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NOTES TECHNIQUES

No. 15

**A VARIETY COLLECTION OF NUT TREES  
AND FRUIT TREES IN VANUATU**

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- Dr Matthew Jebb (Director, Christensen Research Institute, PNG) for his help in determinating *Barringtonias*
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*The names and description of all the cultivars collected during the project is given in a floppy disk (DBaseIII plus) wich can be obtain from:*

- Department of agriculture
- Department of forestry
- Department of National Planning
- Environnement Unit

*The botanical description and the measurement of all the trees tagged during the project will be given further*

## INTRODUCTION

The project *Trees of The Islands: traditional cultivation of fruit trees in Vanuatu*, was initiated in 1991 by ORSTOM and the Department of Agriculture of Vanuatu in order to investigate the potential of local fruit trees and nut trees as smallholder based cash crops.

This project was divided into two main parts:

1. Identification and collection of varieties of Navele (*Barringtonia spp*), Naduledule (*Burckella spp*), Nangai (*Canarium spp*), Nakatambol (*Dracontomelon vitiense*), Namambe (*Inocarpus fagifer*), Nandau (*Pometia pinnata*), Naus (*Spondias dulcis*), Nagavika (*Syzygium malaccense*) and Natapoa (*Terminalia catappa*). Identification of other edible species of fruit trees or nut trees.
2. Assessment of traditional maintenance and protection of the edible fruit trees and nut trees ; Understanding how arboriculture overall is integrated to other production methods in terms of space distribution, work time, production and consumption.

The main purpose of this project is to find the best cultivars for the development and to coordinate this development with the conservation of the biodiversity of the country. This plant stock represents a rich heritage for Vanuatu and some morphotypes are already rare and endangered. For this reason, all the varieties observed, in each island we visited, were tagged with a reference number and carefully recorded. In each island a person has been appointed to look after the established alive collection .

This document is a technical report on the variety collection of fruit trees and nut trees established trough out the islands of Vanuatu. The description of the species studied and their varieties has been given in a previous report<sup>1</sup> and will not take place in this document. Instead we shall give:

1. The local places where the collection is situated

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<sup>1</sup>. WALTER A. and SAM C. (1992): L'Abre dans les iles, exploitation traditionnelle des arbres fruitiers à Vanuatu: rapport intermédiaire. Notes Techniques N°12; ORSTOM, Port-Vila

2. The name of the persons responsible for the collection

3. The full range of the varieties recorded for each species (tagged or not)

4. The list of the best cultivars for the development of any cash crops.

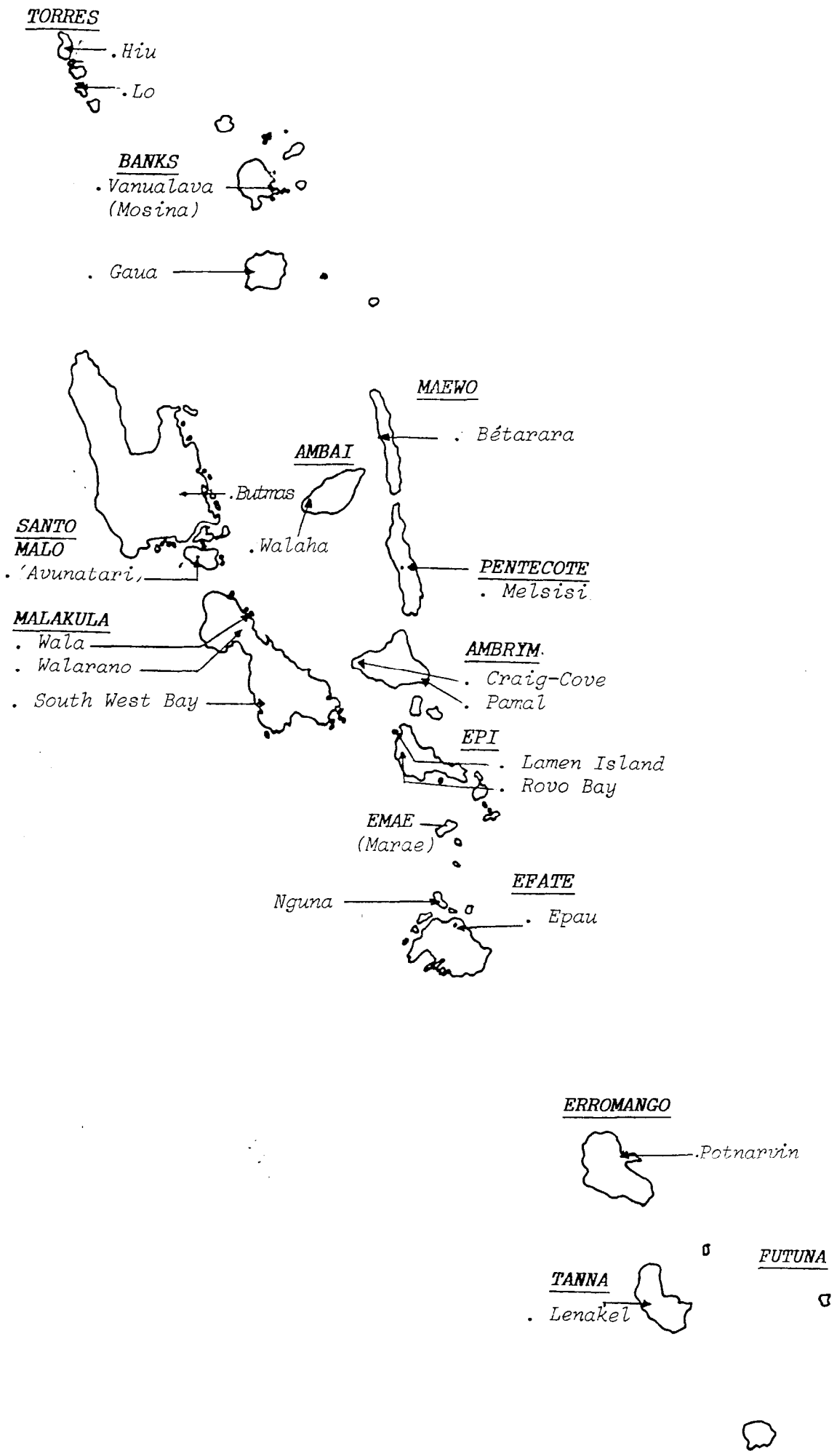


Figure 1 : Areas visited during the survey



## CHAPTER 1: LOCALISATIONS OF THE VARIETY COLLECTION

Twenty areas were visited during the years 1991, 1992, 1993 and 460 trees tagged (Figure 1 and 2). The variability of data recorded in each island depends upon the availability of fruits at the time, the traditional knowledge of trees varieties and the existence of such varieties. In some islands the farmers are able to recognize and name a wider range of varieties of a given species than in some other islands. Some species, like *Barringtonia*, have more named varieties than other, like *Burckella*.

ISLAND	BAR	BUR	CAN	DRA	INO	POM	SPO	SYZ	TER	TOT
AMBAE	7	1	2	2	1	0	1	0	4	18
AMB.A	8	0	2	2	3	0	0	3	4	22
AMB.B	11	2	1	1	1	0	0	0	1	17
BANKS.A	4	0	3	0	0	0	0	0	0	7
BANKS.B	11	2	11	1	6	0	3	1	2	37
EFATE	11	0	9	1	0	0	1	0	1	23
EMAE	5	1	8	0	0	0	3	0	4	21
EPI.A	5	0	2	2	2	0	0	0	2	13
EPI.B	16	2	1	2	4	0	1	0	3	29
ERROMAN.	5	2	3	2	4	0	1	1	1	19
FUTUNA	2	0	0	0	0	0	0	1	1	4
MAEWO	13	1	7	0	0	0	0	1	0	22
MALAK.A	13	2	10	6	9	3	11	3	9	66
MALAK.B	9	1	19	0	0	0	0	0	0	29
MALO	14	0	5	1	0	0	3	2	1	26
PENTECO.	22	1	8	2	6	1	0	6	4	50
SANTO	1	0	1	0	0	0	0	0	0	2
TANNA	6	1	0	1	9	2	0	2	1	22
TONGOA	0	0	7	0	0	0	0	0	0	7
TORRES	7	2	2	1	2	1	2	2	7	26
TOTAL	170	18	101	24	47	7	26	22	45	460

(Amb. A: Craig-Cove, B: Ulei; Banks A: Gaua, B: Vanua-Lava; Malak. A: WalaRano, B: SWB)

Figure 2: Number of specimen trees recorded in the collection

Only one specimen of each kind of tree, named or recognized by the farmers, has been tagged and described. In fact, the number of recorded varieties underestimates the real number of morphotypes in each species. The ground rules are now firmly established and the major parts of the full range of varieties are recognized but it will be essential that the collection be up-dated and completed on regular basis.

ISLAND	VILLAGE (main)	Nb. of TREES	NAME of INFORMANT
AMBAE	Walaha (Namehu)	473 to 488	John Mwele
AMBRYM	Craig-Cove	200 to 221	Edmond Charley
AMBRYM	Ulei (Paman)	222 to 238	Daniel
BANKS	Gaua (Tarasag)	427 to 433	Chif Lialul
BANKS	Vanua-Lava (Mosina)	148 to 199	Salathiel, Fred Palas
EFATE	Epao	379 to 395	Arthur Kalokul
EFATE	Nguna (Tikalasua)	396 to 401	Kalmet
EMAE	Magita	252 to 272	Kalo Tisomori
EPI	Rovo Bay (Alak)	239 to 251	Maxime
EPI	Lamen isl. (naloparua)	295 to 323	Ruben
ERROMANGO	Potnarvin	454 to 472	Mela Ruigu
FUTUNA	Mission Bay	434 to 437	Rolland Situ
MAEWO	Betarara	402 to 433	Paul Ren
MALAKULA	Wala-Rano (Tsinowon)	55 to 118	Manuel Tourere
MALAKULA	Wala isl.	324 to 334	Joseph
MALAKULA	S.West Bay	491 to 519	Alben Ruben
MALO	Avunatari	335 to 378	Jenny Vira
PENTECOTE	Melsisi (Vansemakul (Ilambre)	1 to 16 17 to 49	Fiorina Salway Hilaire tabi rap
TANNA	Ikutintin	273 to 294	Mery nanua
TORRES	Lo	119 to 135	Pasta Juda
	Hiu	136 to 147	Chif John

**Figure 3: Situation of the collections and name of the informants**

The villages where the trees have been tagged and the name of the persons responsible for the collection are given in figure 3.

All the informants visit the trees monthly in the area under their responsibility. They record the trees which have been cut and note the presence or absence of fruits and flowers on each

specimen. Then, they send the data to Port-Vila. The availability and the regularity of this survey is usually good except in some islands.

## CHAPTER 2: VARIETY COLLECTION OF *BARRINGTONIA* spp

### 1. DESCRIPTION AND NAMES OF THE CULTIVARS

Often a single name is given for all species within a genus, except in S/E Ambrym, SWB Malakula and Efate where BARPRO<sup>2</sup> is differentiated from BARNOV/BAREDU, in Epi where BARNOV is differentiated from BARPRO/BAREDU and in Malo where BARPRO and BAREDU are differentiated.

ISLAND	LANGUAGE	NAME	SPECIES
Ambae	Nduindui	pele	BAR spp
Ambrym	Dakaka	tubu	BAR spp
Ambrym	S/E Amb.	tabu	BARNOV
		talep	BARPRO
		tavarsal(tabuvarsal	BAREDU
Banks(Gaua)	Nume	watag	BAR spp
Banks(VNL)	Mosina	wotaG	BAR spp
Efate	North-Efate	fil	BAREDU
		bugor	BARPRO
Emae	Tanamanga	na-vila	BAR spp
Epi	Lewo	tep (or sep)	BARPRO
		tep lop (or sep lop)	BAREDU
		kurgi	BARNOV
Erromango	Oru	felha	BAR spp
Futuna	Futuna	fofoto	BAR spp
Maewo	Baetora	woRotaga	BAR spp
Malakula	Wala/Rano	ndapwi	BAR spp
Malakula	Ninde	namase	BAREDU
		namase	BARNOV
		namase tari	BARPRO
Malo	Malo	fale	BARPRO
		hoRota	BAREDU
Pentecost	Apma	vel	BAR spp
Santo	Butmas/Tur	Rot	BAR spp
Tanna	Lenakel	nulha	BAREDU
Torres	Lo	n'votaga	BAR spp
	Hiu	noutaga	BAR spp

Figure 4: Names of *Barringtonia* spp in Vanuatu

2. The different species of *Barringtonia* will be referred to by the following abbreviations: BAREDU= *B. edulis*; BARPRO= *B. procera*; BARNOV= *B. novae-hiberniae*;

It is clear from figure 4 that some names do not fit with the reconstructed Proto-northern term \*vele given for *B. edulis* neither with the reconstructed Proto-Oceanic term \*putu given for *Barringtonia* sp. (Tryon, 1990 and Ross, 1993).

Specific names are given to every cultivar according to the fruit shape, size and colour. The colour of both epidermis and endocarp is pertinent to this classification. In some islands, the vernacular specific name of any particular cultivar may be forgotten by the farmers but they still recognize it as different from the other. The name and description of all the varieties (tagged or not) are given in annex 1.

We have experienced some difficulties classifying *Barringtonia* into one of the three taxonomical groups (Walter and Sam, 1992). The difficulties are even more considerable tempting to classify morphotypes. It is obvious that some cultivars have migrated through the islands and that they may be found in different places. However most of the physical features of the *Barringtonias* are genetically transmitted, through sexual reproduction, and that one particular variety does not necessarily give the same seedling as the mother tree. The recombination of the physical features through sexual reproduction and the cultivated nature of the *Barringtonias* have created a great number of cultivars which cannot be determined by using botanical observations.

Nevertheless it is possible to assess some groups of cultivars according to the fruit shape and fruit colour.

\* BARPRO is divided into three groups:

- group 1: cylindrical fruits, equal or superior to 80 cm. They seem to be specific of the north Vanuatu (tree numbers: 77; 197; 188; 336; 356; 335; 36; 227; 432; 407; 124; 180; 412; 131; 510)
- group 2: ovoid fruits, inferior to 80 cm, present from the Solomons to Vanuatu
- group 3: dwarf tree (tree numbers: 153; 332; 36; 97; 474)

\* BAREDU is also divided into two groups:

- group 1: cylindrical, sessile fruits, equal or superior to 90 cm; coarse leaf like that of BARPRO; very long inflorescence; poor productivity (tree numbers: 46; 150; 145; 264; 298; 360; 512). The numbers 386; 387 and 431 have the same features, except for the size of the fruits (around 80 cm).

- group 2: all other BAREDU, with an ovoid fruit, usually pediculate except for the following number which have a sessile and more elongated fruit: 224; 298; 305; 339; 481.

\* BARNOV is homogeneous, with ovoid or spherical fruit.

According to the fruit colours eleven cultivars are distinguished whatever the species is. The figure 5 shows a clear predominance of an entirely green cultivar (VVBB). BARPRO is the only one to have a cultivar with a red endocarp and BARNOV is the only one to have a cultivar with a red mesocarp while all the other structures are green (VVRB). Half of the red fruits are BAREDU.

COLOUR	BARPRO	BAREDU	BARNOV	BAR sp	TOTAL
RRBB	0	5	5	1	11
RRRR	1	0	0	0	1
RVBB	0	18	9	1	29
RVBR	2	1	0	0	3
RVRB	2	5	0	0	7
RVRR	6	0	0	0	6
-----					
VRBB	0	1	0	1	2
VVBB	14	17	12	5	48
VVBR	2	0	0	0	2
VVRB	0	0	3	0	3
VVRR	10	1	0	0	11

Note: V= green; R= red; B= white; The letter in first position gives the colour of the epidermis, in second position the exocarp, in third position the mesocarp and in fourth position the endocarp.

### Figure 5: Cultivars of *Barringtonia spp* according to the colours of the fruits

Fruiting and flowering season of BARPRO occurs once a year. The exact fruiting and flowering months have not been firmly established. It looks like they vary from one area to another and slightly from one tree to another.

Fruiting and flowering season of BARNOV and BAREDU occurs continuously throughout the year or several times a year. This characteristic makes these both species more productive than BARPRO.

BARPRO is a cultivated species which is not much shade tolerant and needs regular weeding. BARNOV and BAREDU are both shade tolerant and need less care and can grow wild in disturbed forests.

## 2. THE BEST CULTIVARS OF BARRINGTONIAS

The best cultivars are those which have at least one of the following characteristics:

- a big kernel (superior to 44 x 20 mm for BARPRO and BAREDU or superior to 39 x 20 mm for BARNOV which is generally smaller than the two first ones)
- thin pericarp, easy to open
- red leaves, because this beautiful tree can be an ornamental
- a seedling able to fructify quickly (less than 4 years, which looks to be the minimum necessary time between planting and first fruiting)
- possible propagation by cuttings

### a) Big kernel

The average size of BARNOV's kernel is 30 x 21 mm. They are, in a whole, smaller than the ones of BARPRO (47 x 26 mm for the cylindrical ones and 34 x 24 mm for the ovoid ones) or the ones of BAREDU (21 x 39 mm for the cylindrical ones and 21 x 31,5 mm for the ovoid ones)<sup>3</sup>.

