













INTANGIBLE CULTURAL HERITAGE CASE STUDY

Supporting research and documentation of indigenous knowledge systems on biodiversity conservation, climate change and disaster risk reduction in Eastern Africa

The Creole Garden and Kitchen Pharmacy

August 2021

In collaboration with



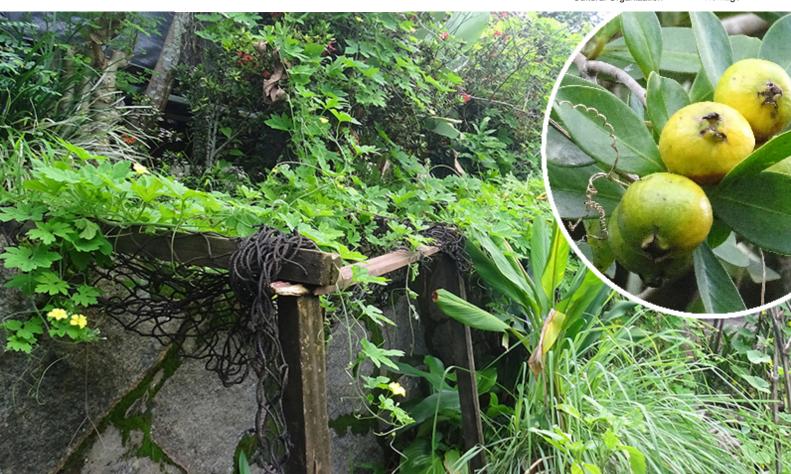
and supported by



United Nations Educational, Scientific and Cultural Organization



Cultural Heritage



ACKNOWLEDGMENT

The Research Team:

Mrs. Penda Choppy - Project Coordinator (University of Seychelles)

Ms. Aneesa Vel (University of Seychelles)

Mr. Terence Vel (University of Seychelles)

Ms. Pricillina Durbarry (University of Seychelles)

Ms. Natacha Rose (University of Seychelles)

Ms. Diana Benoit (University of Seychelles)

Mrs. Cindy Moka (Seychelles Heritage Foundation)

Would like to acknowledge the following inhabitants of the Anse Royale District for their contribution and support without which this project would not have been possible.

Informants:

Mrs. Anita Mathiot (Les Canelles)

Mrs. Flora Bonnelame (Les Canelles)

Mrs. Marie-Anne Adrienne (Mont Plaisir)

Mrs. Marie-Cecile Adrienne (Mont Plaisir)

Mrs. Roselia Balette (Pointe Au Sel)

Mrs. Therese Bertin (Pointe Au Sel)

Mrs. Wilna Roseline (Les Canelles)

Mrs. Yolande Crea (Sweet Escott)

We would also like to extend our gratitude to the University of Seychelles staff for their support and assistance, particularly the Vice-Chancellor Ms. Joëlle Perreau and the Dean, Faculty of Arts and Social Development, Mr. Justin Zelime.

We thank the following for their participation:

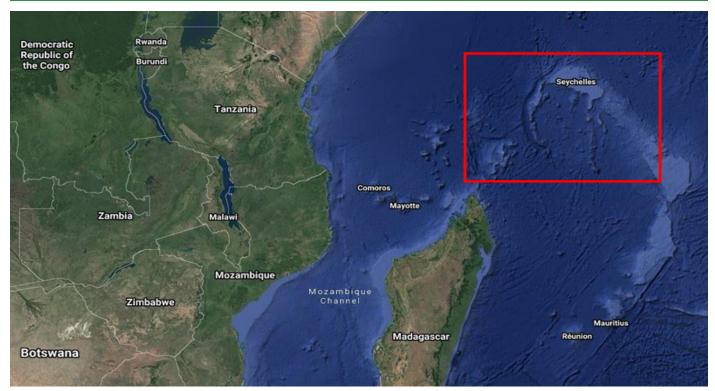
Ms. Dolivette Chang-Ko (Voice-over)

Mr. Barney Labiche (Videographer)

A special thanks goes to the Chief Executive Officer of the Seychelles Heritage Foundation, Ms. Benjamine Rose for engaging with us in the realization of this project.

We are particularly grateful to the UNESCO Regional Office, Nairobi, for giving us this opportunity to link to very important aspects of our creole heritage, that is, culture and biodiversity.

GEOGRAPHICAL LOCATION



Map of Seychelles showing its geographical location in East Africa

Source: Google Maps

BACKGROUND TO THE CASE STUDY

The creole garden is essentially the typical creole lifestyle that emerged from New World societies of plantation slavery (Trouillot, 2006). It consists of foodstuff and condiments, as well as medicinal plants that creole families subsisted on during the early creolization period, and still survives as traditional creole culture in many creole communities, especially rural communities. In Seychelles, the traditional creole lifestyle is closely associated with the kitchen garden that usually surrounds a Seychellois homestead. This garden represents not only an additional source of food and the condiments that are needed to give the Seychellois cuisine its creole character but also protection in the form of medicinal plants, and plants associated with cultural beliefs about protection from evil elements. The creole lifestyle through the creole garden, is celebrated through events like the Creole Festival on an annual basis. However, with modernity and the advent of supermarkets and flats and housing estates replacing the traditional creole community, the creole garden has lost ground and is not being transmitted to the younger generation.

During the COVID-19 lock-down period in Seychelles, our dependency on imported goods became glaringly clear as planes suddenly reduced to essential cargo, and certain fresh vegetables that were flown in every day became scarce. People started planting in pots if they lived in flats, and those who had land began planting typical creole foodstuff such as plantains, dessert bananas, yam, sweet potatoes, tomatoes and herbs. Many recipes and culinary achievements were shared over the social media. Most importantly, people shared recipes from the creole garden and kitchen pharmacy for dealing with the COVID-19 symptoms and boosting the immune system.

In a way, people began questing for their creole identity as the COVID-19 pandemic had made them realize that through their creole gardens, they could improve their food security and reduce the country's carbon footprint. With less Seychellois families maintaining a creole garden, many of the plants associated with it and that contributed to biodiversity (in terms of useful plants), are slowly disappearing. As such, there is a need to document the creole garden and its lifestyle properly in order to promote better knowledge of the creole identity and way of life, and its links with biodiversity, food security, pharmacology and climate change mitigation.

STATEMENT OF THE PROBLEM

The creole garden and associated kitchen pharmacy is closely linked to the traditional creole lifestyle in Seychelles, as in other creole communities. This traditional lifestyle defines the cultural identity of the Seychellois people through their everyday practices and beliefs, inherited from previous ancestral communities from the three continents that populated the islands, or developed and adapted in the local environment over time. This includes animals that provide food, and plants with both medicinal and culinary uses.

The creole garden also contributes to Seychelles' plant biodiversity as most of the islands' indigenous plants are not suitable for consumption, thus cannot support a human community (SNSPC, 2005-2010). Elderly people always talk about how they never had to buy medicine from the pharmacy or have

too many visits to the doctor because their creole gardens kept them healthy. Better use of the creole garden in this manner in today's society could thus reduce our carbon footprint through increased self-sufficiency and limit our impact on the pharmaceutical and food industries. This would also have an impact on climate change adaptability and mitigation.

