Hide, R.L. 1984. Appendix 1. A checklist of wild plants in South Simbu. In: Hide, R.L. ed. South Simbu: Studies in Demography, Nutrition, and Subsistence. Research Report of the Si...

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Research Report
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Simbu Land Use Project

VOLUME VI

SOUTH SIMBU: STUDIES IN DEMOGRAPHY, NUTRITION, AND SUBSISTENCE

Editor
R.L. HIDE
1984

Simbu Provincial Government
Office of Environment and Conservation
Department of Primary Industry
United Nations Development Programme
Institute of Medical Research
Institute of Applied Social and Economic Research

SLUP Report, Volume VI **ERRATA**

page 36, footnote 16, line 5: p. 59

page 47, paragraph 1, line 3: Fig. 3.5

page 61, paragraph 1, line 9: p. 59

page 62, paragraph 2, line 2: Chapter 8

page 113, Table 3.22, Column 1 'Age class of women' should read: <41
>41
<41
>41

page 121: Figure 4.1 is transposed with Figure 5.1 on page 164.

page 153, Table 4.11, Note 2, line 2: fn 11, not 6

page 158: Table 4.13 pertains to children aged 0-4 years

page 164: Figure 5.1 is transposed with Figure 4.1 on page 121.

page 173, paragraph 4, line 4: 1983, not 1981

page 192, paragraph 2, line 7: Mata et al. 1975, not Mata 1977

page 217, paragraph 2, line 4: 0.08, not 0.2

page 219, paragraph 2, last line: 11,187, not 1,187

page 220, paragraph 2, line 8: 5-6, not 2-6

page 280, paragraph 4, line 11: 6.3.82, not 6.82

page 289, paragraph 1, line 7: Table 6.21, not Table 6.22

page 345, paragraph 1, line 1: 1600, not 160

page 363, paragraph 3, line 2: Tyler (1982)

page 456, Table A3.1: in Karimui-Daribi column, add:

1125	Total examined at 2-3.1981
1591	Total examined at 8-9.1981

page 471, paragraph 5, line 4: Figures 6.4, 6.5, 6.6, and 6.7

page 492, Bleeker entry: published at Canberra: ANU Press

Items missing from references:

Driscoll, D. and Winyard, G., 1979. 'Patterns of use of Madang hospital', Papua New Guinea Medical Journal, 22(4): 85-89.

Heywood, P., 1983. 'The functional significance of malnutrition - growth and prospective risk of death in the highlands of Papua New Guinea', Journal of Food and Nutrition, 9(1): 1-19.

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THE RESEARCH REPORT

OF THE

SIMBU LAND USE PROJECT

VOLUME VI

SOUTH SIMBU: STUDIES IN DEMOGRAPHY, NUTRITION, AND SUBSISTENCE

Editor

R.L. Hide

1984

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Provincial Affairs (M. Paining, Assistant Secretary; J. Corrigan, Executive Officer), of DPI (J. Koimo, Assistant Secretary), and of Health (Dr. M. Moynihan, Assistant Secretary; P. Lausi, PHO) all actively supported various aspects of the work.

The Kundiawa-based members of SLUP, Dr. P. Wohlt (Team Leader), A. Goiye, P. Harvey, S. Goodbody, and G. Humphreys helped in many ways over and above their various contributions to this report. Ruth Wohlt and Trish Goodbody, along with P. Barker and Dr. Jane Barker, provided overnight hospitality to a Karimui-Kundiawa commuter on many occasions.

Other Papua New Guinea centres

Port Moresby: Francis Deklin and Onike Kimui of the Office of Environment and Conservation, and the staff of the Institute of Applied Social and Economic Research, provided RLH with institutional support and encouragement. At the University of Papua New Guinea, Dr. Lance Hill, Chairman of the Department of Biology, provided enthusiastic departmental support for the co-operative work on wildlife utilization. J.H. Hilari, Museum technician with the Department, assisted Dr J. C. Pernetta with the preparation of specimens. Dr D. Frodin identified plant specimens. The Department of Anthropology and Social Work arranged for Walter Dep's research. At the Papua New Guinea National Museum, Pam Swadling of the Department of Prehistory arranged the funding for a collection of South Simbu stone artefacts which is now deposited in that institution. J. Menzies of the Natural History Department assisted with the identification of frogs. Dr G. Maynes, of the Research Section of the Division of Wildlife, assisted with the identification of bats. Ross Hughes, then with the national census, assisted with information about census sources, and Dr M. Bakker, also with the national census, commented extensively on a draft of Chapter 3.

On visits to the capital, Emily and Sekove Naquiolevo provided hospitality as they have done for many years, and Mary Pernetta endured too many hours of talk about rats, bats and kapuls, and the joys of living and researching in the South Simbu forest.

Lae: The Division of Botany, Department of Forests, received all botanical specimens and provided identifications.

Chapter 1

INTRODUCTION

R.L. Hide

1.1 Project background and objectives

This volume reports the results of studies carried out in the Southern half of the Simbu Province of Papua New Guinea (Fig. 1.1) by the Simbu Land Use Project (SLUP) between 1980 and 1982.