SPECIES	N° TREE	ISLAND	KERNEL SIZE (mm)
BARNOV	206	Ambrym	36 x 29
BARNOV	237	Ambrym	37 x 28
BARNOV	267	Emae	40 x 22
BAREDU	243	Epi	40 x 25
BAREDU	360	Malo	46 x 21
BAREDU	406	Maewo	46 x 21
BAREDU	298	Epi (LM)	50 x 21
BAREDU	281	Tanna	50 x 28
BAREDU	484	Ambae	51 x 28
BAREDU	485	Ambae	51 x 38
BARPRO	124	Torres	45 x 28
BARPRO	335	Malo	45 x 28
BARPRO	510	Malak.(SWB)	46 x 25
BARPRO	197	Banks(VNL)	47 x 23
BARPRO	189	Banks(VNL)	48 x 38
BARPRO	188	Banks(VNL)	50 x 22
BARPRO	336	Malo	50 x 24
BARPRO	131	Torres	60 x 25

Figure 6: List of the bigger sized kernels of Barringtonias

<sup>3</sup>. For more details see : Walter A. and Sam C. ( 1992a and 1992b)

The trees bearing fruits with a big kernel are given in figure 6

Eleven cultivars among this list of seventeen have a red epidermis. This fact cannot be explained for the moment. The cylindrical fruits have generally a bigger kernel than the ovoide fruits.

b) "Easy to open" cultivars

All three species have cultivars with thin pericarp. But this character is more frequent among the *B. novae-hiberniae* group. The ease of opening the nut in shell is more or less obvious from one tree to the other or from one fruit to the other.

The list of easy to open cultivars as they were called by the local peoples is given in figure 7.

ESPECE	TREE N°	ISLAND
BARNOV	210	Ambrym
BARNOV	237	Ambrym
BARNOV	267	Emae
BARNOV	239	Epi
BARNOV	315	Epi(LM)
BARNOV	316	Epi(LM)
BARNOV	320	Epi(LM)
BAREDU	484	Ambae
BAREDU	485	Ambae
BAREDU	430	Banks(Gaua)
BAREDU	465	Erromango
BARPRO	221	Ambrym
<i>B.sp</i>	9	Pentecost

Figure 7: List of the easy to open cultivars of *Barringtonias*

c) Cultivars with red leaves

BARNOV and BAREDU have cultivars with red leaves but BARPRO not. The red colour of the limb varies from brilliant red to dark red. These trees are not so frequent but present on nearly all visited islands. They have beautiful foliage, suitable to ornament a garden or a park. Further more, Evans does not mention them in Solomon (Evans, 1991), neither does Smith in Fiji (1981). Vanuatu has so to protect them. The list of the red leaves trees is given in figure 8. It must be noted that these trees do not necessarily give a seedling with red leaves even if they are of red leaves most of the time.



ESPECE	TREE N°	ISLAND	NAME
BARNOV	263	Emae	na-vila memerona
BARNOV	251	Epi	kurgj malolo
BAREDU	406	Maewo	woRotaga memea
BAREDU	1;28;30	Pentecost	vel malgonis
BAREDU	472	Erromango	felnga tōgbor
BAREDU	not tagged	Malakula (SWB)	namas mehaha metemete
B.sp	not tagged	Ambae	pele kāgwela
B.sp	not tagged	Ambrym(Cr.Co)	tubu mermer
B.sp	not tagged	Ambrym(S/E)	tabu raRa
B.sp	not tagged	Banks(Gaua)	watag der tamat

Figure 8: List of *Barringtonia* cultivars with red leaves

d) Cultivars of special interest

\* Early fructification

The tree number 265 from Emae has the reputation to start fruiting very quickly after planting. It is a BARPRO called **na-vila papatua**.

\* propagation by cuttings

All the *Barringtonias* are reproduced through fruits or seedlings. But we have found three cultivars which can be propagated by cuttings. They are:

- Tree number 420: **woRotaga fele**, *B. procera* sp from Maewo

- Tree number 484 and 485: **pele pwuhagwaka**, *B. edulis* from Ambae

In Malakula (SWB) local people use to make suckers with all BARPRO during the wet season. The propagation by cuttings is not always successful but is quite easy to do.

## CHAPTER 3: VARIETY COLLECTION OF *BURCKELLA* SPP

### 1. DESCRIPTION AND NAMES OF THE CULTIVARS

There are three species of *Burckella* in Vanuatu. *Burckella obovata*, the most common species, is present in all the islands. It is a wild tree, protected by the local peoples and sometimes cultivated for its fruits.

The second one, *Burckella cf fijiensis* (Hemsl.) A.C. Smith and S.Darwin, is located on the island of Futuna. It is a well known endemic species to Fiji where it is often collected. The species is cultivated in Futuna for edible fruits and timber. In Futuna the tree is 15 m to 20 m high, 35 cm to 75 cm in diameter, growing from sea level to 200 m altitude. The fruit is very characteristic, brown, pyriform, with a curve base, a 2 x 2 calice and a long residual style. The seed has a corious endocarp, smooth and shiny brown. It is perfectly illustrated by Hemsley (1892, plate XIII, figures 1 to 5) under the name *Chelonespermum minus* (see also Walter and Sam 1992b, annexe 6).

It must be noted that the drawing of *Chelonespermum majus* given by Hemsley (1892, plate XII, figure 1) does not fit at all with the observed fruits of *Burckella cf fijiensis* in Futuna. The drawing of *Chelonespermum fijiensis* given by the same author (op. cité plate XII, figures 6 to 9) does not fit perfectly with the seed observed in Futuna. For this reason and because the shape of the Futuneese trees seems quite bigger than the one described by Smith (1981 p.771) we cannot determine the Futuna specimen with an absolute certitude.

The last *Burckella* present at Vanuatu has been collected in South West Bay Malakula. Thus far the species is not known from another area. The species is under determination. It is a large, buttressed tree, 30 m high with a trunk up 80 cm in diameter, occuring near sea level on limestone only. The leaves are 100-140 mm x 36-54 mm, with a 20-26 mm length petiole, a round apex, an acute base and 12-13 paires nerves. The fruit is spherique, smooth and glossy green with numerous longitudinal bridges and a long, thin style. Fruit size is 40-50 mm in diameter. Calice has 2 x 2 sepals. The seed is a dorsi-ventral body, about 35-40 x 25-30 mm. The ventral portion, 15 mm thick, is furnished at the top with numerous little protuberances, like a grater. The dorsal portion is covered with a glossy brown hard testa, the edges of which being sharp, entire or smoothly irregular, acute at apex and cordate at base (plate ). The flowers were not seen. There are two kind of

this species, named *nentoHoy* by the local people. The first one, described above, is called *nentoHoy lapwe* and is moderately cultivated. The second one, not cultivated, is called *nentoHoy la'la'* and is quite smaller than the first one (fruit around 3 cm and seed around 2 cm in diameter). Both species are eaten raw or cooked by local people. We do not know yet if the two kinds belong to the same species.

The list of the vernacular names for *Burckella* spp is given in figure 9.

ISLAND	LANGUAGE	NAME
Ambae	Nduindui	naduledule
Ambrym	Dakaka	taviro
Ambrym	S/E Ambrym	nat
Banks (Gaua)	Nume	nat
Banks (VNL)	Mosina	not
Efate	North Efate	nat
Emae	Tanamanga	na-nato
Epi	Lewo	naR
Epi (LM)	Lewo	ngaru
Erromango	Oru	yetu
Futuna	Futuna	bau ( <i>B. obovata</i> ) bau ( <i>B. cf fijiensis</i> )
Maewo	Baetora	natu
Malakula	Wala/Rano	niuR
Malakula	Ninde	nenet ( <i>B. obovata</i> ) nenetoHoy ( <i>B.sp</i> )
Malo	Malo	sovwa
Nguna	North Efate	na-natu
Pentecost	Apma	wanet
Santo	Butmas-Tur	nat
Tanna	Lenakel	nieR
Torres	Lo	nenot
Torres	Hiu	n'not

NB: Where the latin name is not indicated it is *B. obovata*

### Figure 9: Names of *Burckella* spp in Vanuatu

The name of *Burckella obovata* is sometimes applied to another Sapotace, *Planchonella costata* which is edible in some places (Tanna for example).

In Futuna the same vernacular name applies to *Burckella obovata* and *Burckella fijiense* but not to *Planchonella costata* whose name is *karaka*.

There are few specific names for *Burckella obovata* according to the scarcity of specific cultivars. With the exception of

Pentecost island where the local people record four different morphotypes, the farmers usually recognise two kinds of *Burckella*, one with a round fruit and one with a long fruit. The meaning of the specific names are often man or woman, the first meaning applying either to the long fruit or the round one, depending of the part of the male anatomy which is chosen in reference.

The botanical observation of the fruits allows to distinguish two kinds of morphotypes: one with round fruits and one with elongated fruits (figure 10)

FRUIT SHAPE	TREE N°	ISLAND
Round	483	Ambae
Round (smooth)	233	Ambrym
Round	177	Banks(VNL)
Round (smooth)	312	Epi(LM)
Round	454	Erromango
Round (smooth)	421	Maewo
Round	74	Malakula
Round	279	Tanna
Round	139	Torres
-----		
Elongated	234	Ambrym
Elongated	176	Banks(VNL)
Elongated	271	Emae
Elongated	307	Epi(LM)
Elongated	470	Erromango
Elongated	87	Malakula

Figure 10: The fruit shape of *Burckella obovata*

It must be noted that the round shaped fruits are either smooth or presenting five grooves on their exocarp.

The fruit size is variable being 90 x 81 mm for the five grooved round fruits, 94 x 90 mm for the smooth round fruits and 109 x 58 mm for the elongated fruits.

*Burckella cf fijiense* is a rare, single variety species in Vanuatu. The average size of the fruit is 80 x 61 mm. The tree is so abundant in Futuna (Mission bay) and so homogeneous from one to another that we did not tag any.

## 2. THE BEST CULTIVARS OF BURCKELLA SPP

The variability of *Burckella obovata* is not large enough to point out which is the best cultivar. Nevertheless we recommend to multiply the trees n° 233, n°312 and n°421 for their big fruits.

*Burckella cf fijiensis* and *Burckella* sp from Malakula ( SWB) are rare edible species in Vanuatu and have to be protected.

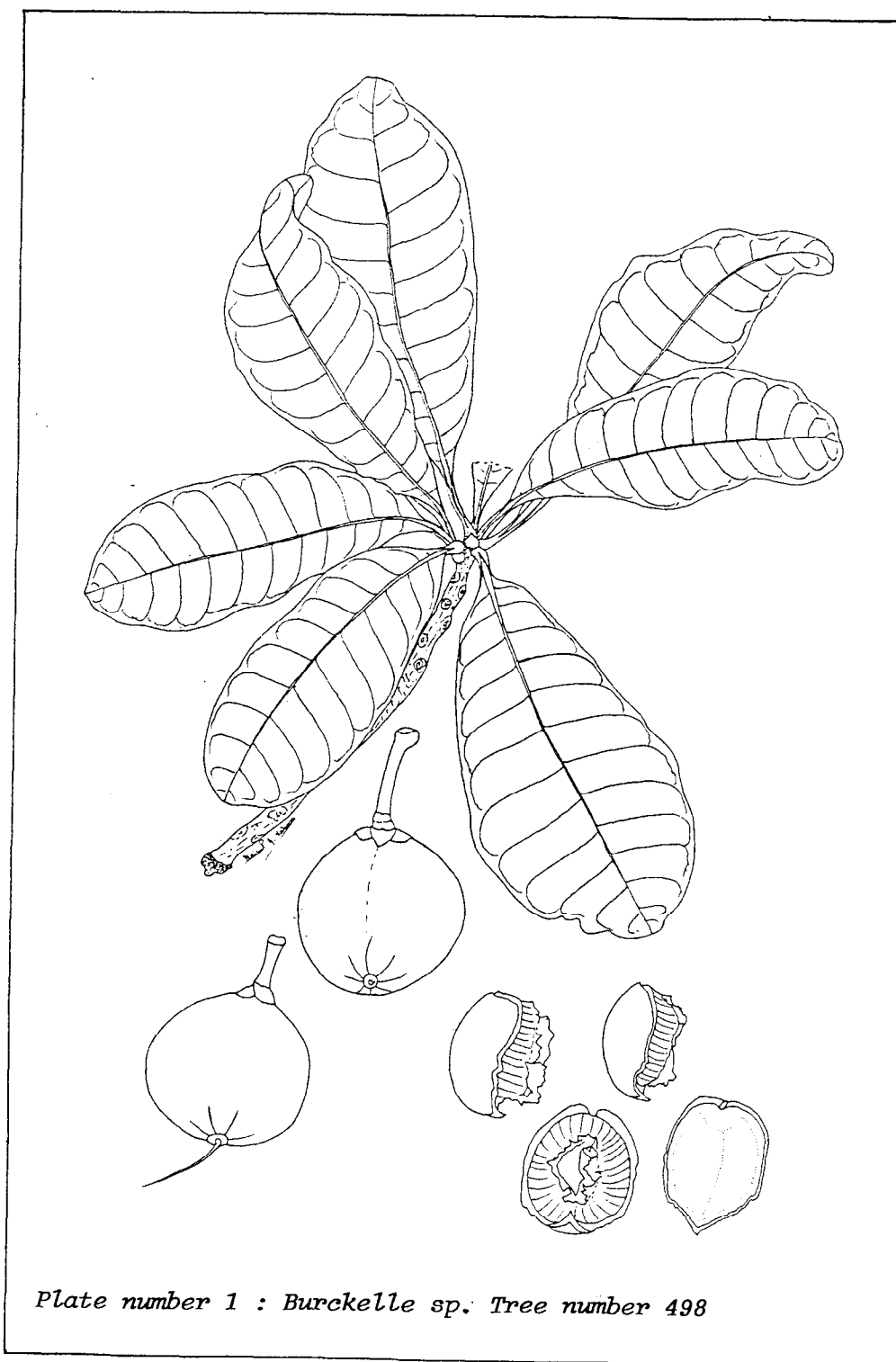


Plate number 1 : *Burckelle* sp. Tree number 498

## CHAPTER 4: VARIETY COLLECTION OF *CANARIUM SPP*

### 1. DESCRIPTION AND NAMES OF THE CULTIVARS

There are two species of edible *Canarium* in Vanuatu: *C. indicum* and *C. harveyi*. Within the last one there are at least two botanical varieties, namely *C. harveyi* var. *harveyi* and *C. harveyi* var. *nova-hebriense*. We have discussed elsewhere the taxonomic problems encountered while trying to determine the different botanical varieties of *C. harveyi* (Walter, and Sam, 1992). In the following pages we shall refer to all the *C. harveyi* as CANHAR, independantly of their variety. *C. indicum* will be refered to as CANIND.

The both species are named under a single term, in every island (figure 11).

ISLAND	LANGUAGE	NAME
Ambae	Nduindui	na-hai
Ambrym	Dakaka	wele
Ambrym	S/E Ambrym	hay
Banks (Gaua)	Nume	ha
Banks (VNL)	Mosina	hie
Efate	North Efate	ahai
Emae	Tanamanga	na-hay
Epi	Lewo	hi
Erromango	Oru	na-hai
Futuna	Futuna	hai
Maewo	Baetora	na-gai
Malakula	Wala-Rano	neha
Malakula	Ninde	nihhi
Malo	Malo	haihai
Nguna	North Efate	na-hai
Pentecote	Apma	wakha
Tongoa		nagae
Torres	Lo	negeR
Torres	Hiu	negeR

Figure 11: Names of *Canarium spp* in Vanuatu

The names fit with the Proto Oceanic word reconstructed for *Canarium* \*(ka)hari (Tryon, 1990). In Ambrym, the term used to name *Canarium* is a reflex of the Proto Oceanic term \*wele usually used to name the *Barringtonia*. It must be noted that, in this area, the term *tubu* presently names *Barringtonia*.

Specific names are given to each cultivar according to the fruit shape and size (annexe 1).

There are five types of CANIND according to the fruit shape (figure 12)<sup>4</sup>.

- two kinds with a round shape
- two kinds with an elongated shape
- one intermediate shape

The fruits belonging to any one kind may have one or two kernels.

The fruit shape of CANHAR is either round or elongated, usually flattened at one side. The most important feature is the cross-sectional shape of the nut-in-shell. Following this characteristic we were able to figure out five kinds of nuts, each kind predominating in one given area (figure 13)<sup>5</sup>.

The fruiting season of both species is long, the fruits slowly maturing. They are eaten during three or four months, mainly between October and March. In fact, the period at which the fruits are eaten varies slightly from one year to another, from one area to another and from one tree to another. It is therefore difficult to assess the exact fruiting season. An ongoing study on fruiting season of fruit trees will give ultimately some precisions about this important economical aspect.

Canariums are growing in forest and are widely cultivated near villages. The forest trees are usually more slender than the cultivated ones. The trees (wild or cultivated) situated in forest are exploited for their wood. The trees transplanted near villages are planted for their fruits. Under intensive culture both species have evolved from being dioecious to polygamous.

## 2. THE BEST CULTIVARS OF CANARIUMS

The best cultivars are those which have at least one of the following characteristics:

- a big kernel (superior to 31 x 21 mm for CANIND, to 30 x 20 mm for CANHAR) The average size for CANIND fruits is 54 x 37 mm, for CANHAR 49 x 33 mm. The average size for CANIND kernel is 31 x 21 mm, for CANHAR 29 x 20 mm.

