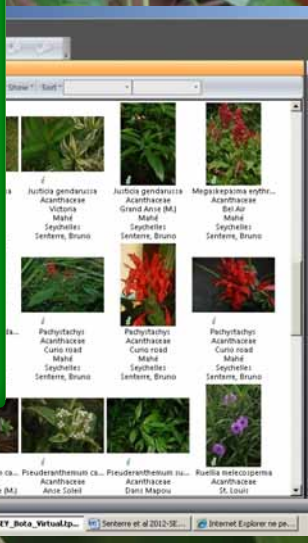
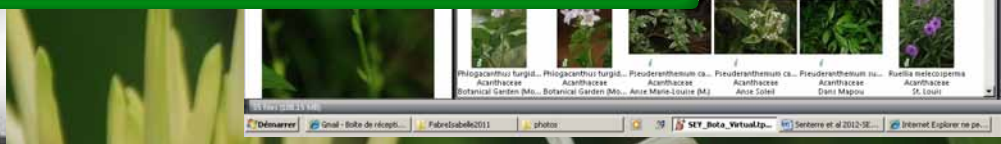
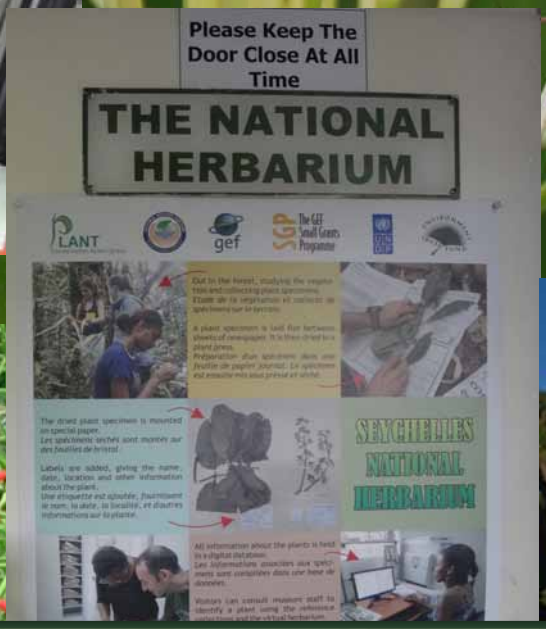
Kapisen

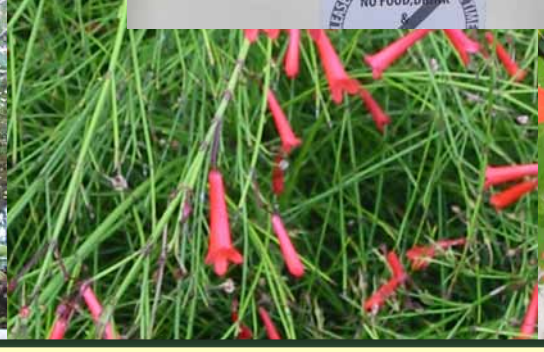
Plant Conservation Action group Newsletter

May 2012 Issue 13 (Special Issue)



Special Issue – the Herbarium Project



gef SGP The GEF Small Grants Programme UNDP PLANT Conservation Action group Natural History Museum To Conserve Nature Conserves Us Environment Trust Fund

The Herbarium Project

Most of you know that we have **endemic plants** in Seychelles – plant species that are found nowhere else in the world – plants such as Coco de Mer, Bwa mediz (Jellyfish tree) and Zakobe... Many of you recognise **ornamental plants** that grow in Seychelles gardens – Hibiscus, Frangipani, Bison (Ixora), Kroton... And surely all of you are familiar with most of the **fruits and vegetables** that we grow – Banana, Frisiter (Golden apple), Lettuce, Zironman (Pumpkin), Cassava (Mayok), Friyapen (Breadfruit)... There are probably many **medicinal plants** that you can identify too – perhaps Lerb sat, Rozanmer, Patdepoul, Gro bonm... And what about other **useful plants** that in the past provided us with rope, mats, hats, glue, soap...

However, many **new plants** have been introduced into Seychelles in the past 30 years. A few of them are spreading very fast and threatening our native vegetation. What is the total number of plant species we have now, how much do we know about them and where are they found on the islands? What do these plants mean to you? Are they useful in some way? Do you like them because they create a beautiful garden, or a lovely green forest background, or provide shade when you are on the beach? Are they just green things that get in the way when you want to build a house, or nasty weeds and invasive creepers that cover your land? Are there plants that you would like to know more about?