SLUP was established with the major aim of providing a primary data base leading to the formulation of practical recommendations for maintaining and improving subsistence agriculture and nutrition within Simbu. Certain features of North Simbu, in particular the mountainous terrain, high population density, and apparent signs of agronomic stress, were significant determinants resulting in the formation of SLUP.

SLUP research in Simbu commenced in August 1979 with two Sections: Land Use (P. Wohlt) and Soil Survey (G. Humphreys). During the first half of 1980 two other specialist sections were formed: Nutrition (P.W.J. Harvey) and Agronomy (S. Goodbody). The South Simbu Section was added later in the year in recognition both of the markedly different environmental and demographic characteristics of the South, and of the need for the other Sections to primarily concentrate on the 95 percent of the provincial population resident in the North.

Project documents originally defined the objectives of the South Simbu Section in very broad terms. Investigations were to be made of:

(i) demography, resource use, nutrition, and other factors among the Southern population;

(ii) climatic and other environmental parameters;

(iii) the dynamics of food and cash crop productivity in relation to soil fertility;

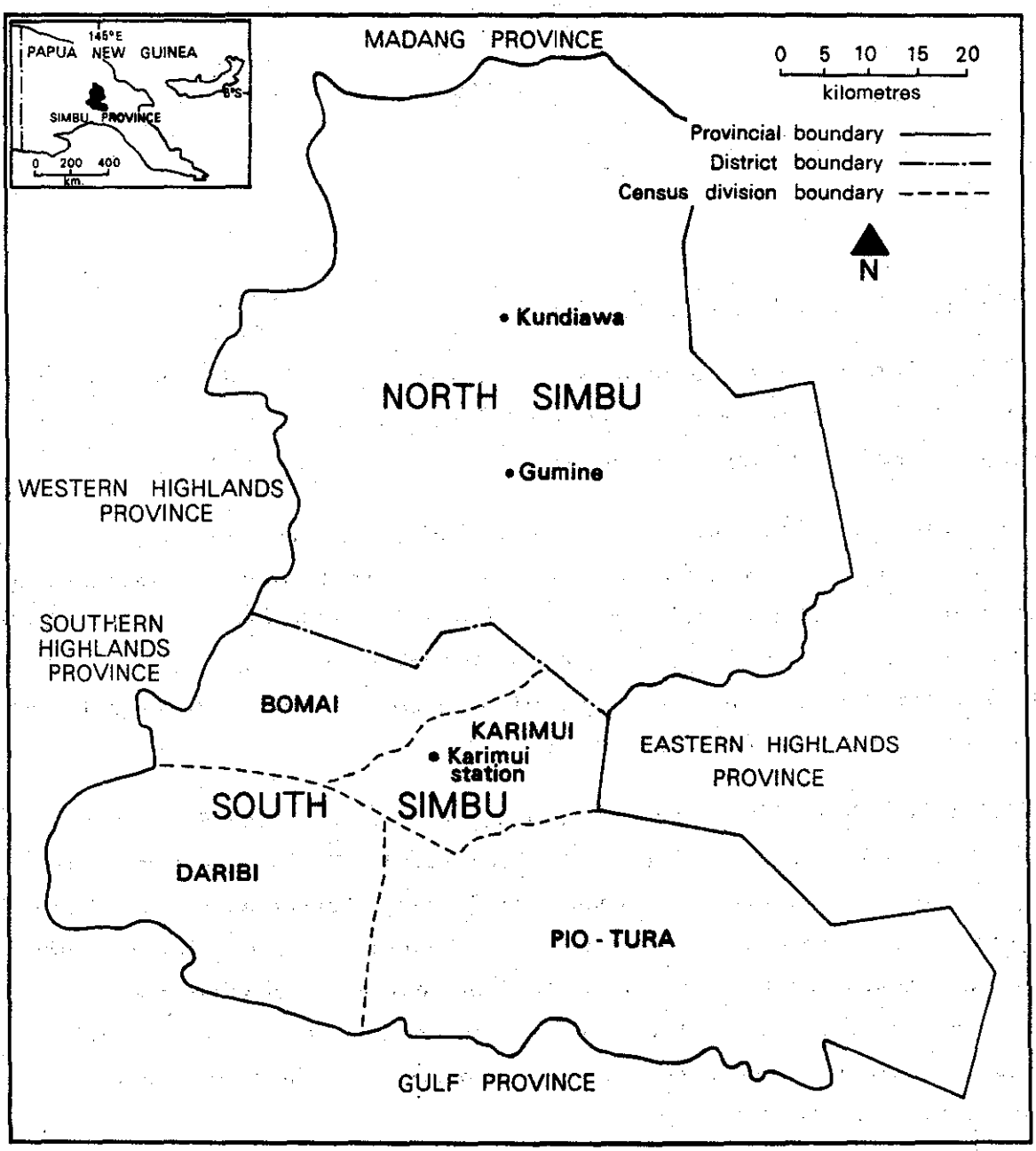

Figure 1.1 Location of South Simbu in Simbu Province, Papua New Guinea

(iv) the extent of migration into the region by settlers from North Simbu, and the characteristics of this informal settlement;

(v) differences in environmental and social conditions above and below about 1400 m (i.e., at or near the boundary between North and South, and within the South proper).

