. Mauritius

Halpern J.H. 2004. Hallucinogens and dissociative agents naturally growing in the United States. *Pharmacology & Therapeutics*. 102(2). pp. 131-138

Hamsa T.P. Kuttan G. Evaluation of the Anti-inflammatory and Anti-tumor Effect of *Ipomoea obscura* (L) and Its Mode of Action Through the Inhibition of Pro Inflammatory Cytokines, Nitric Oxide and COX-2. *Inflammation*. 34(3). pp. 171-183

Jain S.K. Srivastava S, 2005. Traditional uses of some Indian plants among islanders of the Indian Ocean. *Indian Journal of Traditional Knowledge*. 4(4). pp. 345-347

Kumar-Roiné S. Matsui M. Reybier K. Darius H.T. Chinain M. Pauillac S. Laurent D. 2009. Ability of certain plant extracts traditionally used to treat ciguatera fish poisoning to inhibit nitric oxide production in RAW 264.7 macrophages. *Journal of Ethnopharmacology*. 123(3). pp. 369-377

Megala G. Geetha A. 2012. Antiulcerogenic activity of hydroalcoholic fruit extract of *Pithecellobium dulce* in different experimental ulcer models in rats. *Journal of Ethnopharmacology*. 142(2). pp. 415-421

Mosango, D.M. 2008. *Euphorbia heterophylla* L. Schmelzer, G.H. & Gurib-Fakim, A. (Editors). PROTA (Plant Resources of Tropical Africa / Ressources végétales de l'Afrique tropicale), Wageningen, Netherlands. Accessed 24 July 2017. [http://uses.plantnet-project.org/en/Euphorbia_heterophylla_\(PROTA\)](http://uses.plantnet-project.org/en/Euphorbia_heterophylla_(PROTA))

Nagmoti D.M. Khatri D.K. Juvekar P.R. Juvekar A.R. 2012. Antioxidant activity free radical-scavenging potential of *Pithecellobium dulce* Benth seed extracts. *Free Radicals and Antioxidants*. 2(2). pp. 37-43

Odhav B. Beekrum S. Akula U. Baijnath H. 2007. Preliminary assessment of nutritional value of traditional leafy vegetables in KwaZulu-Natal, South Africa. *Journal of Food Composition and Analysis*. 20(5). pp. 430-435

Oliver-Bever B. 1986. *Medicinal Plants in Tropical West Africa*. Cambridge University Press

Orwa C, Mutua A, Kindt R, Jamnadass R, Simons A. 2009. Agroforestry Database: a tree reference and selection guide version 4.0 (<http://www.worldagroforestry.org/af/treedb/>)

Rajajmanickam K Sudha S.S. 2013. In vitro antimicrobial activity and in vivo toxicity of *Moringa oleifera* and *Allamanda cathartica* against multiple drug resistant clinical pathogens. *International Journal of Pharma and Bio Sciences*. 4(1). B. pp. 768-775

Sarker R. Sharmin T. Chowdury S.R. Islam F. 2012. Thrombolytic Activity and Preliminary Cytotoxicity of Five Different Fractions of Methanol Extract of *Allamanda cathartica* Leaf. *Journal of Applied Pharmaceutical Science*. 2(7). pp. 129-132

Seebaluck R. Gurib-Fakim A. Mahomoodally F. 2015. Medicinal plants from the genus *Acalypha* (Euphorbiaceae)-A review of their ethnopharmacology and phytochemistry. *Journal of Ethnopharmacology*, 159, pp. 137-157

Suroowan S. Mahommodally F. 2013. Complementary and alternative medicine use among Mauritian women. *Complementary Therapies in Clinical Practice*. 19(1). pp. 36- 43

Sussman L. 1980. *Journal of Ethnopharmacology*. 2. pp. 259-269

Vishwakalyan B. Nadeem N. 2017. Floristic survey (Barachois de Mahebourg). EPCO

Photography:

Jacquot M. *Cajanus scarabaeoides* (L.) Thouars (Photo). *PI@ntNet*. [https://identify.plantnet-project.org/species/maurice/Cajanus%20scarabaeoides%20\(L.\)%20Thouars](https://identify.plantnet-project.org/species/maurice/Cajanus%20scarabaeoides%20(L.)%20Thouars). Licensed under CC BY-SA 2.0. <https://creativecommons.org/licenses/by-sa/2.0/>

Ji-Elle. *Annona squamosa* L. (Photo). *PI@ntNet*. <http://identify.plantnet-project.org/species/maurice/Annona%20squamosa%20L>. Accessed 08/09/17. Licensed under CC BY-SA 2.0. <https://creativecommons.org/licenses/by-sa/2.0/>

Leeratiwong C. *Tephrosia noctiflora* (Tephrosia). (Photo). *Tephrosia of Thailand*. <http://tephrosia.myspecies.info/taxonomy/term/1117> Accessed 25/08/17. Licensed under CC BY 3.0 <https://creativecommons.org/licenses/by/3.0/>

Menand M. *Cynodon dactylon* (L.). Pers. (Photo). *PI@ntNet*. [http://identify.plantnet-project.org/species/maurice/Cynodon%20dactylon%20\(L.\)%20Pers](http://identify.plantnet-project.org/species/maurice/Cynodon%20dactylon%20(L.)%20Pers). Accessed 10/09/17. Licensed under CC BY-SA 2.0. <https://creativecommons.org/licenses/by-sa/2.0/>

Meyer J-Y. *Phyllanthus acidus* (L.). Skeels. (Phot). *PI@ntNet*. [https://identify.plantnet-project.org/species/maurice/Phyllanthus%20acidus%20\(L.\)%20Skeels](https://identify.plantnet-project.org/species/maurice/Phyllanthus%20acidus%20(L.)%20Skeels). Accessed 25/08/17. Licensed under CC BY-NC-SA 2.0. <https://creativecommons.org/licenses/by-nc-sa/2.0/>

Nemcova S. *Mimosa pudica* L. (Photo). *PI@ntNet*. <https://identify.plantnet-project.org/species/maurice/Mimosa%20pudica%20L>. Accessed 25/08/17. Licensed under CC BY-NC 2.0 <https://creativecommons.org/licenses/by-nc/2.0/>

Orrh W. *Pongia mauritiana*. (Photo). *flickr*. <https://www.flickr.com/search/?text=ziziphus%20mauritiana&license=2%2C3%2C4%2C5%2C6%2C9>. Accessed 25/08/17. Licensed under CC BY-NC-ND 2.0 <https://creativecommons.org/licenses/by-nc-nd/2.0/>

Pirat C. *Carica papaya* L. (Photo). *PI@ntNet*. <http://identify.plantnet-project.org/species/maurice/Carica%20papaya%20L>. Accessed 09/08/17/ Licensed under CC BY-SA 2.0 <https://creativecommons.org/licenses/by-sa/2.0/>

Romero L. *Datura metel*. (Photo). *flickr*. <https://www.flickr.com/photos/luisjromero/11712770123/in/photolist-iR21ut-hrFkjw-723Yab->

[bucNiB-jfZKSH-jg2dYc-jg2os2-723Y8Y-72YU7D-72YU5a-6TnyDF-amVK1d-jg4XKy-2kuzDi-jfZNyz-5uccWw-5ucd7b-8aB1fa-oSVFAa-8HAvr3-5ucd3y-9zP5a6-hFYEHR-34Lxh2-M3CMDp-XJreS2-hzp7Vp-XvjsMJ-MXbDyd-PTZgL-25YG4H-6Fyim-2KHu6W-jsgNi5-9toUeA-7YJzbt-5r8N46-D5ASU-6VSYNB-6wxWS4-9NrRuN-6cEMj5-6qRSU2-D5ANA-PUxQ8-HVGBGs-264c8y-jdHZA-pnZQdV-9wH17w](https://www.flickr.com/photos/dinesh_valke/869607821/in/photolist-exTEhe-52oiPD-exTKWT-52szVu-exTH6D-9VbSAu-exWMSw-exTzmn-2jNCfp-8bz165-8hpyBJ-2jQY7i-8byZUL-8fxsv6-8fAHFs-8jjX28-6KR5GE-52sAxf-2jQY6v-8jjWJV-8bz1Fw-52okbF-8fAFTL-6KLAU6) Accessed 23/08/17. Licensed under CC BY 2.0
<https://creativecommons.org/licenses/by/2.0/>