In order to properly record information about all the plants present in Seychelles, the Plant Conservation Action group (PCA) joined forces with the Natural History Museum to work on a two-year programme which has become known as the Herbarium Project. You can read more about this project and how it is funded on pages 3 and 4. We know that you have a lot of knowledge about the plants around you, so WE WANT YOU TO TAKE PART IN THE HERBARIUM PROJECT AND HELP TO BUILD SEYCHELLES PLANT KNOWLEDGE. You can find out how to help on pages 10-11. You can take part in our plant photo competition too. And you will benefit in the end because one result will be an easily accessible source of plant information for everyone to use – a "Plant Gallery"!

The project has already provided opportunities for local young people to train in botanical work and you can read about the experiences of two of them (p. 5-6). Students from overseas have also had a chance to participate (p. 7). The work of these young scientists has provided input into the plant database and several new discoveries have already been made (p. 7, p. 14-15). Two articles (p. 8, p. 12) provide information on agricultural and culturally important plants that may give you ideas of how you can contribute information. And the fun activity on p. 9 gives you names of plants that you may know in your district or can look for. We need this kind of information too! And to see how schools can create their own herbarium, read p. 13. Finally on p. 16 you can find out more about the work of PCA.

Watch out for further information about the project and its activities in the local media. Later there will also be an exhibition, including some of your contributions, so do please take part!

Katy Beaver, Bruno Senterre

Editors of this special edition of Kapisen

Layout: Eva Schumacher

All photos not credited: contributed by PCA

The electronic pdf version of Kapisen can be downloaded:
www.plantecology.ethz.ch/publications/books/kapisen
Previous issues of Kapisen can be downloaded from:
http://seychelles-conservation.org/kapisen.aspx or

Email: pca.seychelles@gmail.com

Tel: 4241104 or 2574619

This issue of 'Kapisen' is printed on bleach-free paper with a low % of wood by the printhouse

Content

The Herbarium Project	3
Personal experiences	5
Old crop varieties	8
Kwen aktivite	9
How to participate	10
Traditional skills	12
L'herbier à l'école	13
Project findings	14
About PCA	16

The Herbarium Project

This community project coordinated by the Plant Conservation Action group (PCA) has become known as the "Herbarium Project" because all the activities have strong links with the Seychelles National Herbarium. We can describe these activities by asking some questions:

What is a herbarium and what does it do?

A herbarium is basically a collection of plant specimens, usually leaves and flowers, pressed flat and dried, and then placed carefully on special paper together with the name and information about the plant and where it was collected. A herbarium forms a reference collection for all the plants in a country, both native and introduced, and gives historical information, for example about previous locations where the plant was found. (Photo 1)

Photo 1 A type specimen in the herbarium.

Where is the Seychelles National Herbarium?

It is situated in a special room in the Natural History Museum in Victoria. (Photo 2 & 3)

Why is it necessary to have a Herbarium Project?

Many people thought the herbarium was simply a collection of old dead plants, part of our historical heritage. It had been neglected for some years and there were very many species absent from the collection, especially non-native plants. Few people realised that the herbarium can be a really useful scientific 'tool' and play an important role in plant conservation. It can also be a very active and useful resource for the local community.

Photo 2 The Natural History Museum.

So what is the Herbarium Project doing?

There are four main aims, which include several different kinds of activities:

1. Redeveloping the Seychelles National Herbarium so that it becomes an active part of the Natural History Museum: *this includes reorganising the herbarium, making new plant collections, and providing training in herbarium management.* (Photo 4)

2. Giving young local scientists a chance to develop their botanical knowledge and to provide local expertise in plant identification: *this includes field and herbarium studies and developing links with international herbaria and research institutions.* (Photo 5)

Photo 3 The Herbarium door has a special poster on it.

Photo 4 Herbarium specimens have been reorganised.

3. Creating a database of plant knowledge, using many sources of information: *including information from historical specimens, books and scientific papers, and also local knowledge.*

4. Developing ways to involve the Seychellois community in the work of the herbarium: *by providing opportunities to participate in the development of a digital "Plant Gallery" that will be useful to anyone interested in plants* (Photo 6)*; by creating education and awareness materials whereby local people can know more about our plants e.g. a film, a photo competition and interactive exhibitions.*

Who are your partners for this project?