Yet, the creole garden in Seychelles does not exist as a known social concept except in the aesthetic sense of the word. Consequently, it has not been associated with tradition and lifestyle in an academic way, nor has it been documented or its transmission considered an important agenda. Thus, there is a need to document the creole garden and lifestyle and educate the Seychellois population on the links it has to culture and identity, as well as biodiversity conservation and climate change adaptation.

OBJECTIVES OF THE CASE STUDY

- To test the level of awareness of the creole garden and kitchen pharmacy in Seychelles among the youth;
- To assess whether the creole garden and lifestyle is being transmitted from one generation to another;
- To document the various aspects of the creole garden and lifestyle in the context of cultural meaning and practices;
- To raise awareness about the links between the creole garden and kitchen pharmacy, and biodiversity conservation;
- To propose means of promoting the creole garden concept for conservation and educational purposes;
- To propose means of adapting the creole garden lifestyle to modern Seychellois life in changing physical and cultural landscapes.

CASE STUDY FOCUS

Anse Royale is an administrative district in Seychelles located in the South of the main island of Mahé. Its name is French for Royal Bay as it represents a vast coastline landscape which stretches the length of the narrow bay. The district borders with several other districts and it has around 17 sub-districts.

Anse Royale is considered the second town on Mahé because of its many services and facilities. It is historically significant as the original area where a spice garden was attempted by the founding colonial settlers in 1779.

The district is well-known for its popular garden "Le Jardin Du Roi" spice garden or the King's Garden that grows a variety of spices such as vanilla, lemongrass, cinnamon, nutmeg as well as other introduced spices.



LITERATURE REVIEW

The creole garden, kitchen pharmacy and indigenous knowledge

The creole garden and lifestyle is a sustainable way of life that was born out of necessity in island plantations during the slavery period, and evolved to become the central pillar of creole culture, even after slavery and in modern times. This is supported by Michel Trouillot's theory of the plantation as the cultural matrix of creolization (2006).

Referring to the Caribbean islands, Trouillot argues that even if culture is defined purely in the sense of artistic and intellectual production (high culture), "the real achievement is, of course, that of the anonymous men and women who have woven, along the centuries, in spite of slavery and other forms of domination, the cultural patterns upon which rest the highly individualized performances of the intellectuals" (2006, p.10). It can be further argued, that these anonymous men and women are responsible for domesticating and enhancing their physical environment, and for learning how to exploit and conserve the richness of the original plant life around them, through methods that have been passed down through generations in intangible ways.

Trouillot emphasizes the fact that creole cultures emerged against all odds, and were thus evolved on the margins of society – and yet, they came to 'dominate cultural processes' in their respective societies (pp. 10-15). How did that happen?

First, the plantation, during the slavery period, was an agricultural enterprise that used a forced labour that was kept 'at the bottom of the socio-political ladder' (p. 15). This labour force produced commodities for markets 'outside of the economy within which the plantation itself operated (p.16). This meant that the said labour force could not rely on the produce they spent most of their working day on, as a means of revenue for their subsistence. Again, they had to resort to eking out a subsistence by maneuvering their particular situations based on their inherited knowledge and their adaptation to their new circumstances and environments (p. 16). For example, in contradiction to the established slave system, many slave masters allowed their slaves the time and space to grow their own food, simply because it relieved them of the need to feed them (p.17). The terrain they were given were 'steep and broken terrain, less fertile lands not used for the production of plantation staples' (p. 17). This is the cradle of the creole garden, the 'space where one learned to cherish root crops,

plantains, bananas; space to raise and roast a pig, to run after a goat, or to barbecue a chicken; space to bury the loved ones who passed away, to worship the ancestors and to invent the new gods when the old ones were forgotten (p.17).

This space created the creole lifestyle as well, for it engendered the need and the liberty to talk to a neighbor over the fence, and perhaps share produce – the surrounding environment became an extended provision ground, for example, fishing in the adjacent rivers... (p. 17). It is in this space that the slaves' children learned to climb trees, and develop modes of thought and codes of behavior that were to survive plantation slavery itself (p.18).

Transmission of traditional food and medicinal knowledge through the creole garden

Food, in the creole culture, as in any culture, has a symbolic and cultural significance. In some cultures, specific foods are associated with a specific group's cultural identity (Douglas, 2002). Knowledge about food is developed in an informal setting at home, and requires cultural teaching or transmission (Maynard and Greenfield, 2006). The preservation of traditional food knowledge is linked to human empowerment and nutrition, and also to broader human ecological concerns such as biodiversity.

Similarly, indigenous knowledge on medicinal plants has the same cultural and symbolic significance. Many of the plants found in the creole garden, which extends to the surrounding environment around the home, have important medicinal properties which are also linked to traditional beliefs and practices in Seychelles (Matatiken et al., 2011). According to traditional herbalists in Seychelles, plants from the environment of Seychellois homesteads are used to treat ailments such as hypertension, diabetes, gynecological-related issues like the menopause, skin problems like eczema, especially in children, and respiratory disorders, including asthma. Increasingly, stress related problems are also being treated with traditional medicinal herbs (Matatiken et al., 2011). In order to make effective use of this resource, it is important to have a thorough knowledge of the local species, their location, use and anecdotal evidence of their efficacy. This is part of the legacy that elders should leave for posterity, through inter-generational transmission (Matatiken et al., 2011).

There has been increasing interest, in the past

decade, in promoting bio cultural diversity (Maffi, 2001). Biodiversity has been described as the cradle of raw materials for food and the "key to ecological integrity" (Nazarea, 1998, pp.2-3). Folke et al. (1996) also discuss the dependence of economic and human activity on biodiversity, which acts as insurance for ecosystems to function with resilience to changes. Biodiversity conservation should thus extend beyond protected parks to policies and reforms that defend sustainable human activities, such as a social group's cuisine and traditional medicine, and associated plant and animal life.

The creole garden in the Seychellois landscape, and conservation efforts

The Seychelles National Strategy for Plant Conservation (2005-2010) gives a very good idea of how the Seychellois has traditionally exploited his/her immediate environment for sustenance, not only in terms of food, but also for enhancing the health and for home embellishment. Plants around the home and in the environment have been used for food, timber, roofing material, medicine, tools, craftwork and decorations (p. 8).

This is an excellent description of Herskovits' 'acculturation' theory in which he discusses how black American slaves survived in the New World by making use of knowledge remembered or passed on from the Old World, and adapting them to their new environments, whilst also adapting the things they found in their new environment to their needs (1941). Creole culture and its survival depends on adaptation, and on assimilation. For example, as the national strategy for plant conservation makes clear, there are only a few native plants in Seychelles that are edible, 'so almost all our food plants have had to be introduced'. This includes the slaves' staple food, the breadfruit, which is protected by the Breadfruit and Other Trees (Protection) Act (1975, 1976, and 1998) in the laws of Seychelles. These introduced plants are described as being 'vital for our survival' and include not only economically viable plants such coconuts, cinnamon and vanilla, but also medicinal plants such as the 'rozanmer' (Madagascar Periwinkle), and what today many people might perceive as 'weeds', such as the 'gerivit' (Vernonia Cinerea) (SNSPC, 2005-2010, p. 8).