Due to uncertainties about the duration of research and the availability of funding and research assistance, these ambitious objectives were necessarily interpreted as guidelines rather than strict terms of reference. The following section outlines the research projects that were undertaken, and Section 1.3 describes factors determining these choices and the conditions under which the research was carried out.

1.2 Projects undertaken

The following research projects were undertaken by SLUP in South Simbu between May 1980 and December 1982. The Soil Survey Section was responsible for the general assessment of soils (SLUP Volume II, Humphreys, in preparation), and the Nutrition Section for the 1980 and 1981 Nutrition Surveys (SLUP Volume IV, Harvey and Heywood 1983; this volume, Chapter 5).

1.2.1 General: Review of previous environmental, social, and medical research in South Simbu, and review of existing data sources.

1.2.2 Environment:

(i) Soils: General assessment of regional soils; cross-sectional sampling of topsoils under various vegetation types at two locations to assess chemical fertility trends through forest-cultivation-fallow sequence; longitudinal sampling of cultivated topsoils at one site to assess fertility trends during cultivation and relationships between fertility levels and yields.

(ii) Climate: Collection of rainfall and temperature data.

(iii) Vegetation: Limited sampling of secondary associations and collecting of botanical specimens of useful plants.

(iv) Fauna: Extensive collection of animal trophy material from hunters at several locations; intensive collection of material

at one location over 16 months to assess hunting patterns; limited collections of insects (edible and crop pests), and birds' eggs (cassowary and megapode, for assessment of composition).

1.2.3 Population

(i) Analysis of extant demographic data for whole region.

(ii) Microstudy of one community.

(iii) Fertility survey of 109 women from part of the Karimui Census Division.

(iv) Survey of immigrant settlers.

1.2.4 Health and nutrition

(i) Analysis of extant data sources (intervention programmes; health centre, aid post, and MCH records).

(ii) 1980 Nutrition Survey of under 5 year old children throughout the region

(iii) 1981 SLUP/IMR Survey of nutrition, malaria, and intestinal parasites.

(iv) Monitoring of adult weight changes during 1981-82 at one location (originally two).

1.2.5 Land use and agriculture

(i) One (originally two) village field site study: household census (migration experience, marriage patterns, livestock holdings, garden histories); garden surveys, crop inventories, and yield data.

(ii) Agronomic trials at Karimui Station (also established at Bomai but abandoned when air access reduced): time of planting, yields, continuous cropping, and fertilizer response.

(iii) Cash crops: analysis of all extant data on coffee, cardamom, and chillies; monitoring of production from DPI coffee plots at Karimui Station.

(iv) Market survey: sweet potato price variation, and availability of other crops for sale.

1.2.6 Supplementary projects

(i) A collection of stone artefacts was made in the Karimui Census Division with the support of the Papua New Guinea National Museum, and was deposited with this institution.

(ii) Since previous research at Wabo on the Purari River had suggested that arbovirus diseases were important and recommended collections of sera from nonhuman vertebrates in order to identify possible reservoirs (Work and Jozan 1980), a collecting visit by Dr. G. Maynes (Research and Surveys, Division of Wildlife) was exploited to provide sera for the Institute of Medical Research in Goroka.

1.3 Research: strategies, conduct, and conditions

As the above list of projects indicates, the research carried out by SLUP in South Simbu was regional in some aspects, local and in-depth in others. The main factors determining choices of strategy were pragmatic: the availability and adequacy of existing data sources, the availability and experience of research staff, regular changes in the funding situation, and the constraint of distance in a large region where most travel is on foot. Inevitably, achievements rarely matched initial goals.

When the South Simbu Section of SLUP was formed in October 1980 with the arrival of RLH, the Soil Section had largely completed its general assessment of Southern soils and over half the 1980 Nutrition Survey of Southern areas had been carried out. Plans for the initial year's work of the South Simbu Section - there was no guarantee of funding beyond this - were therefore focused on three major topics which consultations and a first reading of source materials suggested as priorities:

(i) nutritional status,

(ii) environmental contraints on cultivation,

(iii) informal settlement.

Chapter 2

ENVIRONMENT, SOCIETY, AND HISTORY

R.L. Hide

2.1 Physical environment

2.1.1 Location and area

The South Simbu region includes the whole southern half of the Simbu Province in the mountainous interior of Papua New Guinea (see Fig. 1.1). The region lies between latitudes 6° 18' and 6° 50' south, and longitudes 144° 25' and 145° 15' east, and includes an area of 2997 km^2, which is 48% of the provincial total of 6181 km^2.

2.1.2 Topography and altitudinal zonation

Topography in the South is far less intricate than in North Simbu. In the north of the region, the foothills of the Marigl Divide descend to a broad plateau area which is deeply incised by the Tua River from east to west (Fig. 2.1). Three heavily dissected volcanic cones, Mt Au (or Suaru), Mt Karimui, and Crater Mountain dominate the surrounding flatter country. In the southwest a series of parallel limestone ridges run from east to west.