- a thin pericarp, easy to open

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4. Figure 12 is reprinted and completed from Walter and Sam (1992b: Annexe 3)

5. Figure 13 is reprinted and completed from Walter and Sam (1992b: Annexe 3)

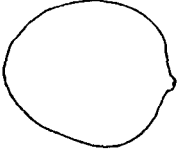
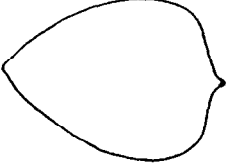




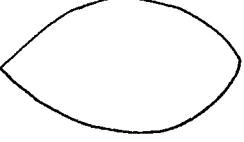





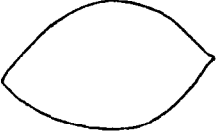

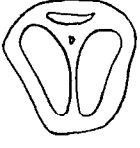
FRUIT SHAPE	1 SEED	2 SEEDS
<p>A- Type <u>Apex</u> and <u>Base</u> round</p>  <p>B- Type <u>Apex</u> acute, <u>Base</u> round</p>  <p>ROUND SHAPE</p>	 <p>Specimen 60 MAL Specimen 94 MAL Specimen 103 MAL Specimen 392 EFA</p>  <p>Specimen 235 AMB Specimen 325 WAL Specimen 416 MAE Specimen 385 EFA Specimen 422 MAE Specimen 330 MAL Specimen 497 SWB</p>	 <p>Specimen 102 AMB Specimen 48 PEN Specimen 419 MAE</p>  <p>Specimen 192 VNL Specimen 352 MALO Specimen 330 WAL Specimen 455 ERO</p>
<p>C- Type <u>Apex</u> acute, <u>Base</u> round</p>  <p>D- Type <u>Apex</u> and <u>Base</u> acute</p>  <p>ELONGATED SHAPE</p>	<p>Sp. 519 SWB</p>  <p>Specimen 19 PEN Specimen 27 PEN Specimen 181 VNL Specimen 240 EPI Specimen 389 EFA</p> <p>Sp. 508 SWB Sp. 500 SWB Sp. 501 SWB Sp. 502 SWB Sp. 504 SWB Sp. 505 SWB Sp. 506 SWB</p>  <p>Specimen 402 MAE Specimen 494 SWB Specimen 495 SWB Specimen 496 SWB Specimen 480 AMBA Specimen 178 VNL Specimen 44 PEN Specimen 213 AMB Specimen 66 LAM Specimen 418 MAE Specimen 354 MALO</p>	 <p>Specimen 6 PEN Specimen 19 PEN Specimen 144 TOR Specimen 346 MALO Specimen 464 ERO Specimen 492 SWB Specimen 475 AMBA Specimen 515 SWB Specimen 516 SWB Specimen 517 SWB</p>  <p>Specimen 424 SAN Specimen 355 MALO Specimen 499 SWB Specimen 518 SWB</p>
<p>E- Type <u>Apex</u> and <u>Base</u> acute</p>  <p>INTERMEDIATE SHAPE</p>	 <p>Specimen 68 MAL Specimen 83 MAL Specimen 433 GAU Specimen 193 VNL Specimen 241 EPI Specimen 272 EMA Specimen 353 MALO</p>	 <p>Specimen 70 MAL Specimen 81 MAL Specimen 151 VNL Specimen 260 EMA</p>

Figure 12 : Different fruit shapes of CANIND



Big ovoid  
fruit  
(6-5 X 3,5)

Middle side  
fruit  
(4-4,5 X 3)

Small cordate  
fruit  
(3 X 2,5)

Other fruit  
shape  
(4 X 2,4)

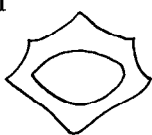
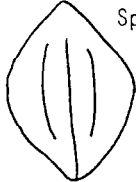
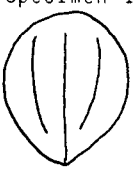



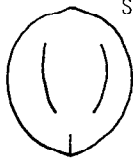

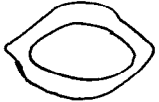
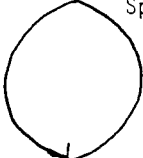


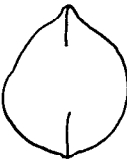

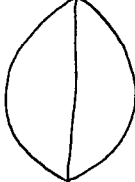
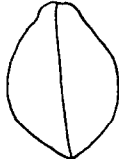

<p>I</p>  <p>6 sides</p>	<p>Specimen 428 GAU</p>  <p>Specimen 429 GAU</p>	<p>Specimen 149 VNL</p>  <p>Specimen 191 VNL Specimen 491 SWB</p>	 <p>Specimen 199 VNL</p>	
<p>II</p>  <p>5 sides</p>	<p>Specimen 401</p>  <p>Specimen 158 VNL</p>	<p>Specimen 414 MAE</p>  <p>Specimen 415 MAE Specimen 179 VNL</p>	 <p>Specimen 96 MAL</p>	
<p>III</p>  <p>2 sides</p>		<p>Specimen 47 PENT</p>  <p>Specimen 400 NGU</p>		<p>Specimen 399 NGU</p>  <p>4,5 x 3</p>
<p>IV</p>  <p>3 rounded sides</p>			 <p>Specimen 397-398 NGU</p>	
<p>V</p>  <p>3 sharp sides</p>	 <p>Specimen 159 VNL</p>	 <p>Specimen 461 ERO</p>		 <p>Specimen 259 EMA</p> <p>4 x 2,3</p>

Figure 13 : Different fruit shapes of CANBAR

- a big yield, a ongoing fructification or a special fruit colour

a) Big kernel

The list of the trees bearing fruits with a big kernel is given in figure 14.

SPECIES	TREE N°	ISLAND	KERNEL SIZE(mm)	Cultivar
<i>C. indicum</i>	272	Emae	45 x 25	wogawuro
<i>C. indicum</i>	499	Malakula(SWB)	42 x 20	ya nemen
<i>C. indicum</i>	496	Malakula(SWB)	40 x 25	gas malala
<i>C. indicum</i>	144	Torres	40 x 22	tawə
<i>C. indicum</i>	495	Malakula(SWB)	38 x 22	buas
<i>C. indicum</i>	418	Maewo	38 x 20	kati
<i>C. indicum</i>	518	Malakula(SWB)	38 x 20	wulakh
<i>C. indicum</i>	385	Efate	36 x 20	alapu
<i>C. indicum</i>	515	Malakula(SWB)	36 x 25	doHoy
<i>C. indicum</i>	500	Malakula(SWB)	35 x 22	lum
<i>C. indicum</i>	501	Malakula(SWB)	35 x 20	pagkahu
<i>C. indicum</i>	519	Malakula	34 x 24	sivirəɾə
<i>C. indicum</i>	504	Malakula(SWB)	34 x 22	tokuwa
<i>C. indicum</i>	422	Maewo	34 x 20	bisugue
<i>C. indicum</i>	505	Malakula(SWB)	33 x 22	peH
<i>C. harveyi</i>	158	Banks (VNL)	40 x 22	lowlow
<i>C. harveyi</i>	428	Banks (Gaua)	38 x 24	lalap
<i>C. harveyi</i>	47	Pentecote	38 x 25	lo
<i>C. harveyi</i>	179	Banks (VNL)	37 x 25	kwotegap
<i>C. harveyi</i>	429	Banks (Gaua)	37 x 23	bunbun
<i>C. harveyi</i>	159	Banks( VNL)	32 x 25	wulme

(NB: the cultivar names given in this figure have to be preceded by the generic vernacular name used in the area)

Figure 14: List of the *Canarium* cultivars bearing fruits with a big kernel

b) "Easy to open" cultivars

The shell of CANHAR are more easy to open than the shell of CANIND, but this task is always difficult. Eleven cultivars of CANIND and one of CANHAR cultivar have an "easy to open" shell (figure 15).

c) Cultivars of special interest

The fruit characteristics of three CANIND specimens and one CANHAR specimen were of special interest:

- Tree N° 402 (CANIND, Maewo) has a continual production of fruits, all over the year
- Trees N° 497, N° 517 (CANIND, Malakula-SWB) have a high production
- Tree N° 416 (CANIND, Maewo) has some deep yellow kernels mixed in the same shell with pure white kernels.
- Tree N° 260 (CANIND, Emae) has yellow leaves and yellow fruits (exocarp is yellow but not the kernel).
- Tree N° 415 (CANHAR, Maewo) has fruits containing 3 fertile seeds.

SPECIES	TREE N°	ISLAND	NAME
<i>C. indicum</i>	205	Ambrym	wele ker
<i>C. indicum</i>	235	Ambrym	ηay terumwe
<i>C. indicum</i>	433	Banks(Gaua)	ηa pkur
<i>C. indicum</i>	385	Efate	aηai alapu
<i>C. indicum</i>	262	Emae	na-ηay kati
<i>C. indicum</i>	272	Emae	na-ηay wogawuro
<i>C. indicum</i>	241	Epi	ηi karie
<i>C. indicum</i>	464	Erromango	na-ηai
<i>C. indicum</i>	418	Maewo	na-gai kati
<i>C. indicum</i>	496	Malak.(SWB)	nιηi gas malala
<i>V. indicum</i>	518	Malak.(SWB)	nιηi wulaHk
<i>C. indicum</i>	352	Malo	ηaiηai hati
<i>C. indicum</i>	144	Torres	negeR tawə
<i>C. harveyi</i>	397	Nguna	na-ηai

note: The meaning of the terms ker, kati, karie, hati is "cut with tooth"

### Figure 15: List of *Canarium* cultivars bearing fruits with an easy to open shell

In conclusion, we have to point out how numerous the cultivars are in South-West Bay and how frequent the big kernels also are. In this area, where the species is abundant and protected by a strong custom, the local population have selected good cultivars for many generations. All the named cultivars have a special interest and they are regularly transplanted. There is a lot of other cultivars, growing wild in the forest. They are unnamed and generally smaller than the cultivated ones.

## CHAPTER 5: VARIETY COLLECTION OF *DRACONTOMELON VITIENSE*

### 1. DESCRIPTION AND NAMES OF THE CULTIVARS

*Dracontomelon vitiense* is the only species of the genus present in Vanuatu. Its different names are given in figure 16.

ISLAND	LANGUAGE	NAME
Ambae	Nduindui	katambolo
Ambrym	Dakaka	mel
Ambrym	S/E Amb.	mal
Banks(Gaua)	Nume	wera
Banks (VNL)	Mosina	woro
Efate	North Efate	ne-Rou
Ermae	Tanamanga	na-Rau
Epi	Lewo	lu
Erromango	Oru	na-Rak
Futuna	Futuna	taveRao
Maewo	Baetora	taŋola
Malakula	Wala/Rano	netapol
Malakula(SWB)	Ninde	na-ru
Malo	Malo	Ratambola
Pentecost	Apma	katpol
Santo	ButmasTur	atapol
Tanna	Lenakel	novil
Torres	Lo	nəro

Figure 16: Names of *Dracontomelon vitiense* in Vanuatu

There are very few specific names applied to this species. When they exist they refer to the size of the fruit (big, small or medium size) or to the fruit colour (white, yellow or red). The local populations describe two kinds of *Dracontomelon vitiense*: one with big fruits and one with small fruits. It is sometimes difficult to perceive the difference.

The botanical observation reveals effectively two different sizes for the fruit (figure 17):

- a big size, diameter upper or equal to 30 mm
- a small size, diameter inferior to 30 mm

The colour of the fruit varies from pale yellow to dark yellow.

FRUIT SIZE (mm)	TREE N°	ISLAND
Small (29)	249	Epi
Small (27)	105	Malakula
Small (26)	477	Ambae
Small (25)	323	Epi(LM)
Small (23)	359	Malo
Small (21)	61	Malakula
Small (20)	458	Erromango
Small (20)	467	Erromango
Small (20)	391	Efate
Small (20)	39	Pentecost
Small (11)	293	Tanna
Big (34)	478	Ambae
Big (34)	214	Ambrym
Big (33)	248	Epi
Big (32)	208	Ambrym
Big (32)	311	Epi(LM)
Big (30)	22	Pentecost
Big (30)	230	Ambrym
Big (30)	123	Torres

Figure 17: Fruit size of *Dracontomelon vitiense*

The dimensions given in figure 17 have to be taken cautiously. The size variation between two fruits is never large and the classification of any fruit in big or small size cannot be taken for granted.

*Dracontomelon vitiense* is always a wild species and it does not seem necessary to ascertain the best cultivars (in this case the best morphotypes) within the species. The sweetness of the pulp, sometimes recorded by local population, is attached to particular trees but does not always appeared in the seedlings of such trees. However this feature is favored under human selection.

The flowering period of the species is not established. The fruits have been recorded from March to June.

## CHAPTER 6: VARIETY COLLECTION OF *INOCARPUS FAGIFER*

### 1. DESCRIPTION AND NAMES OF THE CULTIVARS

Names of *Inocarpus fagifer*, throughout the islands, are given in figure 18. They fit with the two Proto-oceanian word given by Tryon (1990): \*qipi or \*mwampwe. The term talis collected in Santo is the term used elsewhere in Vanuatu for *Terminalia catappa*.

ISLAND	LANGUAGE	NAME
Ambae	Nduindui	magwe
Ambrym	Dakaka	map
Ambrym	S/E Ambrym	map
Banks (Gaua)	Nume	mak
Banks (VNL)	Mosina	mwiak
Efate	North Efate	ne-mak
Emae	Tanamanga	na-mabwe
Epi	Lewo	kinaye
Erromango	Oru	nowane
Futuna	Futuna	ifi
Maewo	Baetora	mague
Malakula	Wala/Rano	nies
Malakula	Ninde	nambwe
Malo	Malo	mambwe
Pentecote	Apma	maba
Santo	ButmasTur	talis
Tanna	Lenakel	nukwanai
Torres	Lo	nəmeuk

Figure 18: Names of *Inocarpus fagifer* in Vanuatu

The tree is a cultivated one and the local peoples describe many cultivars according to the fruit shape, fruit size and fruit colour. In each area there is an average of six different cultivars recorded with a maximum of 18 in Pentecost. It was not possible to collect all of them because there is only one fruiting season around February-March. The tree is more abundant in the southern part of Vanuatu. On the whole the culture of *Inocarpus fagifer* declines from before.

The fruit shape variability is so large that it is difficult to find similar trees. But it is possible to recognise a special group of cultivars characterised by an hooked fruit or a crescent shape fruit (figure 19). In terms of fruit colour, a group with red/orange

fruits and another one with white/pale yellow fruits must be pointed out.

ISLAND	TREE N°	NAME
<b><u>Hooked or crescent shape fruit</u></b>		
Banks (VNL)	183	mwiak taηalηal
Efate	not tagged	ne-mak taηel
Epi	not tagged	kinaye ipisona
Malakula	80; 71;65	nies amivenη
Malo	not tagged	mambwe wari
Pentecost	not tagged	maba batkelkel
Tanna	not tagged	nukwanai piko
-----		
<b><u>Orange or red fruit</u></b>		
Ambrym	not tagged	map vili
Banks (VNL)	148	mwiak meme
Banks (VNL)	196	mwiak lowlowo
Erromango	not tagged	nowane namande
Futuna	not tagged	ifi koka
Malakula	80;65;66	nies amivenη
Pentecost	not tagged	maba tememe
santo	not tagged	talis kar
Tanna	not tagged	nukwanai pometa
-----		
<b><u>White or pale yellow fruit</u></b>		
Ambae	not tagged	magwe daile
Ambrym	203	map mere
Santo	not tagged	talis fok
Tanna	294	nukwanai moho

Figure 19: Some cultivars of *Inocarpus fagifer*

## 2. CULTIVARS OF PARTICULAR INTEREST

There are two main groups of cultivars of particular interest:

- A. The big fruits (length upper or equal to 100 mm, width superior to 70 mm)
- B. The small fruits (length inferior to 60 mm) which can be roasted easily. In this group the dwarf fruit of tree n°301 (Lamen island) is the most interesting.

FRUIT SIZE (mm)	TREE N°	ISLAND	NAME
170 x 90	468	Erromango	nowane numlamkao
130 x 110	146	Torres	nəmek
125 x 118	128	Torres	nəmek
120 x 95	304	Epi (LM)	kinaye
115 x 90	194	Banks (VNL)	mwiak malges
110 x 100	290	Tanna	nukwanai
110 x 90	196	Banks (VNL)	mwiak lowlowo
110 x 90	80	Malakula	nies amiveŋ
110 x 70	275	Tanna	nukwanai pamlemla
100 x 80	294	Tanna	nukwanai moho
100 x 70	471	Erromango	nowane nesul
100 x 70	100	Malakula	nies nibem laets
100 x 70	457	Erromango	nowane
60 x 78	182	Banks (VNL)	mwiak kwagkwag
60 x 70	148	Banks (VNL)	mwiak meme
60 x 55	49	Pentecost	maba metakas
60 x 50	59	Malakula	nies amiveŋ
40 x 40	301	Epi (LM)	kinaye yol

Figure 20: Very big or very small cultivars of *Inocarpus fagifer*



## CHAPTER 7: VARIETY COLLECTION OF *POMETIA PINNATA*

### DESCRIPTION AND NAMES OF THE CULTIVARS

The variety collection of *Pometia pinnata* is very poor. We could not manage to observe and collect fruits, during the past two years. The fruiting period of this species is very short and occurs in an undetermined month (usually recorded around March by the local population; observed in August/September in Tanna).

