PLANTS USED BY CHIMPANZEES AND HUMANS IN CANTANHEZ, GUINEA-BISSAU

FIELD GUIDE

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Title
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We would like to dedicate this guide to the memory of Cláudia Sousa (1975-2014) who contributed so much of her time, knowledge and energy to this research.

Acknowledgements

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Abbreviations used
c. – *circa* (about, approximately)
e.g. – *exempli gratia* (for example)
Syn. – synonym
spp. – species (plural)

CONTENTS

INTRODUCTION

With chimpanzees inhabiting increasingly anthropogenic landscapes, understanding the sustainability of their interactions with people is crucial for biodiversity conservation and human wellbeing. In depth understanding of the co-utilisation of wild resources by humans and chimpanzees can be incorporated into landscape, regional and national conservation policy that acknowledges the needs of both (Bersacola et al. 2018). This enables evidence-based recommendations for the sustainable exploitation of wild plants, especially those heavily used. For example, it can reveal which plant species should be prioritised for replanting in corridors between forest fragments and which should be afforded additional protection to ensure their persistence and long-term sustainable use by humans and chimpanzees.

The western chimpanzee (*Pan troglodytes verus*) is classified as critically endangered by the IUCN and is an important flagship species for conservation in Guinea-Bissau (Sousa 2015).

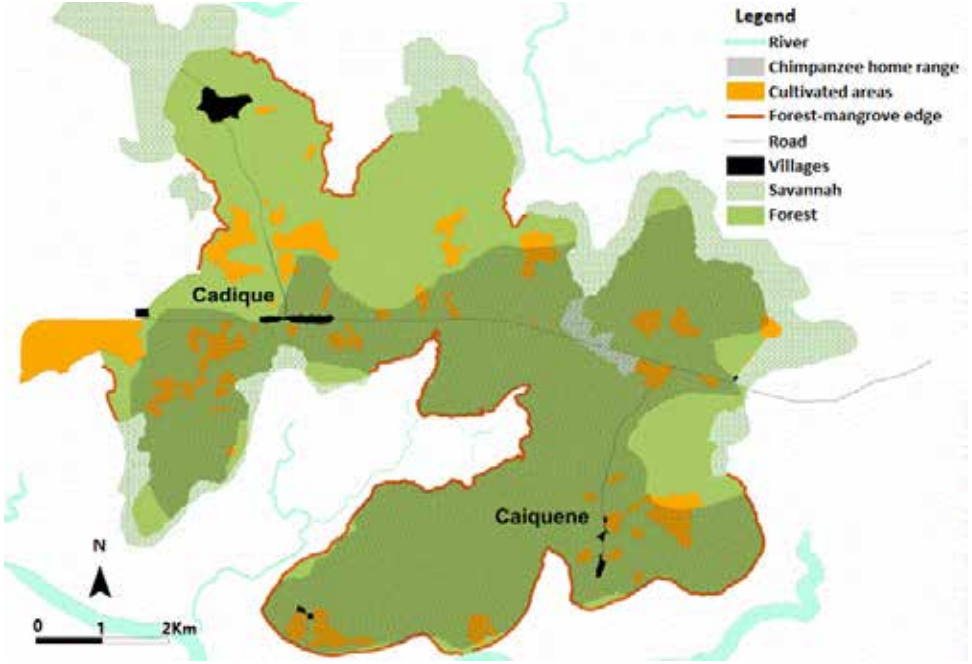
The diet of chimpanzees can consist of hundreds of different plant species, with inter-community differences in species consumed and their importance in diet. In addition to feeding, chimpanzees use wild plants for various other reasons, including to make tools, to access resources such as honey, and to construct nests whereby the branches and leaves of plants are broken and bent, then interwoven into a circular sleeping structure.

Several chimpanzee communities are present in the central-southern forests of Cantanhez National Park (Hockings and Sousa 2013). This field guide focuses on one community of chimpanzees at Caiquene-Cadique with a home range of approximately 12.7 km^2 some of which lies in proximity to agricultural areas and human settlements (Bessa et al. 2015).

Location of Cantanhez National Park, in Guinea-Bissau; the shaded area is detailed in the next map.

The human communities involved in this study were Nalu and Balanta from the villages of Caiquene, Cadique Nalu and Cabdaia. They possess in-depth botanical knowledge and have complex agroeconomic systems. The importance of wild plant resources is recognised by local people as they rely on these for reasons including their subsistence and medicinal needs, as well as for construction and fuel. Certain plants are also used in rituals and ceremonies. For this reason, plants are both vital to survival and hold cultural values (Parathian et al. 2018).

Humans and chimpanzees at this site show extensive overlap in habitat selection, with both using areas inside and outside the main forest blocks. Up to now, the overlap in wild resource use by people and chimpanzees has received limited scientific attention. To examine this in shared landscapes is methodologically challenging, and requires knowledge of plants available in a habitat, and the systematic and simultaneous collection of empirical data on human and chimpanzee resource use. To do this accurately requires bridging disciplinary research approaches and expertise.



Location of the study area, in Cantanhez National Park.

OVERVIEW OF PROJECTS

The data used to inform this field guide were largely collected during projects funded by the Fundação para a Ciência e a Tecnologia (FCT), Portugal. This guide presents results from these projects. The main goal of Research Project "Where humans and chimpanzees meet: assessing sympatry throughout Africa using a multi-tiered approach": PTDC/CS-ANT/121124/2010 (coordinated by Kimberley Hockings) was to elucidate the underlying mechanisms that work to allow human-chimpanzee sympatry to predict and facilitate the continued survival of nonhuman great apes in anthropogenic habitats.

The main goal of Exploratory Project "Chimpanzee tool-use in Guinea-Bissau and behavioural complexity": EXPL/IVC-ANT/0997/2013 (coordinated by Cláudia Sousa) was to explore chimpanzee tool-use behaviour and behavioural complexity in Cantanhez National Park, Guinea-Bissau.

As research continues, additional plant species utilised by chimpanzees in Guinea-Bissau will be identified. Hence, this field guide should be treated as an evolving document. As humans use numerous wild resources in various complex ways, this guide only incorporates those plant species that both humans and chimpanzes utilise. As research on chimpanzees at Cantanhez National Park is limited, this field guide is meant to be a useful resource for new and established researchers alike, and provide a basis for future research on chimpanzee behaviour and human-chimpanzee interactions.

RESEARCH METHODS

We collected cross-disciplinary data during both wet and dry seasons (for detailed methods see Hockings et al., in press). Free listing was used to identify plant species that were potential resources to local people at this site. We collected 157 voucher specimens of local plant species. To obtain local names of plants we showed them to knowledgeable elders. The voucher specimens are stored in the herbarium of LAE CRIA (Environmental Anthropology and Behavioural Ecology Laboratory - Centre for Research in Anthropology), Lisbon, Portugal.

We collected phenology data in eight 50 m x 50 m plots which we selected randomly across the study site in different habitats. We identified and marked trees and lianas with a diameter at breast height (DBH) of greater than 10 cm; these totalled 1994 trees/lianas from 124 species. We monitored each tree and liana every first and third week of the month for a total of nine months.

In addition to opportunistic observations of chimpanzee feeding behaviour, we used indirect methods including faecal sampling and the identification of chimpanzee feeding traces (n=377; monthly, n=9 months). We counted the numbers of plant species in each faecal sample and attributed percentages of food type (fruit, flower, leaf, pith) to the relevant category (Bessa et al. 2015). We took a photograph of each new plant species eaten by the chimpanzees and collected a botanical sample for later identification.

Concurrently with chimpanzee research we carried out weekly semi-structured interviews, visiting all 49 households in the three study villages for 36 weeks to record plant-use by local people (n=8380 reports of plant use). Participants were asked to provide the local name of the plant species their household used that week, which plant part they had used (i.e. fruit, flower, leaf, bark, seed etc.) and for what purpose. We recorded plant-use under five categories: consumables (i.e. food), medicine, fuel (i.e. firewood), artefacts (including tools), and construction. We obtained additional information on plant selection by local people through participant observation of plant harvesting, processing practices and subsistence or commercial use.

ETHICS

Research with local people and chimpanzees was reviewed and approved by CRIA, Portugal. This research was also reviewed and approved by the Instituto da Biodiversidade e das Áreas Protegidas (IBAP), Guinea-Bissau. All research involving wild chimpanzees was non-invasive and strictly adhered to ethics guidelines detailed by the Association for the Study of Animal Behaviour (UK). Oral consent was obtained from local people, and all research followed ethical guidelines for good research practice set by the Association of Social Anthropologists of the UK and Commonwealth.

THE VEGETATION OF CANTANHEZ NATIONAL PARK

The Cantanhez National Park (CNP) belongs to the national system of protected areas of Guinea-Bissau and is managed by IBAP. It is 105,800 hectares and located in the southwest of the country. CNP hosts a high diversity of vegetation types and plant species, harbouring almost all the types of plant formations in Guinea-Bissau. The **dry forest** is the main habitat type, and the main reason for the creation of this protected area. It occurs in several patches, particularly in the central and southern areas of CNP. Strips of **palm groves** of *Elaeis guineensis* surround the dry forest, and **riparian forests** develop in areas subjected to overbank flooding such as rivers and small lakes. The CNP zones of **woodland** and **savannah woodland** are probably of secondary, anthropogenic origin, and more abundant in the north. **Mangroves** develop in coastal and estuarine areas with tidal flooding, and are more extensive in the southernmost part of CNP (Cabedu and Ilha de Melo) and by the Cumbijã river. The ***lalas***, grass savannahs that are flooded during the wet season, are mainly found in the northwest and southwest areas of CNP. **Croplands**, including fields and orchards (e.g. cashew and citruses) as well as **fallows** of different ages are also common.

Dry forest

Characterized by a dense tree layer and a thick canopy of variable extension that limit the development of the shrub layer and, particularly, of the grass layer. It is generally composed of two well developed layers: tall trees (20-30 m) and medium- or small-trees (10-20 m). Emergent trees are common and can reach 35-40 m in height. The shrub layer is composed of young trees and shade-adapted shrubs. The herb layer is poorly developed or virtually absent, primarily consisting of shade plants. Lianas are common and reach the same height as the tall trees. The dry forest is the the main vegetation type at Cantanhez, although its area has been reduced due to human actions.

Palm groves

Characterized by the dominant *Elaeis guineensis* (oil palm, locally *palmeira-dendém*), mixed with other tree-sized species. Strips of palm groves occur in low areas, often around the *lalas.* The tree/palm layer can reach 25-30 m and be quite dense; it is generally accompanied by a layer of lower trees and palms. The shrub layer is composed of young palms and trees, and shade-adapted shrubs. The herb layer is generally discontinuous.

Woodland

It is often considered that tree cover is higher than 40% in this type of formation; trees dominate but their crowns do not form a thick canopy in the uppermost layer. More developed patches of woodland can include two tree layers: taller trees (15-25 m) and smaller trees (10-15 m). The shrub- and herb-layers are always present and generally well developed; lianas are also common. The species found in woodlands are also usually found in dry forests and savannah woodlands. In Cantanhez, the woodlands primarily result from human intervention in areas previously occupied by dry forests. This habitat type is most extensive in the northern zone.

Savannah woodland

Although with an important presence of woody elements, this vegetation type is dominated by herbs, which normally form a continuous layer of tall grasses that dry out after the wet season. It can be difficult to distinguish from the woodland; it is usually considered that the savannah woodland has a tree cover of 10-40%. The shrub layer is generally well developed, with lianas sometimes present. Slash-and-burn farming practices are often responsible for the maintenance of this type of vegetation at a pioneer stage. In Cantanhez, the savannah woodland is largely a result of human activities in previously forested areas, and large areas are found in the north.

Riparian forest

Mostly composed of hydrophilic trees and shrubs that grow along the banks of rivers and small lakes, where the substrate is flooded or wet throughout the year. It usually has only one layer of trees and palms (10-20 m) with variable canopy cover. The shrub and herb layers include species from wet or flooded environments. In CNP, this type of vegetation occurs mainly on the banks of the rivers Cumbijã and Balana and their affluents.

Mangroves

Characterized by tree or shrub vegetation in areas of muddy substrate subjected to tidal effects. It is composed of a small number of halophytes, species adapted to periodic flooding with saline water and to unstable and wet substrates. The most common are *Avicennia germinans* and *Rhizophora* spp. (*R. mangle*, *R. harrisonii* and *R. racemosa*); depending on the topography and hydrography, these species can co-occur or occur separately. In Cantanhez, mangroves occupy the whole coastline but are more extensive in the southernmost zone.

Lala

This is the local name for a grass savannah in lowlands that are flooded during the wet season. The flooding period contrasts with a very dry environment during the rest of the year. The dominating herb layer is composed mainly of grasses (Poaceae), usually with *Anadelphia afzeliana* (*palha-casa*) as the dominant species. Some palms, trees and shrubs might also be present such as *Elaeis guineensis*, *Mytragina inermis* or *Sarcocephalus latifolius*. In CNP, *lalas* are more extensive in the west zone, draining into the Cumbijã river.

Fallows

Dry-farmed lands that are left unused for some time, to restore fertility. The structure and composition evolve very quickly after abandonment. During the first years the vegetation is low, with a high density of heliophiles, namely climbers, shrubs and saplings, as well as trees and palms that were left, or resproutings from previous ones. After 8-10 years, the pioneer trees begin to dominate, and the importance of heliophile herbs and climbers decreases. After several decades, fallow areas have a similar structure to pristine forest, but species composition usually takes longer to recover. They are common around villages.

Cropland

Land used to grow field (e.g., rice, maize, peanuts) or tree (cashew, citruses, bananas) crops. In these areas it is common to find some forest trees such as palms or big trees that were not felled, as well as resprouting trees. Croplands are typically found near the villages.

ORGANIZATION AND USE OF THE GUIDE

This guide presents the plant species that are used by chimpanzees in CNP, as recorded during previous research (see earlier project references). In general, the same plants are used by human communities living within CNP.

CHAPTERS

The chapters describing the plant species are arranged according to main morphological types (life forms, or habits), each represented by a symbol. When more than one life form is possible for a species – for example, either as a climber or shrub, or as a tree or shrub – all the concerned life form symbols are displayed, but the less common ones appear in a duller colour.
Four main life forms are considered in this guide:

Trees and Palms - plants taller than 5 m (adults) but commonly reaching 20-30 m. They generally exhibit an unbranched stem (trunk), woody in trees and fibrous in palms.

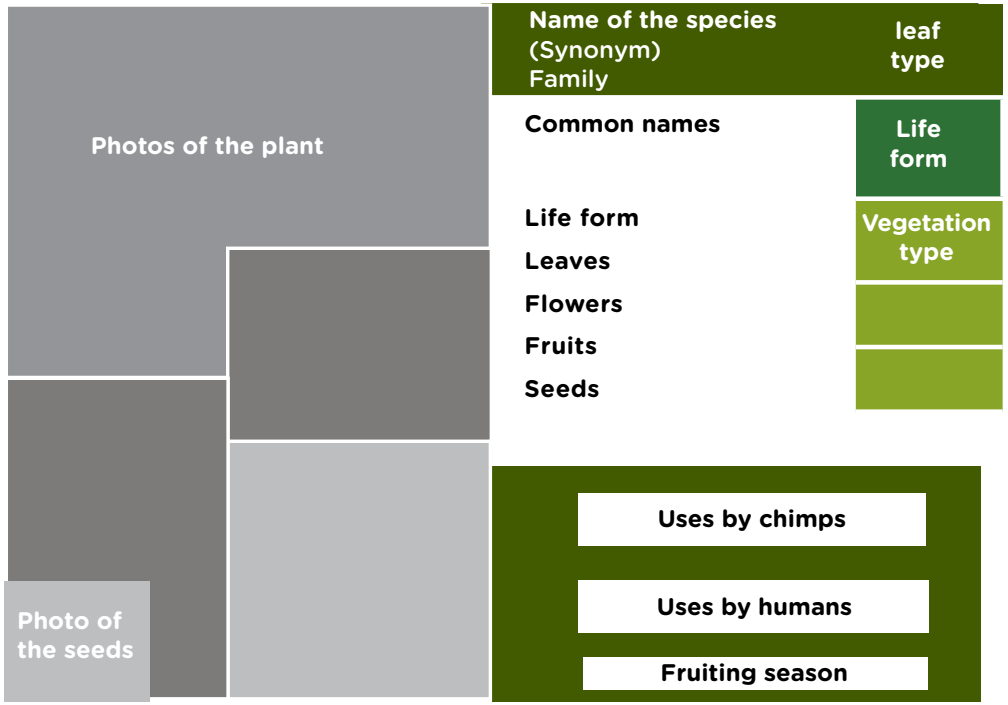
Shrubs - self-supporting woody plants, up to 5 m in height and generally branched from the base.

Climbers - plants that grow leaning or twining around another structure (generally a tree or palm). They have long and slender stems that can be woody (lianas) or herbaceous.

Herbs - plants with non-woody stems, from a few centimetres to 3 m in height. They can be annual (1 year to complete their growth cycle) or perennial (they live for 2 or more years).

SPECIES INFORMATION

Each chapter consists of the species descriptions, with two pages per species. The description is generally presented as follows:



For each species the scientific name and family are presented, as well as its common names in Cantanhez. The scientific names are those currently accepted; synonyms still in use are added, when appropriate. The nomenclature follows that proposed by World Flora Online (www.worldfloraonline.org). The full scientific names can be checked at the end of the guide, in the List of Scientific Names.

A brief botanical description (even page) and colour plates (odd page) are then provided, highlighting the distinctive characteristics, particularly those that can be observed at any time of the year (vegetative). Long descriptions were avoided, as well as overly technical

terms; however, when this could not be avoided, they are explained in the Glossary, at the end of this guide.

The information on the use of plants by chimpanzees and humans is schematic, according to the categories and symbols described below.

For easier identification of the species, symbols were added to illustrate about the type and arrangement of leaves, life form, and habitats (vegetation types) where it occurs in Cantanhez.

COMMON NAMES

The local names of each plant species are presented in the ethnic languages of the different populations living in Cantanhez, some of which were recorded during field work; other names were retrieved from the bibliography.

Reproducing common names is difficult when the concerned languages have no established spelling and different researchers might write the same term in different ways. We tried to choose the most usual form or, if not possible, present the alternatives.

These names are presented first in creole and then, by alphabetic order of the local languages (indicated by their abbreviations):

cr – creole	nl – nalu
ba – balanta	ss – sosso
fu – fula	td – tanda

CHARACTERISTICS FOR SPECIES IDENTIFICATION

The characterization of plant species is mostly based on reproductive characteristics, namely of the flowers and fruits. However, most species exhibit reproductive organs for a very short period, thus limiting their usefulness to identify species in the field.

In this guide we tried to indicate easily observable traits that are present throughout the year. The form, size and arrangement of leaves are therefore the basis to identify the plant species. Life form and size are also described in some detail, and distinctive characteristics of the branches, flowers, fruits and seeds are pointed out. Whenever possible these descriptions are illustrated with photographs.

Considering the specific purpose of this guide, special attention was given to the characterization and illustration of fruits and seeds, which are often ingested by chimpanzees.

USES BY CHIMPANZEES AND HUMANS

Information about plant uses by chimpanzees and humans is schematically presented, with information on the type of use and concerned plant part.

The uses of **plants by chimpanzees** were classified according to four main categories:

Food: for alimentation; data obtained through direct observation, feeding traces (e.g., teeth marks) and faecal samples.

Medicine: for medicinal purposes (e.g. eliminating parasites); data obtained from faecal samples.

Nest: sleeping place in palms or trees; data obtained through direct observation, and recording previously used nests.

Tool: use as tool (e.g., defoliated twigs to extract honey from beehives); data obtained through direct observation and abandoned artefacts (primate archaeology).

The **uses of plants by humans,** recorded from direct observation and interviews (free-listing interview, semi-structured interviews, and weekly survey of the same domestic groups; and, concerning medicines, interviewing traditional healers), were classified according to five main categories:

Food: for alimentation.

Medicine: for the preparation of traditional medicines.

Artefact: tools and other objects for domestic use.

Construction: for house and fence building.

Fuel: firewood.

Some human uses that do not match the above categories are mentioned separately, for example, plant parts used to prepare glue or ink.

For each category of use, the involved plant parts are indicated, according to the following symbols:

Leaves

Leafy branches

Fruits

Seeds

Flowers

Pith

Wood

Roots

Bark

Sap

FRUITING SEASON

Considering the importance of certain fruits to chimpanzees and humans, the available information on fruiting periods is also presented. It was compiled from three main sources: field data from Cantanhez, namely traces and photos of fruits and seeds, herbarium specimens, and published literature.