PCA's major working partner is of course the Natural History Museum. We are receiving major funding from the GEF Small Grants Programme and have also received a grant from the Environment Trust Fund (ETF) for the training aspects. We have NGO partners who have benefitted from the training aspects of the project and/or play a role in the outreach aspects: Island Conservation Society (ICS), Terrestrial Restoration Action Society (TRASS), Seychelles Islands Foundation (SIF) and Wildlife Clubs of Seychelles (WCS).

Photo 5 Forest studies for local botany trainees.

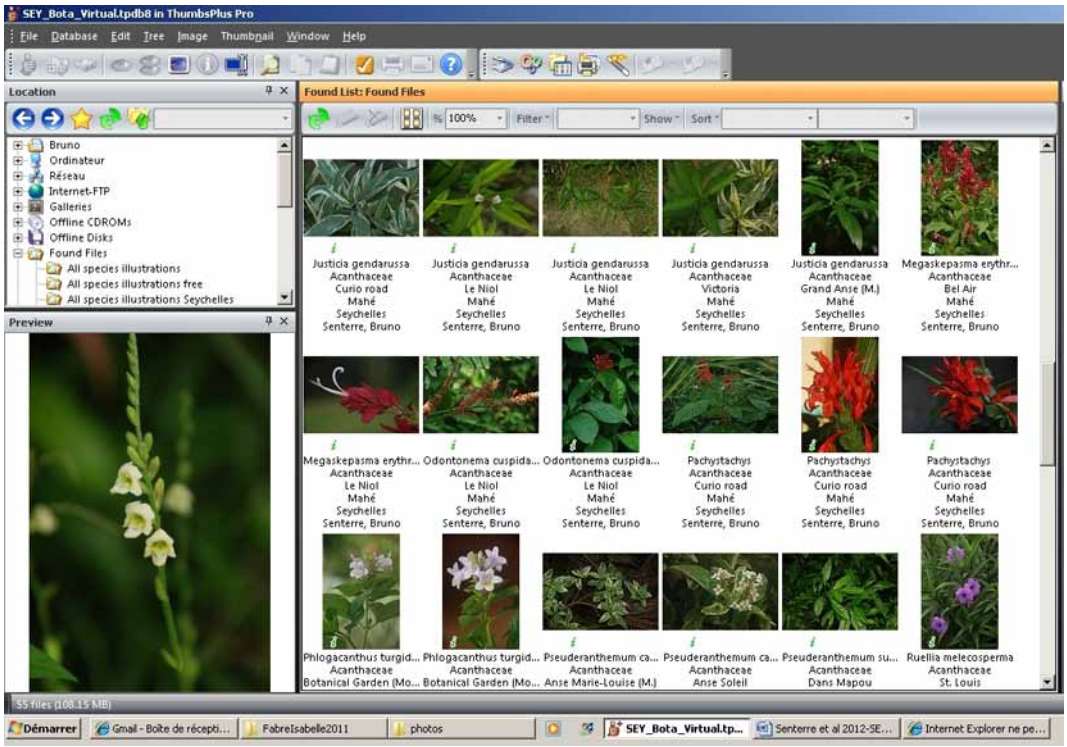


Photo 6 Example of plant photos in the "Plant Gallery".

What I have learned about plants and their study

By Nicole LABICHE-BARREAU
Natural History Museum
nicole2377@hotmail.co.uk

To be involved with the SGP Herbarium project, and with PCA, has been for me an exciting experience. It has developed in me a passion for plants and for exploring the forest in search of discoveries. I have been to places that I never imagined possible before and I have really enjoyed a lot of nice views on the island.

Learning the names of plants was very difficult for me at the beginning; even pronouncing the Latin names was hard. But with practice I became more used to these names and I have got to know a lot of species. More than before, I am aware of plants that I see when I am out anywhere: by the road, in gardens, in the bus, etc. I make sure that I always have my camera with me and this is helping us to set up the virtual herbarium (photo gallery of plants). What I now really enjoy is to identify new plants that I have not seen before.

The Seychelles Natural History Museum has really welcomed this project, and as I am the member of staff involved, it has created a lot of open doors for me. I have had the opportunity to work with botanists from Sweden, France, Belgium and Japan. They each have their own method of working, so the time I spend with them is a bonus for me to expand in this field of work.

At work on the plant database in the herbarium.

The herbarium now has more material and greater capacities to properly manage the plant collections. As time goes by I have really seen how important these collections are to improve our knowledge on Seychelles biodiversity. And I believe that we are moving in the right direction.

Nicole making notes about plants in the forest (L Renguet).

Camera at the ready, Nicole explores the forest (B Senterre).