The contrast between North and South Simbu in altitude is striking: whereas over 90% of the north lies over 1400 m, 80% of the South is below this altitude. A breakdown of altitudinal zonation by census division is shown in Table 2.1 and Fig. 2.1.

2.1.3 Climate

Climatic data for the region are limited. Only one relatively long set of rainfall records, from Karimui Station from 1960 -72, is available, but recording unfortunately ceased in 1973. Some fragmentary data are available from Bomai (Unani) in the early 1960s. Since 1980-81, short runs have been made at Haia in Pio-Tura, Sigidu (cardamom plantation beside Karimui Station), Yuro village (5 km south east of Karimui), and Negabo in Daribi. Data from Sigidu and Yuro are shown in Fig. 2.2, with the Karimui average shown for comparison.

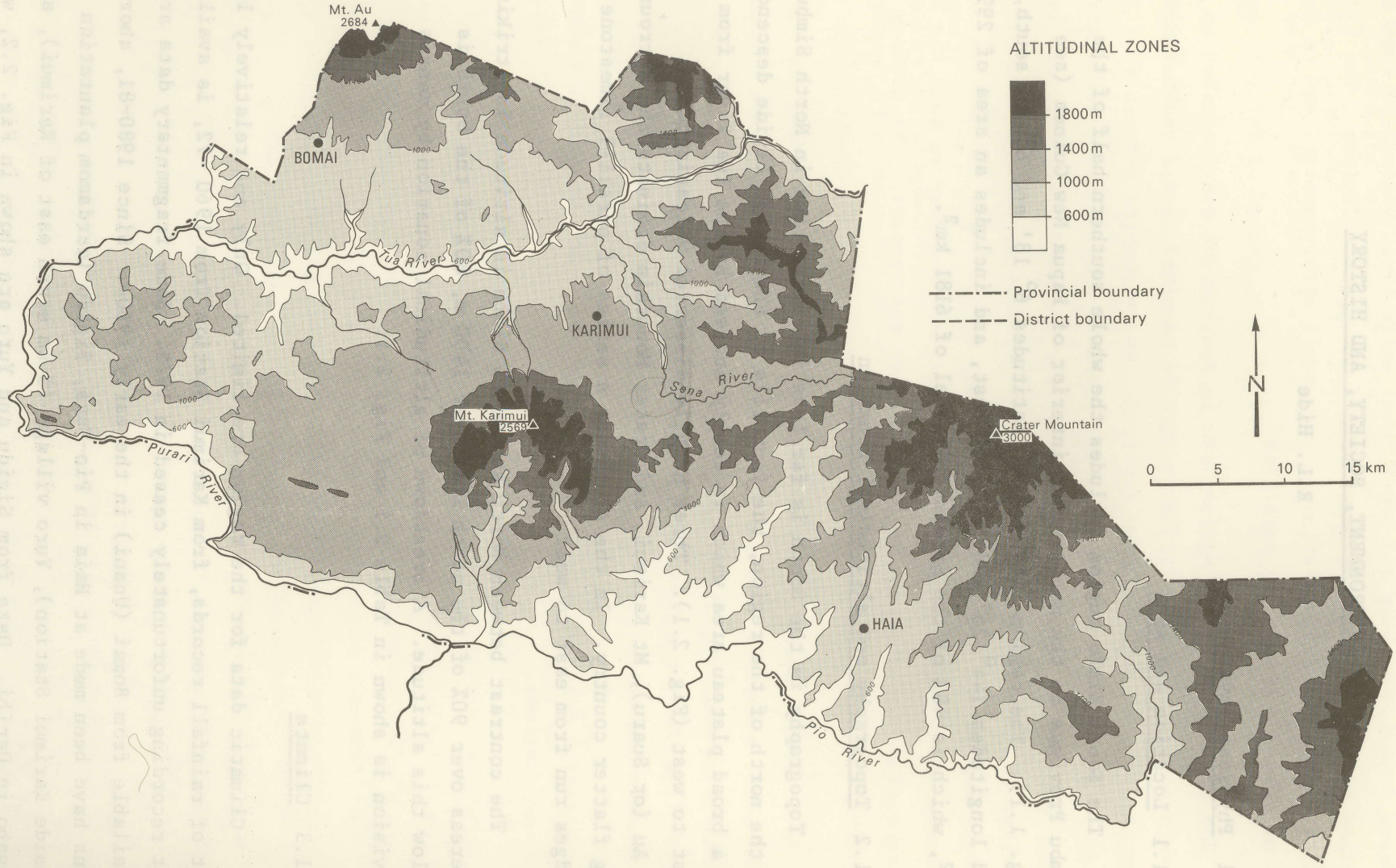

Figure 2.1 Altitudinal zones of South Simbu

TABLE 2.1 South Simbu: altitudinal zones by area and % area of census division[1].