The fruiting season is represented by a bar where the twelve months of the year are indicated using their abbreviations; a dark-grey colour indicates months when fruiting is documented in the above sources, whereas a light-grey indicates months when fruiting is probable.

SPECIES ECOLOGY

Information about the types of vegetation where each species can be found in Cantanhez is shown as follows:

Dry forest

Palm grove

Woodland

Riparian forest

Savannah woodland

Lala

Fallows

Cropland

TYPES AND ARRANGEMENT OF LEAVES

The arrangement of leaves on stems and other leaf characteristics such as the form and the presence of petiole are important to identify plant species. For each species, this information is presented using the following symbols:

Alternate

Opposite

Clustered

Verticillate

Compound trifoliate

Compound digitate

Compound paripinnate

Compound imparipinnate

Compound bipinnate

Palmate or pinnate

trees and palms

Adansonia digitata

Malvaceae (Bombacaceae)

cabacera, cabaceira, calabacera, cabasséra (cr); látè (ba); bóè (fu); m'béke, n'bék (nl); kiri (ss)

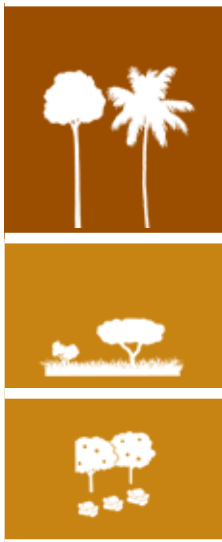
Habit: big tree (≤ 20-25 m in height), deciduous; smooth trunk, larger at the base.

Leaves: alternate, compound, digitate; with 5-7 unequal leaflets (the central one larger than the others), obovate (8-16 cm x 3-6 cm); 12-18 pairs of veins; long petioles (8-15 cm).

Flowers: big, white, with 5 curved petals and numerous stamens; solitary, hanging from long pedicels.

Fruits: big, ovoid (20-35 cm x 10-15 cm), hanging, externally woody and hairy; white, farinaceous pulp, with brown fibres around the seeds.

Seeds: numerous, dark-brown and kidney-shaped (≤ 1 cm long).



	food	medicine	nest	tool
	●			

	food	medicine	construction	artefacts	fuel
	●	●			

J	F	M	A	M	J	J	A	S	O	N	D

Albizia adianthifolia

Fabaceae (Leguminosae – Mimosoideae)

faroba-de-lala, faroba-de-mato, farroba-de-lala (cr); marnei, nétèmàe, néto-máiô (fu); masamp-thai, mesamp (nl); uasa-fiké, uasau (ss)

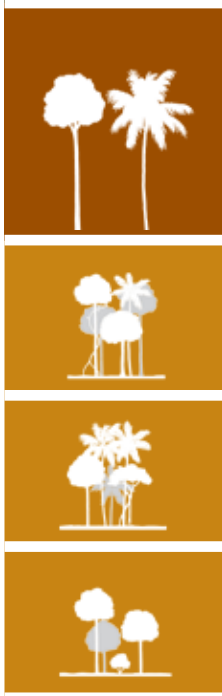
Habit: medium to large tree (20-25 m in height); short bole, sometimes with buttresses; wide, umbrella-shaped crown.

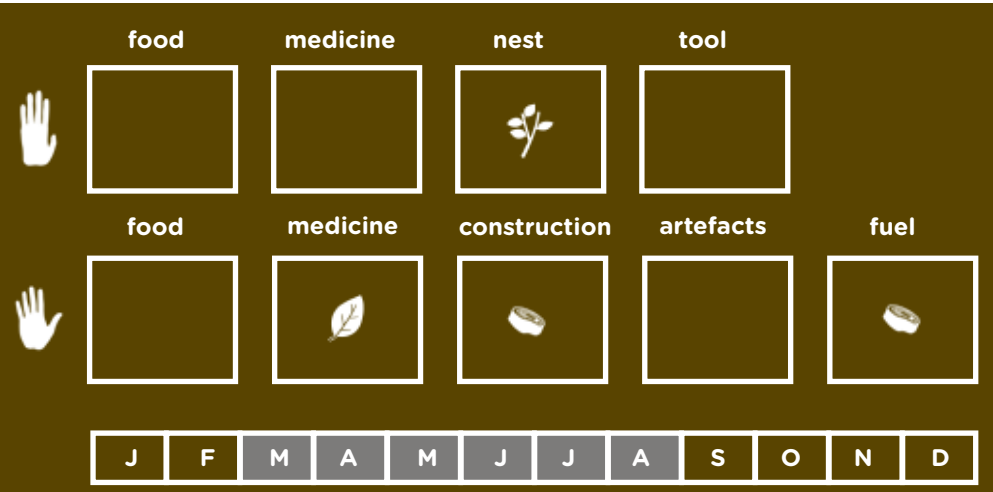
Leaves: alternate, compound, bipinnate (10-20 cm long), with a gland at the petiole; 4-8 pairs of pinnules, each with 5-14 pairs of asymmetric and approximately rectangular leaflets (1-2 cm x 0.5-1 cm); diagonal midvein.

Flowers: small and white, with protruding red stamens; in spherical inflorescences that form groups of 5-10.

Fruits: flat membranous pods (10-15 cm x 2-3 cm), opening on the tree and letting the seeds fall.

Seeds: dark-brown and flat (c. 0.5 cm in diameter), 6-8 per pod; inedible.





Albizia ferruginea

Fabaceae (Leguminosae – Mimosoideae)

faroba-de-lala, faroba-de-mato-macho, faroba-de-mato-preto, farroba-de-lala (cr); marnei, nete-maio (fu); masamp-tchill, masamp-balé (nl)

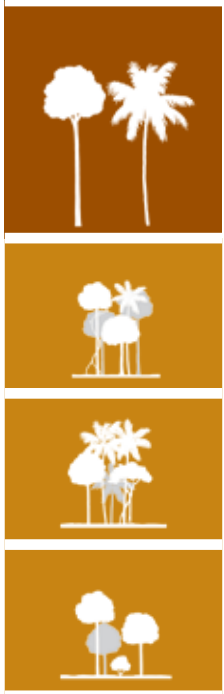
Habit: large tree (≤ 25-30 m in height); long cylindrical bole; brownish-grey trunk, brownish-yellow when cut.

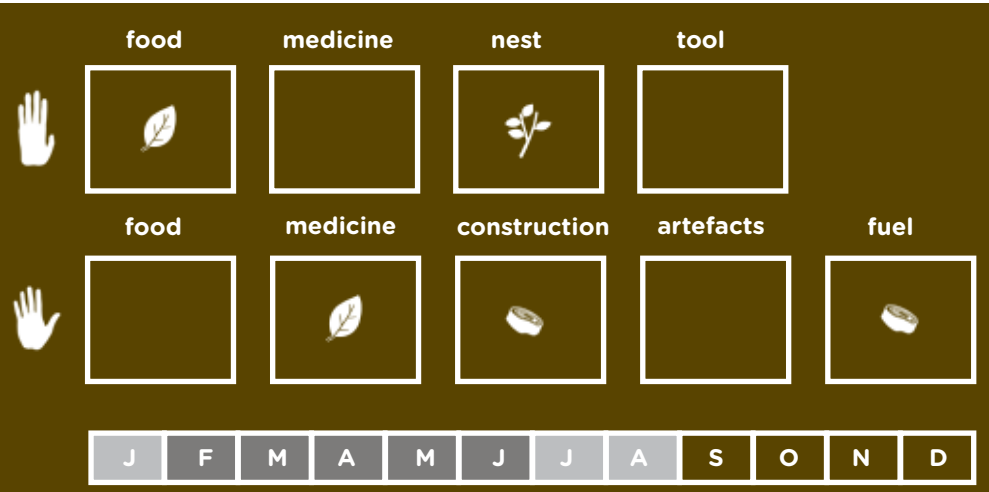
Leaves: alternate, compound, bipinnate (10-20 cm long), with a gland at the rachis and 3-7 pairs of pinnules, each with 8-13 pairs of leaflets which are asymmetric at the base and round at the apex (1.5-2 cm x 0.5-1 cm); central midvein; quite hairy.

Flowers: small and white, with protruding stamens; in spherical inflorescences.

Fruits: flat membranous pods (10-20 cm x 3-4 cm), opening on the tree and letting the seeds fall.

Seeds: brown and flat (≤ 0.8 cm in diameter), 4-10 per pod; inedible.





Anacardium occidentale
Anacardiaceae

cadju, caju (cr); ialiké (nl)

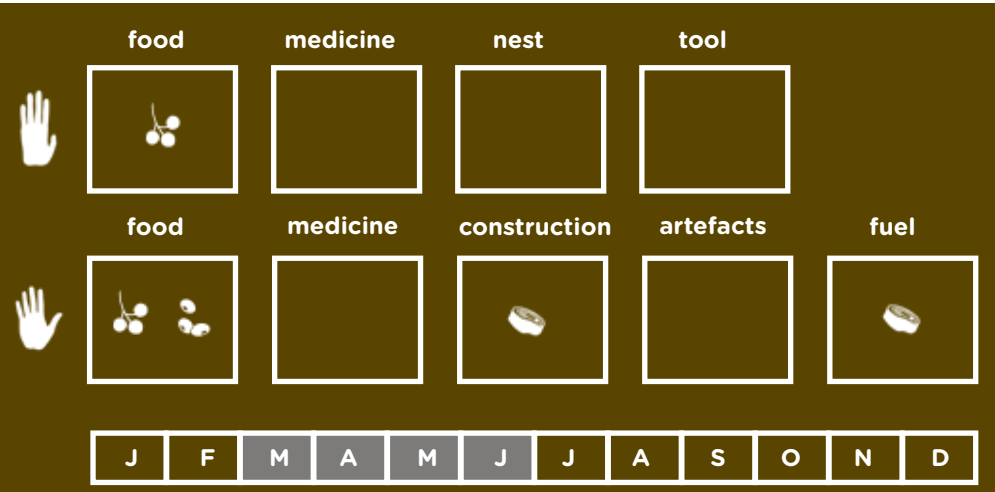
Habit: small tree (≤ 12 m in height), short bole and round crown; widely cultivated across the country.

Leaves: alternate to sub-opposite, thick and large, obovate (15-20 cm x 6-10 cm), more numerous towards the shoot tips.

Flowers: small and dark-pink, in apical inflorescences.

Fruits: consisting of two parts: the pseudofruit, expanded and pear-shaped peduncle, red or yellow, juicy (cashew apple); and the seed, at the peduncle's apex (cashew nut).

Seeds: kidney-shaped, 1 per fruit; not eaten by chimpanzees, as surrounded by anacardic acid.



Anisophyllea laurina

Anisophylleaceae (Rhizophoraceae)

miséria, pau-miséria, pó-de-miséria (cr); mafel, máfèlè (ba); kanse (fu); n'sunp, sénhè, unsununtu (nl); cantingui (ss); angueidja (td)

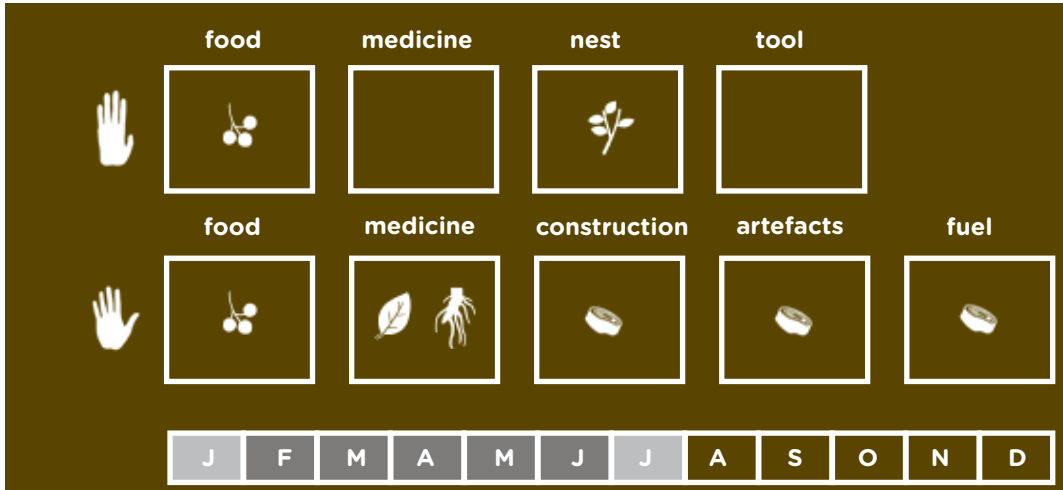
Habit: large tree (≤ 25-30 m in height); long bole, slightly enlarged near the ground; grey bark, turning reddish-brown when cut; approximately circular crown.

Leaves: alternate, of two sizes; the largest, oval or elliptic-ovate, with 3-4 veins radiating from the bases and short petioles; the smallest, not always present, lanceolate, very small, arranged between the large leaves.

Flowers: small and greenish-yellow, in unbranched axillary inflorescences.

Fruits: fleshy and ovoid (4-5 cm x 2-3 cm), yellow when ripe; edible pulp.

Seeds: ovoid (c. 3 cm long), externally woody.



Antiaris toxicaria

Moraceae

língua-di-baca, pau-de-bicho-amarelo, pó-de-bicho, po-de-bitche, pó-de-bicho-branco, pó-de-lete, po-di-bichu-amarelo (cr); djaulée, nhenhe, tambatchilam, tchime (fu); n'nhonhinhe (ss)

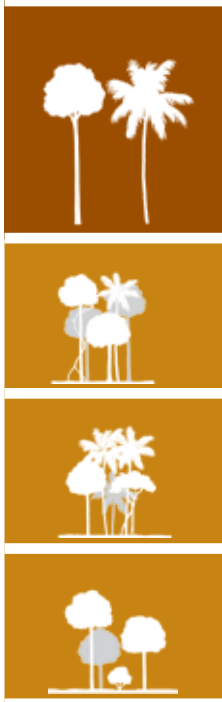
Habit: large tree (≤ 30-35 m in height), with yellow latex; long and cylindrical bole, commonly with buttresses.

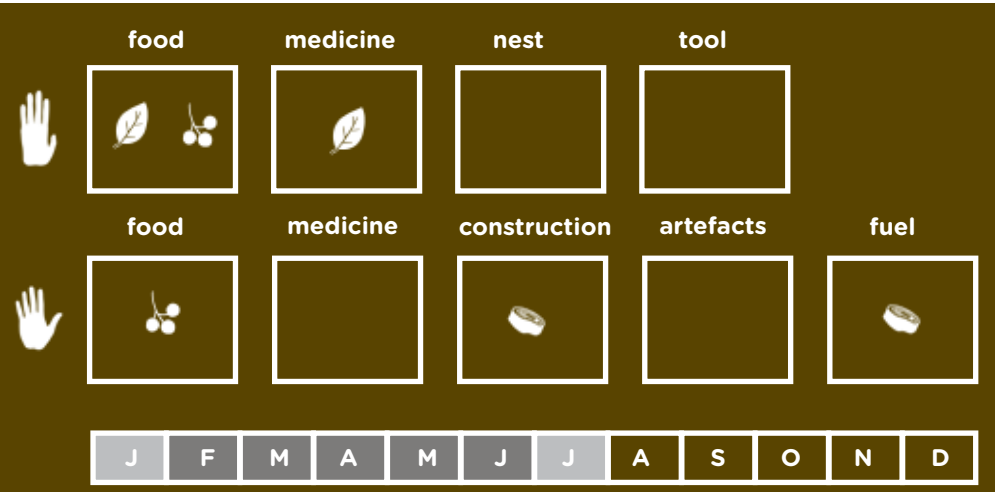
Leaves: alternate, rough, largely elliptic to ovate (10-20 cm x 4-12 cm), asymmetric at the base; 8-12 pairs of veins, quite pronounced on the abaxial surface; short petioles.

Flowers: female flowers solitary; male flowers in twisted disk-shaped inflorescences.

Fruits: fleshy and globular (c. 1.5 cm in diameter), red when ripe.

Seeds: globular (c. 1 cm in diameter), 1 per fruit.





Borassus aethiopum
Arecaceae (Palmae)

cibe (cr); bace (ba); cibedje, dúbè (fu); m'bulá (nl)

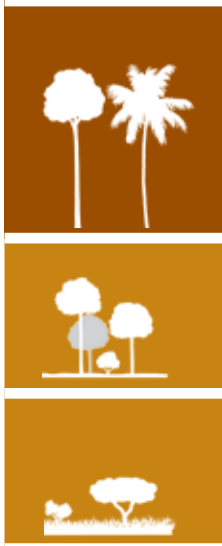
Habit: tree-sized palm (≤ 20-25 m in height); cylindrical stem, generally unbranched and larger towards the apex; dioecious species.

Leaves: large (2-3 m long), arranged at the top of the stem; fan-shaped lamina, with digitate veins; long petioles.

Flowers: unisexual; male flowers small and numerous, in long branched inflorescences (< 1.5 m long); female flowers bigger, in unbranched inflorescences.

Fruits: globular or sub-globular, large (10-15 cm long), in hanging infructescences.

Seeds: surrounded by a fibrous yellow pulp, 3 per fruit.



	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel
	✓		✓	✓	

J	F	M	A	M	J	J	A	S	O	N	D

Carica papaya
Caricaceae

papaia (cr); n'pápa (nl)

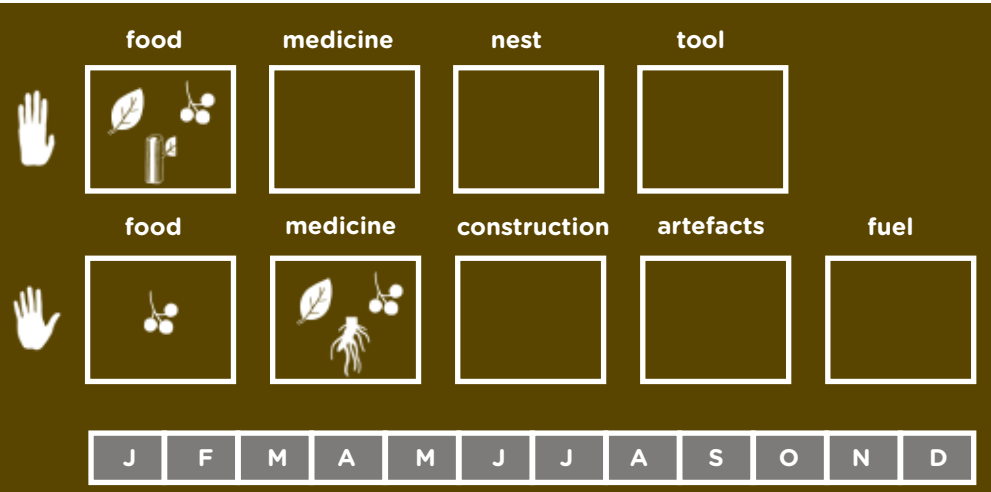
Habit: small tree (5-10 m in height); spongy trunk, unbranched; cultivated near the villages; dioecious species.

Leaves: grouped at the apex of the stem, clearly lobed (30-50 cm in length and width); long petioles.

Flowers: white and unisexual, borne on the axils of leaves; male flowers in inflorescences, female flowers solitary.

Fruits: big, ovoid to sub-globular (≤ 30 cm long), with yellow or orange pulp; edible.

Seeds: black, globular (c. 0.5 cm in diameter), numerous.



Ceiba pentandra
Malvaceae (Bombacaceae)

poilão, poilon, polóm, polón (cr); psáhè, pthaé, rubé, rumbum (ba); m'bath, n'kauué (nl); kondé (ss)

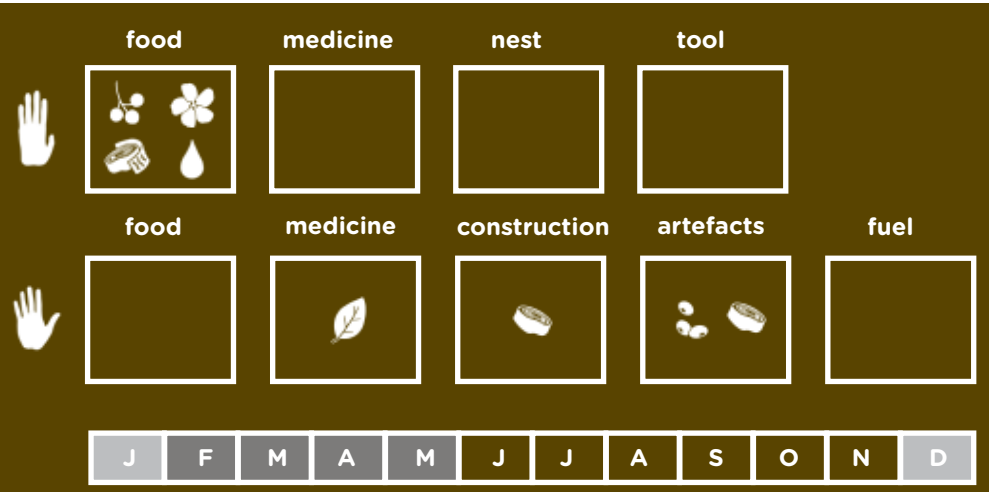
Habit: large tree (≤ 30-35 m in height), deciduous; spiny trunks in young trees; considerable buttresses in larger trees.