Why would a marine biologist trek through the forest?

by Elke Talma
PCA member
turtlechick01@gmail.com

As a trained marine biologist, I specialised in studying marine turtles and spent 6 years trekking up to 8km a day in the hot sun looking for nesting females on beaches around Mahé. After I quit my job, I realised that I actually missed walking. Going alone along the main road was generally safe but boring, but then I heard about the Plant Conservation Action (PCA) group, which organises regular hikes in the forest for its members.

My first ever walk with PCA was in April 2010 to "Congo Rouge" and thanks to Bruno Senterre, PCA's botany trainer, I got to experience the big difference between walking along beaches and walking in mountains! After 5hrs in the forest, hiking up steep mountains and down rocky ravines, following Bruno, who seemed to know where he wanted to go despite the lack of a trail, we made it back to the car with me barely surviving. My trousers were ripped from being caught by vicious vacoa spines, my leg was bleeding after falling in a hole and my knees felt like jelly. I swore NEVER AGAIN!

Elke (in red hat) with Bruno and other trainees (H Elzein).

Going down is hard on the knees! (H Elzein).

Happily, I have been on numerous PCA hikes since then - the longest lasting 10 and a half hours and the highest reaching 850 metres. I have seen a plant that no one had recorded on Mahé since 1874, I can now identify at least 10-15 endemic plants and various invasive and introduced species, I have been awed by spectacular panoramic views, and I am also one of 3 people who may have discovered a new species of fern (... and the only Seychellois marine biologist to do so!).

Through PCA I have participated in various training activities for the herbarium project, ranging from plant identification to setting up line transects in dense forests. In the case of the transect, it was simply a question of applying skills I had already developed monitoring coral reefs, with the added benefit of not worrying about sharks!

Enjoying the view from the top (L Renguet).

Ma contribution volontaire avec le projet de l'herbier des Seychelles

By Isabelle FABRE
Natural History Museum
fabre.iza@gmail.com

Etudiante en Master de Biologie végétale tropicale à l'Université Montpellier II (France), j'ai eu l'occasion de réaliser un stage volontaire de 2 mois aux Seychelles. Durant mon séjour, j'ai pu suivre et assister PCA dans un projet sur l'étude de la flore des Seychelles avec le Muséum d'Histoire Naturelle. Ma principale contribution a porté sur l'étude des fougères seychelloises, un groupe qui me passionne particulièrement.

Mon travail aux Seychelles a consisté dans un premier temps à l'identification et à la réorganisation des spécimens récoltés à l'Herbier de Victoria. Ceci m'a permis de me familiariser avec la flore locale. Une autre partie essentielle de mon temps fut consacrée à l'exploration en forêt en compagnie de botanistes locaux. Ceci à permis de compléter la collection de ptéridophytes de l'Herbier, de signaler de nouvelles localités pour certaines espèces et de prospecter dans des régions peu explorées.

Ces investigations nous ont conduits notamment à la découverte et redécouverte de représentants de la famille des Marattiacées aux Seychelles. Il s'agit d'une espèce d'*Angiopteris* (encore non nommée) et de *Ptisana fraxinea* (non revue aux Seychelles depuis plus d'un siècle). Ces deux espèces sont proches de 'Baton monsenyer' (*Angiopteris madagascariensis*). Pour un œil non averti, celles-ci pourraient paraître semblables, cependant elles présentent des différences morphologiques bien marquées. Cette étude, encore en cours, aura permis de participer à l'amélioration du catalogue des plantes vasculaires des Seychelles. Elle montre aussi que la flore seychelloise recèle encore potentiellement de nombreuses richesses à découvrir ou redécouvrir. De nombreux groupes de plantes demandent encore à être approfondis et de nombreuses localités n'ont pas ou peu été visitées par des spécialistes. Il est important de continuer à former localement des botanistes qui participeront à ces différents travaux de l'Herbier (explorations, collectes, etc.) indispensables pour compléter les connaissances sur les plantes vivants exclusivement ou non aux Seychelles et ainsi pouvoir les conserver au mieux. Les contributions de jeunes botanistes volontaires, ainsi que d'autres amateurs de plantes, peuvent elles aussi apporter leur lot de découvertes et sont autant d'expériences enrichissantes.

Feuilles d'un jeune individu de *Ptisana fraxinea* vers le Mont Sébert (I Fabre).

Individu d'*Angiopteris madagascariensis* en sous-bois, vers Mont Sébert (I Fabre).