Altitude Classes	Bomai		Daribi		Karimui		Pio-Tura		Total	
	Area km^2	%	Area km^2	%	Area km^2	%	Area km^2	%	Area km^2	%
>2200	0.8	0.2	4.0	0.6	1.2	0.2	24.0	1.7	30.0	1.0
1800-2200	9.3	2.1	12.0	1.8	17.7	3.5	82.9	6.0	121.9	4.1
1400-1800	43.9	9.8	36.4	5.6	87.0	17.3	292.1	21.0	459.4	15.3
1000-1400	122.3	27.2	297.8	45.6	242.5	48.3	462.0	33.3	1124.6	37.5
600-1000	235.4	52.4	232.2	35.6	133.7	26.6	386.2	27.7	987.6	33.0
<600	37.7	8.4	70.6	10.8	19.8	4.0	145.7	10.5	273.8	9.0
TOTAL	449.4	100.0	653.1	100.0	501.9	100.0	1392.9	100.0	2997.3	100.0

[1] Source: Humphries (1981)

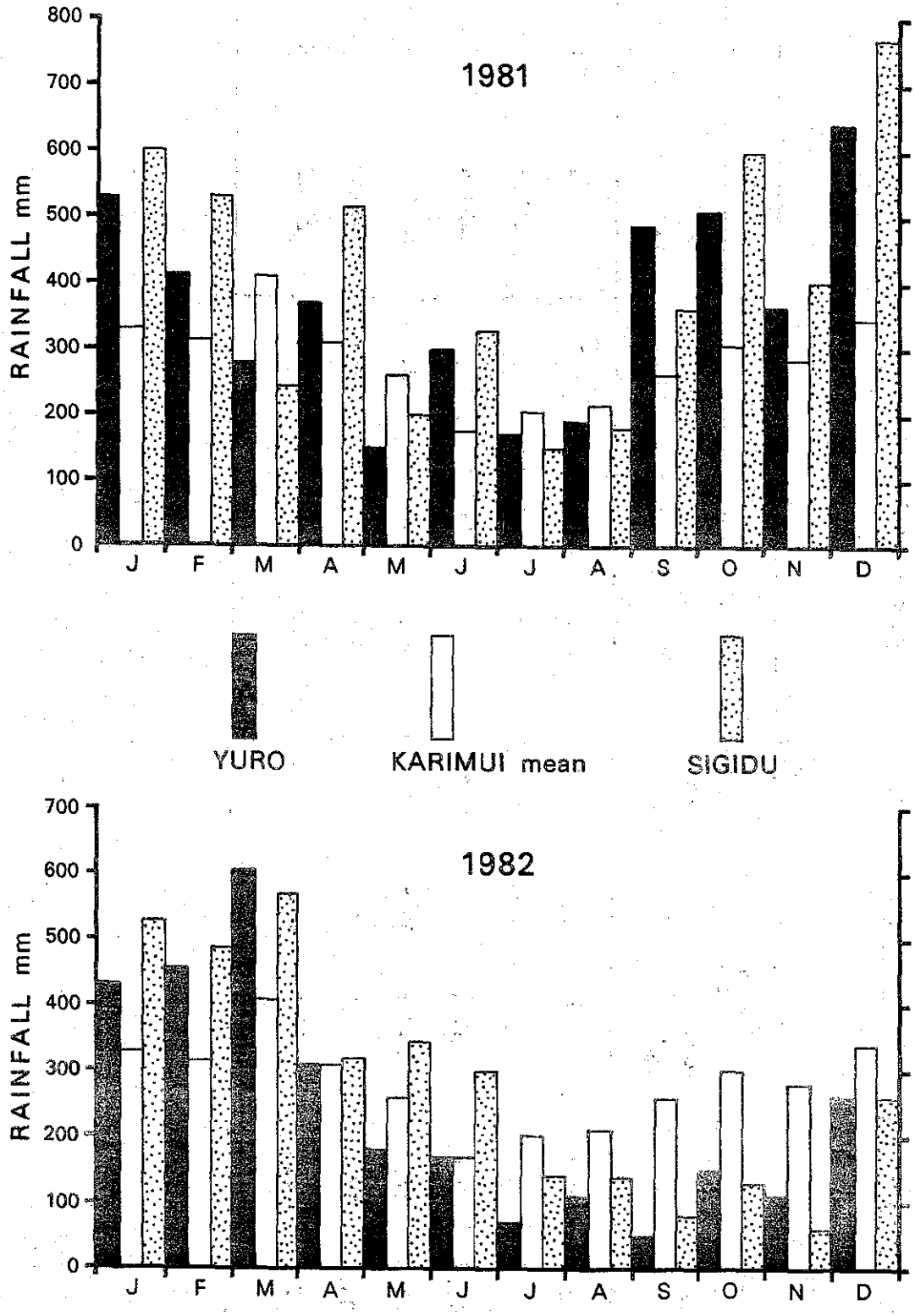

Figure 2.2 Monthly rainfall at Yuro and Sigidu in 1981 and 1982, and Karimui Station mean (1960-73).