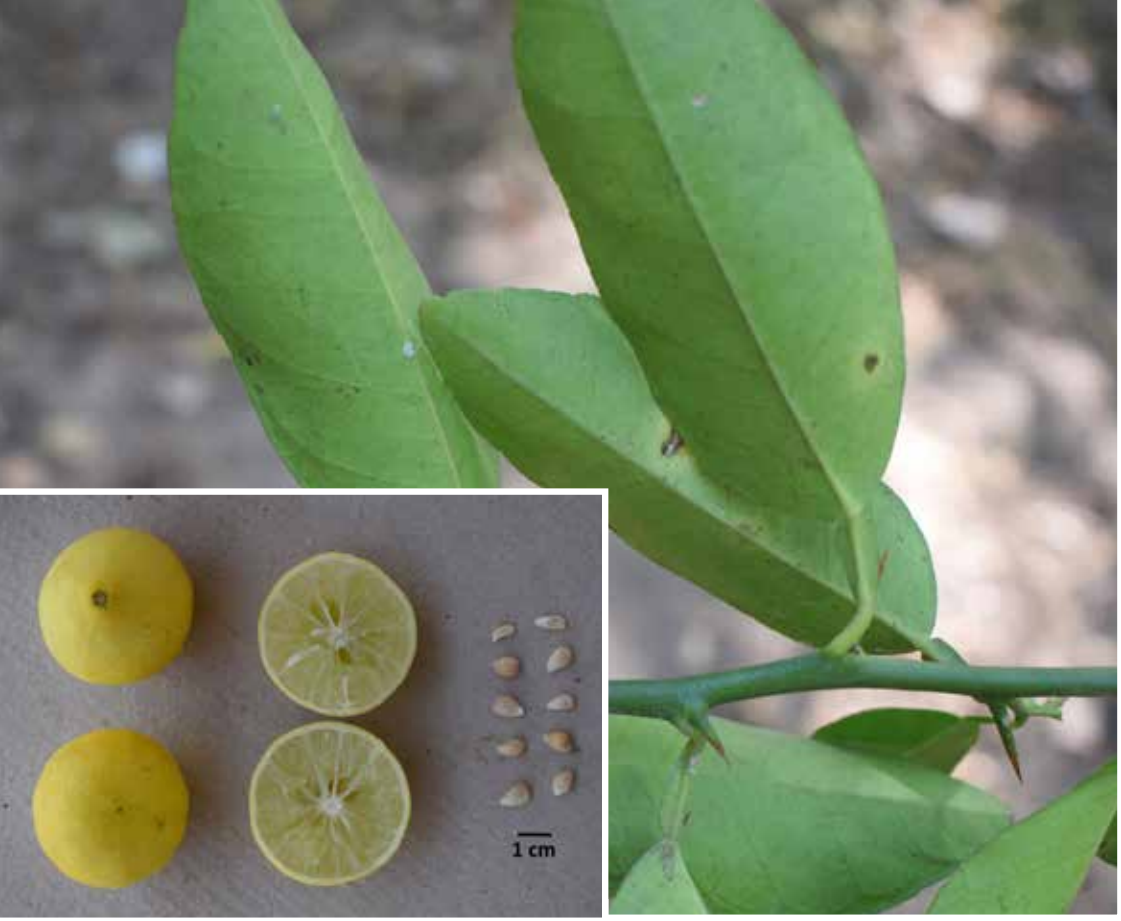
Leaves: alternate, compound, digitate; with 5-9 unequal leaflets, elliptic to narrowly obovate (15-20 cm x 3-6 cm), acuminate at the apex; 15-20 pairs of veins; long petioles (15-25 cm).

Flowers: white, with 5 petals (3-4 cm in diameter) and a pedicel; numerous, in branched inflorescences.

Fruits: big, externally woody, ellipsoid (15-25 cm x 5-8 cm); they open longitudinally into 5 parts, while still on the tree.

Seeds: very small, surrounded by a mesh of white fibres; numerous.





Citrus aurantifolia
Rutaceae

limon francis (cr); n'sinim nelbené (nl)

Habit: small tree (≤ 8 m in height), spiny; cultivated.

Leaves: alternate, elliptic or ovate (4-8 cm x 2-3 cm), dentate; articulate and winged petioles.

Flowers: fragrant, with 5 white or yellowish petals; solitary or in groups of 2-7, axillary.

Fruits: globular (4-6 cm in diameter), with an acid pulp.

Seeds: ovoid (6-8 mm long), inside the pulp.

	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel
	✓	✓			

J	F	M	A	M	J	J	A	S	O	N	D

Citrus sinensis
Rutaceae

laranja (cr); sinim (nl)

Habit: small tree (≤ 10-12 m in height), spiny; cultivated.

Leaves: alternate, ovate to elliptic (6-10 cm x 3-5 cm), finely dentate; articulate and winged petioles.

Flowers: fragrant, with 5 white or cream-coloured petals; solitary or in groups of 2-7, axillary.

Fruits: globular (6-9 cm in diameter), with a sweet pulp.

Seeds: approximately ovoid (≤ 1 cm long), inside the pulp.

	food	medicine	nest	tool
	●			

	food	medicine	construction	artefacts	fuel
	●	●		●	●

J F M A M J J A S O N D

Daniellia oliveri

Fabaceae (Leguminosae – Caesalpinioideae)

pau-incenso, pó-de-incenso (cr); bóbe (ba); tchénè (fu); boto, m'bôbó (nl); kaméuri, ulingi (ss)

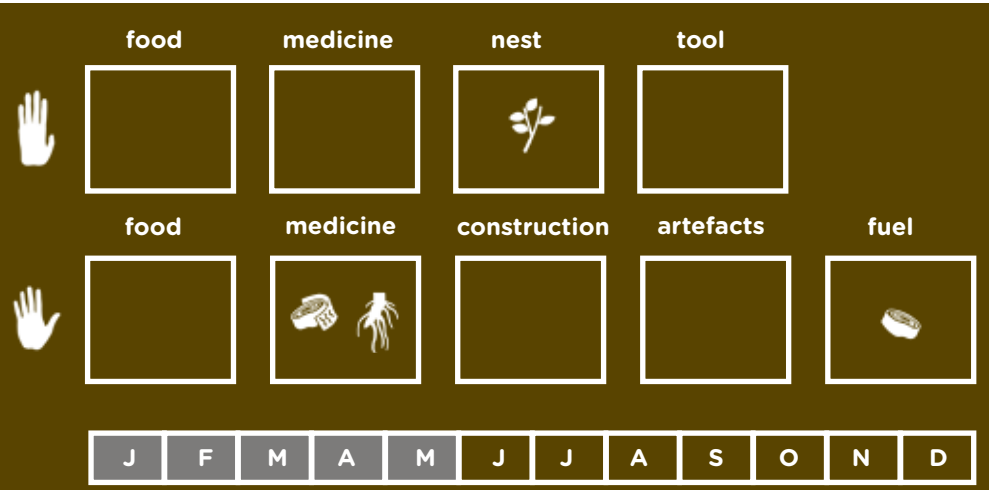
Habit: medium to large tree (≤ 15-20 m in height), deciduous and resiniferous; long bole, with large plates, brownish-grey, red upon cutting.

Leaves: alternate (≤ 40 cm long), compound, paripinnate; 4-10 pairs of opposite or sub-opposite leaflets, elliptic or oval (8-16 cm x 4-8 cm).

Flowers: white, with 5 petals; in axillary, branched inflorescences; they can develop while the tree is still leafless.

Fruits: flat pods (5-9 cm x 3-5 cm).

Seeds: flat and brown, linked to a wing by a thread; 1 per pod.



Detarium senegalense

Fabaceae (Leguminosae – Caesalpinioideae)

mambode, mambódi (cr); boto, pó-pondogo, querenduta (fu); m'béta (nl)

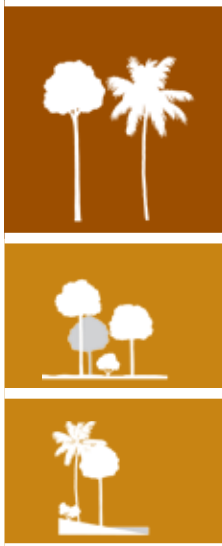
Habit: medium to large tree (15-20 m in height); generally short bole; low crown.

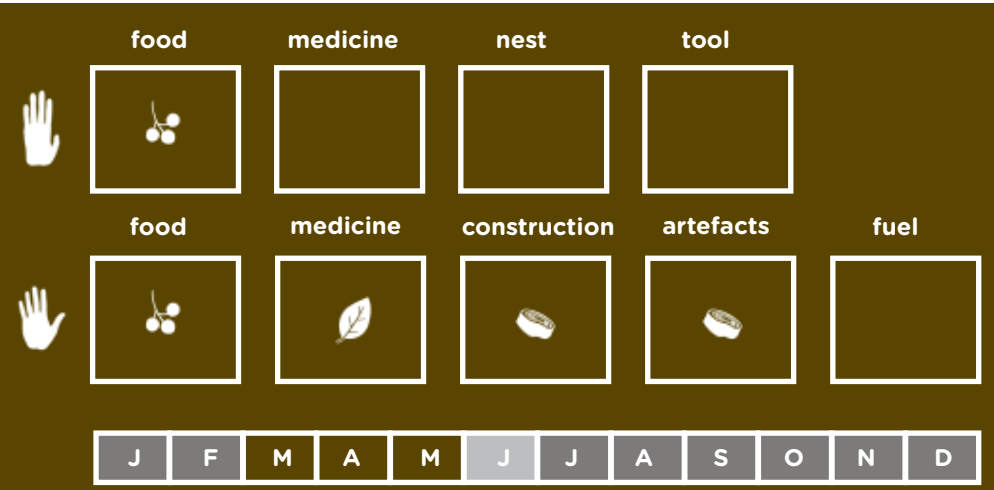
Leaves: alternate, compound; imparipinnate, but sometimes with 2 apical leaflets; 11-13 pairs of alternate or sub-opposite leaflets, elliptic or oval (4-6 cm x 3-4 cm).

Flowers: small and whitish, in axillary, branched inflorescences (8-10 cm).

Fruits: globular but somewhat flat (5-6 cm in diameter), pedunculated; thin and greenish-yellow pulp, in a fibrous mesh surrounding a large stone.

Seeds: inside the woody stone.





Dialium guineense

Fabaceae (Leguminosae – Caesalpinioideae)

beludo, pau-veludo, pó-de-veludo, veludo (cr); m'boié, m'bwoi, n´boi, umboi (ba); boiè-maio, cossirãe, mèco, moquê (fu); m'bim, m'bimbe, n'bim (nl); moquê, moqué (ss); atenguengelere (td)

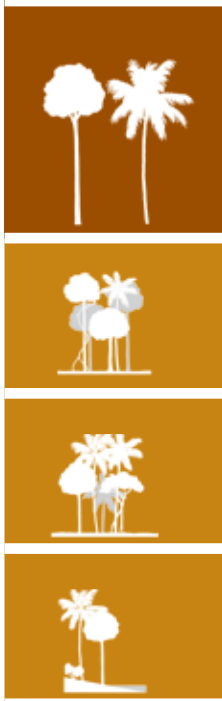
Habit: medium to large tree (15-25 m in height); dark-grey trunk, with lighter-coloured patches.

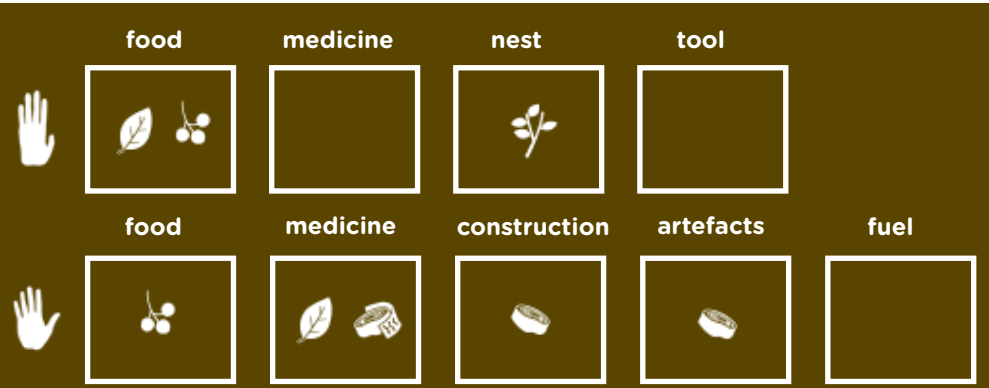
Leaves: alternate, compound, imparipinnate; 5-7 opposite or sub-opposite leaflets, elliptic or oval (5-8 cm x 3-4 cm); thick, brown petioles.

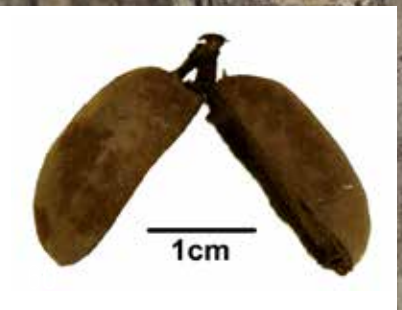
Flowers: small, yellowish and numerous, in branched, apical inflorescences.

Fruits: black, globular but flat (1-2 cm in diameter), quite hairy (velvet-like); in apical infructescences.

Seeds: black, surrounded by a farinaceous and reddish pulp; 1 per fruit; edible.







Diospyros heudelotii
Ebenaceae

silabono (fu); jagôrtá, n'jangugurta, tchamborta, tchamburtá (nl); iatété, malefú, malevu (ss); culum (td)

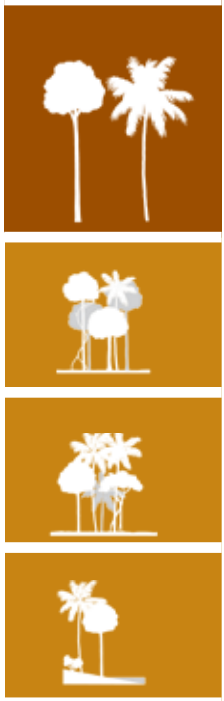
Habit: small to medium tree (10-15 m in height); brownish-grey trunk, smooth or with thin scales, light-brown upon cutting.

Leaves: alternate, lanceolate (8-10 cm x 3-4 cm), with 4-8 pairs of veins; short petioles.

Flowers: small, white or yellow; unisexual; in small groups borne on the axils of shed leaves.

Fruits: fleshy, globular (≤ 2 cm in diameter), the base surrounded by flower remains; yellow when ripe; edible.

Seeds: inside the stone.



	food	medicine	nest	tool
	●			

	food	medicine	construction	artefacts	fuel
	●	●	●		●

J	F	M	A	M	J	J	A	S	O	N	D


AT


MS

Drypetes floribunda

Putranjivaceae (Euphorbiaceae)

Habit: tree (6-10 m in height) or shrub; smooth trunk, light-brown or grey.

Leaves: alternate, elliptic or lanceolate (6-12 cm x 3-5 cm), asymmetrical at the base, with 6-10 pairs of veins; margins generally dentate, with tiny spines; petioles c. 0.5 cm long.

Flowers: small, cream-coloured, in small clusters borne on the stems.

Fruits: globular (c. 1 cm in diameter), fleshy, with edible pulp.

Seeds: inside the stones.

	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel

J F M A M J J A S O N D

Elaeis guineensis
Arecaceae (Palmae)

palmeira-de-óleo, palmeira-dendém, palmeira, palmera (cr); ken, quem, ribe (ba); tem-em-eih (fu); n'sise (nl); tugi (ss)

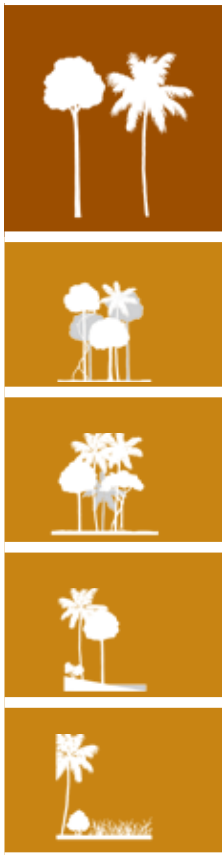
Habit: tree-like palm (≤ 20-25 m in height); cylindrical stem, unbranched, surrounded by petiole bases of shed leaves; each individual has both male and female flowers.

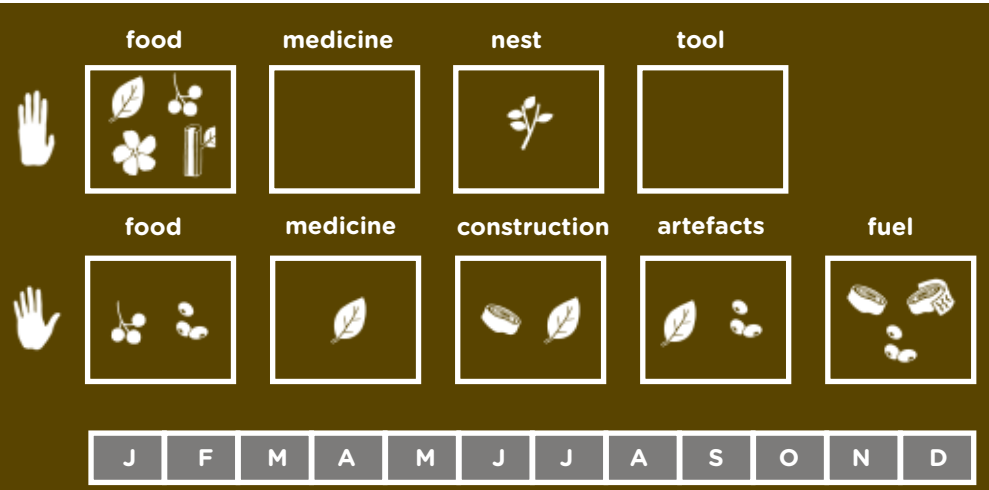
Leaves: large (3-5 m long), pinnate, borne on the stem top; numerous leaflets, narrow and long (≤ 50 cm long); short petioles with spiny margins.

Flowers: unisexual; numerous male flowers in pedunculated inflorescences; female flowers bigger, in dense inflorescences.

Fruits: numerous, ovoid (2.5-4 cm long), in big, globular or sub-globular infructescences (≤ 40 cm long); red when ripe; fibrous and oily pulp.

Seeds: ovoid (1.5-2 cm long), dark-brown, woody, externally fibrous; 1 per fruit.





Ficus exasperata
Moraceae

acarta-lixo, língua-di-baca, po-di-lixa (cr); showhé (ba); nhinha (fu); n'txéf (nl); ngonjí (ss)

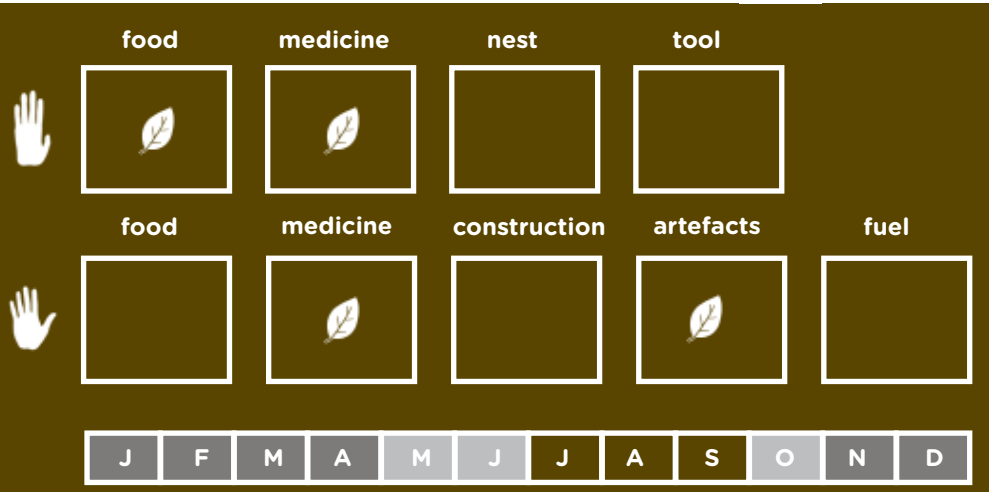
Habit: tree (≤ 15-20 m in height) or shrub; translucent latex, not abundant.