Fanzan (*Cyathea sechellarum*) rencontré lors d'une mission d'exploration vers Congo Rouge (I Fabre).

Old crop varieties – where are they grown now?

In former times, Seychellois relied almost entirely on their own agricultural output for food supplies, with little being imported except rice and lentils. Many species were introduced to give variety in the Seychellois diet; and over the years, many different varieties of specific fruits and vegetables were introduced in order to increase yields and provide different flavours and qualities. Cultivars better adapted to the different conditions in Seychelles, e.g. red/sandy soil, wet/dry season, high/low altitude, were also imported.

Such crop diversity is the basis for food security in a country. It provides resilience in the agricultural sector by, for example, reducing the risk of a new disease or pest affecting all plants of that particular crop species. It also increases the chance of some plants surviving after a severe drought or a bad storm. So retaining diversity will help us to adapt to climate change. But are we in danger of losing the crop diversity that acts as this safeguard for our food supplies?

In the 1980s, for example, we had about 120 varieties of mango and about 80 varieties of avocado in the country, but by 2005 the number of avocado varieties had been reduced to 60. In 2005 a project to locate all old varieties was organised by the Plant Genetic Resources unit of the Ministry of Agriculture. Some records exist from this study, but in recent years there has been a lot of housing development, and new pests and diseases have come into the country,

We need to keep **all** fruit varieties (E Schumacher).

so how relevant is that information now? On top of this, since 2008 the large orchard of different mature fruit trees at Grande Anse is no longer in the hands of the Seychelles Agricultural Agency (SAA), resulting in the loss of trees and limited maintenance. Access to these genetic resources is now also questionable. Even though a few new varieties may have been brought into the country, haven't we lost something very precious?

Hopefully Seychellois are still cultivating many of the old varieties – and if so, maybe you will help us! What older crop varieties do you have in your garden or on your property? Can you take photos of the plants that will help other people to identify this variety? Bring or send information (see page 10) to the Natural History Museum in Victoria. We can all benefit in the future by continuing to grow these plants and sharing them with others.

Bred mouroung and Zanbrovat– are these cultivated less than before? (K Beaver + M Moustache).

MO KASYET LO GONAZ EK GRENSEK

Tradisyonelman nou paran ti apel tou kalite fri ki pa ti popiler GONAZ. En remark abityel: “Ase manz sa bann gonaz – apre ou pa pou manz ou manze!” Bann fri ki ti pous partou e ki personn pa ti okipe i GRENSEK.

Rod non bann fri ki ti ganny konsidere koman gonaz ek grensek. Sa bann mo in ganny ekrir:

1. Normal – orizontalman, gos a drwat
2. An lanver – drwat a gos
3. An long
4. Lo en diagonal

Anserkle sak mo kan ou vwar li dan grid.

B	S	N	E	Y	M	N	A	D	O	B	L
Y	I	A	O	N	I	E	P	I	D	E	S
I	Z	A	N	S	I	G	A	R	B	A	N
F	O	R	Z	T	A	S	A	N	P	T	A
R	R	D	A	O	O	M	E	O	K	A	R
O	A	A	K	L	R	L	T	D	P	N	F
U	N	A	N	O	I	B	O	O	V	M	E
S	Z	A	N	B	L	O	N	A	R	A	D
A	I	S	W	N	W	M	V	A	O	R	N
Y	N	A	V	A	V	A	K	Y	Z	E	I
K	A	L	A	M	N	A	Z	L	E	N	R
N	I	R	P	G	O	U	Y	A	V	Y	P

BILENBEL
BODANMYEN
BWA / DIR *
FRANBWAZ
GOUVAY/DESIN *
KAVAVA
MANBOLO
MASON
PONM / ZAKO *
PRINDEFRANS
PRIN/DIPEI *
ROUSAY
SANTOL
SAPOT
TANMAREN
VAVANG
VYEY/FIY *
ZAK
ZANBLON
ZANBROZA
ZANMALAK
ZORANZIN

* Savedir ki sa non in ganny divize an de porsyon dan grid

Eski ou’n war tou bann mo? Aprezan, ekrir tou bann let ki pa’n ganny servi.
Sa bann let i form ankor de gonaz:

_ _ _ _ _ _ _ e _ _ _ _ _ _ _

Larepons i lo paz 15

The Seychelles Plant Gallery – A project for and by the community

Which plant species and how many plant species do we have in Seychelles? Even for such a small country, we still do not know exactly the number of species occurring – probably somewhere between 1400 and 1800 species. In addition, for many species we know very little about where they occur, especially in which localities within islands. Finally, there are many species that have been introduced during the last few decades, as ornamentals or cultivated plants, and which have never been recorded (see p. 14).