Nevertheless we shall give the list of names as they were obtained through interviews with farmers (figure 21). Tryon (1990) has given the term \*tawan or \* (n)tawa for the Proto-Oceanic name for *Pometia pinnata* and the term \*dau for the Proto-Northern Vanuatu one. All the names collected fit with this reconstruction except in Ambrym (S/E Ambrym) and Malakula (Wala/Rano) where the species name is a reflex of the Proto-Northern Vanuatu term \*rau usually used for *Dracontomelon vitiense*.

ISLAND	LANGUAGE	NAME
Ambae	Nduindui	na-nda
Ambrym	Dakaka	nda
Ambrym	S/E Ambrym	Rao
Banks (Gaua)	Nume	wuten
Banks (Vnl)	Mosina	tawen
Efate	North Efate	nda
Emae	Tanamanga	na-tao
Epi	Lewo	kilata
Erromango	Oru	dao
Futuna	Futuna	tauwa
Maewo	Baetora	dalawa
Malakula	Wala/Rano	Ra
Malakula	Ninde	ne-ndi
Malo	Malo	ndsaria
Pentecôte	Apma	lislis
Santo	Butma/Tur	tsiri
Tanna	Lenakel	natim
Torres	Lo/Hiu	ne-taw'

Figure 21: Names of *Pometia pinnata* in Vanuatu

Specific names are given within the genus. They vary from one to eight, the average being three. The diversity looks to be larger in central Vanuatu (Epi, Malakula and specially Malo where the trees are abundant).

The cultivars are recognized according to the fruit colour. The two main cultivars are a red fruit one and a green fruit one. The fruits are more or less juicy from one tree to another and they look to be often parasited with worms.

## CHAPTER 8: VARIETY COLLECTION OF *SPONDIAS DULCIS*

### 1. DESCRIPTION AND NAMES OF CULTIVARS

There is still some confusion about the taxonomy of the genus *Spondias*. As we have pointed out elsewhere (Walter and Sam, 1992b) the botanical description of the genus in Vanuatu does not fit perfectly the results of the last revision done by Kosterman (1991). For this author, the morphology of the endocarp allows to put each observed specimen in the genus *Spondias* (smooth endocarp encapsulated in a fibrous net) or in the genus *Evia* (endocarp showing numerous and hard spines). In Vanuatu, quite all of the observed specimens have a spiny endocarp and must fall in the genus *Evia*. However we have seen some specimens with both a spiny endocarp and a fibrous capsule. For this reason, it is better to group all the ni-Vanuatu specimens in the *Spondias* group, to avoid too much confusion between the terms.

The names given to *Spondias dulcis* in the different languages of Vanuatu are given in figure 22.

ISLAND	LANGUAGE	NAME
Ambae	Nduindui	<b>u hi</b>
Ambrym	Dakaka	<b>paor</b>
Ambrym	S/E Ambrym	<b>homal</b>
Banks(Gaua)	Nume	<b>wes</b>
Banks(VNL)	Mosina	<b>ur</b>
Efate	North Efate	<b>ne-mal</b>
Emae	Tanamanga	<b>na-mali</b>
Epi	Lewo	<b>malmal</b>
Erromango	Oru	<b>ne-vi</b>
Futuna	Futuna	<b>na-vi</b>
Maewo	Baetora	<b>wisa</b>
Malakula	Wala/Rano	<b>naus-borton</b>
Malakula	Ninde	<b>tsoHwoi</b>
Malo	Malo	<b>Resi</b>
Pentecost	Apma	<b>ba:rus</b>
Santo	Butmas-Tur	<b>wi</b>
Tanna	Lenakel	<b>naus</b>
Torres	Lo	<b>nur</b>
Torres	Hiu	<b>nug</b>

Figure 22: Names of *Spondias dulcis* in Vanuatu

Local peoples usually add some specific names to the former one to distinguish two or three cultivars, according to the fruit size, fruit color or pulp softness.

During the research period (1991-1993) Vanuatu had to endure some severe cyclones. *Spondias* fruits, with their long peduncle, are not particularly resistant to strong winds and most of them were pulled down before maturity. For this reason, the survey of *Spondias* has not been completed. However we are able to point out some cultivars, mainly issued from the Malakula survey in 1991.

The average size of the fruit is 83 mm x 67 mm, the size varying from 60 mm to 125 mm. The epidermis is green (glossy or dull) or yellow. The mesocarp is more or less fibrous and the stone has usually 5 woody, stiff fibres.

Apart from the large size fruits the only cultivar of special interest is the one with a small green fruit and a very small tender endocarp. This fruit may be eaten completely, including the skin (too acid to be eaten in the ordinary fruits) and the endocarp (figure 23). It is eaten just before maturity. Then the pulp becomes dry and the endocarp strong.

ISLAND	TREE N°	NAME
Ambrym	not tagged	paor mwerere
Banks(VNL)	165	ur woraŋraŋ
Emae	254; 255	na-mali atamoli
Malakula	55	naus borton mberean

Figure 23: *Spondias* fruit with a tender and small endocarp (the whole fruit is eaten)

It must be noticed that all this cultivar has always received a special name although the special names are rare within the species.

## 2. THE BEST CULTIVARS OF SPONDIAS

The best cultivars of *Spondias* are those with a big fruit size, a juicy, not fibrous pulpe and a nice glossy orange colour. Another kind of tree is said to bear fruits just before the common fruiting season (figure 24).

ISLAND	TREE N°	NAME	SIZE
<b>Fruit before the comon fruiting season</b>			
Epi	not tagged	malmal tarakak	
<b>Big fruit size</b>			
Malakula	86	naus borton	125
Malakula	58	naus-borton	120
Malakula	57	naus-borton	110
Malakula	115	naus-borton melnator	105
Malakula	73	naus-borton	100
Erromango	459	ne-vi	100
<b>Glossy orange fruit</b>			
Malo	351	Resi voke	

Figure 24: *Spondias* cultivars of special interest

In Malo, some giant fruits are recorded by the population but it was not possible to collect them because the survey occurs out of the fruiting season.

## CHAPTER 9: VARIETY COLLECTION OF *SYZYGIUM MALACCENSE*

### 1. DESCRIPTION AND NAMES OF *SYZYGIUM MALACCENSE*

There are many species of *Syzygium* in Vanuatu and *Syzygium malaccense* is the edible one. Usually, the non edible species of *Syzygium* are named differently than *Syzygium malaccense* (see figure 25 for the names of *S. malaccense*).

Few specific names were recorded, according with the scarcity of varieties within the species.

ISLAND	LANGUAGE	NAME
Ambae	Nduindui	kavika
Ambrym	Dakaka	have
Ambrym	S/E Ambrym	ahi
Banks(Gaua)	Nume	wivir
Banks (VNL)	Mosina	gever
Efate	North Efate	kavik
Emae	Tanamanga	na-kavika
Epi	Lewo	kavika
Erromango	Oru	webe
Futuna	Futuna	kavika
Maewo	Baetora	Havika
Malakula	Wala/Rano	navi
Malakula	Ninde	neweke
Malo	Malo	havika
Pentecost	Apma	kavik
Santo	Butmas/Tur	ifi
Tanna	Lenakel	ne-kavik
Torres	Lo/ Hiu	nəgəviga

Figure 25: Names of *Syzygium malaccense* in Vanuatu

This species is a wild one, sometimes cultivated near the villages, in the coconut plantations or along the pathways.

The fruit size varies and slightly does the fruit shape. The fruit colour varies from pale pink to red. On the whole, the species seems to be relatively homogeneous. The fruits are often parasited by worms.

## 2. CULTIVARS OF SPECIAL INTEREST

All over Vanuatu, there is a special variety of *Syzygium malaccense* which bears white fruits and white flowers. This variety has been received a special specific name whose meaning is "star", "white hair", "albinos", "white". This cultivar is considered valuable by the local populations (figure 26).

ISLAND	TREE N°	NAME
Ambrym	200	have moso
Ambrym	201	have suu
Ambrym	not tagged	ahi ah-moso
Banks (VNL)	not tagged	gever wolul
Epi	not tagged	kavika veRve
Maewo	423	Havika Raniete
Malo	340	Havika tetevuso
Malakula(SWB)	not tagged	neweke mis
Pentecôte	14	kavik maru
Tanna	not tagged	have toən
Torres	122	nəgəviga nigno

Figure 26: White fruits of *Syzygium malaccense*

Apart from big fruited trees recorded here and there, it is the only cultivar of special interest within the species. It is less parasited and sweeter than the red one.

## CHAPTER 10: VARIETY COLLECTION OF *TERMINALIA CATAPPA*

### 1. DESCRIPTION AND NAMES OF THE CULTIVARS

There are three species of *Terminalia* in Vanuatu, namely *Terminalia catappa* (edible species), *Terminalia samoensis* (edible species but not eaten) and *Terminalia sepicana*, rare species used for timber. The same vernacular name covers the three of them (figure 27).

ISLAND	LANGUAGE	NAME
Ambae	Nduindui	tokwa
Ambrym	Dakaka	wike
Ambrym	S/E Ambrym	hoe
Banks(Gaua)	Nume	tilis
Banks (VNL)	Mosina	teles
Efate	North Efate	tali
Emae	Tanamanga	na-talie
Epi	Lewo	tawo
Epi (LM)	Lewo	sawo
Erromango	Oru	tehi
Futuna	Futuna	tarie
Maewo	Baetora	talise
Malakula	Wala/Rano	dawo
Malakula	Ninde	neitiktik*
Malo	Malo	tavoa
Pentecost	Apma	towo ou telis
Santo	Butmas/Tur	tavo
Tanna	Lenakel	tel
Torres	Lo	nə-telihə
Torres	Hiu	nə-tiyitə

\*: The meaning of this term is "to beat"

### Figure 27: Names of the genus *Terminalia* in Vanuatu

Specific names are added in order to differentiate some cultivars according to the fruit size, fruit colour or ease to open the shell. At this level the different species are distinguished and they are so assimilated to a cultivar of *Terminalia catappa*. The number of different cultivars pointed out by the local populations is not important and varies from two to five.

The variability of *Terminalia catappa* is quite large in Vanuatu. The fruit size varies from 25 mm to 100 mm. The fruit colour varies from glossy red to dirty, brownish green, yellow or red. The fruit shape may be globular or flattened, ovoid or slightly elongated, the usually marked wings disappeared sometimes under



the flesh, a hook may be observed at apex. The tree is either wild, spontaneous or cultivated near villages.

We must point out two particular forms of *Terminalia catappa* which are present in nearly all islands.

1. The first one shows a medium size fruit, glossy red, ovoid. This kind of trees are found near seashore and fructifies all over the year (figure 28).

2. The second one has fruits with a thin pericarp and the shell is easy to open (figure 29)

ISLAND	TREE N°	NAME
Ambae	487	tokwa
Ambrym	219	wike siwangere
Banks (VNL)	190	teles
Torres	136	nə-tiyitə
Torres	134	nə-telihə

Figure 28: *Terminalia catappa* morphotypes bearing a glossy red fruit

## 2. BEST CULTIVARS OF TERMINALIA CATAPPA

The best cultivars of *Terminalia catappa* are those with at least one of the following characteristics:

- A. A big kernel (size upper or equal to 30 mm)
- B. An easy to open shell

They are given in figure 29.

It must be noted that four cultivars have, at the same time, a big kernel size and an easy to open shell (Trees N° 67; 92; 187; 437)

ISLAND	TREE N°	NAME	KERNEL SIZE
<b>1. Big fruits</b>			
Ambae	487	tokwa	35 x 12 mm
Ambrym	217	wike winbap	30 x 13 mm
Ambrym	236	hoe pili	30 x 16 mm
Banks (VNL)	187	teles lowlowo	39 x 10 mm
Efate	388	tali popot	32 x 15 mm
Epi	246	tawo krekaviu	32 x 11 mm
Epi (LM)	295	sawo	30 x 13 mm
Futuna	437	tarie maRa	30 x 9 mm
Malakula	92	dawo etsets	35 x 12 mm
Malakula	67	dawo	35 x 10 mm
Malakula	88	dawo	27 x 15 mm
Malakula	328	dawo wala	28 x 14 mm
Torres	120	nə-telihə	47 x 13 mm
<b>B. easy to open shell</b>			
Ambrym	218	wike wuro	25 x 11 mm
Ambrym	220	wike ker	25 x 12 mm
Banks (VNL)	187	teles lowlowo	39 x 10 mm
Emae	252	na-talie miela	25 x 0.5 mm
Futuna	437	tarie maRa	30 x 0.9 mm
Malakula	92	dawo etsets	35 x 10 mm
Malakula	67	dawo	35 x 10 mm
Malakula	328	dawo wala	28 x 14 mm

Figure 29: Best cultivars of *Terminalia catappa*

## CHAPTER 11: DISCUSSION

The results given in this document are not exhaustive. Many areas have not yet been visited and some new morphotypes could be observed in them. In the visited area the survey was based on vernacular names lists given by local populations. The number of morphotypes recorded in one given area depends upon the precision of the language. Sometimes, the language is very precise, or still strong enough to be well known by the present local population, so the list will be almost complete. Sometimes the language is less precise or already impoverished and is unable to name some cultivars, even if they are well known by the population. To avoid this survey bias we have checked as much as possible the lists with botanical observations in the field. Nevertheless, we are quite sure that the real diversity of the studied species exceeds the results given in this paper.

### 1. GENERAL FEATURES OF FRUIT AND NUT TREES CULTIVATION IN VANUATU

1. The diversity within the species is large and increases with cultivation: in this point of view *Barringtonia* spp and *Canarium* spp have the bigger number of morphotypes.

2. This diversity has been established through selection pressure by generations of farmers who have selected, protected and transplanted the best cultivars encountered in the forests. They also have protected any morphotype which was showing a particular feature in terms of size, colour, shape, taste or what so ever. Any man or woman is always proud to grow a tree that the other do not have. For this reason the ni-vanuatu societies have acted for generations as real ecologists, protecting biodiversity, planting trees (even if they cut them sometimes) and giving to the next generation an intact and often ameliorated environment. This habit was not based on a real understanding of the complexity of the ecosystem but on a near religious knowledge of the nature and on the need to balance and secure the subsistence system.

3. The species are well distributed in the whole country but this distribution is not completely homogeneous. *Barringtonia novae-hiberniae* predominates in Central/East Vanuatu (Emae, Epi, Ambrym); *Barringtonia edulis* is quite the only species of *Barringtonia* in the southern part of the country, while *Barringtonia procera* is more abundant in North West Vanuatu than anywhere else (Torres, Banks, Malakula, Epi and Emae). The genus *Canarium* extends from north to Erromango. *Canarium harveyi* is

mainly restricted in the Banks, Sheperds and Erromango, while *Canarium indicum* is particularly abundant in South-West Malakula. *Inocarpus fagifer* is more abundant in the southern part of the country.

Some species are entirely restricted to a small area: *Burckella cf fijiensis* in Futuna and *Burckella sp* in South-west Bay of Malakula. Finally some species or morphotypes are more numerous in some area, the white *Syzygium malaccense* grows abundantly in Malo, the giant fruits of *Spondias dulcis* have to be looked for in Malakula and Malo, *Pometia pinnata* is largely produced in Malo. Each area has to protect in priority the fruits which show the maximum diversity or are produced in abundance (figure 30).

ISLAND	AREA	SPECIES
Ambae	Nduindui	<i>Barringtonia sp</i> (tree N°473)
Banks	Vanua-Lava	<i>Canarium harveyi</i>
Efate	North	wild BAREDU or BARNOV <i>Canarium cf Salomonense</i> (N°390)
Epi/Tongoa/Emae		<i>Canarium harveyi</i>
Erromango	Potnarvin	wild <i>Canarium harveyi</i>
Futuna	Mission Bay	<i>Burckella cf fijiensis</i>
Maewo	Betarara	<i>Terminalia sepicana</i> All kind of <i>Barringtonia</i> (very large diversity)
Malakula	Wala-Rano	big fruits of <i>Spondias dulcis</i>
Malakula	SWB	<i>Canarium indicum</i> (largest diversity) <i>Burckella sp</i> edible
Malo	Avunatari	white <i>Syzygium malaccense</i> <i>Pometia pinnata</i> giant fruit of <i>Spondias dulcis</i>
Tanna	Lenakel	<i>Inocarpus fagifer</i>

Figure 30: species of special interest in each island (biggest diversity; abundant or particular)

4. The fruit and nut trees are found around villages, along the road, near the garden, on coconut or cacao plantation. They are sparsed in the forest but are regrouped elsewhere, sometimes in small patch of agroforest between two coconut plantation. These small agroforests are more likely to be found on areas which face some kind of trends on available land: small islets like Lamén island or Walla island, island like Nguna or Futuna where every space is devoted to a predominant culture, area more devoted to plantation activity or facing quick demographic growth, like the north-east coast of Malakula (Wala-Rano). Elsewhere, like Torres, west coast of Malakula or even Pentecost,

the agroforests are more loosely organized. Arboriculture in Vanuatu is, for the moment, essentially turned toward subsistence.