Leaves: alternate, rough, of varied shapes, generally elliptic (8-16 cm x 4-7 cm) but also with irregular margins and lobed; 2 opposite veins at the base and 3-4 more pairs of conspicuous veins; with petioles.

Fruits: globular figs (2-2.5 cm in diameter), pedunculated; hairy surface.

Seeds: very small and numerous per fruit.

This species can be mistaken for *Antiaris toxicaria*, whose leaves are rough but asymmetrical at the base and do not have a basal pair of opposite veins.



Lecaniodiscus cupanioides
Sapindaceae

ghandjam, pó-di-cama (cr); sátaga (fu); n'sonran (nl); kébe (ss); ataparquê (td)

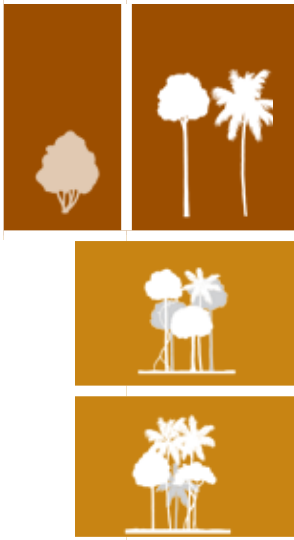
Habit: small tree (≤ 12-15 m in height) with buttresses, or shrub.

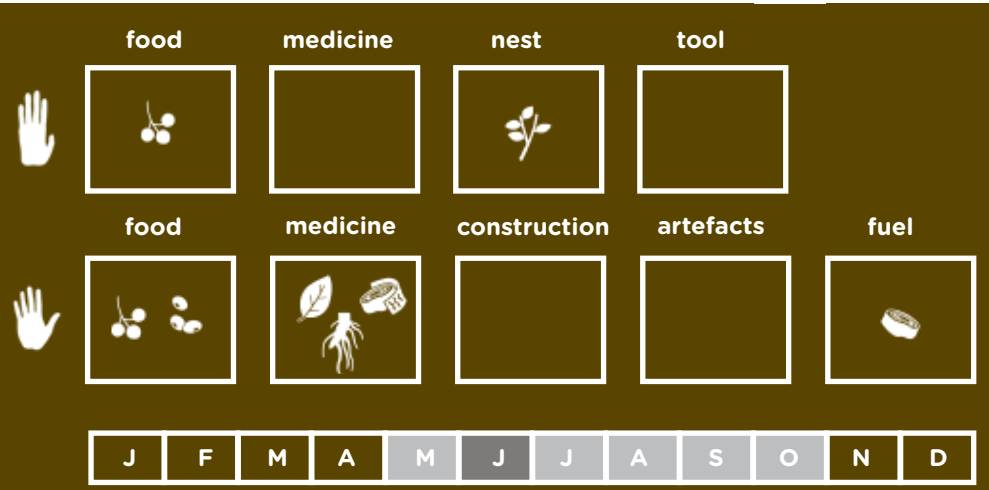
Leaves: alternate, compound paripinnate; 4-7 pairs of alternate to sub-opposite leaflets, widely elliptic or obovate (8-15 cm x 4-8 cm), with 8-12 pairs of veins, conspicuous on the abaxial surface.

Flowers: unisexual; male flowers greenish, with an orange centre, in branched inflorescences (10-25 cm long) borne on the axils of apical leaves; female flowers greenish, in branched inflorescences (5-10 cm long) borne on the axils of apical leaves.

Fruits: fleshy, ovoid (c. 1.5 cm long), pubescent, generally with 1 single seed.

Seeds: dark-purple, with a white and gelatinous edible apex.






BI


EM


MAD


AP

Mangifera indica
Anacardiaceae

manguera, mango (cr); n'mango (nl)

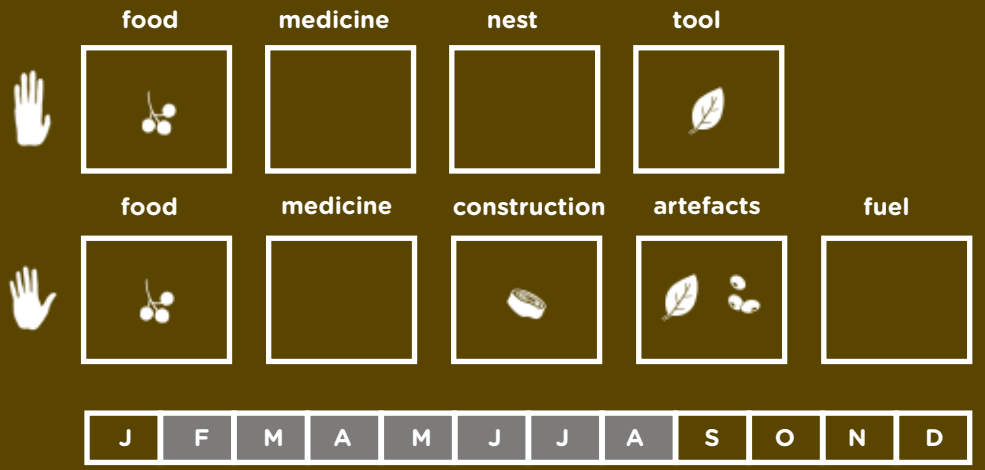
Habit: medium to large tree (≤ 20 m in height); short bole and round crown; cultivated.

Leaves: alternate, lanceolate to elliptic (15-25 cm x 4-6 cm); with petioles.

Flowers: small, greenish, clustered at the shoot tips.

Fruits: fleshy, big, pedunculated, hanging from the shoots; yellow or red when ripe; thick pulp, often fibrous; the size and colour vary greatly with the cultivated variety.

Seeds: large and flat, woody, surrounded by the pulp.



Milicia regia
Moraceae

pó-de-bicho-amarelo, pó-de-bitcho-risso, po-di-bichu (cr); tímè, tumbiro (ba); n'tulune (nl)

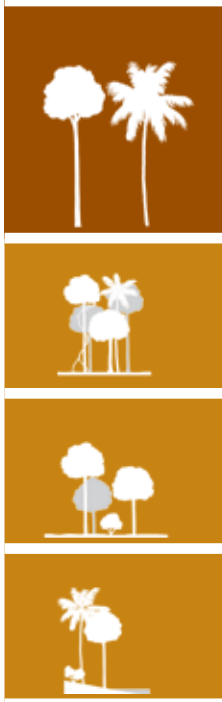
Habit: large tree (≤ 30-35 m in height), with white latex; long bole, without buttresses.

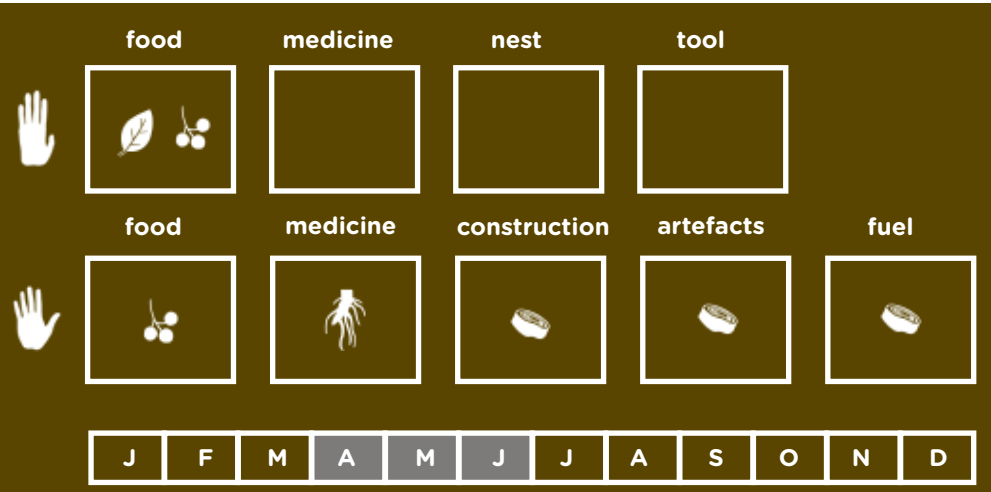
Leaves: alternate, large and thick, ovate (10-15 cm x 8-12 cm), slightly asymmetric at the base; 8-12 pairs of veins; with petioles.

Flowers: unisexual, small, in axillary elongated unbranched inflorescences.

Fruits: compound, elongated (8-12 cm x 2-3 cm), hairy.

Seeds: very small and numerous per fruit.





Monodora tenuifolia
Annonaceae

banana-sanjo-macho (cr); setane (ba); bólhanei, molhanei, quélè (fu); n'pinden-chil (nl); fufu (ss)

Habit: medium tree (≤ 15-20 m in height).

Leaves: alternate, elliptic or obovate (≤ 15-30 cm x 3-5 cm); short petioles.

Flowers: yellowish with brown spots, big, with pedicels; solitary.

Fruits: compound, globular (≤ 10 cm in diameter), yellow when ripe.

Seeds: brown (c. 1 cm long), numerous per fruit, surrounded by the pulp.

food	medicine	nest	tool

food	medicine	construction	artefacts	fuel

J	F	M	A	M	J	J	A	S	O	N	D

Neocarya macrophylla

(Syn. *Parinari macrophylla*)

Chrysobalanaceae

mampatace-grande, tambacumba, tamankumba (cr); n'djapô, téhè (ba); curanaco, nando, náudo (fu); mavéu, n'bute (nl); bansumá (ss)

Habit: shrub or tree (≤ 15 m in height); short bole, grey, fissured into irregular plates; brown and pubescent stems while young.

Leaves: alternate, thick (chartaceous), large, oval or elliptic (15-25 cm x 8-15 cm), with 15-20 pairs of veins; short petioles.

Flowers: with 5 white or pink petals, in apical, branched inflorescences (≤ 30 cm long), densely hairy.

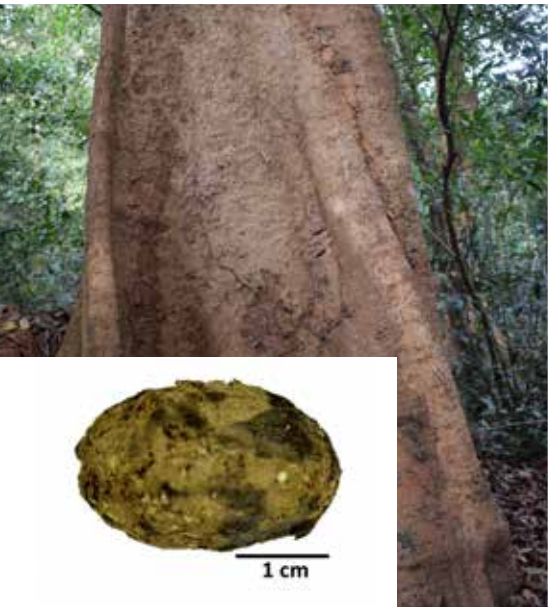
Fruits: ellipsoid, brown with grey spots; fleshy pulp, edible; big, woody stone.

Seeds: inside the stone, brown, slender (1.5-2 cm long); edible.

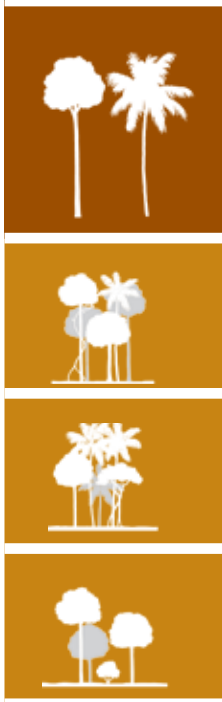
food | medicine | nest | tool

food | medicine | construction | artefacts | fuel

J F M A M J J A S O N D



Parinari excelsa
Chrysobalanaceae



mampatace, mampataz (cr); kilé, meile, n'djano, pilé, undiano (ba); cura, curanaco (fu); lút, n'lut (nl); bitchalám, sugé, sugue (ss); atchaguesse (td)

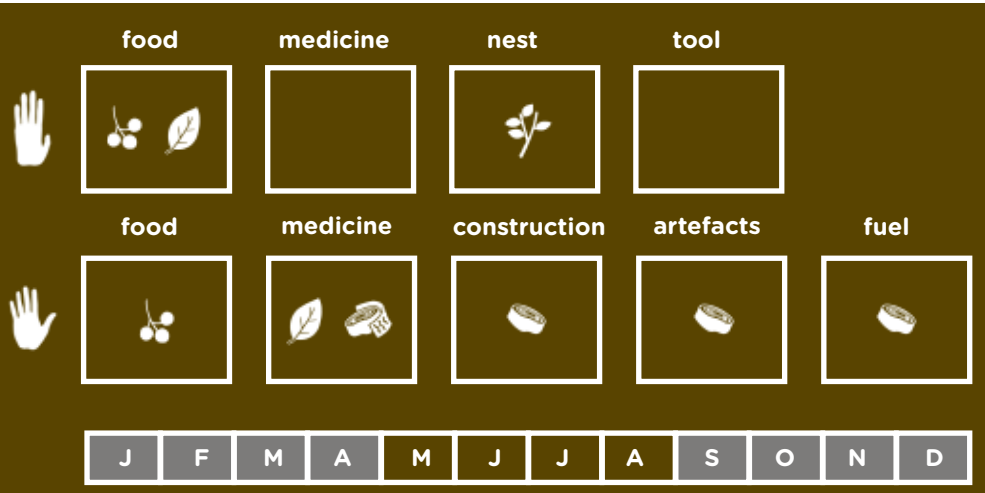
Habit: large tree (≤ 35 m in height); greyish-brown trunk, long bole, with buttresses.

Leaves: alternate, thick, oval (8-15 cm x 6-8 cm), with c. 20 pairs of veins; with petioles.

Flowers: with 5 white petals, in apical branched inflorescences.

Fruits: ovoid to globular (3-4 cm in diameter), brown with grey lace-like ornamentation; fleshy, thin pulp; large woody stone.

Seeds: inside the woody stone.



Parkia biglobosa

Fabaceae (Leguminosae – Mimosoideae)

faroba, farôba, faroba-de-lala, farroba, farrobe (cr); gante, mehanté, nathe (ba); néré, netch, nétè (fu); iú, niú (nl); néri, neri (ss); anjambane (td)

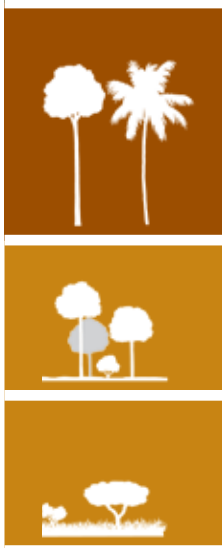
Habit: small to medium tree (10-18 m in height); short bole, with brownish-grey scales; brownish-red when peeled off; round crown.

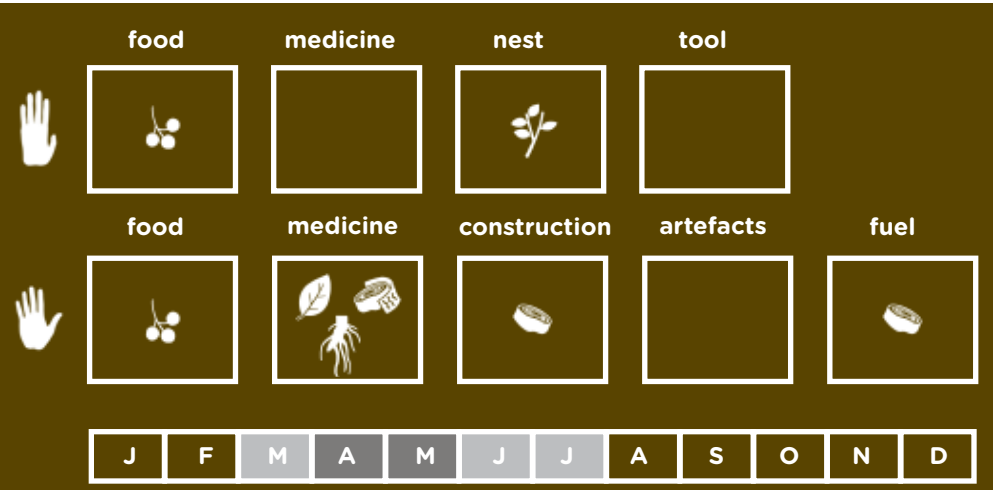
Leaves: alternate, compound bipinnate (20-40 cm long), with 10-30 pairs of pinnules; 30-65 pairs of linear leaflets (10-15 mm x 2-3 mm).

Flowers: red, numerous; in globular inflorescences (4-6 cm in diameter) hanging from a long peduncle.

Fruits: linear pods (20-30 cm x 1.5-2.5 cm), hanging, in clusters, dark-brown when ripe; yellow farinaceous pulp, edible.

Seeds: brown, disk-shaped (6-10 mm in diameter), surrounded by the pulp.





Pentaclethra macrophylla

Fabaceae (Leguminosae – Mimosoideae)

marroné (fu); n'tantass (nl); uauah (ss)

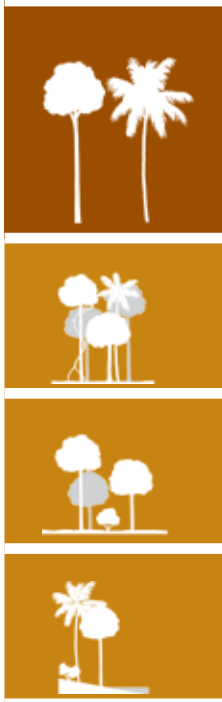
Habit: medium to large tree (≤ 25 m in height); cylindrical bole, with thin scales, long brownish-grey, yellow when peeled off.

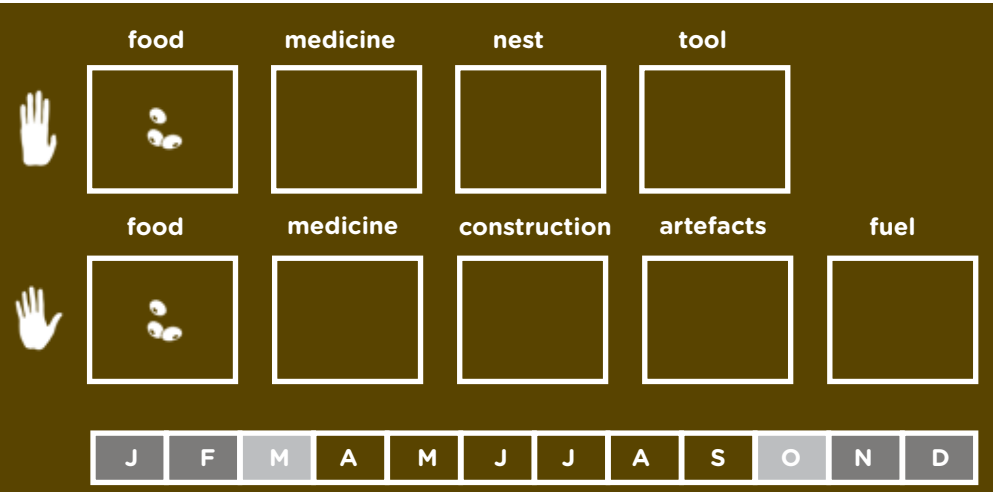
Leaves: alternate, compound bipinnate (40-60 cm long) with 10-13 pairs of pinnules; 12-20 pairs of asymmetric leaflets (1.5-3 cm x 1-2 cm).

Flowers: small, white, numerous, in cylindrical clustered inflorescences.

Fruits: large woody pods (20-40 cm x 6-8 cm), dark-brown and hairy; they split violently while still on the tree, releasing the seeds.

Seeds: dark-brown, flat, largely elliptic (3-4 cm x 2-3 cm).





Phoenix reclinata
Arecaceae (Palmae)

palmeira-tambara, tamareira (cr); sarábá, sérquê (ba); bêlem (fu); n'sak (nl)

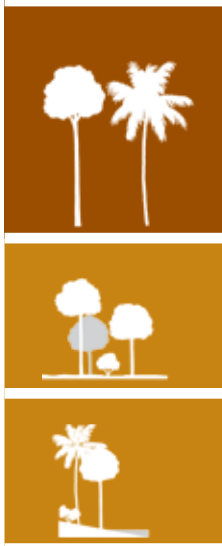
Habit: tree-size palm (≤ 10-12 m in height); cylindrical stem, unbranched and often bent over, marked with leaf scars; dioecious species.