The creole garden is endangered in Seychelles not only because of modernity, but also because of its links to a marginalized past. Though the breadfruit has many nutritional and medicinal benefits (which had kept our ancestors healthy), because it was introduced from the Pacific to feed the slaves in the colonies,

it has a lingering stigma attached to it (Badrie and Broomes, 2010; DeLoughrey, 2007). In Seychelles, it is often associated with the time of misery when it was all the poor people had to eat (Boswell, 2017). As such, it may not be as valued by the ordinary people, as it should be.

The sweet potato is another example whereby the older varieties that were introduced during the early period are being neglected in favour of new improved varieties that provide higher yields or are resistant to pests or disease. However, as the National Strategy points out, these varieties should be maintained for the very reason that they bring variety, but most importantly, in the context of climate change, they may prove to have other 'characteristics that help them to survive in the changed conditions' (2005-2010, p. 8).

Finally, the traditional creole garden is often neglected in favour of exotic plants that tend to give a more manicured aspect to Seychellois modern landscaping (the creole garden is more of a jumble targeting utility before aesthetics). creole culture is created assimilation and adaptation (Hall, 2010), it is important to accept new assimilations and not remain stuck with rigid notions of what a creole garden should constitute. These assimilations have already begun, for example through the introduction of plants like rosemary, oregano and aloe vera from other countries in the Indian Ocean region, and which have now become part of our cuisine and medicinal repertoire (Matatiken and Dogley, 2005).

METHODOLOGY

Sampling, tools and sources of data

The target groups for this research were: (i) Youths aged between 15 and 25 years, (ii) elders of above 65 years.

For the first part of the research, the aim was to find out how much the younger generation knew about the creole garden concept and whether they were involved in any of its practices. As such, a set of mostly open-ended questionnaires were designed and distributed via survey monkey. The desired number was between 200 and 500 respondents. However, only 56 respondents completed the survey in the given time-frame. The questionnaires were sent to the University of Seychelles, professional centres and the Ministry of Education for distribution to secondary schools.

For the second part of the research, purposive

sampling was used to select a restricted number of informants who are known to be practitioners of the creole garden and lifestyle in a specific community, which is the community of Anse Royale. All of these informants are members of the Heritage Foundation of Seychelles (SHF) 'Living Heritage' project, and as such are qualified to be informants in this domain. They have expertise in the creole cuisine, the use of medicinal plants, and they all maintain a creole garden. The main aim was to document the different creole gardens observed and the knowledge of the informants on their cultural meanings and uses. The tools and methods used were interviews and observation.

Though the desired sample in this target group was 14, only 8 were actually achieved due to COVID-19 restrictions which were suddenly reinforced during the fieldwork period.

Data management and analysis strategies

The research required a mixed method approach. The questionnaires, which had already undergone a partial quantitative analysis via the survey monkey, was further analyzed qualitatively for context and categorized by themes, then put through another quantitative assessment for frequency distributions. The overall results were then again analyzed qualitatively through textual interpretation.

In the case of the fieldtrips to the homes of the informants, their interviews were recorded and notes were taken of their home environment and the interactions that took place during the visits. The interviews were then transcribed, translated and the relevant data extracted as per the research objectives and stated research problem.

Additional sources of data

Information gathered from this research have been supplemented by the existing literature which has been published about Seychelles biodiversity and plant life.

ETHICS CONSIDERATIONS AND HUMAN RIGHTS ISSUES

Preparation and distribution of questionnaires:

The anonymity of all respondents was ensured;

For secondary school students, parental consent was sought for their children's participation.

Organizational approval was also sought for the questionnaires to be distributed amongst their

members.

Fieldwork:

Due to COVID-19 restrictions in place when the fieldwork was conducted, the permission of the Public Health Authority was sought to access the elders' compounds. Strict guidelines were observed regarding social distancing, face-masks and sanitization.

Teamwork was limited to two or three persons at a time;

Interviews and consent forms were prepared in Kreol, which is the mother tongue of all informants. The objectives of the project were explained to the informants beforehand.

Fieldworkers ensured that they observed all the social rituals of behaviour when entering the compound of a creole elder, and that this was maintained throughout the time spent there. This of course excluded traditional greetings such as kissing and shaking hands which are currently forbidden due to COVID-19 restrictions.

The project was conducted with the mutual participation of the elders who consider themselves as custodians of the creole garden and lifestyle. They also expressed a sense of pride in being selected for the project and in their creole identity.

STRENGTHS AND LIMITATIONS OF THE CASE STUDY

Strengths

The main strength of this study is that Seychelles has invested a lot in environmental education, so the younger generation tend to be very aware of climate change and environmental issues. As such, it was easy to gain the interest of those who participated and reopen discussions amongst them about environmental issues from another angle.

This study has also served as a means to revive a very important aspect of our bio-cultural heritage that is easily in danger of disappearing. The results of the study can serve as a solid foundation for opening a campaign to raise awareness of the creole garden and lifestyle, and its significance to Seychellois identity and culture. Linking this up with biodiversity conservation and climate change mitigation further strengthens this ICH element as it can be backed by already existing environmental structures.

Limitations

Due to COVID-19 restrictions, access to the informants was very difficult. Distribution of the questionnaires was impeded by bureaucratic issues and this affected the number of participants who had timely access to them. However, the most significant limitation was the time factor. The time allocation to complete the study was very short and the researchers had to do it alongside their regular jobs.

FINDINGS

Questionnaire Analysis

1. Age group:

84% respondents aged between 15-24 and 16% aged 25 and above.

2. Representation of districts:

- Out of 26 districts, 22 districts were represented in the survey.
- The highest concentration of respondents was evenly distributed between Central and South Mahé, and the lowest was in North Mahé.

3. Understanding of the creole garden:

54 respondents out of 56 responded.

- Approximately 11.2% of the total respondents had a good idea of what constitutes a creole garden.
- Approximately 9.5% of the total respondents had almost no idea at all of what constitutes a creole garden.
- Approximately 21% of the respondents had only a vague idea as to what constitutes a creole garden.

4. Knowledge of plants most associated with the creole garden:

Respondents were asked to name 2 plants most commonly associated with the creole garden.

- Based on the fieldwork results, most of the key plants identified as traditional creole garden plants were selected by the questionnaire respondents.
- In order or popularity, these plants include (i) 'Rozanmer' (*Madagascar Periwinkle*), (ii) 'Mayok' (*Cassava*), (iii) 'Bred Mouroum' (*Moringa*), 'Sitronnel' (*Lemongrass*), 'Zepis' (usually referring to parsley and thyme, but may include local ginger and spring onion) all scoring equally, (iv) 'Friyapen'

(*Breadfruit*) and (v) 'Papay' (*Papaya*), both scoring equally. Significantly, the condiment considered as most essential by the informants in the fieldwork, the 'bilimbi', was mentioned only once.

However, some plants mentioned were (i) endemic plants such as the coco de mer, (ii) indigenous plants such as the 'Bwasousouri' (Ochrosia Parviflora) and 'Bwatorti' (Noni) which are also known medicinal plants, but are not commonly found in individual gardens (iii) exotic plants used for modern landscaping such as palm (the plant mentioned was 'pye palm', meaning palm tree, which is the common name for imported palms such as the 'Latanier', would normally have been mentioned by their specific names).