In order to improve our knowledge on these aspects, a partnership was developed between PCA and the National Herbarium, as part of the project funded by the GEF Small Grants Programme (see p. 3). Our main objective is to compile knowledge from historical records, and from current oral knowledge and recent scientific research. A database has been created which contains to date about 2000 plant names and 15000 plant records (including 5000 specimens). This allows us to produce distribution maps of plants, species lists per island or district, etc. In addition, we are compiling illustrations of species into a virtual herbarium (or "Plant Gallery").

With these tools, the Seychelles National Herbarium has developed its capacity to identify plant species (see p. 3, 5). But **local knowledge**, mostly orally transmitted, **is still missing in our database**. **EVERYONE CAN CONTRIBUTE! Here is how you can help:**

First, if you have a plant for which you would like to know the name; and/or

Second, if you know localities of "uncommon" plants (for example a rarely seen ornamental or medicinal plant, or rare variety of fruit tree or other useful plant).

In both cases, you can contribute to the plant database by sending us an email (nicole2377@hotmail.co.uk or bsenterre@gmail.com), or by visiting us at the Natural History Museum, or by telephoning (4321333, extension 8143). Please provide some general information (see the Information Sheet illustrated, which can be photocopied and filled in like the example) and if possible several photographs of the plant, illustrating its different parts.

You will then become an official contributor and we will provide you in return with additional information about your plant (based on the other records already in the database). The most valuable contributions will be selected for our plant photo gallery and you may also win t-shirts and other prizes, in particular if you take part in the photo competition.

There will also be adverts in the media and a Facebook page dedicated to the project, where there will be more information about the particular groups of plants we are looking for.

Information sheet to accompany contributed photographs and other species records provided by local individuals and groups

Author full name : ..... **Date** : .....

Plant name (if known, English, French, Creole or Latin) : .....

.....

Locality : .....

.....

Habitat : .....

□ road side □ garden □ agricultural field □ tree plantation

□ forest □ woodland □ thicket □ open habitat

□ coastal □ mountain □ glacis □ ravine □ wetland

Observations : (plant uses, origin of local name, plant total height, any information not visible on the photograph, e.g. "with a strong aromatic smell", "with milky sap", etc.)

.....

.....

□ planted □ natural regeneration from a planted individual □ naturally occurring

□ tree □ shrub □ herb □ creeper □ other: .....

An example of an information sheet that has been filled in:

Author full name : .... Axxxx Kxxxxxx..... **Date** : .... zanvye 2012.....

Plant name (if known, English, French, Creole or Latin) : .....Pti kanar.....

.....

Locality : ..... Anse à La Mouche, zardin kot Anchor Café.....

.....

Habitat : .....

□ road side ☒ garden □ agricultural field □ tree plantation

□ forest □ woodland □ thicket □ open habitat

□ coastal □ mountain □ glacis □ ravine □ wetland

Observations : (plant uses, origin of local name, plant total height, any information not visible on the photograph, e.g. “with a strong aromatic smell”, “with milky sap”, etc.)

.. son fler i blan ek rouz fonse, 10 cm diamet.. ;.. sa plant i en lespes ase rar, ziska prezan nou pann war li dan en lot zarden.....

☒ planted □ natural regeneration from a planted individual □ naturally occurring

□ tree □ shrub □ herb □ creeper □ other: .....

Please write your contact details on the back of the form - name, address and telephone number, so that we can get in touch with you.

Photos of the plant submitted with the completed form.

Are we in danger of losing these skills?

Heike VIERLING and Katy BEAVER

h.vierling@gmail.com

Many plants have been used in the past to provide us with useful articles. Few young people are familiar with the necessary skills to prepare the materials and make these items. Might we need some of these skills in the future? And can we be sure that the plants will be used sustainably?