4. The cultivation and harvesting of fruits and nuts enhance food security. The consumption of each fruit or nut follows the seasonality of the species. They are eaten to satiety in season, usually out of meals. One after the other and month after month, they balance the diet. They are eaten along the road, on longer journeys, consumed at lunch in the gardens or, at rest, after copra making. The cultivation of fruits or nuts provides supplementary food along the year, maximises the work time because people are able to eat away from home and can stay a full day out of the village, and secure the daily meal between two crops of yam or taro. Because arboriculture is a form of food security for the household (security obtained with a low level of labour), it must be protected and encouraged. Decreasing access to harvested food engenders certainly nutritional problems among urban peoples.

5. If nothing is done to protect this plant stock it will be impoverished quickly. The number of fruit trees is decreasing in exploited areas. We have counted the number of adult fruit or nut trees (belonging to one of the nine species studied in this report) on three 4000 m<sup>2</sup> parcels of land, respectively situated in:

- never exploited forest
- ancient population site (never exploited for 80 years)
- plantation of coconut and cacao where the fruit trees are usually multiply.

The number of fruit or nut trees was 74 in the non-exploited forest, 70 in the ancient site and 22 in the plantation. The quality of the cultivars was increasing from forest to plantation but the number of seedling was decreasing. This result confirms another study made in Santo (Grant Rosoman, personal communication).

During the research, we have observed a decline of seedlings under the adult trees, an impoverishment of the knowledge of vernacular names from old people to young generation and an increasing destruction of mature trees under trends to make available land for yam crops.

## 2. THE VARIETY COLLECTION OF FRUIT AND NUT TREES

The variety collection of fruit and nut trees is now completed. We have given in this report the names of the informants who actually are taking care of the trees in each island. And we have indicated the best cultivars within each species.

All the informants are paid by ORSTOM and will be paid during the following year (on a one or two days work per month). This solution is a temporary one and a more stable solution has to be found, at least in the area where development of nut trees as cash crop will start. This collection is useful for many people:

1. The agronomists or the department of forestry may gather some material from it (seedlings or cuttings) in order to multiply them.

2. The stock, in a whole, can be compared with wild species found in the forest

3. The geneticists will find an available gene stock of the main species studied

4. The botanists would be able to collect new botanical specimens from it, in order to make the revision of some species

5. The biologists have now a localized collection for studies on plants of economic importance: flowering or fruiting period; needs of the plant; sexual habits etc...

This collection is a basic tool for many disciplines, as its biodiversity has to be protected or documented for conservation purposes. Because this biodiversity of fruit and nut trees represents a real heritage for Vanuatu it seems to us that the Environnement Unit is the appropriate structure to take care of this collection and improve it.

## CHAPTER 12: CONCLUSIONS

1. The fruit and nut trees cultivated or harvested in Vanuatu are numerous and diverse. This arboriculture has evolved over time, through continuous care by the past generations and is still very alive.

2. The intensive selection of fruits and nuts with desirable characteristics, over time and by generations of farmers, has produced giant fruits, has improved the sweetness of some fruits or the production yields of some trees and has induced some transformation in the floral biology of some species: *Canarium indicum* and *Canarium harveyi* have both evolved from being dioecious to polygamous.

3. Today, Vanuatu possess a gene pool of cultivars of *Canarium indicum*, *Canarium harveyi*, *Barringtonia edulis*, *Barringtonia procera*, *Barringtonia novae-hiberniae*, *Pometia pinnata*, *Inocarpus fagifer*, *Spondias dulcis* and *Terminalia catappa* and, to a lesser degree, *Syzygium malaccense*. The intra-specific variation of all these species have evolved through intensive selection.

4. Apart from this, Vanuatu also possesses two rare edible Sapotaceae: *B. cf fijiensis* and *B. sp* which need to be documented further. Local people in Vanuatu also possess numerous other fruit species, the knowledge to prepare some toxic species (*Pangium edule*, *Entada phaseoloides*) or preserve some other (*Canarium sp*; breadfruits, banana).

5. *Barringtonia procera*, *Barringtonia edulis*, *Canarium indicum*, *Spondias dulcis* and *Inocarpus fagifer* are cultivated throughout Vanuatu. *Burckella cf fijiensis* is cultivated in Futuna. All these species are cultivated for their edible fruits or nuts but also for their wood (*Canarium spp*) or as medicinal plants. Some species, like *Burckella obovata* or *Dracontomelon vitiense* are cultivated in some special areas to attract fruits bats. *Dracontomelon vitiense* is used as stakes for yam rope.

6. Fruit and nut trees enhance household food security in rural area. The lack of access to bush food in general and to fruit and nut trees in particular, engenders probably nutritional disequilibrium in urban populations.

7. Future economic development on fruits and nuts in Vanuatu should concentrate on *Canarium indicum*, *Barringtonia edulis* and *Terminalia catappa* because of their large distribution, their big yields and the presence of good cultivars within each species (given in the present report).

8. This economic development has to be done through coordination with the environment unit in order to assure the conservation of the gene pool diversity.

9. The next step has to be the organization of the marketing and processing of the nuts. A lot of nuts are lost every year, because the production far exceeds the needs of the population. Some areas are willing to start the commercialisation of their nuts but the main obstacle is the shipping of this production. We recommend to contact the population of South-West bay in Malakula because their stock of *Canarium* seems to be of a very good quality (big yields, easy to open shell, big kernel, and numerous trees).

10. We suggest, if it is possible, to start agronomic study of these nuts (by trial) and to start to plant new trees or, at least, to assure a minimum protection to the growing of seedlings, in some areas.

11. Informations about fruiting and flowering period of some species are missing in this report. An ongoing study, actually in progress, will soon provides results on this important subject.



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## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
<b>BARRINGTONIA</b>			
* ILE AMBAI			
Barringtonia edulis	AMBAI (Nduindui )	pele	pwuhagwaka 484 CSV1008
Barringtonia edulis	AMBAI (Nduindui )	pele	pwuhagwaka 485 CSV1009
Barringtonia edulis	AMBAI (Nduindui )	pele	piroki 481 CSV1004
Barringtonia edulis	AMBAI (Nduindui )	pele	k'agwalefa 482 CSV1005
Barringtonia edulis	AMBAI (Nduindui )	pele	gwatumandi 486 CSV1010
Barringtonia procera	AMBAI (Nduindui )	pele	gwakara
Barringtonia procera	AMBAI (Nduindui )	pele	gwalakesa
Barringtonia procera	AMBAI (Nduindui )	pele	pwoli 474 CSV997
Barringtonia sp	AMBAI (Nduindui )	pele	kanakaripi 473 CSV996
* ILE AMBRYM			
Barringtonia edulis	AMBRYM (S/E Ambrym )	tavarsal	224 CSV614
Barringtonia novae-hiberniae	AMBRYM (Dakaka )	tubu	ker 210 CSV600
Barringtonia novae-hiberniae	AMBRYM (Dakaka )	tubu	nalili 215 CSV605
Barringtonia novae-hiberniae	AMBRYM (Dakaka )	tubu	mermer 216 CSV606
Barringtonia novae-hiberniae	AMBRYM (Dakaka )	tubu	memale 202 CSV592
Barringtonia novae-hiberniae	AMBRYM (Dakaka )	tubu	viriviri 206 CSV596
Barringtonia novae-hiberniae	AMBRYM (S/E Ambrym )	taburka	237 CSV628
Barringtonia novae-hiberniae	AMBRYM (S/E Ambrym )	tabu	pili 222 CSV612
			225 CSV615
Barringtonia novae-hiberniae	AMBRYM (S/E Ambrym )	tabu	miye 223 CSV613
Barringtonia novae-hiberniae	AMBRYM (S/E Ambrym )	tabu	rumael 228 CSV618
Barringtonia novae-hiberniae	AMBRYM (S/E Ambrym )	tabu	ressu 229 CSV619
Barringtonia procera	AMBRYM (Dakaka )	tubu	tirip 221 CSV611
Barringtonia procera	AMBRYM (S/E Ambrym )	talep	226 CSV616
			231 CSV621
Barringtonia procera	AMBRYM (S/E Ambrym )	talep	taboho 227 CSV617
Barringtonia procera	AMBRYM (S/E Ambrym )	talep	mur 232 CSV622
Barringtonia sp	AMBRYM (Dakaka )	tubu	an tomo 211 CSV601
Barringtonia sp	AMBRYM (Dakaka )	tubu	reRa 212 CSV602
Barringtonia sp	AMBRYM (S/E Ambrym )	tabu	raRa
* ILE BANKS(GAUA)			
Barringtonia edulis	BANKS(GAUA) (Nume )	watag	malges 427 CSV935
Barringtonia edulis	BANKS(GAUA) (Nume )	watag	wuswor 430 CSV938
Barringtonia edulis	BANKS(GAUA) (Nume )	watag	vei 431 CSV940
Barringtonia procera	BANKS(GAUA) (Nume )	watag	vulvere 432 CSV941
Barringtonia racemosa	BANKS(GAUA) (Nume )	watag	watwataga
Barringtonia sp	BANKS(GAUA) (Nume )	watag	der tanat
Barringtonia sp	BANKS(GAUA) (Nume )	watag	me
Barringtonia sp	BANKS(GAUA) (Nume )	watag	wul
* ILE BANKS(VNL)			
Barringtonia edulis	BANKS(VNL) (Mosina )	wotaG	tartar meme 157 CSV557

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NCM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
Barringtonia edulis	BANKS(VNL) (Mosina )	wotaG mwai	150 CSV550
Barringtonia novae-hiberniae	BANKS(VNL) (Mosina )	wotaG nun	152 CSV552
Barringtonia procera	BANKS(VNL) (Mosina )	wotaG neretamat	160 CSV560
Barringtonia procera	BANKS(VNL) (Mosina )	wotaG wol	153 CSV553
Barringtonia procera	BANKS(VNL) (Mosina )	wotag tartar meme	188 CSV570
			197 CSV584
			198 CSV585
Barringtonia procera	BANKS(VNL) (Mosina )	wotag tartar malges	189 CSV571
Barringtonia racemosa	BANKS(VNL) (Mosina )	wotaG wonakbit	195 CSV582
Barringtonia sp	BANKS(VNL) (Mosina )	wotaG wotong	184 CSV564
<b>* ILE EFATE</b>			
Barringtonia edulis	EFATE (Nord-Efate )	fil tugul	383 CSV863
			387 CSV867
Barringtonia edulis	EFATE (Nord-Efate )	fil malakes	381 CSV861
Barringtonia edulis	EFATE (Nord-Efate )	fil miel	382 CSV862
Barringtonia edulis	EFATE (Nord-Efate )	fil tugul	385 CSV866
Barringtonia edulis	EFATE (Nord-Efate )	fil sarik	394 CSV874
Barringtonia edulis	EFATE (Nord-Efate )	fil warifur	395 CSV875
Barringtonia novae-hiberniae	EFATE (Nord-Efate )	fil	384 CSV864
Barringtonia procera	EFATE (Nord-Efate )	fil batu	
Barringtonia procera	EFATE (Nord-Efate )	bugor	379 CSV859
Barringtonia procera	EFATE (Nord-Efate )	bugor	360 CSV860
Barringtonia racemosa	EFATE (Nord-Efate )	fil nges	
Barringtonia sp	EFATE (Nord-Efate )	bugor kas	
<b>* ILE EMAE</b>			
Barringtonia edulis	EMAE (Tanamanga )	na-vila oro	264 CSV689
Barringtonia novae-hiberniae	EMAE (Tanamanga )	na-vila kati	267 CSV692
Barringtonia novae-hiberniae	EMAE (Tanamanga )	na-vila kau	268 CSV693
Barringtonia novae-hiberniae	EMAE (Tanamanga )	na-vila memerona	263 CSV688
Barringtonia procera	EMAE (Tanamanga )	na-vila sokiana	
Barringtonia procera	EMAE (Tanamanga )	na-vila papatua	265 CSV690
Barringtonia sp	EMAE (Tanamanga )	na-vila miala	
<b>* ILE EPI</b>			
Barringtonia edulis	EPI (Lewo )	tep lop makaere	243 CSV634
Barringtonia novae-hiberniae	EPI (Lewo )	kurqi na memaen	244 CSV635
Barringtonia novae-hiberniae	EPI (Lewo )	kurqi malolo	242 CSV633
			251 CSV643
Barringtonia novae-hiberniae	EPI (Lewo )	kurqi karie	239 CSV630
Barringtonia procera	EPI (Lewo )	tep tan	
Barringtonia sp	EPI (Lewo )	tep malolo	
<b>* ILE EPI(LM)</b>			
Barringtonia edulis	EPI(LM) (Lewo )	sep lop yiwe	300 CSV762
Barringtonia edulis	EPI(LM) (Lewo )	sep lop	296 CSV760

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE	HERBIERS
<i>Barringtonia edulis</i>	EPI(LM) (Lewo )	kurgi	305	CSV767
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi melo	299	CSV761
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi me	296	CSV758
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi melo	302	CSV764
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi viyanga	308	CSV770
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi melo	309	CSV771
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi me	310	CSV772
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi ka-kawe	313	CSV775
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi	314	CSV776
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi karia	315	CSV777
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi karie melo	316	CSV778
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi karie melo	320	CSV782
<i>Barringtonia novae-hiberniae</i>	EPI(LM) (Lewo )	kurgi nera ieliel	322	CSV784
<i>Barringtonia procera</i>	EPI(LM) (Lewo )	sep plasi	319	CSV781
<b>* ILE ERROMANGO</b>				
<i>Barringtonia edulis</i>	ERROMANGO (Oru )	felnga	462	CSV981
<i>Barringtonia edulis</i>	ERROMANGO (Oru )	felnga taptiti	465	CSV984
<i>Barringtonia edulis</i>	ERROMANGO (Oru )	felnga	466	CSV985
<i>Barringtonia edulis</i>	ERROMANGO (Oru )	felnga urat	469	CSV988
<i>Barringtonia edulis sp</i>	ERROMANGO (Oru )	felnga to'gbor	472	CSV991
<b>* ILE FUTUNA</b>				
<i>Barringtonia edulis</i>	FUTUNA (Futuna )	fofoto wuiwui	435	CSV965
<i>Barringtonia procera</i>	FUTUNA (Futuna )	fofoto ngarie	434	CSV964
<i>Barringtonia sp</i>	FUTUNA (Futuna )	fofoto ura		
<b>* ILE MAEWO</b>				
<i>Barringtonia edulis</i>	MAEWO (Baetora )	woRotaga tamburuta	405	CSV888
<i>Barringtonia edulis</i>	MAEWO (Baetora )	woRotaga memea	406	CSV889
<i>Barringtonia edulis</i>	MAEWO (Baetora )	woRotaga susului	409	CSV892
<i>Barringtonia edulis</i>	MAEWO (Baetora )	woRotaga susului	411	CSV894
<i>Barringtonia edulis</i>	MAEWO (Baetora )	woRotaga wora kwangi	417	CSV900
<i>Barringtonia procera</i>	MAEWO (Baetora )			woRotaga
wosa 407 CSV890				
<i>Barringtonia procera</i>	MAEWO (Baetora )	woRotaga fele bakewa	408	CSV891
<i>Barringtonia procera</i>	MAEWO (Baetora )	woRotaga wosa	410	CSV893
<i>Barringtonia procera</i>	MAEWO (Baetora )	woRotaga wosa raveangi	412	CSV895
<i>Barringtonia procera</i>	MAEWO (Baetora )	woRotaga woli	413	CSV896
<i>Barringtonia sp</i>	MAEWO (Baetora )	woRotaga tabanoi	403	CSV886
<i>Barringtonia sp</i>	MAEWO (Baetora )	woRotaga bari	404	CSV887
<i>Barringtonia sp</i>	MAEWO (Baetora )	woRotaga fele	420	CSV903
<i>Barringtonia sp</i>	MAEWO (Baetora )	woRotaga tamate		
<i>Barringtonia sp</i>	MAEWO (Baetora )	woRotaga dau		