5. Benefits of the creole garden:

Respondents were asked what in their opinion, were the benefits of the creole garden. Some respondents gave more than one answer. Their answers have been categorized in the following fields in terms of number of times cited:

Benefits	Medicinal properties	Aesthetic	Biodiversity
Mentions	8	6	2

Benefits	Healthy,	Saving on	Culture and
	organic	expenses	identity
	living		
Mentions	17	24	6

6. Access to a creole garden:

Respondents were asked if they had a creole garden and what were its contents.

- 39 out of 56 responded to this question, representing about 70% of the total participants of the survey.
 - 2 participants said they did not have a creole

garden. On the assumption that the 17 who declined to answer did not have a creole garden either, 8.4% of the total participants of the survey either do not have access to a creole garden or have no idea what it is.

 Most of the plants cited by the participants who said they had a creole garden were indeed traditional creole garden plants.

7. Loss of the creole garden:

The respondents were asked if they thought the creole garden was disappearing and why.

- 73% said yes and 27% said no.
- The following were cited most often as reasons for the loss of the creole garden: (i) Loss of knowledge and interest (especially among youths), (ii) No appropriate land, (iii) Modernization (better access to imported goods and medical facilities), (iv) More interest in exotic plants.

8. Efforts to conserve the creole garden

- 41% of the respondents believe that not much effort is being put into preserving the creole garden.
- 34% of the respondents cited various efforts being made by the government, schools and wildlife clubs to preserve some aspects of the creole garden, but generally more in the context of general environment conservation.

9. Understanding of biodiversity:

- 80% of the respondents answered this question, 20% skipped it.
- (i) 36% of the respondents have the right idea about the meaning of biodiversity, (ii) 11% are not sure, (iii) 7% have no idea whatsoever, and (iv) 14% have a vague idea.

10. Contribution of the creole garden to plant biodiversity in Seychelles:

- 64% of the respondents answered, 36% skipped.
- 30% of the respondents believe that the creole garden contributes to the variety of useful plants in Seychelles.
- 70% of the respondents either did not respond or gave answers that were not relevant.

11. Creole garden plants in respondents' immediate environment and usage:

Respondents were given a list of 20 creole garden plants. About 98% affirmed that they used these plants.

The table below shows the most abundant and rarest plants in the respondents' environment.

Most abundant (Above 70%)	Rarest (Below 30%)	
ʻPiman' (Chilli pepper)-84%	'Yapannan'-7%	
'Rozanmer' (<i>Madagascar</i> <i>Periwinkle</i>)-80%	'Zenzanm lokal' (local ginger)-7%	
'Papaya'-82%	'Safran ver' (tumeric)-13%	
'Bilimbi'-78%	'Koket'-27%	

12. Transmission of creole garden plants usage.

85% of the respondents had learned about creole garden plant use from the elders in their families or neighbourhood. The remaining percentage did not give relevant answers.

Fieldwork Data Analysis

Cultural significance

- The creole garden is for sustenance: (i) food supplement, (ii) condiments special to creole cuisine (iii) drinks, e.g. fruit juice and toddy, (iv) medicine, (v) protection, e.g. 'bwamalgas' reverses effect of ingested substances dreamt about.
- Most creole garden plants have a large diversity of uses, e.g. coconut is used as condiment, ingredient for dessert, food for animals, medicinal purposes, extract of other products such as oil and copra, household products such as brooms, building materials, drinks such as coconut water and toddy.
- The creole garden must contain a specific category of plants (and animals) to be considered as such: starchy foods ('gro manze'); condiments; vegetables; fruits; herbs and medicinal plants; animals; flowers.
- The creole garden is a source of pride to the Seychellois homeowner in terms of aesthetics, due to its colourful flowers.
- The creole garden represents identity/ créolité.

Transmission of knowledge

- Natural transmission from generation to generation is no longer being done due to more access to manufactured food and medicine.
- The younger generation is more preoccupied with modern gadgets and not interested in the creole garden.

- Some local traditional concepts associated with the creole garden and lifestyle are disappearing due to lack of use, and with it, the vocabulary: 'benswe', 'kwirl', 'yapannan'.
- As the older generation dies, less people are growing plants associated with the creole garden.

Reducing carbon footprint in context of food and pharmaceutical industries

- Most informants stated that their creole gardens save them money as it increases their self-sufficiency.
- Some elders believe that using medicinal plants from the garden is sometimes more effective than going to the doctor e.g. one informant treated a man whom she had diagnosed as suffering from wind, with 'yapannan', when different doctors had failed to diagnose him.
- Creole garden products are healthier and render their consumers healthier.

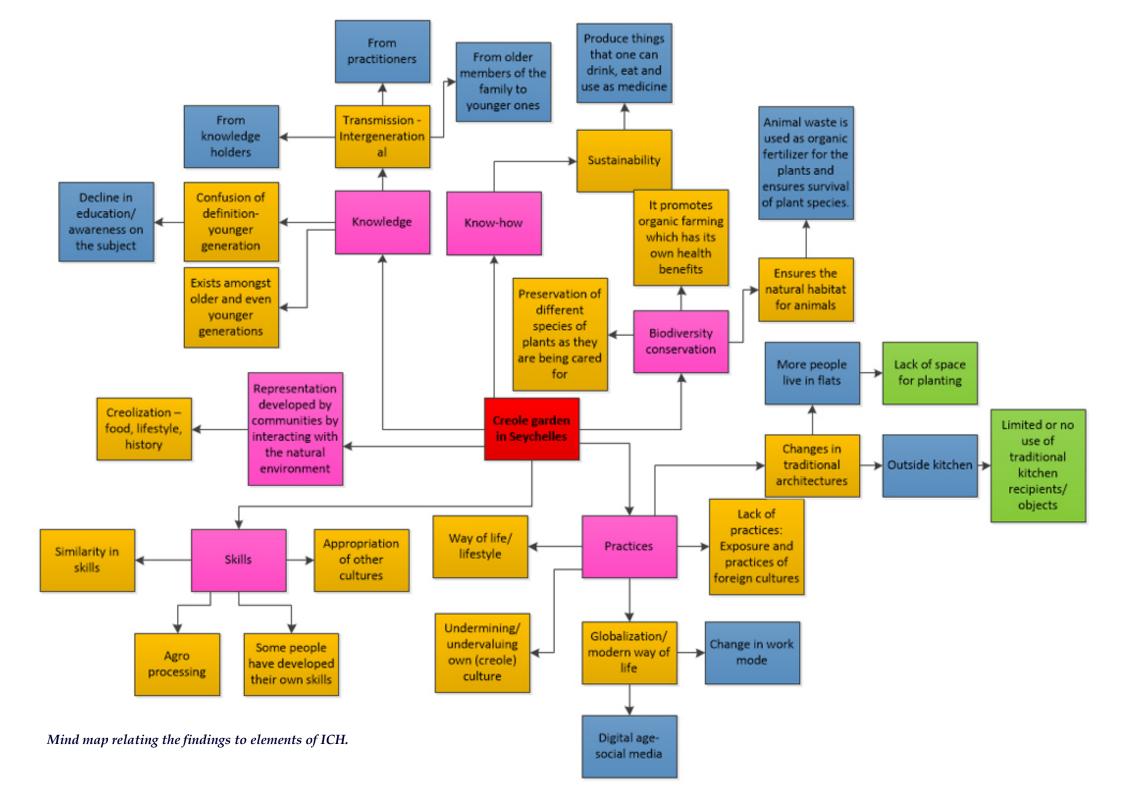
Biodiversity conservation

- The creole garden is an eco-system: People depend on the plants for consumption, some of the plants are used to feed animals, the animal waste is used to feed the plants, people eat the animals
- Some essential medicinal plants such as 'yapannan' have almost disappeared.
- Some medicinal plants are considered as 'weeds' and consequently destroyed systematically, e.g. through mechanical grass-cutting.
- Modern landscaping involves more exotic plants such as orchids, and are valued more than the more useful plants of the creole garden.