In general the climate of most of the region between the altitudes of 500 and 1400 m falls within either the premontane humid, or premontane perhumid, classes defined by McAlpine et al. (1983: 150-161). Rainfall is generally high, ranging from 3000-5000 mm annually. The predominant seasonal pattern is for a minimum between May and August during the southeast season, and a maximum between December and March during the northwest season. Just south of the provincial border, at Wabo on the Purari River, the annual total is 9000 mm and the seasonal pattern is reversed (Hall 1979: 3, Map 3).

Twelve-months data from Yuro village at 1150 m altitude indicate a mean annual maximum temperature of 28.8°C and a mean minimum of 17.2°C. These figures are both slightly warmer than predictions (respectively 27.3 and 15.8°C) for this altitude from national lapse rates (McAlpine et al. 1983: 95). It is possible that the unusual topography of the flat Karimui plateau results in a rather warmer temperature regime than would otherwise be found at this altitude. This suggestion is supported by the occurrence of a number of lowland birds above their normal altitudinal limits on the plateau (Diamond 1972: 54).

Climatic conditions during 1981-82 were unusual in two respects: in the first place 1981 was exceptionally wet with both Sigidu and Yuro recording annual totals (respectively 4882 and 4407 mm) considerably in excess of the previous highest annual figure from Karimui Station (4002 mm); and secondly, the latter part of 1982 was exceptionally dry. More precisely, during the seven months between September 1981 and March 1982 totals of 3723 and 3501 mm respectively were recorded at Sigidu and Yuro (giving monthly averages of 532 and 500 mm). In contrast, over the seven months between May and November 1982, their respective totals were 1197 and 884 mm, or monthly averages of 171 and 121 mm. By comparison, during the 1972 drought Karimui Station recorded a total 774 mm between June and November (129 mm per month) after a very wet May with 472 mm. Data on the incidence of dry spells of various durations for both Sigidu and Yuro shown in Table 2.2 indicate the difference between 1981 and 1982 and show that extended spells of 10 or more rainless days are likely to be infrequent in normal years. Analysis of 1981 data from Sigidu and Yuro suggests that 36-40% of daily rainfall recordings fell in the range 5-24 mm, 12-15% between 25-49 mm, only 4-5% between 50-99 mm, and none over 100 mm.

TABLE 2.2 Incidence of dry spells of varied duration at two locations during 1981 and 1982.

Duration of dry spell (days)	Number of dry spells			
	1981		1982	
	Sigidu	Yuro[1]	Sigidu	Yuro
2-3	11	14	13	11
4-5	4	3	4	4
6-9	3	1	4	3
10-15	-	-	5	3
Total dry spells	18	18	26	21
Total days	66	48	138	105

(1) No data for May.

(2) Sigidu data complete except for last week of December; Yuro data also incomplete for last week of December and 13 days in October-November.

2.1.4 Vegetation

The dominant vegetation covering most of the South is forest, with current gardens and young regrowth prominent only in areas around human settlement and thus primarily restricted to the Karimui and Bomai plateaux. The only area of apparently stable grassland is a small patch in the far southwest of Daribi near the Tua River (see footnote 2 below).

There are two major forest types: lowland hill forest below 1000-1400 m, and lower montane forest above this altitude (Paijmans 1975, 1983; Johns 1976). The montane forest is mainly restricted to the slopes of Mt Karimui and Mt Au, and varies considerably in structure and composition according to altitude, rainfall, slope, and aspect (Paijmans 1975: 14-15). Diamond (1972: 11, 28, 32) reports a well defined moss level at 2000 m on a west ridge of Mt Karimui above which the summit vegetation was distinctly stunted. On an eastern ridge (more exactly, perhaps, southeastern), however, he notes that this began at approximately 1400 m. The shrubby summit vegetation, in which trees in the Ericaceae family are prominent, appears to predominate on many of the steep crater walls.

As with gradations within the montane forest, the boundary between this type, which is characterised by such genera as *Agathis*, *Castanopsis*, *Elmerrillia*, and *Lithocarpus* (besides many others), and the lowland hill forest in which such genera as *Pometia*, *Canarium*, *Terminalia*, and *Syzygium* are common, is variable between 1000 and 1400 m. On the east and northeast of the Karimui plateau the break takes place at about 1100 m and is explicitly recognised by the local population who contrast two zones, kolobo ('cold') and begere ('hot'). Since 42% of the South Simbu region lies below 1000 m, it is probable that over half the region is covered with lowland hill forest. On the basis of crown size, Paijmans (1975) has mapped three subtypes. Medium-crowned hill forest is most common, with the large- and small-crowned types essentially representing adaptations to respectively favourable and adverse conditions of soil and slope. Thus the large-crowned hill forest is restricted to parts of the Karimui and Bomai plateaux and to the gently sloping upper valley of the Sena River in the east, while the small-crowned type predominates in the limestone country in the southeast of Daribi.