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
<b>* ILE MALAKULA</b>			
Barringtonia edulis	MALAKULA (Wala/Rano )	ndapwi neviagis	76 CSV475
Barringtonia edulis	MALAKULA (Wala/Rano )	ndapwi neviangis	331 CSV798
			333 CSV800
			93
Barringtonia edulis	MALAKULA (Wala/Rano )	ndapwi neviangis	324 CSV788
Barringtonia edulis	MALAKULA (Ninde )	namase mengaHa	
Barringtonia novae-hiberniae	MALAKULA (Wala/Rano )	ndapwi	104 CSV496
Barringtonia procera	MALAKULA (Wala/Rano )	ndapwi dibwitan	97 CSV492
			332 CSV799
Barringtonia procera	MALAKULA (Wala/Rano )	ndapwi amiveng	78 CSV477, CSV674
Barringtonia procera	MALAKULA (Wala/Rano )	ndapwi amiveng	77 CSV476, CSV673
Barringtonia procera	MALAKULA (Wala/Rano )	ndapwi	75 CSV474, CSV672
			79 CSV478
Barringtonia procera	MALAKULA (Wala/Rano )	ndapwi	84 CSV482, CSV676
Barringtonia racemosa	MALAKULA (Wala/Rano )	ndapwi neRenamRa	85 CSV483
<b>* ILE MALAKULA(SWB</b>			
Barringtonia procera	MALAKULA(SWB(Ninde )	namase tari timiyale	
Barringtonia procera	MALAKULA(SWB(Ninde )	namase mande	
Barringtonia sp	MALAKULA(SWB(Ninde )	namase miyale	
<b>* ILE MALAKULA-SWB</b>			
Barringtonia edulis	MALAKULA-SWB(Ninde )	namase lapwe	512 CSV1041
Barringtonia novae-hiberniae	MALAKULA-SWB(Ninde )	namase miyale lowlow	507 CSV1036
Barringtonia procera	MALAKULA-SWB(Ninde )	namase tari	509 CSV1038
Barringtonia procera	MALAKULA-SWB(Ninde )	namase tari melkese	510 CSV1039
Barringtonia procera	MALAKULA-SWB(Ninde )	namase tari melkese	511 CSV1040
Barringtonia procera	MALAKULA-SWB(Ninde )	namase tari melkese	513 CSV1042
Barringtonia procera	MALAKULA-SWB(Ninde )	namase tari	514 CSV1043
Barringtonia sp	MALAKULA-SWB(Ninde )	namase melkese	493 CSV1020
Barringtonia sp	MALAKULA-SWB(Ninde )	namase	503 CSV1032
<b>* ILE MALO</b>			
Barringtonia edulis	MALO (Malo )	fale hoRota	342 CSV821
Barringtonia edulis	MALO (Malo )	fale hoRota manda	338 CSV817
			339 CSV818
Barringtonia edulis	MALO (Malo )	fale hoRota	348 CSV827
			360 CSV840
Barringtonia procera	MALO (Malo )	fale mbisiroi	335 CSV814
Barringtonia procera	MALO (Malo )	fale woli	
Barringtonia procera	MALO (Malo )	fale malakensa	345 CSV824
			358 CSV838
Barringtonia procera	MALO (Malo )	fale vinvuso	336 CSV815
Barringtonia procera	MALO (Malo )	fale voke vinunda	344 CSV823
Barringtonia procera	MALO (Malo )	fale vuso vinunda	337 CSV816
Barringtonia procera	MALO (Malo )	fale vokivoki	356 CSV835

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
Barringtonia racemosa	MALO (Malo )	fale fale	
Barringtonia sp	MALO (Malo )	fale hoRota	349 CSV828 347 CSV826
* ILE NGUNA			
Barringtonia edulis	NGUNA (Nord-Efate )	na-vila	396 CSV876
* ILE PENTECOTE			
Barringtonia edulis	PENTECOTE (Apmā )	vel malgonis	28 CSV443, CSV802 30 1
Barringtonia edulis	PENTECOTE (Apmā )	vel sip kapkabarak	7 CSV421
Barringtonia edulis	PENTECOTE (Apmā )	vel temit	29 CSV803
Barringtonia edulis	PENTECOTE (Apmā )	vel mene (tememe)	2 AM002 31
Barringtonia edulis	PENTECOTE (Apmā )	vel beke	46 CSV454
Barringtonia edulis	PENTECOTE (Apmā )	vel wasil temit	12 CSV429
Barringtonia novae-hiberniae	PENTECOTE (Apmā )	vel kaspā tememe	4 CSV424
Barringtonia novae-hiberniae	PENTECOTE (Apmā )	vel wasil tememe	8 CSV425
Barringtonia novae-hiberniae	PENTECOTE (Apmā )	vel wasil temit	24 CSV439, CSV806
Barringtonia novae-hiberniae	PENTECOTE (Apmā )	vel wotak tememe	42 CSV451, CSV804 25 CSV440
Barringtonia procera	PENTECOTE (Apmā )	vel wo tememe	CSV420
Barringtonia procera	PENTECOTE (Apmā )	vel wo temit	5 CSV422
Barringtonia procera	PENTECOTE (Apmā )	vel ta:nap	15 CSV447 36
Barringtonia sp	PENTECOTE (Apmā )	vel kaspā temit	
Barringtonia sp	PENTECOTE (Apmā )	vel wasil temit	20 CSV435
Barringtonia sp	PENTECOTE (Apmā )	vel wowo	9 CSV426, CSV810
Barringtonia sp	PENTECOTE (Apmā )	vel boswi	17 CSV433
Barringtonia sp	PENTECOTE (Apmā )	vel wotak temit	43
Barringtonia sp	PENTECOTE (Apmā )	vel kaehak (kaak)	
Barringtonia sp	PENTECOTE (Apmā )	vel kwas	
Barringtonia sp	PENTECOTE (Apmā )	vel kaspā tememe	26 CSV441
* ILE SANTO(BUT)			
Barringtonia edulis	SANTO(BUT) (Butmas-Tur )	Rot vok	425 CSV922 426 CSV923
* ILE TANNA			
Barringtonia edulis	TANNA (Lenakel )	nulnga kapen	284 CSV734, CSV708 277 CSV739
Barringtonia edulis	TANNA (Lenakel )	nulnga ilavan	280 CSV700
Barringtonia edulis	TANNA (Lenakel )	nulnga tekoplae	281 CSV701
Barringtonia edulis	TANNA (Lenakel )	nulnga kavon	275 CSV710

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
Barringtonia edulis	TANNA (Lenakel )	nulnga kakoplae	285 CSV705
Barringtonia sp	TANNA (Lenakel )	navingen toEn	
* ILE TORRES			
Barringtonia edulis	TORRES (Lo )	nEvotaga hugruvE	130 CSV527
Barringtonia edulis	TORRES (Hiu )	noutaga mwel	145 CSV544
Barringtonia edulis	TORRES (Lo )	nEvotaga wot	126 CSV524
Barringtonia novae-hiberniae	TORRES (Lo )	nEvotaga wot	121 CSV519
Barringtonia procera	TORRES (Lo )	nEvotaga velangehE	131 CSV528
Barringtonia procera	TORRES (Lo )	nEvotaga velangehE	119 CSV517
Barringtonia procera	TORRES (Lo )	nEvotaga velangehE	124 CSV522
Barringtonia sp	TORRES (Lo )	nEvotaga mwel	

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS
<b>BURCKELLA</b>						
* ILE AMBAI						
Burckella	obovata	AMBAI	(Nduindui )	naduledule		483 CSV1006
* ILE AMBRYM						
Burckella	obovata	AMBRYM	(Dakaka )	taviro		
Burckella	obovata	AMBRYM	(Dakaka )	taviro	meta	
Burckella	obovata	AMBRYM	(S/E Ambrym )	nat	wite teviey	234 CSV625
Burckella	obovata	AMBRYM	(S/E Ambrym )	nat	wite terumwe	233 CSV624
* ILE BANKS(GAUA)						
Burckella	obovata	BANKS(GAUA)	(Nume )	nat		
* ILE BANKS(VNL)						
Burckella	obovata	BANKS(VNL)	(Mosina )	not	las	177 CSV573
Burckella	obovata	BANKS(VNL)	(Mosina )	not	nokor	176 CSV572
* ILE EFATE						
Burckella	obovata	EFATE	(Nord-Efate )	nat		
* ILE EMAE						
Burckella	obovata	EMAE	(Tanamanga )	na-nato	varau	271 CSV696
Burckella	obovata	EMAE	(Tanamanga )	na-nato		
* ILE EPI						
Burckella	obovata	EPI	(Lewo )	naR		
* ILE EPI(LM)						
Burckella	obovata	EPI(LM)	(Lewo )	ngaru	piyavi	307 CSV769
Burckella	obovata	EPI(LM)	(Lewo )	ngaru		312 CSV774
* ILE ERROMANGO						
Burckella	obovata	ERROMANGO	(Oru )	yetu		454 CSV973
Burckella	obovata	ERROMANGO	(Oru )	yetu		470 CSV989
* ILE FUTUNA						
Burckella	fijiensis	FUTUNA	(Futuna )	bau		CSV960
* ILE MAEWO						
Burckella	obovata	MAEWO	(Baetora )	natu	natu	
Burckella	obovata	MAEWO	(Baetora )	natu	kabe	421 CSV906
* ILE MALAKULA						
Burckella	obovata	MALAKULA	(Wala/Rano )	niuR		74 CSV473
Burckella	obovata	MALAKULA	(Wala/Rano )	niuR		87 CSV485
Burckella	obovata	MALAKULA	(Wala/Rano )	niuR		



## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
Burckella obovata	MALAKULA (Wala/Rano )	niuR	
* ILE MALAKULA(SWB			
Burckella obovata	MALAKULA(SWB(Ninde )	nenet	djuch
Burckella obovata	MALAKULA(SWB(Ninde )		doHoy
* ILE MALAKULA-SWB			
Burckella sp	MALAKULA-SWB(Ninde )	nenet doHoy	lapwe 498 CSV1026
* ILE MALO			
Burckella obovata	MALO (Malo )	sovwa	
* ILE NGUNA			
Burckella obovata	NGUNA (Nord-Efate )	nanatu	
* ILE PENTECOTE			
Burckella obovata	PENTECOTE (Apma )	wanet	kapkau
Burckella obovata	PENTECOTE (Apma )	wanet	tewewep
Burckella obovata	PENTECOTE (Apma )	wanet	temrarak
Burckella obovata	PENTECOTE (Apma )	wanet	wanet 41
* ILE SANTO			
Burckella obovata	SANTO (Farsaf )	nat	
Burckella obovata	SANTO (Farsaf )	nat	fok
Burckella obovata	SANTO (Farsaf )	nat	ful
* ILE TANNA			
Burckella obovata	TANNA (Lenakel )	nieR	bilaun 279 CSV699
Burckella obovata	TANNA (Lenakel )	nieR	kemulo
* ILE TORRES			
Burckella obovata	TORRES (Lo )	nenot	towen
Burckella obovata	TORRES (Lo )	nenot	kuse
Burckella obovata	TORRES (Hiu )	nEnot	kwEse 139 CSV538
Burckella obovata	TORRES (Hiu )	nEnot	142 CSV541



## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
Canarium	indicum	EMAÉ	(Tanamanga )	na-ngay	talao	260	CSV685
Canarium	indicum	EMAÉ	(Tanamanga )	na-ngay	kati	262	CSV687
Canarium	indicum	EMAÉ	(Tanamanga )	na-ngay	wogawuro	272	CSV697
Canarium	sp	EMAÉ	(Tanamanga )	na-ngay	masibay		
Canarium	sp	EMAÉ	(Tanamanga )	na-ngay	popoti		
Canarium	vulgare	EMAÉ	(Tanamanga )	na-ngay	nemarau	261	CSV686
* ILE EPI							
Canarium	indicum	EPI	(Lewo )	ngi	karie	241	CSV632
Canarium	indicum	EPI	(Lewo )	ngi	keviu	240	CSV631
Canarium	indicum	EPI	(Lewo )	ngi		303	CSV755
Canarium	sp	EPI	(Lewo )	ngi	puindi		
Canarium	sp	EPI	(Lewo )	ngi	Heravike		
Canarium	sp	EPI	(Lewo )	ngi	kayuwa		
Canarium	sp	EPI	(Lewo )	bgi	susun		
Canarium	sp	EPI	(Lewo )	ngi	maRapala		
Canarium	sp	EPI	(Lewo )	ngi	lualima		
* ILE ERROMANGO							
Canarium	harveyi	ERROMANGO	(Oru )	nangai	nangon	461	CSV980
Canarium	indicum	ERROMANGO	(Oru )	nangai		455	CSV974
Canarium	indicum	ERROMANGO	(Oru )	nangai		464	CSV983
Canarium	sp	ERROMANGO	(Oru )	nangai	lavu		
* ILE FUTUNA							
Canarium	harveyi	FUTUNA	(Futuna )	ngai			CSV961
* ILE MAEWO							
Canarium	harveyi	MAEWO	(Baetora )	na-gai	takawa	414	CSV897
						415	CSV898
Canarium	indicum	MAEWO	(Baetora )	na-gai		402	CSV883
Canarium	indicum	MAEWO	(Baetora )	na-gai	a"go	416	CSV899
Canarium	indicum	MAEWO	(Baetora )	na-gai	kati	418	CSV901
Canarium	indicum	MAEWO	(Baetora )	na-gai	tirigu	419	CSV902
Canarium	indicum	MAEWO	(Baetora )	na-gai	bisugue	422	CSV907
Canarium	indicum	MAEWO	(Baetora )	na-gai	bisugue	422	CSV907
* ILE MALAKULA							
Canarium	harveyi	MALAKULA	(Wala/Rano )	nenga		96	CSV491, CSV657
Canarium	indicum	MALAKULA	(Wala/Rano )	nenga	atsets	70	CSV469, CSV655
						102	CSV495
Canarium	indicum	MALAKULA	(Wala/Rano )	nenga	timbonbo	94	CSV490
Canarium	indicum	MALAKULA	(Wala/Rano )	nenga		68	CSV467
						69	CSV468
						330	CSV797
Canarium	indicum	MALAKULA	(Wala/Rano )	nenga		83	CSV481
Canarium	indicum	MALAKULA	(Wala/Rano )	nenga		81	CSV479, CSV656

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
Canarium	indicum	MALAKULA	(Wala/Rano )	nenga	Res	325	CSV792
* ILE MALAKULA-SWB							
Canarium	harveyi	MALAKULA-SWB(Ninde	)	nengi	lakon	491	CSV1018
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	tes	492	CSV1019
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	lit	494	CSV1021
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	buas	495	CSV1022
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	gas malala	496	CSV1023
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	momo	497	CSV1024
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	ya memen	499	CSV1027
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	lum	500	CSV1028
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	pangkahu	501	CSV1030
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	saHruwo	502	CSV1031
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	toHruwo	504	CSV1033
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	ya numboHo	506	CSV1035
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	peH	505	CSV1034
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	nowolban	508	CSV1037
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	doHroy	515	CSV1044
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	panke	516	CSV1045
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	bwas barabarap	517	CSV1046
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	wulalHk	518	CSV1047
Canarium	indicum	MALAKULA-SWB(Ninde	)	ningi	sivire	519	CSV1048
* ILE MALO							
Canarium	indicum	MALO	(Malo )	ngaingai	hati	352	CSV831
Canarium	indicum	MALO	(Malo )	ngaingai	mbisiroi	346	CSV825
Canarium	indicum	MALO	(Malo )	ngaingai		353	CSV832
Canarium	indicum	MALO	(Malo )	ngaingai		354	CSV833
Canarium	indicum	MALO	(Malo )	ngaingai		355	CSV834
* ILE NGUNA							
Canarium	harveyi	NGUNA	(Nord-Efate )	nangai		397	CSV877
Canarium	harveyi	NGUNA	(Nord-Efate )	nangai	moli	398	CSV878
Canarium	harveyi	NGUNA	(Nord-Efate )	nangai	salomon	399	CSV879
Canarium	harveyi	NGUNA	(Nord-Efate )	nangai		400	CSV880
Canarium	harveyi	NGUNA	(Nord-Efate )	nangai		401	CSV882
* ILE PENTECOTE							
Canarium	harveyi	PENTECOTE	(Apna )	waknga	lo	47	CSV456, CSV807
						18	
Canarium	indicum	PENTECOTE	(Apna )	waknga	kat	19	CSV434
						48	CSV457
Canarium	indicum	PENTECOTE	(Apna )	waknga	bo	6	CSV430
Canarium	indicum	PENTECOTE	(Apna )	waknga	sapsap	27	CSV442
Canarium	indicum	PENTECOTE	(Apna )	waknga	bwas	44	CSV452
Canarium	sp	PENTECOTE	(Apna )	waknga	atsalan		
Canarium	sp	PENTECOTE	(Apna )	waknga	gaspo:		

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
Canarium	sp	PENTECOTE	(Apma )	waknga	tewewep		
Canarium	vitiense	PENTECOTE	(Apma )	katpol	dini	45	CSV453
* ILE TONGOA							
Canarium	harveyi	TONGOA	(nakanamanga )	nagae	nimarav	438	RMV1
Canarium	harveyi	TONGOA	(nakanamanga )	nagae	ni-efate	439	RMV2
Canarium	harveyi	TONGOA	(nakanamanga )	nagae	mokandu	440	RMV3
Canarium	harveyi	TONGOA	(nakanamanga )	nagae	ni-efate	441	RMV4
Canarium	harveyi	TONGOA	(nakanamanga )	nagae	telau	443	RMV6
Canarium	harveyi	TONGOA	(nakanamanga )	nagae	soango	444	RMV7
Canarium	vulgare sp	TONGOA	(nakanamanga )	nagae	motua moai	442	RMV5
* ILE TORRES							
Canarium	harveyi	TORRES	(Lo )	negeR	wot	127	CSV525
Canarium	indicum	TORRES	(Hiu )	negeR	taw€	144	CSV543
Canarium	sp	TORRES	(Lo )	negeR	gare		

