

## FLORA UNIT

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The flora of Mauritius consists of about 691 species of plants out of which 273 species are endemic to the island, which means they are found nowhere else in the world and about 150 species are shared with other islands of the Mascarene Archipelago; Reunion and Rodrigues. A high proportion of these native species (80%) are considered threatened according to the IUCN Red List criteria. 96 species are known from less than 50 individuals and forty of these are known from less than 10 individuals in the wild. The [International Union for Conservation of Nature](http://www.iucn.org) (IUCN - [www.iucn.org](http://www.iucn.org)) has quoted Mauritius as having the third most threatened island flora in the world, after Hawaii and the Canary Islands.

The flora unit at NPCS is responsible for the conservation and management of the native flora.

### **History of native flora in Mauritius**

When Mauritius was first visited in the 17th century, it was covered by dense vegetation. Following colonization, the forests of Mauritius have been cleared for agriculture, forestry, villages and towns, and other developments. Today good quality native forests occupy less than 2.0 % of our total area. These forests are found on mountain ridges, on the Offshore Islets and in Black River Gorges and Bras D' Eau National Parks. These forest remnants provide the last habitats for our endemic flora and fauna.

Our remaining native forests are under constant threat of alien invasive plants such as Chinese guava (*Psidium cattleianum*), privet (*Ligustrum robustum*) and ravenale (*Ravenala madagascariensis*). These exotic plants compete with the native species for space, light and nutrients. Introduced animals also contribute significantly to the degradation process either by physically damaging the plants or helping in the dispersion of the seeds of the exotic plants. Herbivorous mammals such as the rusa deer (*Cervus timorensis*) and the hare (*Lepus nigricollis*) browse young plants and tender shoots. Monkeys (*Macaca fascicularis*) selectively destroy flowers and fruits as well as foliage, wild pigs (*Sus scrofa*) cause extensive damage by eating

roots of plants and disturbing the soil, and rats eat the ripe fruit. Red whiskered bulbul and wild pigs disperse the seeds of the Chinese guava.

Some beautiful plants of our national heritage include:

- **Boucle d'oreille / *Trochetia boutoniana***



Found only on the flanks of Le Morne Brabant, it was declared as the National Flower on 12 March 1992. The red bell-shaped flowers contain coloured nectar and are pollinated by geckos (lizard) & grey white eye (pic pics).

- **Fleur de Lys / *Crinum mauritianum***



The *Crinum mauritianum* is a herbaceous plant and is endemic to Mauritius. It was believed to be extinct in the wild, but was rediscovered in 1973, near Midlands Dam (Barrage de Midlands). Due to its white flowers, it has become an ornamental in Mauritius, and it is frequently used in landscaping.

- Bois dentelle / *Elaeocarpus bojeri*



Bois dentelle is a beautiful shrub tree, found in high cloud forest on the island of Mauritius. The species has no commercial value. Only two populations of this plant species are left in Mauritius.

- Bois bouquet banané / *Ochna mauritiana*



This species are native to tropical woodlands of Africa, the Mascarenes and Asia. The name of this genus comes from the Greek word *Ochne*, used by Homer and meaning *wild pear*, as the leaves are similar in appearance. These plants are widely cultivated as decorative plants.

# ENDEMIC PLANTS OF MAURITIUS



Scientific name: *Trochetia boutoniana*  
Common name: Boucle d'oreille



Scientific name: *Ochna mauritiana*  
Common name: Bois bouquet banané



Scientific name: *Roussea simplex*  
Common name: Liane rousseau



Scientific name: *Hibiscus genevii*  
Common name: Hibiscus



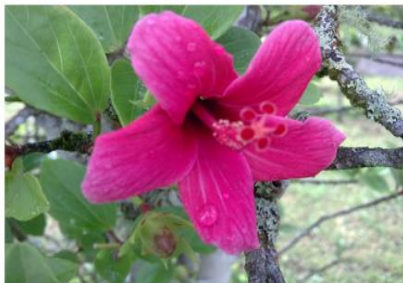
Scientific name: *Dombeya acutangula*  
Common name: Dombeya



Scientific name: *Chassalia coriacea*  
Common name: Bois corail



Scientific name: *Elaeocarpus bojeri*  
Common name: Bois dentelle



Scientific name: *Hibiscus fragilis*  
Common name: Hibiscus



Scientific name: *Nesocodon mauritiana*  
Common name: Mauritian bloody bell flower