DISCUSSION

The creole garden represents a whole lifestyle that is still relevant and important to the older generation - by definition, in the past it represented sustenance and the wellbeing of the community. This is why it is still considered important by the older generation. This creolization process includes the following: (i) making the best possible use of all available land around the homestead to produce the basic necessities for sustenance, e.g. where there is stony ground, all sorts of recycled containers would be filled with soil to grow herbs, condiments and medicinal plants, and terracing would be practiced where the land is very steep; (ii) the surrounding area around the homesteads are used as an extension of the creole garden around the home, for example, breadfruit, coconut and fruit trees are shared amongst neighbours as a sort of barter; (iii) creole dishes were developed from the produce that was available in the immediate environment. As the original plant life that existed in the islands were not enough for sustenance, plants like the Madagascar periwinkle ('rozanmer') and the Moringa ('bred mouroum') were introduced from the neighbouring islands, and used in the traditional ways they had been used in their original habitats. This was possible because the main protagonists of creolization were the slaves who had been taken from these original habitats. Eventually, in merging with other groups from other places, and in adapting to the new environment, the ways of using plants and animals from these original habitats evolved and became specific to Seychelles.

The results of the study among the younger generation is generally confirmed by the study among the older generation. However, though the youths have displayed an awareness of medicinal plants and creole garden food culture, their understanding of the whole concept is limited, as is their practice of the lifestyle. More precisely, social practices have changed because people no longer rely entirely on their immediate surroundings for their livelihood and entertainment. (i) The skills associated with planting around the home are eroded because younger generations have different work schedules and do not have time to engage in this activity. The skills are thus not passed on. (ii) Traditional building styles which were synced with the local environment and sometimes depended on what was available in the immediate environment have changed because construction now involves mostly imported materials. Traditional architecture which was designed to capture airflow is not always considered nowadays because air-conditioning is an option. This means more use of electricity and gases that are harmful to the atmosphere. (iii) People engage less in making home-made snacks as a recreation, and if they do, they rely more on shop bought ingredients rather than making use of what is available in their gardens. As a result, the creole garden and architecture is unnecessarily made redundant.



The basis of the kitchen pharmacy is that most plants and plant products from the creole garden that are used in the kitchen also have medicinal or health benefits. For example, according to the informants in this study, the curry leaf which is a regular ingredient in creole dishes, can help to stabilize blood pressure. Local ginger, which is part of the basic ingredients of almost every creole dish, comprising of ginger, garlic, salt and pepper, is also used as a remedy for coughs and sores. As such, it is important that this knowledge is passed down to the next generation. Since the study has shown that traditional modes of transmission is diminishing, that is, from the older generation to the younger through actual practice, new modes of transmission have to be found. The diffusion of this study in the form of literature or via various media channels is an example of these new modes of transmission.

The creole garden and lifestyle is linked to several elements of ICH as described in the UNESCO 2003 convention for the protection of ICH (*refer to the pink boxes in the above mind map*). These elements are specified in the domain, entitled, 'Knowledge and practices concerning nature and the universe'.

Some specific examples:

In the context of communities' interaction with their natural environment, we realized that because of the conditions of slavery, colonization and isolation during the early settlement period, the creole garden emerged as a survival phenomenon and is central to the creolization process in Seychelles.

However, in the context of cultural practices in present times, the creole lifestyle has been affected by globalization, modernization, changes in architectural practices and work modes, resulting in the erosion of the creole garden and associated kitchen pharmacy.

In the context of ICH and biodiversity conservation, a revival of the creole garden values and lifestyle would contribute towards a healthier lifestyle and a renewal of the knowhow of the maintenance of the creole garden and its uses. For example, condiments and foodstuff with health attributes, as well as medicinal plants through new modes of transmission.

CONCLUSIONS

The main benefit that has come out of this research is the linkage of biodiversity conservation and climate change mitigation to ICH. This

has brought out the fact that the Seychellois' traditional food culture and medicinal practices is in itself an ecosystem that should be preserved and promoted. It is a fact that in Seychelles, there has been national campaigns promoting environmental concerns such as biodiversity conservation and the blue economy, and climate change adaptation. There have been no campaigns however, to promote the creole lifestyle and identity apart from showcasing various aspects of it in the annual Creole Festival, which is at any rate, at a very low ebb currently. And yet, many Seychellois have reacted to the present pandemic by seeking traditional medicinal recipes and food production around the home, as it was brought home to us how vulnerable we are as a remote island state that depends mostly on importations. There is a need thus, to discuss how indigenous and modern knowledge can be merged to address current challenges (Kidd, 2016). There is also a need to better appreciate the links between biodiversity, climate change and ICH. As such, as discussed by Folke et al., (1996) biodiversity conservation should indeed go beyond the creation of parks and extend to policies that consider sustainable human activity. This research thus calls for a national campaign on the creole garden and lifestyle and its connections to biodiversity conservation and climate change, beginning with the following recommendations.

RECOMMENDATIONS

Education: Creation of a 'Living Heritage' garden at the Domaine de Val des Près heritage site, which will be accessible to the public, including young people.

Conservation: Creation of a nursery at the University of Seychelles and corresponding living creole garden at the Anse Royale Home of the Elderly for formal teaching and oral transmission.

Promotion: Publication of a book which documents the creole garden and creole lifestyle. Follow-up activities and presentations in districts.

Policies: Lobby for the creole garden category to be included in national home embellishment programmes and for this element of our ICH to be included in cultural policies and heritage education in future.

Artocarpus altilis

Common name: Breadfruit

Creole name: Friyapen

Plant Family: MORACEAE

Uses: Culinary

Exotic



Cultural interest: Was brought in to 'feed the slaves' all over the colonies (DeLoughrey, 2008) and protected by laws of Seychelles (Breadfruit and Other Trees Protection Act, 1917).

Medicinal uses

Benefits: The fruits and seeds are good sources of carbohydrates, protein, dietary fiber, fatty acids, pro-vitamin A, potassium, and calcium with significant amounts of ascorbic acid, niacin, and iron (Badrie & Broomes, 2010).

Breadfruit is a species of flowering tree in the mulberry family. Its name comes from the fact that, when cooked, the fruit of the breadfruit tree has a potato-like flavor, similar to fresh-baked bread. Breadfruit trees can grow to a height of 20cm. The skin of the fruits is green and slightly rough. It gradually turns lighter, becoming yellow when ripe. The white pulp is firm and does not contain any seeds as the fruit develops without any fertilization. It is generally eaten as a starchy vegetable but can also be used to make a pudding. In Seychelles, there is a saying that visitors who eat the breadfruit are likely to return to the islands.