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
<b>DRACONTOMELON VITIENSE</b>			
* ILE AMBAI			
Dracontomelon vitiense	AMBAI (Nduindui )	katambolo	477 CSV1000
Dracontomelon vitiense	AMBAI (Nduindui )	katambolo bokura	478 CSV1001
* ILE AMBRYM			
Dracontomelon vitiense	AMBRYM (Dakaka )	mel po	214 CSV604
Dracontomelon vitiense	AMBRYM (Dakaka )	mel ten	
Dracontomelon vitiense	AMBRYM (Dakaka )	mel wobi	208 CSV598
Dracontomelon vitiense	AMBRYM (S/E Ambrym )	malowus	
Dracontomelon vitiense	AMBRYM (S/E Ambrym )	mal	230 CSV620
* ILE BANKS(GAUA)			
Dracontomelon vitiense	BANKS(GAUA) (Nume )	wera	
* ILE BANKS(VNL)			
Dracontomelon vitiense	BANKS(VNL) (Mosina )	woro	154 CSV554
* ILE EFATE			
Dracontomelon vitiense	EFATE (Nord-Efate )	ne-Rou	391 CSV871
* ILE EMAE			
Dracontomelon vitiense	EMAE (Tanamanga )	na-Rau	
Dracontomelon vitiense	EMAE (Tanamanga )	na-Rau pakura	
* ILE EPI			
Dracontomelon vitiense	EPI (Lewo )	lu na-tarakak	249 CSV641
Dracontomelon vitiense	EPI (Lewo )	lu na-krekaviu	240 CSV639
Dracontomelon vitiense	EPI (Lewo )	lu nameto	
* ILE EPI(LM)			
Dracontomelon vitiense	EPI(LM) (Lewo )	lu kopwi	323 CSV785
Dracontomelon vitiense	EPI(LM) (Lewo )	lu	311 CSV773
* ILE ERROMANGO			
Dracontomelon vitiense	ERROMANGO (Oru )	na-Rak	458 CSV977
Dracontomelon vitiense	ERROMANGO (Oru )	na-Rak yat	467 CSV986
* ILE FUTUNA			
Dracontomelon vitiense	FUTUNA (Futuna )	taveRao	
* ILE MAEWO			
Dracontomelon vitiense	MAEWO (Baetora )	tangola gonamate	
Dracontomelon vitiense	MAEWO (Baetora )	tangola	

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
* ILE MALAKULA			
Dracontomelon vitiense	MALAKULA (Wala/Rano )	netapol	61 CSV790 62 CSV791 - CSV463
Dracontomelon vitiense	MALAKULA (Wala/Rano )	netapol amiveng	106 CSV498
Dracontomelon vitiense	MALAKULA (Wala/Rano )	netapol	60
Dracontomelon vitiense	MALAKULA (Wala/Rano )	netapol	105 CSV497 103
* ILE MALAKULA(SWB)			
Dracontomelon vitiense	MALAKULA(SWB(Ninde )	na-ru	lape
Dracontomelon vitiense	MALAKULA(SWB(Ninde )	na-ru	
* ILE MALO			
Dracontomelon vitiense	MALO (Malo )	Ratambola	vuso
Dracontomelon vitiense	MALO (Malo )	Ratambola	ndaiga 359 CSV831
Dracontomelon vitiense	MALO (Malo )	Ratambola	tambai
* ILE PENTECOTE			
Dracontomelon vitiense	PENTECOTE (Apma )	katpol	beta 22 CSV437
Dracontomelon vitiense	PENTECOTE (Apma )	katpol	tewewep
Dracontomelon vitiense	PENTECOTE (Apma )	katpol	mwetak 39 CSV449
* ILE SANTO			
Dracontomelon vitiense	SANTO (Farsaf )	atapol	
* ILE TANNA			
Dracontomelon vitiense	TANNA (Lenakel )	novil	293 CSV740
* ILE TORRES			
Dracontomelon vitiense	TORRES (Lo )	nEro	
Dracontomelon vitiense	TORRES (Lo )	nEro pel	123 CSV521

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NCM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
<b>INOCARPUS FAGIFER</b>			
* ILE AMBAI			
Inocarpus fagifer	AMBAI (Nduindui )	magwe daile	
Inocarpus fagifer	AMBAI (Nduindui )	magwe	469 CSV1016
* ILE AMBRYM			
Inocarpus fagifer	AMBRYM (Dakaka )	map mere	203 CSV593
Inocarpus fagifer	AMBRYM (Dakaka )	map so	204 CSV594
Inocarpus fagifer	AMBRYM (Dakaka )	map	209 CSV599
Inocarpus fagifer	AMBRYM (S/E Ambrym )	map maboho	
Inocarpus fagifer	AMBRYM (S/E Ambrym )	map vet	
Inocarpus fagifer	AMBRYM (S/E Ambrym )	map vili	
Inocarpus fagifer	AMBRYM (S/E Ambrym )	map mareali	238 CSV629
* ILE BANKS(GAUA)			
Inocarpus fagifer	BANKS(GAUA) (Nume )	mak	
* ILE BANKS(VNL)			
Inocarpus fagifer	BANKS(VNL) (Mosina )	mwiak tangalngai	183 CSV563
Inocarpus fagifer	BANKS(VNL) (Mosina )	mwiak mome	148 CSV548
Inocarpus fagifer	BANKS(VNL) (Mosina )	mwiak worangrang	155 CSV555
Inocarpus fagifer	BANKS(VNL) (Mosina )	mwiak kwagkwag	182 CSV562
Inocarpus fagifer	BANKS(VNL) (Mosina )	mwiak malges	194 CSV581
Inocarpus fagifer	BANKS(VNL) (Mosina )	mwiak lowlowo	196 CSV583
* ILE EFATE			
Inocarpus fagifer	EFATE (Nord-Efate )	ne-mak lafkir	
Inocarpus fagifer	EFATE (Nord-Efate )	ne-mak tangel	
Inocarpus fagifer	EFATE (Nord-Efate )	ne-mak wases	
Inocarpus fagifer	EFATE (Nord-Efate )	ne-mak mak-lol	
* ILE EMAE			
Inocarpus fagifer	EMAE (Tanamanga )	na-mabwe nakoau	
Inocarpus fagifer	EMAE (Tanamanga )	na-mabwe sisak	
Inocarpus fagifer	EMAE (Tanamanga )	na-mabwe nawanawa	
* ILE EPI			
Inocarpus fagifer	EPI (Lewo )	kinaye na-memaen	245 CSV636
Inocarpus fagifer	EPI (Lewo )	kinaye mleleRu	247 CSV638
Inocarpus fagifer	EPI (Lewo )	kinaye meresului	
Inocarpus fagifer	EPI (Lewo )	kinaye ipisona	
Inocarpus fagifer	EPI (Lewo )	kinaye imalum	



## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
Inocarpus	fagifer	EPI	(Lewo )	kinaye	imwanding		
Inocarpus	fagifer	EPI	(Lewo )	kinaye	loe		
Inocarpus	fagifer	EPI	(Lewo )	kinaye	ipiyawa		
* ILE EPI(LM)							
Inocarpus	fagifer	EPI(LM)	(Lewo )	kinaye	yol	301	CSV763
Inocarpus	fagifer	EPI(LM)	(Lewo )	kinaye	me	297	CSV759
Inocarpus	fagifer	EPI(LM)	(Lewo )	kinaye		304	CSV766
Inocarpus	fagifer	EPI(LM)	(Lewo )	kinaye	sandiadiaka	305	CSV768
* ILE ERROMANGO							
Inocarpus	fagifer	ERROMANGO	(Oru )	nowane	namande		
Inocarpus	fagifer	ERROMANGO	(Oru )	nowane	hesul	471	CSV990
Inocarpus	fagifer	ERROMANGO	(Oru )	nowane	numlankao	468	CSV987
Inocarpus	fagifer	ERROMANGO	(Oru )	nowane		457	CSV976
						456	CSV975
* ILE FUTUNA							
Inocarpus	fagifer	FUTUNA	(Futuna )	ifi	koka		
Inocarpus	fagifer	FUTUNA	(Futuna )	ifi	mara		
Inocarpus	fagifer	FUTUNA	(Futuna )	ifi	ponovai		
* ILE MAEWO							
Inocarpus	fagifer	MAEWO	(Baetora )	mague	riringi		
Inocarpus	fagifer	MAEWO	(Baetora )	magus	logo		
* ILE MALAKULA							
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	nibem laets	100	CSV786
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	amiveng	059	CSV462
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	wok		
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	namalew		
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	nawas		
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	nibeveng	326	CSV793
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	nibem laets	063	
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	nibem laets		
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies		071	CSV739
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	amiveng	080	CSV787
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	amiveng	065	
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies	amiveng	064	CSV465
Inocarpus	fagifer	MALAKULA	(Wala/Rano )	nies		327	CSV794
* ILE MALAKULA(SWB)							
Inocarpus	fagifer	MALAKULA(SWB(Ninde	)	nambwe	dam		
Inocarpus	fagifer	MALAKULA(SWB(Ninde	)	nambwe	melkese		
Inocarpus	fagifer	MALAKULA(SWB(Ninde	)	nambwe	lit		

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
Inocarpus	fagifer	MALAKULA	(SWB(Ninde	)	nambwe	miyale	
* ILE MALO							
Inocarpus	fagifer	MALO	(Malo	)	mambwe	voke	
Inocarpus	fagifer	MALO	(Malo	)	mambwe	vava	
Inocarpus	fagifer	MALO	(Malo	)	mambwe	sise	
Inocarpus	fagifer	MALO	(Malo	)	mambwe	wari	
Inocarpus	fagifer	MALO	(Malo	)	mambwe	tagotagove	
* ILE PENTECOTE							
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	teneme	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	lit	003 CSV808
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	honga	040 CSV450
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	kul	010 CSV427
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	tsiare	038
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	dun	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	barabo	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	karo	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	sabongbong	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	wawos	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	bosus bwihil	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	bo	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	walke	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	wubwet	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	wakade	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	sia	37 CSV448
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	boswi	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	batekeltekel	
Inocarpus	fagifer	PENTECOTE	(Apm	)	maba	metakas	49 CSV458bis
* ILE SANTO							
Inocarpus	fagifer	SANTO	(Farsaf	)	talis	kar	
Inocarpus	fagifer	SANTO	(Farsaf	)	talis	seis	
Inocarpus	fagifer	SANTO	(Farsaf	)	talis	fox	
* ILE TANNA							
Inocarpus	fagifer	TANNA	(Lenakel	)	nukwanai	zoho	294 CSV741
Inocarpus	fagifer	TANNA	(Lenakel	)	nukwanai	pamiemla	274 CSV713
							282 CSV711
							275 CSV712
Inocarpus	fagifer	TANNA	(Lenakel	)	nukwanai	pometa	
Inocarpus	fagifer	TANNA	(Lenakel	)	nukwanai	piko	
Inocarpus	fagifer	TANNA	(Lenakel	)	nukwanai	kasowak	
Inocarpus	fagifer	TANNA	(Lenakel	)	nukwanai	zetui	
Inocarpus	fagifer	TANNA	(Lenakel	)	nukwanai	nwakawisak	
Inocarpus	fagifer	TANNA	(Lenakel	)	nukwanai	yasiya	
Inocarpus	fagifer	TANNA	(Lenakel	)	nukwanai	bapin	

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
Inocarpus	fagifer	TANNA	(Lenakel )	nukwanai	pwiling pwien		
Inocarpus	fagifer	TANNA	(Lenakel )	nukwanai	powon	285	CSV706
Inocarpus	fagifer	TANNA	(Lenakel )	nukwanai		273	CSV714
						289	CSV716
						288	CSV715
Inocarpus	fagifer	TANNA	(Lenakel )	nukwanai		290	CSV733
* ILE TORRES							
Inocarpus	fagifer	TORRES	(Lo )	nEmeuk		128	CSV526
Inocarpus	fagifer	TORRES	(Hiu )	nEmek		146	CSV545
Inocarpus	fagifer	TORRES	(Lo )	nEmeuk			

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
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**POMETIA PINNATA****\* ILE AMBAI**

Pometia	pinnata	AMBAI (Nduindui )	na-nda	moli
Pometia	pinnata	AMBAI (Nduindui )	na-nda	hihe
Pometia	pinnata	AMBAI (Nduindui )	na-nda	matakambu

**\* ILE AMBRYM**

Pometia	pinnata	AMBRYM (Dakaka )	nda	fwel
Pometia	pinnata	AMBRYM (Dakaka )	nda	bung
Pometia	pinnata	AMBRYM (Dakaka )	nda	beta
Pometia	pinnata	AMBRYM (Dakaka )	nda	wona
Pometia	pinnata	AMBRYM (S/E Ambrym )	Rao	Ravetei
Pometia	pinnata	AMBRYM (S/E Ambrym )	Raover	
Pometia	pinnata	AMBRYM (S/E Ambrym )	Rao	rabong

**\* ILE BANKS(GAUA)**

Pometia	pinnata	BANKS(GAUA) (Nume )	wuten	malges
Pometia	pinnata	BANKS(GAUA) (Nume )	wuten	lolou

**\* ILE BANKS(VNL)**

Pometia	pinnata	BANKS(VNL) (Mosina )	tawen	malges
Pometia	pinnata	BANKS(VNL) (Mosina )	tawen	tememe

**\* ILE EFATE**

Pometia	pinnata	EFATE (Nord-Efate )	nda	tamet nar
Pometia	pinnata	EFATE (Nord-Efate )	nda	xakes

**\* ILE EMAE**

Pometia	pinnata	EMAE (Tanamanga )	na-tao	painga
Pometia	pinnata	EMAE (Tanamanga )	na-tao	sisak
Pometia	pinnata	EMAE (Tanamanga )	na-tao	memerona
Pometia	pinnata	EMAE (Tanamanga )	na-tao	toro

**\* ILE EPI**

Pometia	pinnata	EPI (Lewo )	kilata	namaen
Pometia	pinnata	EPI (Lewo )	kilata	hong
Pometia	pinnata	EPI (Lewo )	kilata	samoli
Pometia	pinnata	EPI (Lewo )	kilata	sapopong
Pometia	pinnata	EPI (Lewo )	kilata	sakundupipiyu
Pometia	pinnata	EPI (Lewo )	kilata	sakula

**\* ILE ERROMANGO**

Pometia	pinnata	ERROMANGO (Oru )	dao	
Pometia	pinnata	ERROMANGO (Oru )	dao	milvang

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
* ILE FUTUNA							
Pometia	pinnata	FUTUNA	(Futuna )	tauwa	mano		
Pometia	pinnata	FUTUNA	(Futuna )	tauwa	koka		
Pometia	pinnata	FUTUNA	(Futuna )	tauwa	tupou		
* ILE MAEWO							
Pometia	pinnata	MAEWO	(Baetora )	dalawa	malakesara		
Pometia	pinnata	MAEWO	(Baetora )	dalawa	mataRambu		
* ILE MALAKULA							
Pometia	pinnata	MALAKULA	(Wala/Rano )	Ra	mtap	90	
Pometia	pinnata	MALAKULA	(Wala/Rano )	Ra	pteB	101	
Pometia	pinnata	MALAKULA	(Wala/Rano )	Ra	rases		
Pometia	pinnata	MALAKULA	(Wala/Rano )	Ra	mentedaRo		
Pometia	pinnata	MALAKULA	(Wala/Rano )	Ra	neviso dents	95	CSV660
* ILE MALAKULA(SWB							
Pometia	pinnata	MALAKULA(SWB(Ninde	)	ne-ndi	siveRe		
Pometia	pinnata	MALAKULA(SWB(Ninde	)	ne-ndi			
* ILE MALO							
Pometia	pinnata	MALO	(Malo )	ndsaria	burokin baike		
Pometia	pinnata	MALO	(Malo )	ndsaria	meli		
Pometia	pinnata	MALO	(Malo )	ndsaria	tolojmalao		
Pometia	pinnata	MALO	(Malo )	ndsaria	vunaganbo		
Pometia	pinnata	MALO	(Malo )	ndsaria	Roke		
Pometia	pinnata	MALO	(Malo )	ndsaria	tandoria		
Pometia	pinnata	MALO	(Malo )	ndsaria	malahensa		
Pometia	pinnata	MALO	(Malo )	ndsaria	djori		
* ILE PENTECOTE							
Pometia	pinnata	PENTECOTE	(Apma )	lislis	temene		
Pometia	pinnata	PENTECOTE	(Apma )	lislis	temit		
Pometia	pinnata	PENTECOTE	(Apma )	lislis		33	
* ILE SANTO							
Pometia	pinnata	SANTO	(Farsaf )	tsiri	kar		
Pometia	pinnata	SANTO	(Farsaf )	tsiri	fok		
Pometia	pinnata	SANTO	(Farsaf )	tsiri	loioabar		
* ILE TANNA							
Pometia	pinnate	TANNA	(Lenakel )	natim	mapEn	292	CSV735
Pometia	pinnata	TANNA	(Lenakel )	natim		291	CSV734
Pometia	pinnata	TANNA	(Lenakel )	natim			
* ILE TORRES							
Pometia	pinnata	TORRES	(Lo )	ne-tawE	ni		

FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)			NOM VERNACULAIRE		ARBRE HERBIERS
Pometia	pinnata	TORRES	(Lo	)	ne-taw€	pei	135 CSV534
Pometia	pinnata	TORRES	(Lo	)	ne-taw€	miyig€	