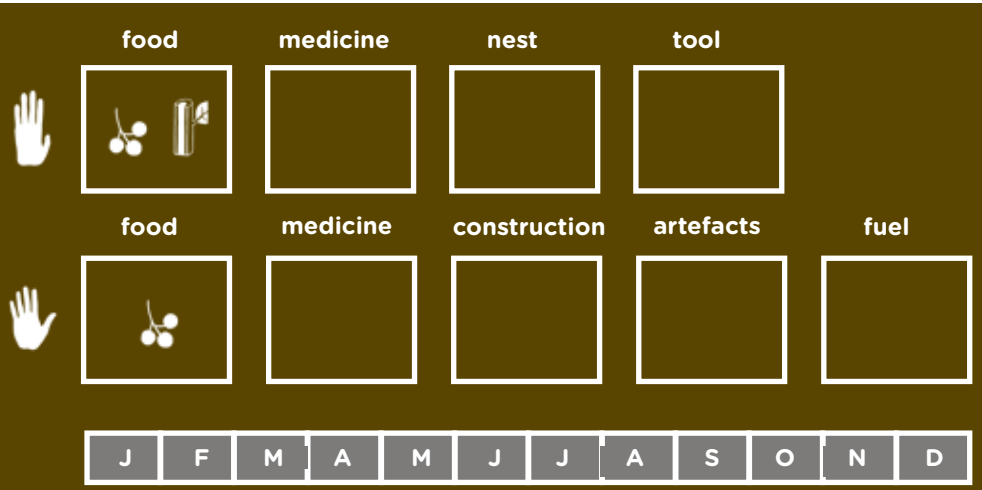
Leaves: large (≤ 4 m long), pinnate, borne on the top of the stem; numerous leaflets, long and narrow (≤ 40 cm x 2-3 cm), with small spines on the margins; short petioles, spiny.

Flowers: unisexual; male flowers numerous, clustered in branched inflorescences (≤ 25 cm long); female flowers in branched inflorescences (≤ 80 cm long).

Fruits: ellipsoid, in branched infructescences (≤ 60-80 cm long); yellow when ripe, edible pulp.

Seeds: ovoid, brown (c. 1 cm long); 1 per fruit.





Pouteria alnifolia

(Syn. *Malacantha alnifolia*)

Sapotaceae

pó-de-remo (cr); nhada-haco, nhénhéò (fu); tantodí (nl); lakó, lalaúri (ss)

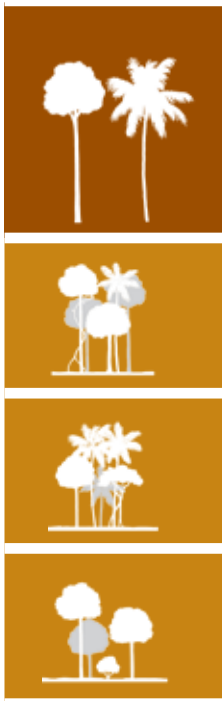
Habit: tree (15-20 m in height) with scarce white latex; young branches covered by many brownish hairs.

Leaves: alternate, membranous, obovate (15-25 cm x 10-15 cm); 10-20 pairs of veins; with petioles.

Flowers: small, with 5 yellowish petals, clustered at the axils of leaves.

Fruits: fleshy, subglobular (1.5-2.5 cm in diameter); red when ripe; edible pulp.

Seeds: ellipsoid, dark-brown.



	food	medicine	nest	tool
	●		●	

	food	medicine	construction	artefacts	fuel
	●				●

J F M A M J J A S O N D

Pseudospondias microcarpa
Anacardiaceae

cadjôdjáe (fu)

Habit: medium tree (≤ 20 m in height).

Leaves: compound imparipinnate, with 5-17 alternate to subopposite leaflets, oval or elliptic (≤ 12 cm x 6 cm), asymmetric at the base.

Flowers: unisexual, small, greenish-white, in branched, hanging inflorescences.

Fruits: fleshy, ovoid (1.5-2 cm long), dark-blue when ripe.

Seeds: globular, surrounded by the pulp.

	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel

J	F	M	A	M	J	J	A	S	O	N	D

Ricinodendron heudelotii
Euphorbiaceae

pulga-de-mato (cr); n'tonte, tonta (nl)

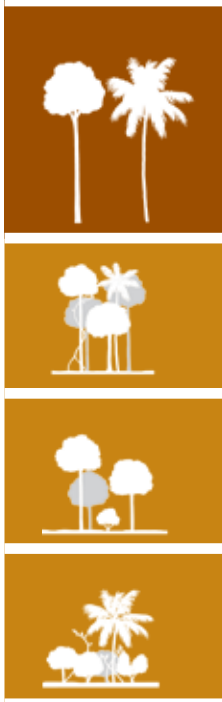
Habit: large tree (≤ 30 m in height), deciduous; bole enlarged at the base; dioecious species.

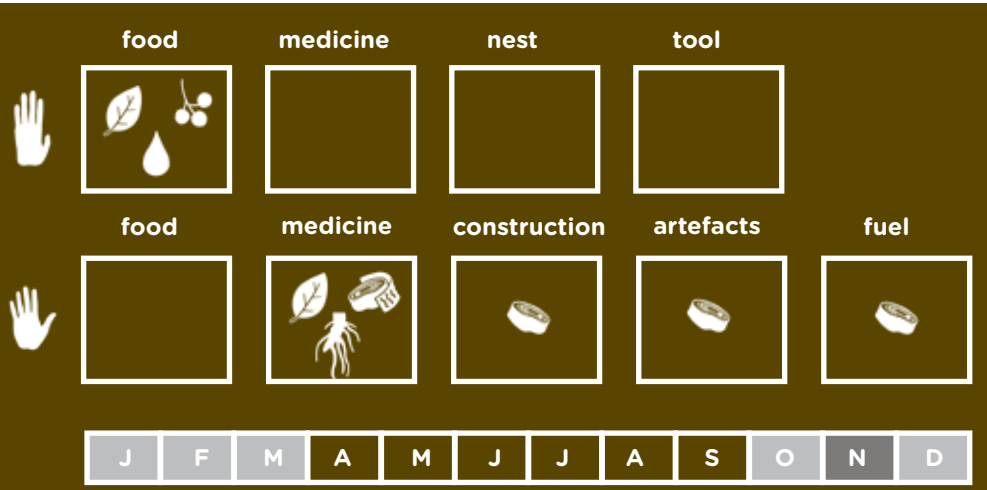
Leaves: clustered, hairy, with 3-7 membranous elliptic segments (25 cm x 10 cm); long petioles; ≤ 5 cm long stipules.

Flowers: unisexual, small, greenish-yellow; in apical and axillary inflorescences.

Fruits: fleshy (c. 3 cm in diameter), with 2-3 lobes.

Seeds: brown, approximately globular (≤ c. 1 cm in diameter), edible.





Spondias mombin
Anacardiaceae

mandiple (cr); p'sale, sale, samé, shal (ba); tchálè (fu); n'fal (nl); lugurí (ss)

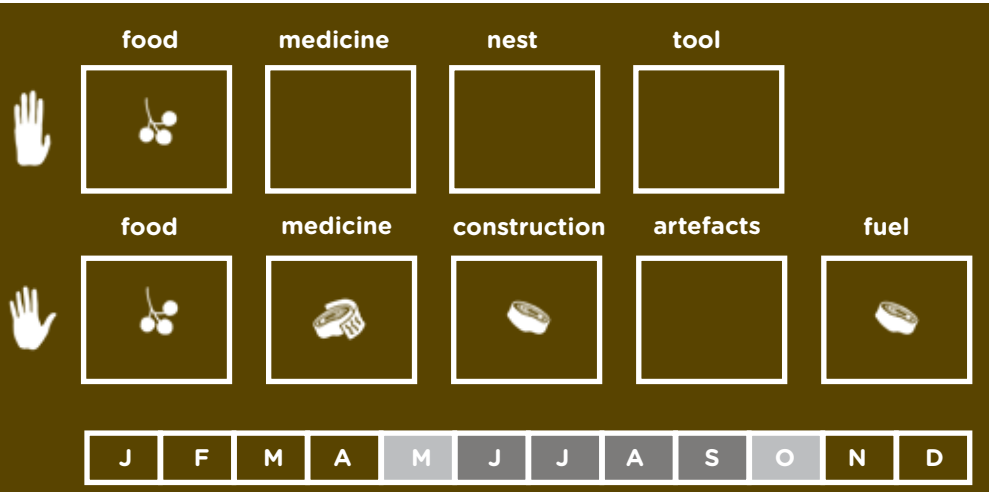
Habit: small to medium tree (10-15 m in height), deciduous; quite thick bark, vertically fissured; buttresses in larger trees.

Leaves: alternate, compound imparipinnate (≤ 50 cm long); 11-19 asymmetric leaflets, opposite or subopposite, elliptic (7-12 cm x 3-5 cm), the apical one smaller than the others.

Flowers: small, white, in apical branched inflorescences.

Fruits: fleshy, ovoid (3-5 cm long), pedunculated, yellow when ripe; in clusters; edible pulp.

Seeds: inside a woody ovoid stone (1.5-2 cm x 2-3 cm).



Sterculia tragacantha

Malvaceae (Sterculiaceae)

nassino, pau-corda, pau-de-saia, pó-de-cabaço (cr); búè, umbufúrè (ba); barquelei, tabáe, tchapelêguê, tehapeleque (fu); mandunduf (nl); mangéboré (ss); atakssulé (td)

Habit: tree (15-20 m in height), deciduous; long bole that can be ridged at the base.

Leaves: alternate, pubescent, obovate (10-20 cm x 6-12 cm), clustered at the shoot tips; 4-6 cm long petioles; with stipules.

Flowers: clustered in axillary inflorescences, with pedicels; with 5 segments.

Fruits: pubescent, with 5 red boat-shaped segments that open when ripe.

Seeds: black, ovate, rather flat (≤ c. 1 cm long).

	food	medicine	nest	tool

	food	medicine	construction	artefacts	fuel

J	F	M	A	M	J	J	A	S	O	N	D

Strombosia pustulata
Olacaceae

osso-de-dari (cr); tinlake, n'tim lák (nl); balé (ss)

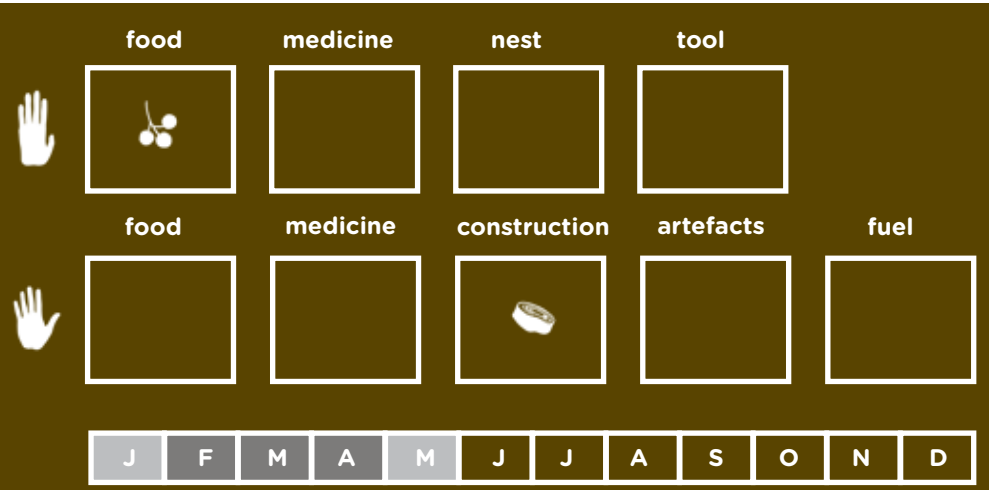
Habit: large tree (≤ 30-35 m in height); cylindrical and long bole, with buttresses.

Leaves: alternate, dark-green, elliptic or lanceolate (8-12 cm x 4-6 cm), attached to green stems; with petioles.

Flowers: small, white or yellowish, in small axillary groups.

Fruits: fleshy, globular or ellipsoid (≤ 3 cm long), pedunculated.

Seeds: inside the stone, 1 per fruit.



Treculia africana
Moraceae

jaca-de-mato, mantxambé (cr); jambi (ba); guibinte, mantchampudje (fu); n'sempé (nl); iendengi (ss)

Habit: large tree (≤ 20-30 m in height), with white latex; long bole, with buttresses.

Leaves: alternate, thick, asymmetric at the base, elliptic or ovate (15-30 cm x 8-15 cm); 8-14 pairs of veins; with petioles.

Flowers: unisexual, clustered in spherical inflorescences, generally borne on the stems.

Fruits: green, in large globular infructescences (15-25 cm in diameter), generally on the stems; edible.

Seeds: slender (≤ 1 cm long), numerous per fruit; edible.

	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel
	✓	✓			✓

J	F	M	A	M	J	J	A	S	O	N	D

Trichilia monadelpha
Meliaceae

po-di-bijugos (cr); nti kababayo (nl)

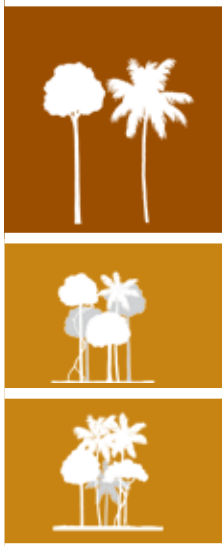
Habit: small to medium tree (≤ 15-25 m in height), with buttresses.

Leaves: alternate, compound imparipinnate; 9-15 opposite or subopposite leaflets, elliptic (10-25 cm x 3-8 cm), with 7-20 pairs of veins.

Flowers: greenish-white (c. 8 mm in length), in branched inflorescences, axillary or apical.

Fruits: subglobular (c. 1.5 cm long), splitting into 3 parts.

Seeds: black, each one partially covered by a red membrane.



	food	medicine	nest	tool
	✓		✓	

	food	medicine	construction	artefacts	fuel
		✓			

J	F	M	A	M	J	J	A	S	O	N	D

Vitex doniana

Lamiaceae (Labiatae – Verbenaceae)

azeitona, cetona, cetona-pequeno, cetona-preta (cr); múni, múri (ba); búmé (fu); n'sokór (nl); kukukunkuri (ss)

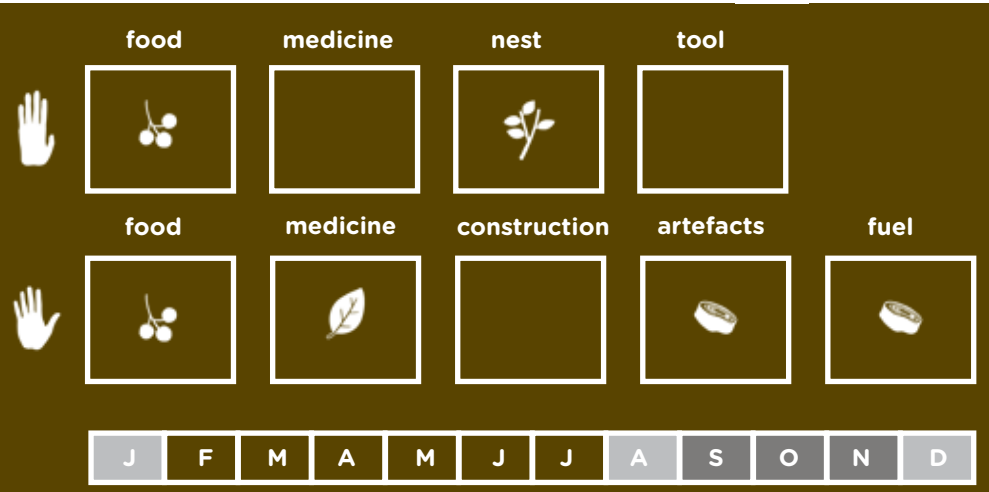
Habit: tree (≤ 15 m in height) or shrub; short bole; dense and round crown.

Leaves: opposite, compound digitate, with 5 thick and unequal leaflets, the middle ones larger than the others, obovate (10-20 cm x 5-10 cm); 8-12 pairs of veins; long petioles (8-15 cm).

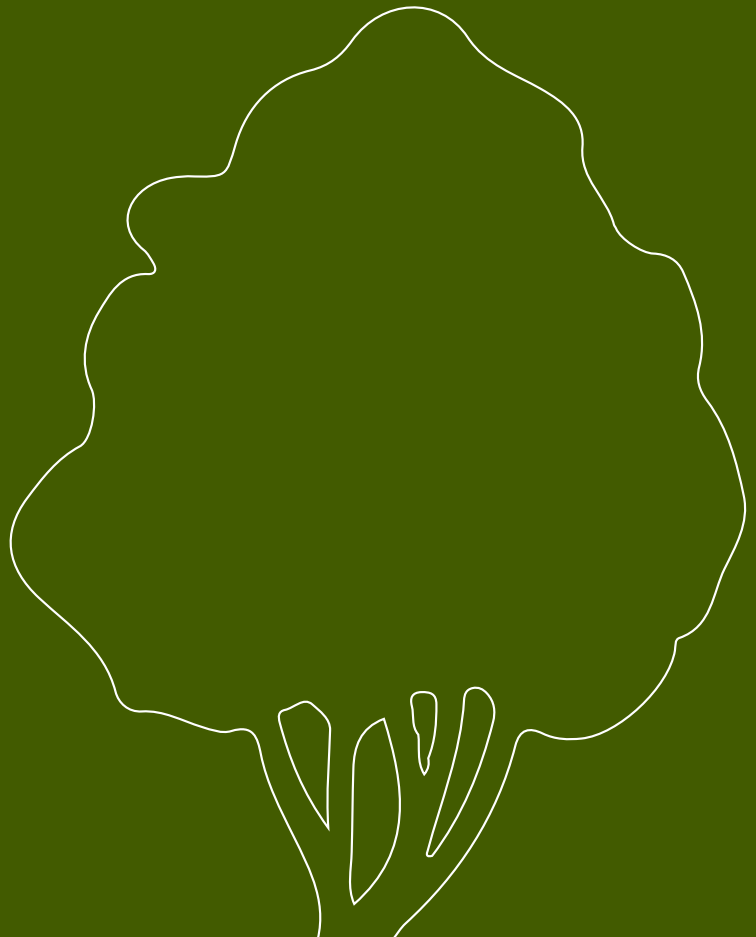
Flowers: white or violet, with 5 petals, one of which larger than the others; in branched axillary inflorescences.

Fruits: fleshy, globular or ovoid (2-3 cm long), black when ripe; in small groups; edible pulp.

Seeds: inside the woody stone.



shrubs



Alchornea cordifolia

Euphorbiaceae

pó-de-arco, pó-di-linguana (cr); blora, bloré, bulóra (ba); charque, djebonedje, gracassaque (fu); m'sumena, m'sumuna, n'sum-né (nl); bolonta, m'bolotá (ss)

Habit: shrub, sometimes liana or small tree (3-6 m in height), with white latex.

Leaves: alternate, broadly ovate (15-25 cm x 7-15 cm), pointed at the apex; long petioles.

Flowers: unisexual; male flowers small and green; female flowers greenish-grey (10-12 mm long), in axillary inflorescences or borne on the stems, slender (15-30 cm long).

Fruits: green, pubescent (1-1.5 cm in diameter).

Seeds: globular, red; 1 per fruit.

	food	medicine	nest	tool

	food	medicine	construction	artefacts	fuel

Other human uses: leaves are used to make inks.

J	F	M	A	M	J	J	A	S	O	N	D

Cajanus cajan

Fabaceae (Leguminosae - Papilionoideae)

feijão-congo (cr)

Habit: shrub (1-4 m in height); introduced and cultivated species.

Leaves: compound trifoliate, alternate; elliptic to oblanceolate leaflets (6-9 cm x 2-3 cm); with petioles.

Flowers: yellow (c. 2 cm in diameter), 6-10 in branched pedunculated inflorescences.

Fruits: pods (c. 6-9 cm x 1 cm), tomentose; pointed apex; protuberant where seeds are located.

Seeds: brown or cream-coloured beans, almost spherical.

	food	medicine	nest	tool
	●			

	food	medicine	construction	artefacts	fuel
	●	●			●

J	F	M	A	M	J	J	A	S	O	N	D

Combretum micranthum
Combretaceae

buko, chá-de-buco (cr); bsálá, p'sangla (ba); canquelibá (fu); n'babass, n'harta (nl); buko, cancaliba (ss); ambate (td)

Habit: shrub or small tree (≤ 8 m), rarely a liana; brownish-red stems; longitudinally fissured bark.