1. String and rope: made from a) Sisal ('Lalwa'); b) 'Koko maron'; c) 'Var' (Sea hibiscus)

2. Things made from bamboo – d) baskets; and e) a 'lavann' (used for sorting out rice and lentils)

3. A mat made from 'Vakwa'

4. Containers made from the leaf base of 'Palmis'

(Photos: 1a, b, c, 2e & 3 H Vierling; 2d & 4 K Beaver)

L'herbier à l'école – Un outil de démonstration de la méthode scientifique

Ecole Française des Seychelles, classes de CM1 et CM2

Cette année, l'école française des Seychelles met en avant la botanique dans les classes du primaire et de la maternelle. Un projet a été développé avec l'aide de la communauté scientifique locale afin de mettre en pratique la méthode scientifique à l'école. Plant Conservation Action group (PCA) et le Seychelles Natural History Museum sont venus nous montrer comment les botanistes étudient, classent et identifient les plantes de notre environnement afin de mieux les connaître et donc de mieux les protéger.

Au cours de deux journées, les botanistes Nicole Labiche-Barreau et Bruno Senterre ont collecté avec les élèves toutes les espèces de plantes présentes dans l'école. Les spécimens collectés ont été mis sous presse dans des papiers journaux, puis séchés afin de former l'Herbier général de l'école française des Seychelles. Chaque élève du primaire a également réalisé un herbier de poche dans un carnet personnel, en y ajoutant les informations nécessaires pour une étude scientifique, tels que lieu de collecte, date, observations sur la plante, etc.

Identification d'un spécimen dans l'herbier de poche d'un élève (Ecole Française).

Les aspects liés à l'observation des plantes ont été développés en classe avec les enseignants. Les élèves ont appris le vocabulaire lié à l'étude des plantes. Ils ont également, étudié les conditions de germination et de croissance en plantant des graines. Les classes de maternelle (CM) se sont intéressées à la classification des feuilles d'après leur similitude (entières, lobées, dentées, alternes ou opposées, etc.). Les élèves de la maternelle au primaire ont également reproduit, grâce à une observation minutieuse à la loupe, toutes sortes de feuilles, avec de l'encre de chine, des pastels ou de la peinture.

Nicole montrant aux élèves comment utiliser les spécimens de référence (B Senterre).

Enfin, lors d'une visite ultérieure, les deux botanistes ont montrés aux élèves comment bien conserver l'herbier général, en montant les plantes sur des feuilles de bristol et en y collant les informations associées sur une étiquette, y compris le nom scientifique de la plante. Les élèves ont également appris comment valoriser et utiliser l'herbier général afin d'identifier les plantes collectées dans leur herbier personnel. L'herbier général répertorie pas moins de 96 types de plantes différentes et est classé en quatre groupes : les dicotylédones (surtout arbres), les monocotylédones (surtout herbes), les fougères et enfin les mousses.

Tous nos travaux autour du projet de l'herbier de l'école seront exposés en juin à l'Alliance Française de Victoria, Seychelles. Les élèves vont mettre en valeur l'herbier général en sélectionnant les plus belles planches et en réalisant des cartouches qui répertorient des informations sur chaque espèce de plante. Une espèce endémique a même été trouvée dans l'école, ainsi que quelques espèces dites envahissantes. A plus long terme, l'herbier de l'école pourra être utilisé pour le suivi de la flore (colonisations vs. disparition), l'ajout de photographies aux spécimens ou encore pour échanges avec d'autres écoles.

Collecte des spécimens dans l'école (B Senterre).

Impact of the Herbarium Project on local expertise in plant identification: the example of Acanthaceae

Nicole Labiche-Barreau (Natural History Museum) & Bruno Senterre (PCA)

nicole2377@hotmail.co.uk and bsenterre@gmail.com

The Acanthaceae family consists of herbs, shrubs and some lianas. Their leaves are simple and opposite without stipules. They generally have beautiful, large and colorful flowers, with a bilateral symmetry like orchids or beans flowers. The Acanthaceae are mostly tropical plants and there are about 2500 different species.

In Seychelles, Robertson (1989) cited 21 species in her checklist, while Friedmann (1994) listed 25 taxa. Of these, only 7 taxa have been considered as native, including 2 endemics. One of these endemics, *Justicia gardineri*, has been seen only once, on Silhouette, and the other is restricted to Aldabra, i.e. *Hypoestes aldabrensis*. The remaining native species are mostly constituents of the flora of the Aldabra group, except for one critically endangered species (see Carlstrom 1996, sub *Pseuderanthemum tunicatum*) on Silhouette.

Brillantaisia owariensis characterized by its large leaves with winged petiole (B Senterre).

Sanchezia parvibrateata, new record for the flora of Seychelles, commonly planted in public places in Victoria (B Senterre).