Scientific name: *Barleria observatrix*  
Common name: Barleria



Scientific name: *Psidia terebinthina*  
Common name: Baume



Scientific name: *Coffea macrocarpa*  
Common name: Café marron

## **Ex-situ conservation of native plants of Mauritius**

The Native Plant Propagation Centre (NPPC) is the main *ex-situ* facility for the conservation of the native flora of Republic of Mauritius. It has been set up in 1996 at Robinson Road, Curepipe to provide necessary facilities for the propagation of threatened native plant species, ferns, and orchids together with a collection of native plants in an Arboretum. It comprises of the following amenities:-



Figure 1: Green House

The greenhouse is a structure covered with glass that allows sufficient sunlight to enter for the purpose of growing plants. At NPPC the greenhouse consists of three departments namely preparation room, mist chamber & weaning chamber.

Propagation of threatened plants is carried out both sexually by seeds and vegetatively by cuttings, spores and bulbils using specific techniques.

During the past ,native plants had been successfully propagated and which include some of the most endangered species such *Helichrysum caepitosum*, *Pandanus prostates*, *Syzygium guehoii*, *Cyphostemma mappia*, *Eugenia tinnifolia*, *Terminalia bentzoe*, *Ficus densifolia*, *Pandanus*

*macrostigma*, *Pandanus pyramidalis*, *Pilea laevicaulis*, *Stilingea lineate*, *Hyophorbe vaughanii*, *Urena lobata*, *Badula sieberi*, and *chionanthus bromeana*.



Figure 2: Shade House

In the shade house, hardening process is achieved. This process enables the plants resist harsh conditions such as water stress & scorching sun.



Figure 3: Fernery Unit



The fernery unit comprises of a fern laboratory & a collection of several species of pteridophytes & orchid species. Propagation of ferns are carried out in the fern lab through spores & bulbils.



Figure 4: Arboretum

The arboretum acts as a field gene bank where endemic plants of Mauritius are grown along with a medicinal corner. It is also used to create awareness among the public and for educational purposes.

### **Conservation Management Area (CMA)**

CMAs are actively managed plots which have been set up in Black River Gorges National Park in a bid to preserve our different vegetation types. Some of these plots have been fenced so as to exclude deer and wild pigs. All the exotic invasive weeds (e.g., Chinese guava, privet, and liane cerf) have been removed to allow natural regeneration of the native forests.

The network of 13 CMAs covers 85 hectares and encompasses all of the main forest. The forest area under active management is being continually enlarged to help protect native species in situ.

#### **List of fenced CMAs**

Petrin CMA

Petrin Extension  
Mare Longue CMA  
Florin CMA  
Macchabée CMA  
Brise Fer CMA  
Morne Seche CMA  
Fixon CMA  
Bellouguet CMA  
Bel Ombre CMA  
Mt Cocotte CMA

#### List of non-fenced restoration areas

Wiehe plot  
Mare aux Joncs  
Plaine Paul  
Fixon extension  
Wiolab- Plateau Remousse  
Plaine Champagne  
Mare longue extension

### **Protected Area Network (PAN) Project**

- This project is about expansion and ensuring effective management of the protected area network both in public and private sector to safeguard threatened biodiversity. The Government has the firm intention to protect the remaining biodiversity in areas which have not been monitored and surveyed. It is funded by UNDP/GEF, Government of Mauritius, private sector and ONG.
- The project objectives seek to strengthen the institutional and operational capacity to:
  1. Identify, prioritize and target gaps in private and state owned lands for protected area expansion and conservation.

2. Develop regulatory drivers and incentive framework to support protected area expansion and conservation on private and state owned lands.
3. Cost effectively mitigates the threats and pressures on the unique biodiversity in the protected area network.
4. To ensure better integration of the protected area network into the country's socio economic development priorities in particular ecotourism activities to ensure its long term financial sustainability.
5. Involvement of relevant stakeholders in the implementation of the project.

At the end of the project the following targets are set:

1. The protected area network is targeted to be increased from 8,027 ha to 14,920 ha.
2. More than 400 ha of degraded forests will be cleared from invasive and restored with native in the next 5 years.
3. This project will help to propose attractive incentives to the private sector so that they can take care of their forests and control of alien invasive species could be sustained at a national level.
4. It will also encourage research on better cost effective strategies for the control of alien invasive species which as you are all aware is one of the important threats to Mauritian native biodiversity.

## **Maintenance Weeding**

All CMA's and newly weeded areas have been maintained by the contract labourers working on Protected Area Network (PAN) project.



Figure 5: Area with invasive alien species

Figure 6: Workers weeding the CMA