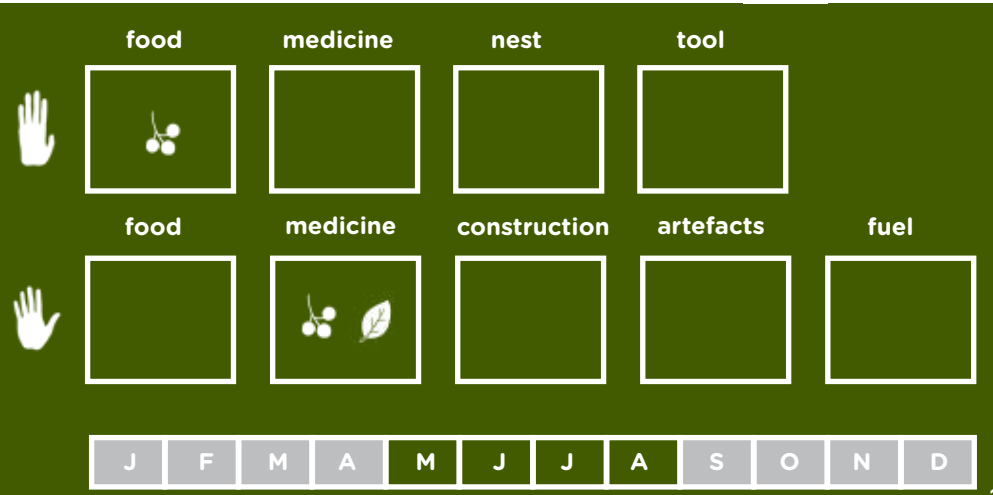
Leaves: opposite, elliptic (5-8 cm x 3-5 cm), reddish before falling; short petioles.

Flowers: small, greenish-white, in long, slender axillary inflorescences.

Fruits: of similar length and width (≤ 1.5 cm), dark-brown in the centre; with 4 yellow or light-brown wings and 1 seed at the centre.

Seeds: attached to the fruits.

The genus *Combretum* comprises several species of trees, shrubs and lianas, of opposite or verticillate leaves (e.g. *C. grandiflorum*, *C. mucronatum*, C. *paniculatum*, *C. racemosum*, *C. tomentosum*); some of them may develop as either shrubs or lianas, depending on the vegetation type.




F. polita


F. lutea


F. natalensis

strangler *Ficus*
Moraceae

n'fór (nl)

Besides the two species separately addressed in this guide, the genus *Ficus* (commonly named figs) includes several others that might occur as shrubs, trees or, often, strangler shrubs.

While green, the fruit of *Ficus* is actually an inflorescence of non-fertilized flowers; when ripe, it is a group of fruits. It is very difficult to distinguish the seeds of one species from another with the naked eye or even with a magnifying glass.

In the case of strangler figs, the seeds are generally dropped on the bases of palm leaves by birds, after eating the fruits. Seeds germinate and extend their roots down to the ground, gradually surrounding the palm stem and strangling it. When the palm dies, the fig remains and develops as a tree.

The fruits of several fig species are edible.

Strangler figs occur in the same habitats as palms. Some of the species present at Cantanhez are *F. lutea*, *F. natalensis*, *F. ovata*, *F. polita*, *F. sagittifolia* and *F. scott-elliottii*.

J F M A M J J A S O N D

Ficus sur
Moraceae

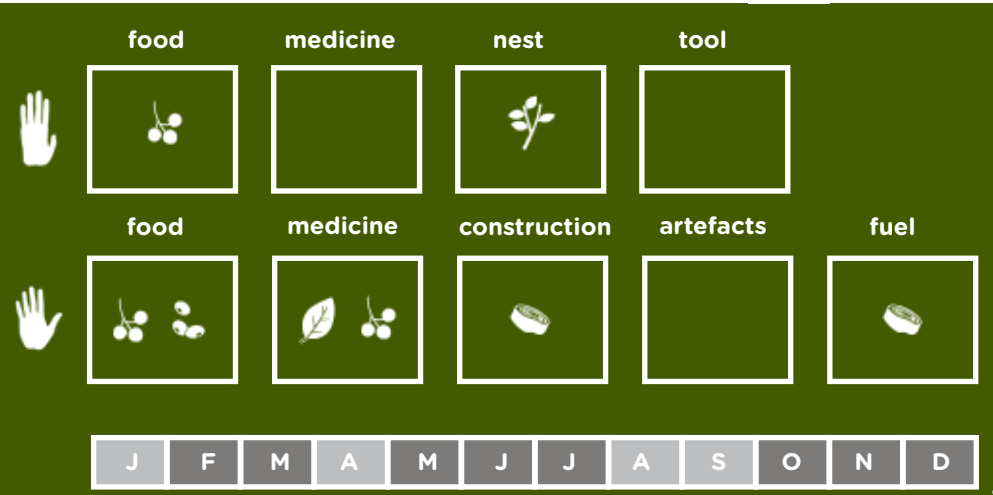
figuera (cr); blata, kolí, tumbli (ba); tcheque, tchequedje (fu); tonkin-iá, tonquinha, tonkinjá (nl); kodé (ss); anaque (td)

Habit: shrub, mainly in fallows, or small forest tree (8-12 m in height) of short bole; white latex.

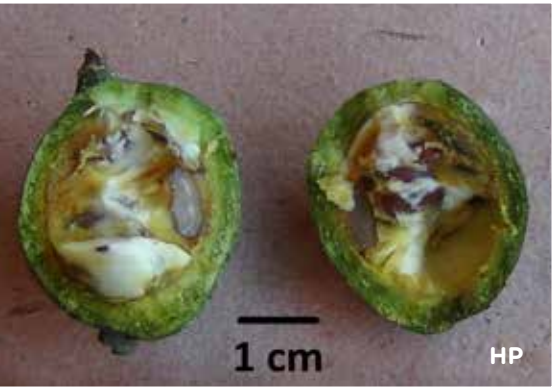
Leaves: alternate, large, ovate (10-20 cm x 5-10 cm); margin broadly dentate; 2 veins radiating from the base and 5-9 pairs of other veins, conspicuous on the abaxial side; sometimes very long petioles (≤ 8 cm).

Fruits: globular figs (3-5 cm in diameter), in clusters borne on the trunk and branches; they turn from green to yellow and then red when ripe.

Seeds: very small and numerous.



Macrosphyra longistyla
Rubiaceae



mama-di-cabra (cr); tepôbô (ba)

Habit: shrub (2-5 m in height) or small liana, generally branched from the base; densely hairy.

Leaves: opposite, ovate (8-15 cm x 4-10 cm); densely hairy on both sides; with petioles and stipules.

Flowers: white, turning yellowish (c. 5 cm in diameter); linear styles protruding 4-5 cm above the petals; umbrella-like arranged in apical inflorescences.

Fruits: green, globular (4-5 cm in diameter), externally woody, turning black when dry; with numerous seeds.

Seeds: small, flat.

	food	medicine	nest	tool
	●			

	food	medicine	construction	artefacts	fuel
	●				

J	F	M	A	M	J	J	A	S	O	N	D

Memecylon afzelii
Melastomataceae

Habit: shrub or small tree (≤ 8-10 m in height), with square stem cross-sections.

Leaves: opposite, elliptic or lanceolate (6-10 cm x 3-5 cm); short petioles.

Flowers: small, white, in inflorescences borne on the axils of leaves or on leafless stems.

Fruits: fleshy, globular or ellipsoid (1.2-1.5 cm long).

Seeds: small, 1-2 per fruit.

food	medicine	nest	tool

food	medicine	construction	artefacts	fuel

J	F	M	A	M	J	J	A	S	O	N	D

BI

Musa spp.
Musaceae

bananeira (cr); n'bantan (nl)

Habit: shrub-size herbaceous plant, with a pseudostem of 2-3 m that is annually renewed; cultivated.

Leaves: alternate, the bases surrounding the stem; large blade (1-2 m x 30-50 cm).

Flowers: numerous along the axis of the inflorescence (≤ 1 m long), which has purple bracts.

Fruits: fleshy, slender (12-25 cm long), light-green or yellow; without seeds.

There are several banana varieties of at least two species: *Musa acuminata*, with fruits as long as 18 cm, and *Musa* x *paradisiaca,* with fruits longer than 20 cm. These plants can produce bananas virtually year-round.

	food	medicine	nest	tool
	●			

	food	medicine	construction	artefacts	fuel
	●				

J F M A M J J A S O N D

Newbouldia laevis
Bignoniaceae

manduco-de-feticero (cr); canhómburi (fu); n´simkété, n'sinkét, singèle (nl); angade-tcharre (td)

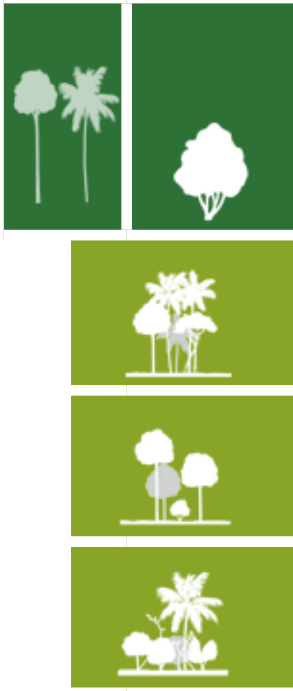
Habit: shrub with several stems radiating from the base, or small tree (≤ 8 m in height); grey trunk.

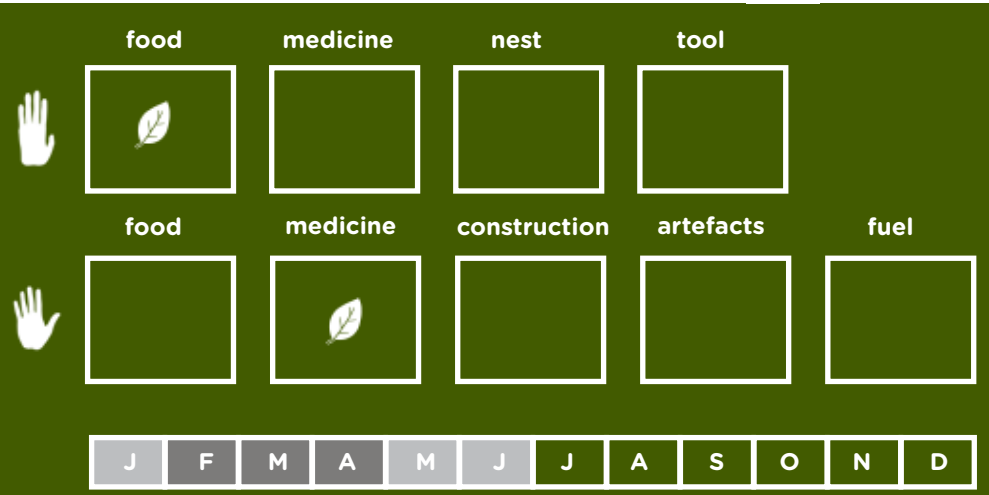
Leaves: compound imparipinnate (≤ 50 cm long); 7-13 opposite leaflets, asymmetric and elliptic (12-25 cm x 4-6 cm), of dentate margin and pointed apex, with lilac dots at the base.

Flowers: pink and white, large (4-5 cm long), in apical inflorescences.

Fruits: cylindrical, long and narrow (25-35 cm x c. 2 cm), hanging from the stems.

Seeds: surrounded by a membranous wing.





Phyllanthus muellerianus

Phyllanthaceae (Euphorbiaceae)

mámámómóti (fu); mafer (nl); belekeserenji (ss); angandoram (td)

Habit: shrub or small climber (3-6 m in height), branched from the base; spines on the stems, near the petioles.

Leaves: alternate, elliptic or ovate (3-7 cm x 2-4 cm); short petioles.

Flowers: unisexual, very small, greenish; clustered in axillary inflorescences.

Fruits: red, fleshy, subglobular (c. 0.5 cm in diameter); in small slender infructescences.

Seeds: with c. 2 mm in diameter.

	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel
		✓			

J	F	M	A	M	J	J	A	S	O	N	D

Rothmannia whitfieldii
Rubiaceae

fina (fu); n'bobé (nl)

Habit: shrub or small tree (≤ 8 m in height).

Leaves: opposite to ovate (20-25 cm x 8-12 cm); with petioles.

Flowers: large (≤ c. 20 cm long), solitary, drooping.

Fruits: globular, large (≤ 7 cm in diameter).

Seeds: brown, ellipsoid; numerous per fruit, surrounded by a yellowish pulp.

	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel
		✓			

Other human uses: the fruits are used to make inks.

J	F	M	A	M	J	J	A	S	O	N	D

Saccharum officinarum
Poaceae (Gramineae)

cana-di-azucar (cr)

Habit: shrub-sized herb (≤ 3-4 m in height), with spongy stem (≤ 5 cm in diameter).

Leaves: alternate, the bases surrounding the stem; long and narrow blades (2-4 cm wide).

Flowers: whitish, in apical inflorescences (50-80 cm long).

Seeds: small, brown.

	food	medicine	nest	tool

	food	medicine	construction	artefacts	fuel

J	F	M	A	M	J	J	A	S	O	N	D

Sarcocephalus latifolius

(Syn. *S. esculentus; Nauclea esculenta*)

Rubiaceae

madronha, madronho, caboupa, tambacumba-de-santcho (cr); cunhe, ptehén'tugudu, tehé-intogudê, tetudu, tètúgde, thétouro (ba); bacoré, cóile, condé, decumé, naude-puthu, naudó-putcho, obacoré (fu); n'tole, n'fol (nl); dudanké, dunduko (ss)

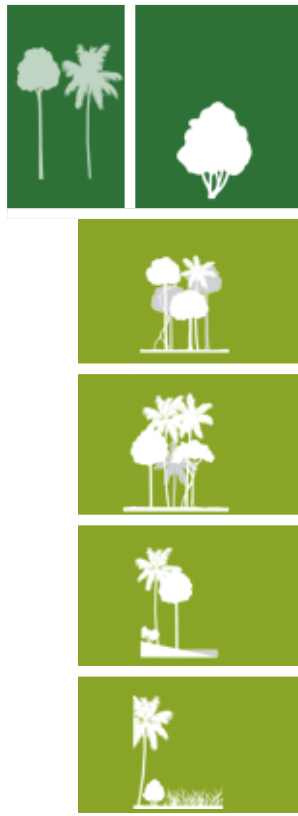
Habit: shrub or small tree (≤ 8 m in height); short and twisted trunk.

Leaves: opposite, big, largely elliptic (≤ 20 cm x 12 cm), thick and glossy.

Flowers: small, white, numerous; in globular apical inflorescences (4-5 cm in diameter).

Fruits: globular (4-7 cm in diameter), dark-red when ripe.

Seeds: very small; numerous per fruit, surrounded by a reddish pulp.



food | medicine | nest | tool

food | medicine | construction | artefacts | fuel

J F M A M J J A S O N D

Synsepalum pobeguinianum
Sapotaceae

n'koyio (nl)

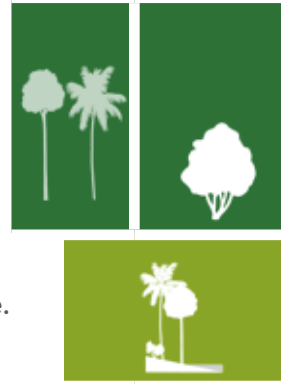
Habit: shrub or small tree (≤ 15 m in height) of short bole; white latex.

Leaves: alternate, obovate (12-20 cm x 5-8 cm), clustered at the shoot tips; filiform stipules (≤ 8 mm long); short petioles.

Flowers: small, whitish, in small clusters borne on leafless stems, close to the scars of shed leaves.

Fruits: fleshy, ovoid (c. 2 cm long), yellow when ripe.

Seeds: black, large, 1 per fruit.



food | medicine | nest | tool

food | medicine | construction | artefacts | fuel

J | F | M | A | M | J | J | A | S | O | N | D

Tabernaemontana africana
Apocynaceae

leite de vaca, pó-di-braso (cr); blá, glanhê (ba); corèbode (fu); latelaté, n'lat laté (nl); nhinguekinhé (ss)

Habit: shrub or small tree (≤ 10 m in height), with white latex.

Leaves: opposite, large and thick, elliptic (15-20 cm x 8-12 cm), with 5-10 pairs of veins; petioles ≤ 3 cm long.

Flowers: tube-shaped (≤ 10 cm long), with 5 white or greenish petals, in inflorescences.

Fruits: double, opposite, fleshy (4-6 cm in diameter), yellow when ripe.

Seeds: small, numerous per fruit.

	food	medicine	nest	tool
	●			

	food	medicine	construction	artefacts	fuel
	●	●			

J	F	M	A	M	J	J	A	S	O	N	D

Uvaria chamae
Annonaceae

banana-sanjo, banana-de-santcho (cr); qélè-bálé, qélè-bálei, quelibaledje (fu); n'pinde, n'pinden-di-mato (nl); mourandá (ss)

Habit: shrub (2-4 m in height) or small liana.

Leaves: alternate, elliptic or ovate (5-10 cm x 5 cm), with a characteristic smell when crushed; with petioles.

Flowers: greenish-yellow, solitary or in groups of 2-5.

Fruits: composed of several fleshy elements, pubescent, approximately cylindrical (4-6 cm x 2-3 cm), arranged in a star-like manner.

Seeds: brown, ellipsoid; several per fruit, surrounded by a white edible pulp.

food	medicine	nest	tool

food	medicine	construction	artefacts	fuel

J	F	M	A	M	J	J	A	S	O	N	D

climbers

Ampelocissus bombycina
Vitaceae

kunták (nl)

Habit: herbaceous climber (≤ 4-6 m in height), woody on the lower part of the stem; with tendrils.

Leaves: alternate; membranous, largely ovate, with 3-5 vaguely marked lobes (10-20 cm wide and long); finely dentate margin; densely hairy on the abaxial surface; with petioles.

Flowers: reddish, small and numerous, in branched inflorescences.

Fruits: fleshy, globular or oval (c. 1.5 cm in diameter), red when ripe.

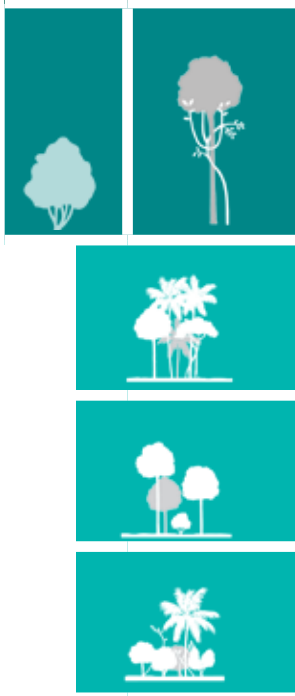
Seeds: c. 1 cm long, surrounded by an edible pulp.

food	medicine	nest	tool
●			

food	medicine	construction	artefacts	fuel
	●			

J	F	M	A	M	J	J	A	S	O	N	D

Landolphia heudelotii
Apocynaceae



fole-bajuda, fole-di-lala, fole-pequeno, folezinho (cr); psôbé, shubé (ba); débol-pólêdje, pore (fu); m'bolé (nl); furé (ss)

Habit: liana (≤ c. 10 m long) or shrub (≤ 4-5 m in height), with white latex.

Leaves: opposite and thick; elliptic or lanceolate (5-10 cm x 3-4 cm); short petioles.

Flowers: white, scented (c. 1 cm in diameter), in apical inflorescences.

Fruits: fleshy, globular (2-6 cm in diameter), in groups of 2-6 with different diameters; yellow when ripe; gelatinous pulp, acid and cream-coloured.

Seeds: numerous per fruit, ovoid (c. 1 cm long), surrounded by pulp.

	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel
	✓	✓			✓

Other human uses: the latex is used to repair bicycle tires and catch birds.

J	F	M	A	M	J	J	A	S	O	N	D

Landolphia hirsuta
Apocynaceae

fole-macaco (cr); m'boudi, (nl); folón-córe (ss)

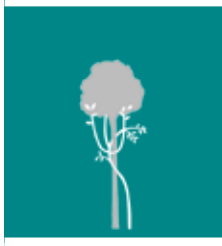
Habit: large liana (≤ 30-40 m long, trunk diameter of 20-30 cm); with white latex.

Leaves: opposite, elliptic or lanceolate (10-25 cm x 8-14 cm); hairy on the abaxial surface; short petioles.

Flowers: white or yellow, in dense axillary inflorescences.

Fruits: globular (≤ 6 cm in diameter), fleshy; yellow when ripe; gelatinous and acid pulp.

Seeds: numerous per fruit, surrounded by the pulp.



	food	medicine	nest	tool
	●			

	food	medicine	construction	artefacts	fuel
	●				

Other human uses: the latex is used to make glue.

J	F	M	A	M	J	J	A	S	O	N	D
■	■	■									■

Saba senegalensis
Apocynaceae

fole-di-lifanti (cr); m'binglé (ba); n'badak (nl); buduko (ss)

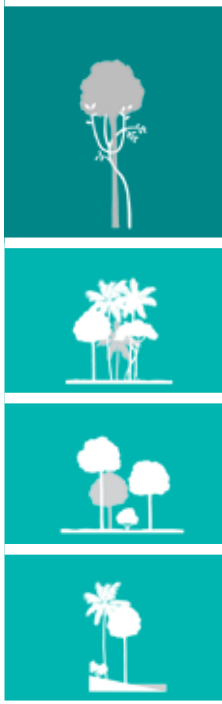
Habit: big liana (≤ 30-40 m long and trunk of 15-25 cm in diameter); with white latex.