Breadfruit has a wide range of applications in traditional medicine, with all parts of the plant being used to treat a range of conditions. The fruit contains artocarpine and the enzyme papayotine, phenols quercetin, and camphorol, plus gamma-aminobutyric acid, which lowers blood pressure. The stem-bark and fruit contain cyclopropane sterols. The toasted flowers are rubbed on the gums around aching teeth to ease the pain. An extract from the flowers is effective in treating ear edema.

Moringa oleifera

Common name: Horse Radish tree

Creole name: Bred mouroum

Plant Family: MORINGACEAE

Uses: Culinary

Introduced



Medicinal uses

A fast-growing, drought-resistant tree, considered one of the world's most valuable trees, as almost every part of the tree can be used for food or has some other beneficial property. The leaves commonly for making soup ('bouyon bred') Moringa is rich in many essential vitamins and minerals.

The leaves have seven times more vitamin C than oranges and 15 times more potassium than bananas. It also has calcium, protein, iron, and amino acids, which help your body heal and build muscle.

It's also packed with antioxidants, substances that can protect cells from damage and may boost your immune system. There's some evidence that some of these antioxidants can also lower blood pressure and reduce fat in the blood and body.

Diabetes: Several early studies show that insulin-like proteins found in Moringa may help lower blood sugar. Plant chemicals found in the leaves might help the body process sugar better, affecting how the body releases insulin.

In the tropics, it commonly uses as forage for livestock. The oil obtained from the seeds is good in the treatment of skin diseases. The juice is extracted from its roots and leaves in poultices for inflammation and swelling of the neck (Robineau, 1991).

Averrhoa bilimbi

Common name: Cucumber tree

Creole name: Bilenbi

Plant Family: OXALIDACEAE

Uses: Culinary, Medicinal

Exotic



Medicinal uses

Three leaves added to water, and the liquid is drunk daily as a remedy for high blood pressure. When applied externally as a paste or poultice, the leaves prevent itching. A decoction of leaves can cure inflammation of the rectum, and the paste is good for mumps, rheumatism, and pimples. Although being a bit sour, the fruits can be eaten raw or sipped in rock salt as a snack or used in curries. It can be used as a substitute for tamarind (*Tamarindus indica*) or tomatoes to flavour different dishes. It can replace the mango fruit in making the local and much-appreciated chutney.

An infusion of the flowers is good for coughs. The fruit is an astringent, stomachic, and refrigerant, and its juice is made into a syrup as a cooling drink to reduce fever. It is antiscorbutic and valuable for slight bleeding from the bowels and the stomach and internal haemorrhage (Gurib-Fakim, 2007).

- It is also good to cure beriberi, biliousness, and coughs.
- One or two pickled fruits are good to control diarrhoea.
- Rotten fruit is rubbed into the skin to treat fungal diseases.

In Seychelles, the fruits are good for removing stains on clothes, and for treating smelly armpits.

Manihot esculenta

Common name: Cassava

Creole name: Mayok

Plant Family: EUPHORBIACEAE

Uses: Culinary, Medicinal

Exotic



The Cassava plant is a shrub to 3 meters with tuberous roots and knobby stems and deeply palmate lobed leaves up to 20 cm long. Cassava is the third largest source of carbohydrates for human food globally, with Africa its most significant centre of production. Even though a prevalent food plant, improper usage, and consumption of this plant can result in poisoning. Parts of the plant contain harmful toxins. The sweet cassava variety includes toxins in the skin on the tubers, while the bitter cassava has the poison incorporated in the tubers and the skin. The toxins are destroyed by drying and cooking. The leaves cannot be consumed raw since they contain cyanide, a naturally occurring poison. Cassava grown during drought is exceptionally high in these toxins (Lavergne & Véra, 1989).

The bitter variety of cassava root is good to treat diarrhoea and malaria. Leaves are suitable to treat hypertension, headache, and pain. The tubers are grated as a poultice or powder that is good to apply to wounds, whitlow, and skin disorders, and mixed with castor oil, it can relieve pain. The tubers are mainly boiled with coconut milk and sugar and eaten as a dessert in Seychelles or boiled and baked as various bread, cakes, or porridge.

Cocos nucifera

Common name: Coconut

Creole name: Koko

Plant Family: PALMAE

Uses: Culinary, Medicinal

Indigenous



Benefits: cytotoxic, emetic, emollient, hypotensive and purgative... (Fern, 2014)

Cultural Interest: National 'Tree of Life' due to diversity of use: medicinal – purge, fungal infections, diarrhoea, sunstroke relief, fever and rheumatism relief; construction – roofing, etc.; culinary – cooking oil, coconut milk, toddy (local palm wine).

A tree of life: every part of this tree can and has been used in countless ways by the people of Seychelles and other coastal communities worldwide! In the past, the leaves were used as a roofing material, the husk fibres for ropes, and to date, the oil is commercially on the market and in Creole cuisine, and Toddy, a typical palm wine, is tapped from the coconut tree. The clear liquid inside a young coconut is very refreshing to drink, especially when chilled. It has a high potassium content and contains antioxidants. The flesh of mature coconuts can be eaten raw or grated, and its milk squeezed and used in cooking.

Coconut water rubbed on the forehead relieves sunstroke. The oil from mature nuts rubbed on the skin, relieves fever, rheumatism, and sunburn (National Heritage Research Section Seychelles, 1994).

Carica papaya

Common name: Papay

Creole name: Papay

Plant Family: CARICACEAE

Uses: Culinary, Medicinal



The papaya is a small tree with a scarred trunk and a head of palmate lobed and toothed leaves of up to 70 cm wide, with the large oval or pear-shaped fruit clustered below and among the leaves. It is a fast-growing, smooth, semi-woody tree cultivated in tropical regions worldwide.

The ripe fruit of the papaya is good to eat fresh. The unripe green fruit makes chutney and salads; one of the specificities of the tree and its fruit is that they contain papain, which helps digestion, and it is also valuable for tenderizing meat.

The papaya is a popular fruit and a vegetable. In former times, a traditional creole wedding was considered incomplete without a dish of "konfitir Papay tournen," a locally made papaya jam. The papaya fruit is used in the creole cuisine in curries and stews, including the grey-black seeds as a substitute for pepper.

Medicinal uses

An infusion of male flowers or seeds is drunk to kill worms. The milky sap from the unripe fruit is used for eczema and ringworm. A beverage of the roots can be good for rheumatism, and eating the ripe fruit is thought to be helpful for constipation. The fruit is used to treat injuries from sea urchins. The mashed fruit is used to treat boils. Eating the papaya fruit can help to reduce high blood pressure (National Heritage Research Section Seychelles, 1994).



Musa spp.

Common name: Banana

Creole name: Bannann

Plant Family: MUSACEAE

Uses: Culinary, Medicinal



This unique plant resembles a tree but has no real woody material. The leaves are sheathed and become shredded by the wind when unfurled. There are a number of varieties ranging from 2 – 15 meters tall. Locally they are grown mostly for fruit and also for cooking the desert called 'Ladob' or a sweet or savoury mash called 'katkat', or banana fritters called "gato bannann". Bananas are also made into crisps.