Besides the general mapping from aerial photographs of broad vegetation types, little botanical research has been done in South Simbu. Some work was initiated in the early 1970s by a CSIRO team but analysis was not completed before the programme was discontinued in the mid 1970s (J. Saunders pers. comm.). Related CSIRO work resulted in a partial map of the approximate extent of gardens and secondary growth on the main Karimui and Bomai plateaux (see Simpson 1975: 15). During 1981-82, a small botanical collection (nearly 300 specimens), focusing on locally used plants and those in secondary associations, was made and deposited with the Herbarium at Lae. These plants, including a number recorded by J. Saunders, are listed in Appendix 1.

2.1.5 Fauna

Due to the extent of forest, and the generally low density of human population, South Simbu has a rich fauna which is extensively exploited for food and other uses. Although considerable scientific collections of various orders have been made, most have not been described in published form.

The major exception is Diamond's important monograph (1972) reporting field studies of birds made in 1964-65. Local sources at Karimui suggest that other ornithologists have visited the area but no records of such visits have been traced. Prior to 1980, small undescribed collections of mammals were made by Diamond (1972: 9), and by biologists from the Wau Ecology Institute (J.H. Sedlacek in 1963, A.B. Mirza in 1977). The former were deposited (Diamond, pers. comm.) with the American Museum of Natural History (which did not respond to several enquiries), the latter with the Bishop Museum (Ziegler, pers. comm.). Frogs and reptiles were also collected in the 1960s by Diamond (ibid.) and by F. Parker (pers. comm., Greer and Parker 1974). There is no record of any previous collection of fish or eels from South Simbu. Numerous small collections of insects have been made by agricultural officers (Cole, Searle, Aland, Smith)[1], by the malaria service (Awa 1965; see also Alpers 1980 for the

[1] Cole's 1960 collection from Bomai was sent to Aiyura (Cole 1960) but no records can be traced; Searle's 1970 collection is mentioned in a letter by Senior Entomologist T.L. Fenner (see below); identifications of Aland's collection in 1972 are given by T.L. Fenner in a letter (20.9.72) on file with Aland's 1972 Karimui Soil Report (Land Use Section, DPI, Waigani Drive) and possibly also File 8-4-3, Entomology, DPI, Konedobu; Smith's data are reported in File 8060J, Entomology, DPI, Konedobu, and also Smith 1977).

Appendix 1

A CHECKLIST OF WILD PLANTS IN SOUTH SIMBU

This appendix lists, by family and genus, a number of wild plants present in the South Simbu environment. Family name abbreviations follow those given in the Division of Botany's Dictionary (1973). Where known, Daribi names are given. Symbols indicate plant form (tree, herb, vine, etc.), altitudinal zone, major uses (food, medicinal, etc.), and parts used. Definitions for the symbols used are given below. The list includes three kinds of entry, as indicated in the far right-hand column:

(a) plants collected during 1981-1982 by R.L. Hide and deposited at the Division of Botany Herbarium at Lae (with some duplicates at the Department of Biology, University of Papua New Guinea). These collections are indicated by the voucher numbers in the far right-hand column.

(b) plants (exclusively trees) recorded by J. Saunders of CSIRO during work at Karimui in 1973. These are indicated by the initials JS.

(c) a few plants recognised in the field but not collected (nc.).

The 300 or so plants listed here include, of course, only a proportion of the total South Simbu flora. Although only a provisional listing, such basic botanical knowledge of the region is a prerequisite both for further detailed studies of such important aspects of human-environment interactions as fallow sequences, and for understanding of traditional knowledge of the forest and the fauna that it supports.

Completion of this list would not have been possible without the assistance of many people: particular thanks are due to both M. Galore, the A/Director, Division of Botany, and his staff (P. Katik and J. Wiakabu) at the Lae Herbarium, and to Dr D. Frodin, UPNG, for botanical identifications; to Dr T.G. Hartley, CSIRO, for checking names and authorities; to J. Saunders, CSIRO, for the use of his Karimui data; to Yuro villagers for their assistance with collecting specimens and recording Daribi names and knowledge; and to C. Whitby, SIL, for suggestions concerning Daribi orthography.

Symbols used

* (preceding generic name) = recent introduction

Form

E = epiphyte
F = fern
H = herb
S = shrub
T = tree
V = vine

Altitudinal zone

I = 800-1400 m
II = 1400-1900 m
III = 1900-2300 m

Use

C = construction
D = decorative, cosmetic
Dy = dye
F = human food
Fb = food eaten by birds
Fm = food eaten by mammals
Fi = fishing (lure, poison)
M = medicinal
P = packaging, wrapping etc.
R = ritual
R = rope
S = smoking (wrapping tobacco)
T = technological (tools, weapons, musical instruments).