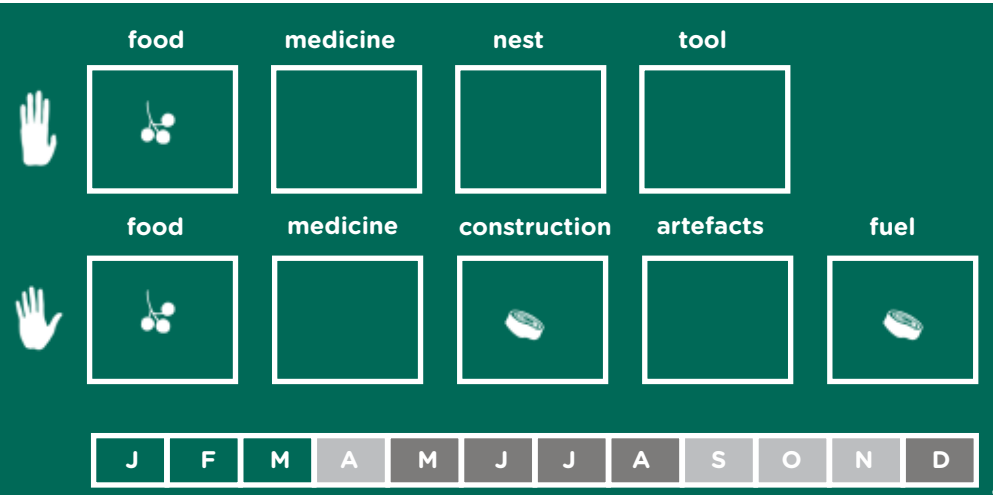
Leaves: opposite, elliptic or ovate (10-20 cm x 5-10 cm); 1-1.5 cm long petioles.

Flowers: white or yellow, scented, in apical inflorescences.

Fruits: ovoid (≤ 12 cm x 8 cm), fleshy, with a rugged surface; yellow when ripe; gelatinous pulp.

Seeds: numerous per fruit, ovoid (≤ 1.2 cm long), surrounded by the pulp.





Tetracera potatoria
Dilleniaceae

malila-de-água (cr); n'harta (nl); nintí (ss)

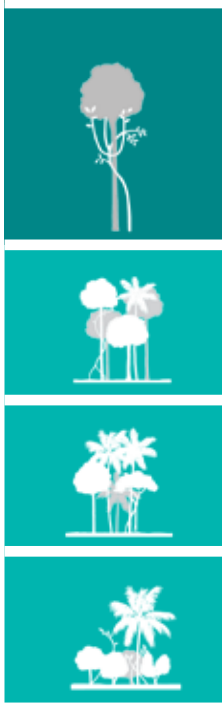
Habit: woody climber (≤ 10-15 m long); the cut stem provides potable water.

Leaves: alternate, elliptic or obovate (8-12 cm x 4-6 cm), with dentate margins; rough on both surfaces; with petioles.

Flowers: white, in apical or axillary inflorescences.

Fruits: dry, in numerous groups; externally green, red upon splitting.

Seeds: black, globular (c. 5 mm in diameter); 1 per fruit.



food	medicine	nest	tool
✓	✓		

food	medicine	construction	artefacts	fuel
	✓			✓

Other human uses the stem is used as a water source.

J	F	M	A	M	J	J	A	S	O	N	D

Triclisia patens
Menispermaceae

portotô, uelifedjite (fu); manar-bancho, manar-kambantchum (nl); firifora (ss)

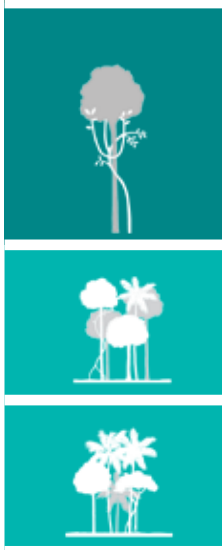
Habit: big liana (≤ 15-25 m long).

Leaves: alternate, elliptic or ovate (10-20 cm x 6-10 cm); long petioles.

Flowers: small, yellow, unisexual, in inflorescences borne on the stems or on the leaf axils.

Fruits: fleshy, ellipsoid (1-1.5 cm long), densely haired on the surface; arranged in groups, generally borne on the stem.

Seeds: ovoid (c. 1 cm long), 1 per fruit.



	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel
	✓	✓			

J	F	M	A	M	J	J	A	S	O	N	D

herbs

Aframomum alboviolaceum
Zingiberaceae

belenkufa (cr), mabôbé (nl)

Habit: perennial herb (≤1.5 m in height), with rhizome.

Leaves: arranged alternately, their bases around the stem; pubescent ligules; lanceolate leaf blades (≤ 30 cm x 8 cm).

Flowers: large, with a yellow centre and blue or violet edges; in groups of 2-5; develop at the ground level.

Fruits: ovoid (≤ 8 cm long), fleshy, red; at the ground level.

Seeds: ovoid (c. 0.5 cm long), numerous per fruit.

There are other species of this genus, namely *Aframomum rostratum* and *A. sceptrum*, that can be mistaken for this one.

	food	medicine	nest	tool
	●			

	food	medicine	construction	artefacts	fuel
	●	●			

J	F	M	A	M	J	J	A	S	O	N	D

Chasmopodium caudatum
Poaceae (Gramineae)

caratá (cr); n'tankás (nl)

Habit: large annual herb (≤ 2-3 m in height), growing in tufts.

Leaves: alternate, around the stem; hairy bases; ligules with long hairs; linear-lanceolate blades (1-4 cm wide and 30-40 cm long).

Flowers: apical branched inflorescences (spikes).

Seeds: small, ellipsoid (c. 0.5 cm long), surrounded by a flower-derived membrane.

	food	medicine	nest	tool
	✓	✓		

	food	medicine	construction	artefacts	fuel
			✓		✓

J	F	M	A	M	J	J	A	S	O	N	D

Hibiscus sabdariffa
Malvaceae

bajique, baguitche (cr); n'batú, umbatú (ba); fólerè (fu); n'salau (nl)

Habit: annual herb, subwoody at the base (≤ 1-1.5 m in height); dry-farmed.

Leaves: alternate, oval 3-lobed blades (≤ 10 cm long), with 3-5 veins radiating from the base; with petioles.

Flowers: yellow, with a red centre, ≤ 7 cm in diameter; borne on leaf axils; the external part becomes fleshy and bright-red.

Fruits: dry, conic (1.5-2 cm long).

Seeds: dark-brown, kidney-shaped (≤ 7 mm long).

	food	medicine	nest	tool
	✓			

	food	medicine	construction	artefacts	fuel
	✓	✓			

J	F	M	A	M	J	J	A	S	O	N	D

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GLOSSARY

Explanation of some terms used in this guide; those marked with an asterisk are illustrated below.

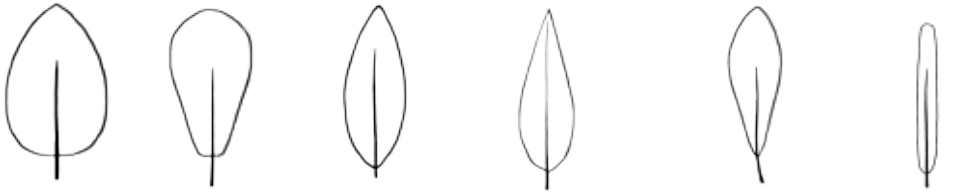
acuminate - tapering gradually to a protracted point
alternate* - single leaves positioned at different heights on a stem, each at a different node (see also "opposite")
artefacts - plant parts used by humans to make objects
axil* - the angle between an organ (e.g., the leaf) and the axis to which it is attached (e.g., the branch)
bipinnate or **bipinnately compound leaf*** - compound leaf, twice pinnately divided, with secondary axes bearing the leaflets (pinnules) arranged along a main axis (rachis)
bole - the main trunk of a tree
bract - leaf-like structure, usually different in form from the foliage leaves, associated with an inflorescence or flower
buttress - supporting outgrowth from the base of a bole
chartaceous - papery
clustered* - when referring to leaves: concentrated at the shoot tips
compound* – leaf formed by two or more separate leaflets inserted in the same petiole or stalk
construction - plant parts used for the construction of houses and fences
crown - the branches and foliage at the top of a tree
deciduous - that sheds all the leaves during a certain period of the year
dentate* - leaf with sharp, spreading, rather coarse teeth standing out from the margin
digitate* - compound leaf with leaflets radiating from a common point, arranged like the fingers on an open hand
dioecious - species with male and female unisexual flowers on different plants
ellipsoid - a three-dimensional shape; longitudinal elliptic outline and circular cross section

elliptic* - a two-dimensional shape; oval in outline, narrowed to rounded ends in profile
filiform - thread-like
food - part of plant used as food
fuel - part of plant used as firewood
globular - a three-dimensional shape; spherical or orbicular; circular in outline
habit or **life form** - the growth form of a plant
imparipinnate* - pinnately compound leaf with a single terminal leaflet and hence with an odd number of leaflets
inflorescence - flower branch, including the bracts, flower stalks, and flowers
infructescence - a group or cluster of fruits resulting from an inflorescence
lamina or **leaf blade*** - the usually flattened and green blade of a leaf, which can be one entire unbroken leaf (simple) or a highly dissected and divided leaf (compound)
lanceolate* - lance-shaped, about 3-times longer than wide, with the broadest part nearer the base and an acute apex
latex - a milky, clear or sometimes coloured sap of diverse composition found in some plants
leaflet - individual part of a compound leaf, usually leaf-like and with its own stalk
liana - a woody climbing or twining plant
ligule - outgrowth from the inner junction of the grass leaf sheath and blade, often membranous, sometimes represented by a fringe of hairs
linear* - narrow and long leaf, with parallel margins
lobe - a usually rounded or pointed projecting part, usually one of two or more, each separated by a fissure or sinus
medicine - part of plant used for medicinal purposes
midvein* - the central or principal vein of a leaf
nest - chimpanzees' sleeping place, in tree canopies
oblanceolate* - lance-shaped, but with a wider distal part

obovate* - similar to ovate but with a wider distal part
opposite* - positioned at the same level (node) in pairs, opposite each other, along a stem (see also "alternate")
oval or **ovoid** - any curve that looks like an egg or an ellipse
ovate* - with an oval outline broader towards the base than the apex, "egg-shaped"
ovoid - a three-dimensional egg shape; ovate in outline
paripinnate* - pinnate with an even number of leaflets and without a terminal leaflet
pedicel - the stalk of an individual flower
peduncle - the stalk of an inflorescence or infructescence
perennial - plant that lives for more than two years
petal - free segment of the corolla, in a flower
petiole* - the stalk of a leaf
pinnate* - compound leaf, with leaflets arranged as a feather along the rachis
pinnule* - the secondary axis of a bipinnate leaf, with its leaflets
pith - the spongy, central tissue in some twigs, stems, and roots
pod - dry and generally elongated fruit containing seeds and splitting open when ripe; typical of many Fabaceae
pubescent - covered with short, soft hairs
rachis* - the main axis in a compound leaf, extending from the petiole
rhizome - root-like underground stem which sends up new leaves and stems each season
spine - a stiff, sharp, pointed structure, formed by modification of a plant organ
stamen - one of the male organs of a flower, consisting typically of a stalk (filament) and a pollen-bearing portion (anther)
stipule* - one of a pair of leaf-like, scale-like or bristle-like structures inserted at the base or on the petiole of a leaf
stone - hard layer enclosing one or two seeds
style - the usually narrow, elongated structure of the female part of the flower

subglobular – approximately globular
subopposite – almost opposite arrangement of leaves or leaflets along an axis
tendril - a slender organ formed from a modified stem, leaf or leaflet which, by coiling around objects, supports a climbing plant
tomentose - covered with not very long cottony hairs, closely interwoven
tool - plant part used as a tool
trifoliate* - a leaf having three leaflets
unisexual - flower with one sex only, either bearing the anthers with pollen, or an ovary with ovules
vein*- secondary vein of a leaf, radiating from the midvein
verticillate* - whorled; arranged in one or more whorls (i.e., around a common node)
wing - any flat, often membranous expansion or flange, e.g. on a seed

FORMS OF LEAVES AND LEAFLETS



Ovate Obovate Elliptic Lanceolate Oblanceolate Linear

LEAF ARRANGEMENT

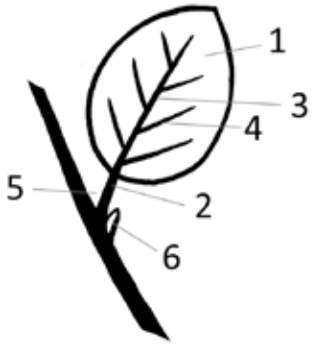
Alternate Opposite Clustered Verticillate

COMPOUND LEAVES

Paripinnate Imparipinnate Bipinnate Trifoliate Digitate

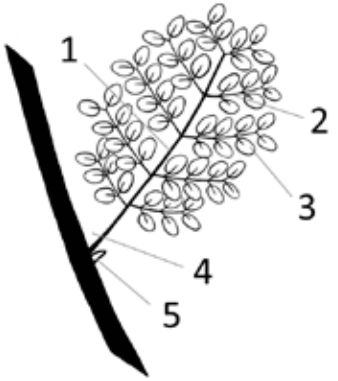
PARTS OF LEAF

SIMPLE LEAF



1 blade or lamina
2 petiole
3 midvein
4 vein
5 axil
6 stipule

BIPINNATELY COMPOUND LEAF



1 rachis
2 pinnule
3 leaflet
4 axil
5 stipule

LIST OF SCIENTIFIC NAMES

Species names, their authors and families are indicated. Species described in the guide are presented in *italics* and **bold**; species that are mentioned but not described are presented in *italics*; synonyms are indicated in plain text.

LIST OF COMMON NAMES

Common name	Language	Species	Chapter
acarta-lixo	creole	*Ficus exasperata*	Trees & Palms
ambate	tanda	*Combretum micranthum*	Shrubs
anaque	tanda	*Ficus sur*	Shrubs
angade-tcharre	tanda	*Newbouldia laevis*	Shrubs
angandoram	tanda	*Phyllanthus muellerianus*	Shrubs
angueidja	tanda	*Anisophyllea laurina*	Trees & Palms
anjambane	tanda	*Parkia biglobosa*	Trees & Palms
atakssulé	tanda	*Sterculia tragacantha*	Trees & Palms
ataparquê	tanda	*Lecaniodiscus cupanioides*	Trees & Palms
atchaguesse	tanda	*Parinari excelsa*	Trees & Palms
atenguengelere	tanda	*Dialium guineense*	Trees & Palms
azeitona	creole	*Vitex doniana*	Trees & Palms
bace	balanta	*Borassus aethiopum*	Trees & Palms
bacoré	fula	*Sarcocephalus latifolius*	Shrubs
baguitche	creole	*Hibiscus sabdariffa*	Herbs
bajique	creole	*Hibiscus sabdariffa*	Herbs
balé	sosso	*Strombosia pustulata*	Trees & Palms
banana-de-santcho	creole	*Uvaria chamae*	Shrubs
banana-sanjo	creole	*Uvaria chamae*	Shrubs
banana-sanjo-macho	creole	*Monodora tenuifolia*	Trees & Palms
bananeira	creole	*Musa* spp.	Shrubs
bansumá	sosso	*Neocarya macrophylla*	Trees & Palms
barquelei	fula	*Sterculia tragacantha*	Trees & Palms
belekeserenji	sosso	*Phyllanthus muellerianus*	Shrubs
bêlem	fula	*Phoenix reclinata*	Trees & Palms
belenkufa	creole	*Aframomum alboviolaceum*	Herbs
beludo	creole	*Dialium guineense*	Trees & Palms
bitchalám	sosso	*Parinari excelsa*	Trees & Palms
blá	balanta	*Tabernaemontana africana*	Shrubs
blata	balanta	*Ficus sur*	Shrubs
blora	balanta	*Alchornea cordifolia*	Shrubs
bloré	balanta	*Alchornea cordifolia*	Shrubs

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
bóbe	balanta	*Daniellia oliveri*	Trees & Palms
bóè	fula	*Adansonia digitata*	Trees & Palms
boiè-maio	fula	*Dialium guineense*	Trees & Palms
bólhanei	fula	*Monodora tenuifolia*	Trees & Palms
bolonta	sosso	*Alchornea cordifolia*	Shrubs
boto	nalu	*Daniellia oliveri*	Trees & Palms
boto	fula	*Detarium senegalense*	Trees & Palms
bsálá	balanta	*Combretum micranthum*	Shrubs
buco	creole	*Combretum micranthum*	Shrubs
buduko	sosso	*Saba senegalensis*	Climbers
búè	balanta	*Sterculia tragacantha*	Trees & Palms
buko	sosso	*Combretum micranthum*	Shrubs
buló́ra	balanta	*Alchornea cordifolia*	Shrubs
búmé	fula	*Vitex doniana*	Trees & Palms
cabaceira	creole	*Adansonia digitata*	Trees & Palms
cabacera	creole	*Adansonia digitata*	Trees & Palms
cabasséra	creole	*Adansonia digitata*	Trees & Palms
caboupa	creole	*Sarcocephalus latifolius*	Shrubs
cadjôdjáe	fula	*Pseudospondias microcarpa*	Trees & Palms
cadju	creole	*Anacardium occidentale*	Trees & Palms
café	creole	*Combretum micranthum*	Shrubs
café-bravo	creole	*Combretum micranthum*	Shrubs
caju	creole	*Anacardium occidentale*	Trees & Palms
calabacera	creole	*Adansonia digitata*	Trees & Palms
cana-di-azucar	creole	*Saccharum offcinarum*	Shrubs
cancaliba	sosso	*Combretum micranthum*	Shrubs
canhómburi	fula	*Newbouldia laevis*	Shrubs
canquelibá	fula	*Combretum micranthum*	Shrubs
cantingui	sosso	*Anisophyllea laurina*	Trees & Palms
caratá	creole	*Chasmopodium caudatum*	Herbs
cetona	creole	*Vitex doniana*	Trees & Palms
cetona-pequeno	creole	*Vitex doniana*	Trees & Palms
cetona-preta	creole	*Vitex doniana*	Trees & Palms
chá-de-buco	creole	*Combretum micranthum*	Shrubs

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
charque	fula	*Alchornea cordifolia*	Shrubs
cibe	creole	*Borassus aethiopum*	Trees & Palms
cibedje	fula	*Borassus aethiopum*	Trees & Palms
cóile	fula	*Sarcocephalus latifolius*	Shrubs
condé	fula	*Sarcocephalus latifolius*	Shrubs
corèbode	fula	*Tabernaemontana africana*	Shrubs
cossiráe	fula	*Dialium guineense*	Trees & Palms
culum	tanda	*Diospyros heudelotii*	Trees & Palms
cunhe	balanta	*Sarcocephalus latifolius*	Shrubs
cura	fula	*Parinari excelsa*	Trees & Palms
curanaco	fula	*Neocarya macrophylla*	Trees & Palms
curanaco	fula	*Parinari excelsa*	Trees & Palms
débol-póiêdje	fula	*Landolphia heudelotii*	Climbers
decumé	fula	*Sarcocephalus latifolius*	Shrubs
djauláe	fula	*Antiaris toxicaria*	Trees & Palms
djebonedje	fula	*Alchornea cordifolia*	Shrubs
dúbè	fula	*Borassus aethiopum*	Trees & Palms
dudanké	sosso	*Sarcocephalus latifolius*	Shrubs
dunduko	sosso	*Sarcocephalus latifolius*	Shrubs
faroba	creole	*Parkia biglobosa*	Trees & Palms
farôba	creole	*Parkia biglobosa*	Trees & Palms
faroba-de-lala	creole	*Albizia adianthifolia*	Trees & Palms
faroba-de-lala	creole	*Albizia ferruginea*	Trees & Palms
faroba-de-lala	creole	*Parkia biglobosa*	Trees & Palms
faroba-de-mato	creole	*Albizia adianthifolia*	Trees & Palms
faroba-de-mato-macho	creole	*Albizia ferruginea*	Trees & Palms
faroba-de-mato-preto	creole	*Albizia ferruginea*	Trees & Palms
farroba	creole	*Parkia biglobosa*	Trees & Palms
farroba-de-lala	creole	*Albizia adianthifolia*	Trees & Palms
farroba-de-lala	creole	*Albizia ferruginea*	Trees & Palms
farrobe	creole	*Parkia biglobosa*	Trees & Palms
feijão-congo	creole	*Cajanus cajan*	Shrubs
figuera	creole	*Ficus sur*	Shrubs
fina	fula	*Rothmannia whitfieldii*	Shrubs