Medicinal uses

Young leaves rubbed with castor-oil, are applied to the head for headaches. The most popular use is to stop diarrhoea, where the green fruit is boiled in its skin and eaten. The sheaths enveloping the leaves are applied to stone fish stings, and also to burns. The fruit, which is added to a decoction of coffee beans, is also used to treat urinary problems (National Heritage Research Section Seychelles, 1994).



Capsicum frutescens L.

Common name: Chilli Pepper

Creole name: Piman

Plant Family: SOLANACEAE

Uses: Culinary, Medicinal

Introduced



Chilli pepper is a cultivated woody stem shrub with ovate leaves, small white drooping flowers, and small pointed fruit, red when ripe, hot to taste, and used as a condiment or flavouring.

A meal in Seychelles is not complete without the beloved *Piman!* Chilli peppers have been in the human diet for millennia. There is archaeological evidence in south-western Ecuador that chilli peppers were cultivated for food more than 6000 years ago. Chilli peppers pods, which are berries, are used fresh or dried. Chillies are often dried to preserve them for long periods. Fresh chilies can also be processed as pickles.

Medicinal uses

The leaves are used in a poultice to treat boils. They are good as herbal remedies for coughs and colds. It is also believed to be good for deworming (National Heritage Research Section Seychelles, 1994).



Citrus mitis

Common name: Calamondin

Creole name: Bigarad

Plant Family: RUTACEAE

Uses: Culinary, Medicinal

Introduced



The Calamondin is a shrub or small tree growing up to 6 m at the most. The tree bears small citrus fruits resembling miniature tangerines; the fruit is used mainly to flavour food and drinks. It has a tangerine odour and has green coloured peel which turns orange when ripe. Despite its appearance and aroma, the taste of the fruit itself is quite sour, though the peel has a sweet smell. Some types of this fruit can be sweet. Traditionally the fruit's pulp is used to make a drink similar to lemonade, and when frozen, the fruit can serve as ice cubes in beverages such as tea, soft drinks, water, and cocktails. The juice is typically best for seasoning fish and making vinaigrettes.

Medicinal uses

Calamondin juice is used for treating acne, insect bites, and itching. A decoction of the leaves, often with lemongrass and cinnamon, is used in a steam bath for removing fever. The juice mixed with honey is good for coughs. For infections from ingrowing nails – "Panari," the whole fruit is cooked in the fire, and the affected finger is dipped in the warm fruit. Calamondin is suitable for epilepsy; the fruit is massaged on the face (Gurib-Fakim, 2007).



Zingiber officinale

Common name: Ginger

Creole name: Zenzanm

Plant Family: MUSACEAE

Uses: Culinary, Medicinal



Introduced

This is a herb which grows up to 50cm with large lanceolate leaves, up to 25cm long. A cone-shaped spike about 7-8cm long grows from the rhizome with yellow bracts enclosing yellow and purple flowers. It is one of the cornerstones of creole cooking, forming a trinity with garlic and pepper (though the latter are not traditionally grown in Seychelles).

Medicinal uses

Local ginger is grown in the creole garden mainly for medicinal purposes. An infusion of the rhizome is suitable for coughs. Some crushed ginger is applied to infected spots to aid healing.

Notes: Ginger is considered a spice throughout the world. Modern research has proved it to be highly effective against seasickness (Gurib-Fakim, 2007).

Catharanthus roseus (L.) G. Don.

Common name: Periwinkle

Creole name: Rozanmer

Plant Family: APOCYNACEAE

Uses: Medicinal

Exotic



The periwinkle is a herb that grows up to 60 cm with obovate opposite leaves, solitary or paired axillary pinkish mauve or white, tubular flowers with 5 spreading free lobes, and narrow fruit containing numerous dark brown cylindrical seeds.

Medicinal uses

An infusion of the leaves is generally used as a tonic against diabetes and stimulates appetite, especially in small children. The same infusion is also drunk in the treatment of colical pains and stomach ache.

Notes: Research has proven that "rozanmer" is effective against cancers, primarily childhood leukemia (National Heritage Research Section Seychelles, 1994).



Mentha x piperita L.

Common name: Mint

Creole name: Lanmant

Plant Family: LAMIACEAE

Uses: culinary, medicinal

Exotic



The mint is an erect perennial herb, intensely aromatic, with stalked ovate, serrated edged leaves, and dense oblong terminal spikes of lilac-pink flowers. This popular herb thrives in excellent, wet, and shaded environments but can tolerate many conditions and grow in full sunlight—a fast-growing plant with a well-defined aroma and flavour. The menthol in the peppermint gives the herbs its characteristic effect when eaten – there is an initial hotness, followed by coolness in the mouth. The leaves are suitable for making tea, savoury dishes, and desserts. A tea made out of fresh or dried leaves and drank after dinner will soothe the stomach and aid digestion.

Medicinal uses

An infusion of the leaves is drunk to treat coughs and colds and to ease flatulence. Mint can also help soothe and relax muscles when inhaled or applied to the skin (Gurib-Fakim, 2007).



Cymbopogon citratus

Common name: Lemongrass

Creole name: Sitronnel

Plant Family: POACEAE

Uses: culinary, medicinal

Exotic



Lemongrass is an aromatic grass and unique to tropical climates and rarely bears flowers. Where conditions are suitable, the plant will grow up to 1.5m tall. Its stems are dense and long, and the leaves thin. Because of the stalk's tough and fibrous nature, it is often crushed to release its aromatic oils and used whole. Alternatively, the outer casing is pulled out, and only the lower, white tender part of the stalk is finely chopped or crushed before using. For culinary use, the lemongrass is preferred dried.

Medicinal uses

Lemongrass steam inhaled under a blanket is used to attenuate a fever. Use lemongrass is also used in a bath for a soothing aromatherapy experience. A lemongrass infusion can help reduce the symptoms of fever (National Heritage Research Section Seychelles, 1994).



Maranta arundinacea L.

Common name: Arrowroot

Creole name: Larourout

Plant Family: Marantaceae

Uses: culinary, medicinal

Introduced



The arrowroot plant has a creeping rhizome with upward-curving, fleshy cylindrical tubers covered with large thin scales that leaves scars.

Medicinal uses

Arrowroot has many medicinal uses as well. It is produces an edible starch that digests quickly. In Seychellois culture, it was traditionally used to feed babies and people recovering from an illness or medical treatment. Due to its antiseptic properties, arrowroot tea is used to ease urinary problems. When taken daily, it helps to lower cholesterol. The mashed rhizome is suitable for application to wounds from insect bites (National Heritage Research Section Seychelles, 1994).