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBLIERS
<b>SPONDIAS DULCIS</b>						
* ILE AMBAI						
Spondias	dulcis	AMBAI	(Nduindui )	uhi pohoki	dandamo	
Spondias	dulcis	AMBAI	(Nduindui )	uhi	ango	
Spondias	dulcis	AMBAI	(Nduindui )	uhi pohoki		479 CSV1002
* ILE AMBRYM						
Spondias	dulcis	AMBRYM	(Dakaka )	paor	ngorngor	
Spondias	dulcis	AMBRYM	(Dakaka )	paor	mwerere	
Spondias	dulcis	AMBRYM	(Dakaka )	paor	ten	
Spondias	dulcis	AMBRYM	(S/E Ambrym )	homal	tereli	
Spondias	dulcis	AMBRYM	(S/E Ambrym )	homal	telep	
* ILE BANKS(GAUA)						
Spondias	dulcis	BANKS(GAUA)	(Nume )	wes	dam	
Spondias	dulcis	BANKS(GAUA)	(Nume )	wes	dorangrang	
Spondias	dulcis	BANKS(GAUA)	(Nume )	wes		
* ILE BANKS(VNL)						
Spondias	dulcis	BANKS(VNL)	(Mosina )	ur		156 CSV556, CSV650
Spondias	dulcis	BANKS(VNL)	(Mosina )	ur	worangrang	165 CSV577, CSV651
Spondias	dulcis	BANKS(VNL)	(Mosina )	ur	lowlowo	185 CSV567, CSV652
* ILE EFATE						
Spondias	dulcis	EFATE	(Nord-Efate )	ne-mal	ken	
Spondias	dulcis	EFATE	(Nord-Efate )	ne-mal	kas	
Spondias	dulcis	EFATE	(Nord-Efate )	ne-mal		393 CSV873
* ILE EMAE						
Spondias	dulcis	EMAE	(Tanamanga )	na-mali	kao	256 CSV681
Spondias	dulcis	EMAE	(Tanamanga )	na-mali	atomoli	254 CSV679
						255 CSV680
Spondias	dulcis	EMAE	(Tanamanga )	na-mali	alocara	
* ILE EPI						
Spondias	dulcis	EPI	(Lewo )	malma!	yui	
Spondias	dulcis	EPI	(Lewo )	malmal	taranak	
* ILE EPI(LM)						
Spondias	dulcis	EPI(LM)	(Lewo )	malmal		317 CSV779
* ILE ERROMANGO						
Spondias	dulcis	ERROMANGO	(Oru )	ne-vi	nangon	
Spondias	dulcis	ERROMANGO	(Oru )	ne-vi		454 CSV978

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HEUTEURS
* ILE FUTUNA			
Spondias dulcis	FUTUNA (Futuna )	na-vi	
* ILE MAEWO			
Spondias dulcis	MAEWO (Baetora )	wisa	dama
Spondias dulcis	MAEWO (Baetora )	wisa	vatu
* ILE MALAKULA			
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	56 CSV460, CSV511
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	55 CSV459, CSV509, CSV665
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	58 CSV510, CSV667
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	72 CSV471, CSV507, CSV668
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	73 CSV472, CSV508, CSV669
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	86 CSV484, CSV513, CSV670
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	115 CSV506, CSV661
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	57 CSV461, CSV512, CSV666
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	116 CSV514, CSV662
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	117 CSV515, CSV663
Spondias dulcis	MALAKULA (Wala/Rano )	naus-borton	118 CSV516, CSV664
* ILE MALAKULA(SWB)			
Spondias dulcis	MALAKULA(SWB(Ninde )	nan tsoHwoi	
* ILE MALO			
Spondias dulcis	MALO (Malo )	Resi	magonbo
Spondias dulcis	MALO (Malo )	Resi	paroholo
Spondias dulcis	MALO (Malo )	Resi	voke 351 CSV830
Spondias dulcis	MALO (Malo )	Resi	350 CSV829
			343 CSV822
* ILE PENTECOTE			
Spondias dulcis	PENTECOTE (Apma )	ba:rus	usmene
Spondias dulcis	PENTECOTE (Apma )	ba:rus	mwetax
Spondias dulcis	PENTECOTE (Apma )	ba:rus	tewewep
Spondias dulcis	PENTECOTE (Apma )	ba:rus	
* ILE SANTO			
Spondias dulcis	SANTO (Farsaf )	wi	windu
Spondias dulcis	SANTO (Farsaf )	wi	kar
Spondias dulcis	SANTO (Farsaf )	wi	fakir
* ILE TANNA			
Spondias dulcis	TANNA (Lenakel )	naus	



## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
* ILE TORRES			
Spondias dulcis	TORRES (Lo )	nur	129
Spondias dulcis	TORRES (Hiu )	nug	138 654537
Spondias dulcis	TORRES (Lo )	nur	

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS
<b>SYZYGIIUM MALACCENSE</b>						
* ILE AMBAI						
Syzygium	malaccense	AMBAI	(Nduindui )	kavika	menamapute	
Syzygium	malaccense	AMBAI	(Nduindui )	kavika		
* ILE AMBRYM						
Syzygium	malaccense	AMBRYM	(Dakaka )	have	moso	200 CSV590
Syzygium	malaccense	AMBRYM	(Dakaka )	have	suu	201 CSV591
Syzygium	malaccense	AMBRYM	(Dakaka )	have	kaga	
Syzygium	malaccense	AMBRYM	(Dakaka )	have	ten	207 CSV597
Syzygium	malaccense	AMBRYM	(S/E Ambrym )	ahi	ah-maso	
Syzygium	malaccense	AMBRYM	(S/E Ambrym )	ahi	ah-gabili	
* ILE BANKS(GAUA)						
Syzygium	malaccense	BANKS(GAUA)	(Nume )	wivir		
* ILE BANKS(VNL)						
Syzygium	malaccense	BANKS(VNL)	(Mosina )	gever	wotorou	
Syzygium	malaccense	BANKS(VNL)	(Mosina )	gever	welul	
Syzygium	sp	BANKS(VNL)	(Mosina )	wopotlaw		186 CSV566
* ILE EFATE						
Syzygium	malaccense	EFATE	(Nord-Efate )	kavik	kaf-kekok	
Syzygium	malaccense	EFATE	(Nord-Efate )	wavik		
* ILE EMAE						
Syzygium	malaccense	EMAE	(Tanamanga )	na-kavika		
Syzygium	malaccense	EMAE	(Tanamanga )	na-kavika	gogo	
Syzygium	malaccense	EMAE	(Tanamanga )	na-kavika	tau	
* ILE EPI						
Syzygium	malaccense	EPI	(Lewo )	kavika	veRe	
Syzygium	malaccense	EPI	(Lewo )	kavika	na-larakak	
Syzygium	malaccense	EPI	(Lewo )	kavika	kanop	
Syzygium	malaccense	EPI	(Lewo )	kavika	veRawe	
Syzygium	malaccense	EPI	(Lewo )	kavika	piyawi	
Syzygium	malaccense	EPI	(Lewo )	kavika	kona	
* ILE ERROMANGO						
Syzygium	malaccense	ERROMANGO	(Oru )	webe, nomim		463 CSV982
Syzygium	sp	ERROMANGO	(Oru )	webe	bel	
* ILE FUTUNA						
Syzygium	malaccense	FUTUNA	(Futuna )	kavika	uto	436 CSV966

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
Syzygium	malaccense	FUTUNA	(Futuna )	kavika	masi		
* ILE MAEWO							
Syzygium	malaccense	MAEWO	(Baetora )	Havika	Raniete morous		
Syzygium	malaccense	MAEWO	(Baetora )	Havika	Raniete	423	CSV909
Syzygium	richii	MAEWO	(Baetora )	natora	dau		
Syzygium	sp	MAEWO	(Baetora )	natora	ere		
* ILE MALAKULA							
Syzygium	malaccense	MALAKULA	(Wala/Rano )	navi		64	CSV464
Syzygium	malaccense	MALAKULA	(Wala/Rano )	navi	nivinius	82	CSV480
Syzygium	malaccense	MALAKULA	(Wala/Rano )	navi			
Syzygium	malaccense	MALAKULA	(Wala/Rano )	navi			
Syzygium	sp	MALAKULA	(Wala/Rano )	navi	nimenmen		
Syzygium	sp	MALAKULA	(Wala/Rano )	navi		99	CSV494
* ILE MALAKULA(SWB							
Syzygium	malaccense	MALAKULA(SWB(Ninde	)	neweke	bong		
Syzygium	malaccense	MALAKULA(SWB(Ninde	)	neweke	mis		
* ILE MALO							
Syzygium	malaccense	MALO	(Malo )	havika	mburusi		
Syzygium	malaccense	MALO	(Malo )	havika	letevuso	340	CSV819
Syzygium	malaccense	MALO	(Malo )	havika	mbarohani		
Syzygium	malaccense	MALO	(Malo )	havika		341	CSV820
* ILE PENTECOTE							
Syzygium	cf nutans	PENTECOTE	(Apma )	malmaikavik		23	CSV438
Syzygium	malaccense	PENTECOTE	(Apma )	kavik		11	CSV428
						16	CSV432
						21	CSV436
Syzygium	malaccense	PENTECOTE	(Apma )	kavik	tuturan	32	CSV444
Syzygium	malaccense	PENTECOTE	(Apma )	kavik	maru	14	CSV431
Syzygium	malaccense	PENTECOTE	(Apma )	kavik	tang		
* ILE SANTO							
Syzygium	malaccense	SANTO	(Farsaf )	ifi	kar		
Syzygium	malaccense	SANTO	(Farsaf )	ifi	ngor		
Syzygium	malaccense	SANTO	(Farsaf )	ifi	fok		
Syzygium	malaccense	SANTO	(Farsaf )	ifi	nenvir		
* ILE TANNA							
Syzygium	malaccense	TANNA	(Lenakel )	ne-kavik, nave	tofn		
Syzygium	malaccense	TANNA	(Lenakel )	ne-kavik, nave	apen		
Syzygium	malaccense	TANNA	(Lenakel )	ne-kavik, nave	afil		

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE (LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
Syzygium	malaccense	TANNA	(Lenakel )	ne-kavik.nave	sasau	283	CSV703
Syzygium	malaccense	TANNA	(Lenakel )	ne-kavik.nave	korneta	287	CSV707
* ILE TORRES							
Syzygium	malaccense	TORRES	(Lo )	nEgEviqa		125	CSV523
Syzygium	malaccense	TORRES	(Lo )	nEgEviqa	nigno	122	CSV520
Syzygium	malaccense	TORRES	(Hiu )	nEgEviqa			

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE	ILE(LANGUE)	NOM VERNACULAIRE	ARBRE HERBIERS
<b>TERMINALIA CATAPPA</b>			
* ILE AMBAI			
Terminalia catappa	AMBAI (Nduindui )	tokwa	487 CSV1013
Terminalia catappa	AMBAI (Nduindui )	tokwa	474 CSV999
Terminalia catappa	AMBAI (Nduindui )	tokwa	490 CSV1017
Terminalia sepicana	AMBAI (Nduindui )	tokwa ga	488 CSV1014
* ILE AMBRYM			
Terminalia catappa	AMBRYM (Dakaka )	wike winbap	217 CSV607
Terminalia catappa	AMBRYM (Dakaka )	wike siwangere	219 CSV609
Terminalia catappa	AMBRYM (Dakaka )	wike wuro	218 CSV608
Terminalia catappa	AMBRYM (Dakaka )	wike ker	220 CSV610
Terminalia catappa	AMBRYM (S/E Ambrym )	hoe miE	
Terminalia catappa	AMBRYM (S/E Ambrym )	hoe pili	236 CSV627
* ILE BANKS(GAUA)			
Terminalia catappa	BANKS(GAUA) (Nume )	tilis	
* ILE BANKS(VNL)			
Terminalia catappa	BANKS(VNL) (Mosina )	teles	190 CSV576
Terminalia catappa	BANKS(VNL) (Mosina )	teles we	
Terminalia catappa	BANKS(VNL) (Mosina )	teles lowlowo	187 CSV569
Terminalia sp	BANKS(VNL) (Mosina )	teles toko	
* ILE EFATE			
Terminalia catappa	EFATE (Nord-Efate )	tali pur maomao	
Terminalia catappa	EFATE (Nord-Efate )	tali pur	
Terminalia catappa	EFATE (Nord-Efate )	tali popot	388 CSV868
Terminalia samoensis	EFATE (Nord-Efate )	tali talili	
* ILE EMAE			
Terminalia catappa	EMAE (Tanamanga )	na-talie miela	252 CSV 677
			270 CSV695
Terminalia catappa	EMAE (Tanamanga )	na-talie masibay	
Terminalia catappa	EMAE (Tanamanga )	na-talie tau	269 CSV694
Terminalia catappa	EMAE (Tanamanga )	na-talie matakapuda	
Terminalia catappa	EMAE (Tanamanga )	na-talie aloara	253 CSV678
Terminalia samoensis	EMAE (Tanamanga )	na-talie lasi	
* ILE EPI			
Terminalia catappa	EPI (Lewo )	tawo tarakak	250 CSV642
Terminalia catappa	EPI (Lewo )	tawo krekoviw	244 CSV637
Terminalia catappa	EPI (Lewo )	tawo kakoru	

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
* ILE EPI(LM)							
Terminalia	catappa	EPI(LM)	(Lewo )	sawo		295	CSV757
Terminalia	catappa	EPI(LM)	(Lewo )	sawo		318	CSV760
Terminalia	catappa	EPI(LM)	(Lewo )	sawo	malum	321	CSV783
* ILE ERROMANGO							
Terminalia	catappa	ERROMANGO	(Oru )	teli		460	CSV979
* ILE FUTUNA							
Terminalia	catappa	FUTUNA	(Futuna )	tarie	fatu		
Terminalia	catappa	FUTUNA	(Futuna )	tarie	maRa	437	CSV968
Terminalia	samoensis	FUTUNA	(Futuna )	tarie	nui		
* ILE MAEWO							
Terminalia	catappa	MAEWO	(Baetora )	talise	ororo		
Terminalia	catappa	MAEWO	(Baetora )	talise	memea		
Terminalia	samoensis	MAEWO	(Baetora )	talise	hanaova		
Terminalia	sepicana	MAEWO	(Baetora )	talise	kau		
* ILE MALAKULA							
Terminalia	catappa	MALAKULA	(Wala/Rano )	dawo	etsets	92	CSV489
Terminalia	catappa	MALAKULA	(Wala/Rano )	dawo		67	CSV466
							CSV659
Terminalia	catappa	MALAKULA	(Wala/Rano )	dawo	natsiv	96	CSV493
Terminalia	catappa	MALAKULA	(Wala/Rano )	dawo		88	CSV486
Terminalia	catappa	MALAKULA	(Wala/Rano )	dawo		89	CSV487
Terminalia	catappa	MALAKULA	(Wala/Rano )	dawo	wala	328	CSV795
Terminalia	catappa	MALAKULA	(Wala/Rano )	dawo	Res	329	CSV796
Terminalia	catappa	MALAKULA	(Wala/Rano )	dawo		107	CSV499
Terminalia	samoensis	MALAKULA	(Wala/Rano )	dawo	neRe dmets	91	CSV488
* ILE MALAKULA(SWB							
Terminalia	catappa	MALAKULA(SWB(Ninde	)	nei-tiktik			
* ILE MALO							
Terminalia	catappa	MALO	(Malo )	tavoa	manday		
Terminalia	catappa	MALO	(Malo )	tavoa	maRvuso		
Terminalia	catappa	MALO	(Malo )	tavoa	tsilay		
Terminalia	samoensis	MALO	(Malo )	tavoa	Ranatanumwe	367	CSV836
* ILE PENTECOTE							
Terminalia	catappa	PENTECOTE	(Apma )	towo		34	CSV445
						35	CSV446
						334	CSV811
Terminalia	catappa	PENTECOTE	(Apma )	towo	netakal		

## FRUITS ET NOIX DE VANUATU: INVENTAIRE

NOM SCIENTIFIQUE		ILE(LANGUE)		NOM VERNACULAIRE		ARBRE HERBIERS	
Terminalia	catappa	PENTECOTE	(Apma )	towo	temit	13	CSV423
						13	AM003
* ILE SANTO							
Terminalia	catappa	SANTO	(Farsaf )	tavo	kar		
Terminalia	catappa	SANTO	(Farsaf )	tavo	fok		
Terminalia	catappa	SANTO	(Farsaf )	tavo	bo		
Terminalia	sp	SANTO	(Farsaf )	tavo	lang		
* ILE TANNA							
Terminalia	catappa	TANNA	(Lenakel )	tei	apen		
Terminalia	catappa	TANNA	(Lenakel )	tei	toŋn		
Terminalia	catappa	TANNA	(Lenakel )	tei	ilokotakota	278	CSV698
Terminalia	sp	TANNA	(Lenakel )	tei	ket		
* ILE TORRES							
Terminalia	catappa	TORRES	(Lo )	nŋ-teliŋŋ		120	CSV518
Terminalia	catappa	TORRES	(Hiu )	nŋ-tiyitŋ		136	CSV535
Terminalia	catappa	TORRES	(Lo )	nŋ-teliŋŋ		133	CSV532
Terminalia	catappa	TORRES	(Lo )	nŋ-teliŋŋ		134	CSV533
Terminalia	catappa	TORRES	(Hiu )	nŋ-tiyitŋ		137	CSV536
Terminalia	samoensis	TORRES	(Lo )	nŋ-teliŋŋ	nŋmwe	132	CSV531
Terminalia	samoensis	TORRES	(Hiu )	nŋ-tiyitŋ	nŋmwe	140	CSV539