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
firirfora	sosso	*Triclisia patens*	Climbers
fole-bajuda	creole	*Landolphia heudelotii*	Climbers
fole-di-lala	creole	*Landolphia heudelotii*	Climbers
fole-di-lifanti	creole	*Saba senegalensis*	Climbers
fole-macaco	creole	*Landolphia hirsuta*	Climbers
fole-pequeno	creole	*Landolphia heudelotii*	Climbers
fólerè	fula	*Hibiscus sabdariffa*	Herbs
folezinho	creole	*Landolphia heudelotii*	Climbers
folón-córe	sosso	*Landolphia hirsuta*	Climbers
fufu	sosso	*Monodora tenuifolia*	Trees & Palms
furé	sosso	*Landolphia heudelotii*	Climbers
gante	balanta	*Parkia biglobosa*	Trees & Palms
ghandjam	creole	*Lecaniodiscus cupanioides*	Trees & Palms
glanhê	balanta	*Tabernaemontana africana*	Shrubs
gracassaque	fula	*Alchornea cordifolia*	Shrubs
guibinte	fula	*Treculia africana*	Trees & Palms
ialiké	nalu	*Anacardium occidentale*	Trees & Palms
iatété	sosso	*Diospyros heudelotii*	Trees & Palms
iendengi	sosso	*Treculia africana*	Trees & Palms
iú	nalu	*Parkia biglobosa*	Trees & Palms
jaca-de-mato	creole	*Treculia africana*	Trees & Palms
jagôrtá	nalu	*Diospyros heudelotii*	Trees & Palms
jambi	balanta	*Treculia africana*	Trees & Palms
kaméuri	sosso	*Daniellia oliveri*	Trees & Palms
kanse	fula	*Anisophyllea laurina*	Trees & Palms
kèbe	sosso	*Lecaniodiscus cupanioides*	Trees & Palms
ken	balanta	*Elaeis guineensis*	Trees & Palms
kilé	balanta	*Parinari excelsa*	Trees & Palms
kiri	sosso	*Adansonia digitata*	Trees & Palms
kodé	sosso	*Ficus sur*	Shrubs
kolí	balanta	*Ficus sur*	Shrubs
kondé	sosso	*Ceiba pentandra*	Trees & Palms
kukukunkuri	sosso	*Vitex doniana*	Trees & Palms
kunták	nalu	*Ampelocissus bombycina*	Climbers

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
lakó	sosso	*Pouteria alnifolia*	Trees & Palms
lalaúri	sosso	*Pouteria alnifolia*	Trees & Palms
laranja	creole	*Citrus sinensis*	Trees & Palms
latalaté	nalu	*Tabernaemontana africana*	Shrubs
látè	balanta	*Adansonia digitata*	Trees & Palms
leite de vaca	creole	*Tabernaemontana africana*	Shrubs
limon francis	creole	*Citrus aurantiifolia*	Trees & Palms
língua-di-baca	creole	*Antiaris toxicaria*	Trees & Palms
língua-di-baca	creole	*Ficus exasperata*	Trees & Palms
lugurí	sosso	*Spondias mombin*	Trees & Palms
lút	nalu	*Parinari excelsa*	Trees & Palms
m'bath	nalu	*Ceiba pentandra*	Trees & Palms
m'béke	nalu	*Adansonia digitata*	Trees & Palms
m'béta	nalu	*Detarium senegalense*	Trees & Palms
m'bim	nalu	*Dialium guineense*	Trees & Palms
m'bimbe	nalu	*Dialium guineense*	Trees & Palms
m'binglé	balanta	*Saba senegalensis*	Climbers
m'bôbó	nalu	*Daniellia oliveri*	Trees & Palms
m'boié	balanta	*Dialium guineense*	Trees & Palms
m'bolé	nalu	*Landolphia heudelotii*	Climbers
m'bolotá	sosso	*Alchornea cordifolia*	Shrubs
m'boudi	nalu	*Landolphia hirsuta*	Climbers
m'bulá	nalu	*Borassus aethiopum*	Trees & Palms
m'bwoi	balanta	*Dialium guineense*	Trees & Palms
m'sumena	nalu	*Alchornea cordifolia*	Shrubs
m'sumuna	nalu	*Alchornea cordifolia*	Shrubs
mabôbé	nalu	*Aframomum alboviolaceum*	Herbs
madronha	creole	*Sarcocephalus latifolius*	Shrubs
madronho	creole	*Sarcocephalus latifolius*	Shrubs
mafel	balanta	*Anisophyllea laurina*	Trees & Palms
máfèlè	balanta	*Anisophyllea laurina*	Trees & Palms
mafer	nalu	*Phyllanthus muellerianus*	Shrubs
malefú	sosso	*Diospyros heudelotii*	Trees & Palms
malevu	sosso	*Diospyros heudelotii*	Trees & Palms

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
malila d'água	creole	*Tetracera potatoria*	Climbers
mama-di-cabra	creole	*Macrosphyra longistyla*	Shrubs
mámámómóti	fula	*Phyllanthus muellerianus*	Shrubs
mambode	creole	*Detarium senegalense*	Trees & Palms
mambódi	creole	*Detarium senegalense*	Trees & Palms
mampatace	creole	*Parinari excelsa*	Trees & Palms
mampatace-grande	creole	*Neocarya macrophylla*	Trees & Palms
mampataz	creole	*Parinari excelsa*	Trees & Palms
manar-bancho	nalu	*Triclisia patens*	Climbers
manar-kambantchum	nalu	*Triclisia patens*	Climbers
mandiple	creole	*Spondias mombin*	Trees & Palms
manduco-de-feticero	creole	*Newbouldia laevis*	Shrubs
mandunduf	nalu	*Sterculia tragacantha*	Trees & Palms
mangéboré	sosso	*Sterculia tragacantha*	Trees & Palms
mango	creole	*Mangifera indica*	Trees & Palms
manguera	creole	*Mangifera indica*	Trees & Palms
mantxambé	creole	*Treculia africana*	Trees & Palms
marnei	fula	*Albizia adianthifolia*	Trees & Palms
marnei	fula	*Albizia ferruginea*	Trees & Palms
marroné	fula	*Pentaclethra macrophylla*	Trees & Palms
masamp-balé	nalu	*Albizia ferruginea*	Trees & Palms
masamp-tchill	nalu	*Albizia ferruginea*	Trees & Palms
masamp-thai	nalu	*Albizia adianthifolia*	Trees & Palms
matchampudje	fula	*Treculia africana*	Trees & Palms
mavéu	nalu	*Neocarya macrophylla*	Trees & Palms
mèco	fula	*Dialium guineense*	Trees & Palms
mehanté	balanta	*Parkia biglobosa*	Trees & Palms
meile	balanta	*Parinari excelsa*	Trees & Palms
mesamp	nalu	*Albizia adianthifolia*	Trees & Palms
miséria	creole	*Anisophyllea laurina*	Trees & Palms
molhanei	fula	*Monodora tenuifolia*	Trees & Palms
moqué	sosso	*Dialium guineense*	Trees & Palms
moquê	fula	*Dialium guineense*	Trees & Palms
moquê	sosso	*Dialium guineense*	Trees & Palms

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
mourandá	sosso	*Uvaria chamae*	Shrubs
múni	balanta	*Vitex doniana*	Trees & Palms
múri	balanta	*Vitex doniana*	Trees & Palms
n'babass	nalu	*Combretum micranthum*	Shrubs
n'badak	nalu	*Saba senegalensis*	Climbers
n'bantan	nalu	*Musa* spp.	Shrubs
n'batú	balanta	*Hibiscus sabdariffa*	Herbs
n'bék	nalu	*Adansonia digitata*	Trees & Palms
n'bim	nalu	*Dialium guineense*	Trees & Palms
n'bobé	nalu	*Rothmannia whitfieldii*	Shrubs
n'bute	nalu	*Neocarya macrophylla*	Trees & Palms
n'djano	balanta	*Parinari excelsa*	Trees & Palms
n'djapô	balanta	*Neocarya macrophylla*	Trees & Palms
n'fal	nalu	*Spondias mombin*	Trees & Palms
n'fol	nalu	*Sarcocephalus latifolius*	Shrubs
n'harta	nalu	*Tetracera potatoria*	Climbers
n'harta	nalu	*Combretum micranthum*	Shrubs
n'kauué	nalu	*Ceiba pentandra*	Trees & Palms
n'koyio	nalu	*Synsepalum pobeguinianum*	Shrubs
n'lat laté	nalu	*Tabernaemontana africana*	Shrubs
n'lut	nalu	*Parinari excelsa*	Trees & Palms
n'mango	nalu	*Mangifera indica*	Trees & Palms
n'nhonhinhe	sosso	*Antiaris toxicaria*	Trees & Palms
n'pápa	nalu	*Carica papaya*	Trees & Palms
n'pinde	nalu	*Uvaria chamae*	Shrubs
n'pinden-chil	nalu	*Monodora tenuifolia*	Trees & Palms
n'pinden-di-mato	nalu	*Uvaria chamae*	Shrubs
n'sak	nalu	*Phoenix reclinata*	Trees & Palms
n'salau	nalu	*Hibiscus sabdariffa*	Herbs
n'sempé	nalu	*Treculia africana*	Trees & Palms
n'sinim nelbené	nalu	*Citrus aurantiifolia*	Trees & Palms
n'sinkét	nalu	*Newbouldia laevis*	Shrubs
n'sise	nalu	*Elaeis guineensis*	Trees & Palms
n'sokór	nalu	*Vitex doniana*	Trees & Palms

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
n'sonran	nalu	*Lecaniodiscus cupanioides*	Trees & Palms
n'sum-né	nalu	*Alchornea cordifolia*	Shrubs
n'sunp	nalu	*Anisophyllea laurina*	Trees & Palms
n'tankás	nalu	*Chasmopodium caudatum*	Herbs
n'tantass	nalu	*Pentaclethra macrophylla*	Trees & Palms
n'tim lák	nalu	*Strombosia pustulata*	Trees & Palms
n'tole	nalu	*Sarcocephalus latifolius*	Shrubs
n'tonte	nalu	*Ricinodendron heudelotii*	Trees & Palms
n'tulune	nalu	*Milicia regia*	Trees & Palms
n'txéf	nalu	*Ficus exasperata*	Trees & Palms
n'jangugurta	nalu	*Diospyros heudelotii*	Trees & Palms
n´boi	balanta	*Dialium guineense*	Trees & Palms
n´simkété	nalu	*Newbouldia laevis*	Shrubs
nando	fula	*Neocarya macrophylla*	Trees & Palms
nassino	creole	*Sterculia tragacantha*	Trees & Palms
nathe	balanta	*Parkia biglobosa*	Trees & Palms
naude-puthu	fula	*Sarcocephalus latifolius*	Shrubs
náudo	fula	*Neocarya macrophylla*	Trees & Palms
naudó-putcho	fula	*Sarcocephalus latifolius*	Shrubs
néré	fula	*Parkia biglobosa*	Trees & Palms
neri	sosso	*Parkia biglobosa*	Trees & Palms
néri	sosso	*Parkia biglobosa*	Trees & Palms
netch	fula	*Parkia biglobosa*	Trees & Palms
nétè	fula	*Parkia biglobosa*	Trees & Palms
nete-maio	fula	*Albizia ferruginea*	Trees & Palms
nétèmàe	fula	*Albizia adianthifolia*	Trees & Palms
néto-máiô	fula	*Albizia adianthifolia*	Trees & Palms
ngonjí	sosso	*Ficus exasperata*	Trees & Palms
nhada-haco	fula	*Pouteria alnifolia*	Trees & Palms
nhenhe	fula	*Antiaris toxicaria*	Trees & Palms
nhénhéò	fula	*Pouteria alnifolia*	Trees & Palms
nhinguekinhé	sosso	*Tabernaemontana africana*	Shrubs
nhinha	fula	*Ficus exasperata*	Trees & Palms
nintí	sosso	*Tetracera potatoria*	Climbers

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
niú	nalu	*Parkia biglobosa*	Trees & Palms
nti kababayo	nalu	*Trichilia monadelpha*	Trees & Palms
obacoré	fula	*Sarcocephalus latifolius*	Shrubs
osso-de-dari	creole	*Strombosia pustulata*	Trees & Palms
p'sangla	balanta	*Combretum micranthum*	Shrubs
p'sale	balanta	*Spondias mombin*	Trees & Palms
palmeira	creole	*Elaeis guineensis*	Trees & Palms
palmeira-de-óleo	creole	*Elaeis guineensis*	Trees & Palms
palmeira-dendém	creole	*Elaeis guineensis*	Trees & Palms
palmeira-tambara	creole	*Phoenix reclinata*	Trees & Palms
palmera	creole	*Elaeis guineensis*	Trees & Palms
papaia	creole	*Carica papaya*	Trees & Palms
pau-corda	creole	*Sterculia tragacantha*	Trees & Palms
pau-de-bicho-amarelo	creole	*Antiaris toxicaria*	Trees & Palms
pau-de-saia	creole	*Sterculia tragacantha*	Trees & Palms
pau-incenso	creole	*Daniellia oliveri*	Trees & Palms
pau-miséria	creole	*Anisophyllea laurina*	Trees & Palms
pau-veludo	creole	*Dialium guineense*	Trees & Palms
pilé	balanta	*Parinari excelsa*	Trees & Palms
pó-de-arco	creole	*Alchornea cordifolia*	Shrubs
pó-de-bicho	creole	*Antiaris toxicaria*	Trees & Palms
pó-de-bicho-amarelo	creole	*Milicia regia*	Trees & Palms
pó-de-bicho-branco	creole	*Antiaris toxicaria*	Trees & Palms
po-de-bitche	creole	*Antiaris toxicaria*	Trees & Palms
pó-de-bitcho-risso	creole	*Milicia regia*	Trees & Palms
pó-de-cabaço	creole	*Sterculia tragacantha*	Trees & Palms
pó-de-incenso	creole	*Daniellia oliveri*	Trees & Palms
pó-de-lete	creole	*Antiaris toxicaria*	Trees & Palms
pó-de-miséria	creole	*Anisophyllea laurina*	Trees & Palms
pó-de-remo	creole	*Pouteria alnifolia*	Trees & Palms
pó-de-veludo	creole	*Dialium guineense*	Trees & Palms
po-di-bichu-amarelo	creole	*Antiaris toxicaria*	Trees & Palms
po-di-bijugos	creole	*Trichilia monadelpha*	Trees & Palms
pó-di-bitchu	creole	*Milicia regia*	Trees & Palms

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
pó-di-braso	creole	*Tabernaemontana africana*	Shrubs
pó-di-cama	creole	*Lecaniodiscus cupanioides*	Trees & Palms
pó-di-linguana	creole	*Alchornea cordifolia*	Shrubs
po-di-lixa	creole	*Ficus exasperata*	Trees & Palms
pó-pondogo	fula	*Detarium senegalense*	Trees & Palms
poilão	creole	*Ceiba pentandra*	Trees & Palms
poilon	creole	*Ceiba pentandra*	Trees & Palms
polóm	creole	*Ceiba pentandra*	Trees & Palms
polón	creole	*Ceiba pentandra*	Trees & Palms
pore	fula	*Landolphia heudelotii*	Climbers
portotô	fula	*Triclisia patens*	Climbers
psáhè	balanta	*Ceiba pentandra*	Trees & Palms
psôbé	balanta	*Landolphia heudelotii*	Climbers
ptehén'tugudu	balanta	*Sarcocephalus latifolius*	Shrubs
pthaé	balanta	*Ceiba pentandra*	Trees & Palms
pulga-de-mato	creole	*Ricinodendron heudelotii*	Trees & Palms
qélè-bálé	fula	*Uvaria chamae*	Shrubs
qélè-bálei	fula	*Uvaria chamae*	Shrubs
quélè	fula	*Monodora tenuifolia*	Trees & Palms
quelibaledje	fula	*Uvaria chamae*	Shrubs
quem	balanta	*Elaeis guineensis*	Trees & Palms
quem-quelebá	fula	*Combretum micranthum*	Shrubs
querenduta	fula	*Detarium senegalense*	Trees & Palms
ribe	balanta	*Elaeis guineensis*	Trees & Palms
rubé	creole	*Ceiba pentandra*	Trees & Palms
rumbum	balanta	*Ceiba pentandra*	Trees & Palms
sale	balanta	*Spondias mombin*	Trees & Palms
samé	balanta	*Spondias mombin*	Trees & Palms
sarábá	balanta	*Phoenix reclinata*	Trees & Palms
sátaga	fula	*Lecaniodiscus cupanioides*	Trees & Palms
sénhè	nalu	*Anisophyllea laurina*	Trees & Palms
sérquê	balanta	*Phoenix reclinata*	Trees & Palms
setane	balanta	*Monodora tenuifolia*	Trees & Palms
shal	balanta	*Spondias mombin*	Trees & Palms

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
showhé	balanta	*Ficus exasperata*	Trees & Palms
shubé	balanta	*Landolphia heudelotii*	Climbers
silabono	fula	*Diospyros heudelotii*	Trees & Palms
singèle	nalu	*Newbouldia laevis*	Shrubs
sinim	nalu	*Citrus sinensis*	Trees & Palms
sugé	sosso	*Parinari excelsa*	Trees & Palms
sugue	sosso	*Parinari excelsa*	Trees & Palms
tabáe	fula	*Sterculia tragacantha*	Trees & Palms
tade	fula	*Combretum micranthum*	Shrubs
tamankumba	creole	*Neocarya macrophylla*	Trees & Palms
tamareira	creole	*Phoenix reclinata*	Trees & Palms
tambacumba	creole	*Neocarya macrophylla*	Trees & Palms
tambacumba-de-santcho	creole	*Sarcocephalus latifolius*	Shrubs
tambatchilam	fula	*Antiaris toxicaria*	Trees & Palms
tantodí	nalu	*Pouteria alnifolia*	Trees & Palms
tchálè	fula	*Spondias mombin*	Trees & Palms
tchamborta	nalu	*Diospyros heudelotii*	Trees & Palms
tchamburtá	nalu	*Diospyros heudelotii*	Trees & Palms
tchapelêguê	fula	*Sterculia tragacantha*	Trees & Palms
tchénè	fula	*Daniellia oliveri*	Trees & Palms
tcheque	fula	*Ficus sur*	Shrubs
tchequedje	fula	*Ficus sur*	Shrubs
tchime	fula	*Antiaris toxicaria*	Trees & Palms
tehapeleque	fula	*Sterculia tragacantha*	Trees & Palms
téhè	balanta	*Neocarya macrophylla*	Trees & Palms
tehé-intogudê	balanta	*Sarcocephalus latifolius*	Shrubs
tem-em-eih	fula	*Elaeis guineensis*	Trees & Palms
tepôbô	balanta	*Macrosphyra longistyla*	Shrubs
tetudu	balanta	*Sarcocephalus latifolius*	Shrubs
tètúgde	balanta	*Sarcocephalus latifolius*	Shrubs
thétouro	balanta	*Sarcocephalus latifolius*	Shrubs
tímè	balanta	*Milicia regia*	Trees & Palms
tinlake	nalu	*Strombosia pustulata*	Trees & Palms

COMMON NAME	LANGUAGE	SPECIES	CHAPTER
tonkin-iá	nalu	*Ficus sur*	Shrubs
tonkinjá	nalu	*Ficus sur*	Shrubs
tonquinha	nalu	*Ficus sur*	Shrubs
tonta	nalu	*Ricinodendron heudelotii*	Trees & Palms
tugi	sosso	*Elaeis guineensis*	Trees & Palms
tumbiro	balanta	*Milicia regia*	Trees & Palms
tumbli	balanta	*Ficus sur*	Shrubs
uasa-fiké	sosso	*Albizia adianthifolia*	Trees & Palms
uasau	sosso	*Albizia adianthifolia*	Trees & Palms
uauah	sosso	*Pentaclethra macrophylla*	Trees & Palms
uelifedjite	fula	*Triclisia patens*	Climbers
ulingi	sosso	*Daniellia oliveri*	Trees & Palms
umbatú	balanta	*Hibiscus sabdariffa*	Herbs
umboi	balanta	*Dialium guineense*	Trees & Palms
umbufúrè	balanta	*Sterculia tragacantha*	Trees & Palms
undiano	balanta	*Parinari excelsa*	Trees & Palms
unsununtu	nalu	*Anisophyllea laurina*	Trees & Palms
veludo	creole	*Dialium guineense*	Trees & Palms

ABOUT THE AUTHORS

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