BIBLIOGRAPHY

- Badrie, N. & Broomes, J. (2010). Beneficial uses of breadfruit (Artocarpus altilis): Nutritional, medicinal and other uses. In *Bioactive Foods in Promoting Health* (pp. 491-505). Academic Press.
- Bastide, R. (1974). La femme de couleur en Amérique Latine. L'Homme et la Société, 31(1), pp.51-71.
- Beaver, K. (2008). *Native plants of Seychelles: a basic checklist and field guide*. Ministry of education Seychelles.
- Benoist, J. (1998). Hindouismes créoles. Mascareignes, Antilles. Paris: Éd. du CTHS.
- Berkes, F. (2012). Sacred ecology. Routledge.
- Bolland, O. N. (1998). Creolisation and creole societies: a cultural nationalist view of Caribbean social history. *Caribbean quarterly*, 44(1-2), 1-32.
- Boswell, R. (2017). Sensuous stories in the Indian Ocean islands. *The Senses and Society*, 12(2), pp.193-208. Retrieved from https://www.tandfonline.com/doi/full/10.1080/17458927.2017. 1319603.
- Cohen, P. (2000). Le cari partagé: anthropologie de l'alimentation à l'île de la Réunion. KARTHALA Editions.
- DeLoughrey, E.M. (2007). Globalizing the routes of breadfruit and other bounties. *Journal of Colonialism and Colonial History*, 8(3).
- Douglas, M. (2002). Implicit meanings: Selected essays in anthropology. Routledge.
- Folke, C., Holling, C.S. & Perrings, C. (1996). Biological diversity, ecosystems, and the human scale. *Ecological applications*, 6(4), pp.1018-1024.
- Freyre, G. (1974). Maitre et esclaves: la formation de la societe brasilienne. Gallimard.
- Friedmann, F. (1994). Flore des Seychelles Dicotyédones.
- Gadgil, M., Berkes, F., & Folke, C. (1993). Indigenous knowledge for biodiversity conservation. *Ambio*, 151-156.
- Gurib-Fakim, A. (2007). Medicinal plants of Mauritius and of the world.
- Hall, S. (2010). 'Creolité and the process of creolisation', in Robin Cohen and Paola Toninato (eds.) *The Creolization Reader: Studies in Mixed Identities and Cultures*. pp. 26-38. London and New York: Routledge.
- Kidd, C. (2016). The Political Ontology of Conservation. In Culture and Conservation: Investigating the Linkages between Biodiversity Protection and Cultural Values and Practices (pp. 6-17). Arcus Foundation.
- Herskovits, M. J. (1941). *The Myth of the Negro Past*. New York and London: Harper and Brothers Publishers.
- Jaffe, J., & Gertler, M. (2006). Victual vicissitudes: Consumer deskilling and the (gendered) transformation of food systems. *Agriculture and human values*, 23(2), 143-162.
- Lavergne, R., & Véra, R. (1989). Étude ethnobotanique des plantes utilisées dans la pharmacopée traditionnelle à la Réunion (p. 236). Agence de coopération culturelle et technique.
- Livingstone, D. (2006). Informal learning. Learning in places. Z. Bekerman, Burbules, NC. Silberman-Keller, D. New York
- Maffi, L. (2001). On bio cultural diversity. Smithsonian Institution Press.

- Matatiken, D., & Dogley, D. (2005). *Guide to Endemic Palms and Screw Pines of the Seychelles Granitic Islands*. Plant Conservation Action Group.
- Matatiken, D. et al. (2011). Conservation and Management of Medicinal Plants: Experiences from Seychelles. *Asian biotechnology and development review*, 13(3), pp.77-83.
- Medicinal Plants of Seychelles Book one 2nd Edition, pg.59, National Heritage Research Section, 2010
- Ministry of Education and Culture (National Heritage). (1994). Medicinal Plants of Seychelles
- National Heritage Research Section Seychelles, (1994) Medicinal plants of Seychelles
- Nature Seychelles. (2013). Grow and eat your own food. 2nd edition.
- Nazarea, V. D. (1998). Cultural memory and biodiversity. The University of Arizona Press.
- O. Nigel Bolland. (1998) Creolisation and Creole Societies: a Cultural Nationalist View of Caribbean Social History, Caribbean Quarterly, 44:1-2, 1-32, DOI: 10.1080/00086495.1998.11829568
- Robineau, L. (1991). Vers une pharmacopée caraibe, Recherche scientifiques et usage populaire dans le Caraibe intramil. Enda-Caraibe UNAH, 4, 475.
- Skerrett, A. et al. (2010). Outer Islands of Seychelles. Zil Elwannyen Sesel.
- Steen G, Hansen & Victorin F. Laboudallon, Flora of the Seychelles- A field guide to selected plants., Seychelles 2013, pg.600
- The Creole Melting Pot: Journey into the Seychellois Creole World. https://www.thecreolemeltingpot.com
- Tibère, L. (2016). Food as a factor of collective identity: The case of creolisation. *French Cultural Studies*, 27(1), 85-95.
- Trouillot, M. (2006). Culture on the Edges: Creolization in the Plantation Context. In *The African Diaspora and Creolization*, Florida: A.C.T.I.O.N Foundation Literary Forum. (Online) http://internationalcreolefest.org/images/CahierICF06-Booklet.pdf#page=7
- Seychelles. (2005). *National Strategy for Plant Conservation 2005-2010*. Plant Conservation Action Group.
- UNESCO. (2007). Intangible Heritage/2003 Convention.
- World Health Organization. (2000). *Promoting the role of traditional Medicine in Health Systems: A strategy for the African Region* 2001-2010.
- Warner-Lewis, M. (1998). Trinidad Yoruba: Its theoretical implications for creolisation processes. *Caribbean quarterly*, 44(1-2), 50-61.



Yapannan (Eupatorium ayapana)-a disappearing medicinal plant in the creole garden.



Bwamalgas (Euphorbia tirucalli). Used ritually in an infusion to counter evil. In typical creole garden style, medicinal plants mixed with colourful, decorative flowers.



Sugarcane (historically associated with the plantation)-used for the local fermented drink, baka, and the heart is boiled as a treatment for urinary infections. Also a snack.



The creole garden makes use of recycled materials.



Creole pride in the home environment.



Madagascar Periwinkle (Rozanmer).



Organically raised fowls part of the creole garden landscape.



Passing on the creole garden to the younger generation.



Welcoming guests with fruit juice made from creole garden produce.



A creole garden dish made with golden apples and spiced with chilli.



Mrs. Anita Mathiot



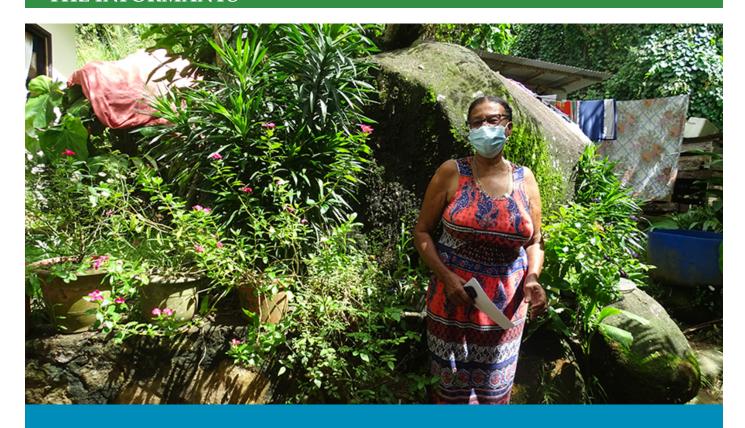
Mrs. Flora Bonnelame



Mrs. Marie Anne Adrienne



Mrs. Marie Cecile Adrienne



Mrs. Roselia Balette



Mrs. Therese Bertin



Mrs. Wilna Roseline



Mrs. Yolande Crea