Roubaudi L. *Passiflora suberosa* L. (Photo). *PI@ntNet*. <https://identify.plantnet-project.org/species/maurice/Passiflora%20suberosa%20L>. Accessed 25/08/17. Licensed under CC BY-SA 2.0. <https://creativecommons.org/licenses/by-sa/2.0/>

Santacreu H. *Passiflora suberosa* L. (Photo). *PI@ntNet*. <https://identify.plantnet-project.org/species/maurice/Passiflora%20suberosa%20L>. Accessed 25/08/17. Licensed under CC BY-SA 2.0. <https://creativecommons.org/licenses/by-sa/2.0/>

Santacreu H. *Tradescantia spathacea* Sw. (Photo). *PI@ntNet*. <https://identify.plantnet-project.org/species/maurice/Tradescantia%20spathacea%20Sw>. Accessed 25/08/17. Licensed under CC BY-SA 2.0 <https://creativecommons.org/licenses/by-sa/2.0/>

Simpson C.M. *Sonchus asper* (L.) Hill. (Photo). *PI@ntNet*. [https://identify.plantnet-project.org/species/maurice/Sonchus%20asper%20\(L.\)%20Hill](https://identify.plantnet-project.org/species/maurice/Sonchus%20asper%20(L.)%20Hill). Accessed 25/08/17. Licensed under CC BY-NC 2.0. <https://creativecommons.org/licenses/by-nc/2.0/>

Valke D. Coral cupper berry tree (Photo). *flickr*.
https://www.flickr.com/photos/dinesh_valke/869607821/in/photolist-exTEhe-52oiPD-exTKWT-52szVu-exTH6D-9VbSAu-exWMSw-exTzmn-2jNCfp-8bz165-8hpyBJ-2jQY7i-8byZUL-8fxsv6-8fAHFs-8jjX28-6KR5GE-52sAxf-2jQY6v-8jjWJV-8bz1Fw-52okbF-8fAFTL-6KLAU6. Accessed 22/08/17. Licensed under CC BY-SA 2.0 <https://creativecommons.org/licenses/by-sa/2.0/>

Valke D. *Vernonia cinerea* (Photo). *flickr*.
https://www.flickr.com/photos/dinesh_valke/9937428936/in/photolist-g98VpE-g98VpN-nDTKLU-4pW6E9-dYJoUS-e6r7Z2-wv7cnV-g98SiQ-9UsKe5-e6wLzq-nWoeM8-e6r6Cc-cZpif3-e6wHU5-wv7cgT-e6r7jg-wd9wXn-DXTb83-2fa1Zc-2fa1U2-8H69YC-6RhVSC-iAtf5x-wd2Hry-2fa1XV-78NhNw-6RhWpu-87fy43-6RhVdE-G3GgLT-4aDknY-iAsp1H-DrHEN2-DQyWCW-DJCBcz-FWQFi8-DqMdlb-DJsTUc-CVo4DC-FCzKuS-E1M3FN-DR9UKT-G3GffM-DsfHYn-E1g3wK-DsfJrg-CPbfD8-DR9Teg-DvaRQY-6RhUnq. Accessed 25/08/17. Licensed under CC BY-SA 2.0.
<https://creativecommons.org/licenses/by-sa/2.0/>

Vanderhoff R. *Commelina benghalensis* L. (Photo). *PI@ntNet*. <https://identify.plantnet-project.org/species/maurice/Commelina%20benghalensis%20L>. Accessed 23/08/2017. Licensed under CC BY-NC-SA 2.0 <https://creativecommons.org/licenses/by-nc-sa/2.0/>