As part of the "Herbarium Project" (funded by GEF-SGP, see page 3-4), in particular the training and herbarium redevelopment components, plant specimens were collected during field trips with the trainees. Specimens were dried and integrated into the Seychelles National Herbarium. In addition, we reviewed the material collected since the last taxonomic revision published by Friedmann (1994) and present in the Seychelles National Herbarium. There are about 100 specimens of Acanthaceae collected in the Seychelles, of which ca. 23 have been collected post-Friedmann, by ourselves. Most of these new collections came from gardens or semi-natural habitats, and are accompanied by photographs of the living plants for the virtual herbarium. The identity of all species previously recorded from Seychelles and the new specimens reviewed has been verified using recent taxonomic literature.

Based on the material reviewed, we recorded 33 species of Acanthaceae for the flora of Seychelles. This represents an increase of ca. 30 % compared to Friedmann's flora. All new records are exotic

ornamental species. In addition, we have been able to give further details about the identity of several native species.

The well known “Manztou”, widespread on Mahé and other inner islands, was referred to by Friedmann (1994) as *Asystasia* sp.B. More recently, Kiew & Vollensen (1997) reviewed species concepts and names in the *Asystasia gangetica* group. This study allowed us to identify the *Asystasia* sp.B (sensu Friedmann) as *A. gangetica* subsp. *micrantha*, which is an African species probably native to Aldabra (cited as *A.* sp.A sensu Friedmann) but introduced in the inner islands.

The most interesting finding on the native flora is about the Seychelles *Pseuderanthemum*. Indeed, here again a more recent taxonomic revision (Champluvier 2002) allowed us to rectify the identity of the Seychelles species. This small herb, known from only 1 current locality at Dan Mapou (Silhouette) is not an introduced Indian species (*P. malabaricum*), nor the relatively widespread Central African *P. tunicatum* (see Friedmann 1994), but a much rarer species from East Africa, *P. subviscosum*. Such results have an impact on the phytogeographical relationships of the Seychelles flora, as well as on the evaluation of the IUCN threat category for that species.

Pachystachys spicata, new record for the flora of Seychelles, in a garden along Curio road (B Senterre).

Among the newly recorded ornamental species, one can be mentioned which is already naturalized and relatively widespread on Mahé. This is *Brillantaisia owariensis*, a widespread species from moist montane forests of tropical Africa. This plant is very noticeable due to its very large blue flowers and large leaves. It grows in dense populations along the roadsides of Le Niol, Sans Soucis, La Misere, Cascade, etc. In its area of origin, it flowers *en masse* once every 8-10 years. More observations will be needed to better know the reproduction cycle of this plant in Seychelles.

In conclusion, many species are still unrecorded in Seychelles, and many of these occur in our gardens or along roadsides. In order to achieve our revision of Acanthaceae, and other plant families, we need the contributions of all. The National Herbarium is encouraging the general public to bring in photos of plants, or to contact us, if they have seen unusual plants (see page 10-11 for details).

References

Carlström A. (1996) Endemic and Threatened Plant Species on the Granitic Seychelles. Consultancy Report, Ministry of Foreign Affairs, Division of Environment, Victoria.

Champluvier D. (2002) Pseuderanthemum (Acanthaceae) in Tropical Africa. Systematics and Geography of Plants 72 (1-2) :33-53.

Friedmann F (1994) Flore des Seychelles (Dicotylédones). Editions de l’Orstom, Paris.

Kiew R. and Vollensen K. (1997) Aystasia (Acanthaceae) in Malaysia. Kew Bulletin 52 (4): 965-971.

Robertson S.A. (1989) Flowering Plants of Seychelles Royal Botanic Gardens, Kew. (A checklist of plants)

Larepons ‘Kwen aktivite’ – BIGARAD e KORSOL

Plant Conservation Action group – who we are and what we do

When we started: November 2002

Who we are: We are a **voluntary** membership organisation (**NGO**), with a committee elected annually. We have monthly meetings and regular field trips.

Our main aim is to further plant conservation in Seychelles and to work on projects that promote conservation action and awareness about plants in Seychelles, especially native plants.

What we do:

- Plant species identifications
- Advice on vegetation restoration/rehabilitation
- Vegetation surveys and management plans
- Research and monitoring
- Conservation action for plants
- Capacity building
- Raising awareness about plants
- Field trips for members and plant enthusiasts

Our latest major project: The Herbarium project, which you can learn about in the pages of this issue of "Kapisen".

Website: We are about to set up a NEW website – http://www.pcaseychelles.org
Contacts: pca.seychelles@gmail.com; Telephone +248 4241104 or +248 2574619