Part used

B = bark
E = exudate
F = flower
Fr = fruit
L = leaf
P = pith
R = root
S = seed
Sh = shoot
St = stem
W = wood

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
ACANTH.	*Calophanoides* sp.	yagusu keba	H	I	F	L	728
	Jadunia racemiflora Bremek	keba ni	S	I	Fb		666
AMARANTH.	*Achyranthes aspera* L.	pipisan nosai	H	I			530
	Cyathula prostrata (L.) Bl.	gedu nosai	H	I			591
	**Iresine herbstii* Hook.f.	sagirigiri	H	I			660
ANACARD.	*Buchanania* sp.	ega	T	I			JS
	Dracontomelum sp.	wara	T	I			JS
	Euroschinus sp.	elewi	T				JS
	Semecarpus magnificus K.Schum.	orolia	T	I	F,P,T, Fb	LLW	632
ANNO.	*Goniothalamus aruensis* Scheff.	eneni	S	I	M,Fb	L	637
	Oncodostigma leptoneura Diels	sobo	T	I	Fm		737
	Polyalthia sp.	oraga	T				JS
APOC.	*Alstonia* sp. or spp.	poin, yowi tobolu	T	I			JS
	Cerbera sp. or spp.	ane	T		R	S	JS
AQUIFOL.	*Ilex ledermannii* Loes.	obo ni	T	I			614

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
ARAC.	*Alocasia* sp.nov.	tawia	H	I	Fm,b		676
	Pothos brassii B.L. Burtt	kena bono	V	I	Fb		741
ARAL.	*Osmozylon novoguineense* (Scheff.) Becc.	punong	T	I	M,Fb	L	623
	Schefflera actinophylla Harms.	punong	V	I	Fb		549
	Schefflera schumanniana Harms.	punong	V	I	Fi		689
	Schefflera sp. "E".aff. *schumanniana* Harms.	punong	S	II			744
ARAUC.	*Araucaria cunninghamii* D.Don.	wiru	T	I			nc.
BALSAMIN.	*Impatiens* sp.	nene	H	I			nc.
BARRINGTON.	*Barringtonia ?niedenzuana* (K.Schum.) Knuth	soga	T	I	Fb		685
BEG.	*Begonia brachybotrys* Merr. & Perry		H	I			526
	Begonia tafaensis Merr. & Perry aff.	gereli dili	H	I	D,Fb	LFl	638
BIGNON.	*Tecomanthe dendrophila* (Bl.) K.Schum.	yabi bono	V	I			646
BIX.	*Bixa orellana* L.	hora	T	I	D	Fr	nc.

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
BURSER.	*Canarium* sp. or spp.	dobu, segi	T	I			JS
CARYOPHYLL.	*Drymaria cordata* (L.) Willd. ex R. & S.	waikure nosai	H	I	M	L	563
CELAST.	*Perrottetia alpestris* (Bl.) Loes.	ongwaro	T	I	C,S	W	695
	Solenospermum sp.	bono ni	T				JS
CHLORANTH.	*Chloranthus officinalis* Bl.	kiru ni, kebani	S	I	M,Fb	L	548,719
COMMEL.	*Commelina* sp.	pego	H	I	F	L	nc.
	Pollia macrophylla Benth.	pego ye	H	I			592
COMP.	*Adenostemma lavenia* (L.) Kuntze	daga nosai	H	I			664
	**Ageratum conyzoides* L.	nosai	H	I			522
	Bidens pilosa L.	pipisan nosai	H	I			523
	**Crassocephalum crepidioides* (Benth.) S.Moore	mage segegebai	H	I			521
	Erechtites valerianifolia (Wolf.) DC.	saison	H	I			569
	**Galinsoga parviflora* Cav.	sopisan nosai	H	I			524
	Microglossa pyrifolia (Lmk.) Kuntze	siwe bono, waibunga bono	V	I	M	L	635,727

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
CORN.	*Mastixia kaniensis* Melch.	dini	T	I			739
CUCURBIT.	*Benincasa hispida* (Thumb.) Cogn.	uwo bono	V	I			731
	Trichosanthes sp. or spp.	neru	V	I	F	Fr	nc.
CUNON.	*Opocunonia* sp.	mogali	T				JS
	Pullea sp.	mogali	T				JS
	Schizomeria serrata Hochr.	mogali	T	I	Fb		612
CYP.	*Cyperus distans* L.f.	sigi nosai	H	I			560
	Cyperus neoguineensis Kuek.	sigi nosai	H	I			590,668
DATISC.	*Octomeles* sp.	pene	T				JS
DILLEN.	*Dillenia* sp. or spp.	dini, yuru	T	I			JS
ELAEOCARP.	*Aceratium oppositifolium* DC.	toligeru ni	T	I	Fb		658
	Elaeocarpus amplifolius Schltr.	ega	T	I	Fb,P		603
	Sericolea micans Schltr.	selga	S	III			804
	Sloanea aberrans (Brandis) A.C. Sm.	sabi	T	I			735
ERIC.	*Dimorphanthera anchorifera* J.J.Sm.	giginene boro	V	II			748
	Diplycosia rupicola Sleum.	tani	S	III			801,850

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
ERIC.(cont.)	*Rhododendron agathodaemonis* J.J.Sm.	tani	S	III			822,826
	Rhododendron anagalliflorum Wernh.	tani	H/S	III			836
	Rhododendron lindaueanum Koord.	tani	S	III			800,816
	Rhododendron macgregoriae F.v. Muell.	hone	S	I-III	Fb		734,814
	Vaccinium acrobracteatum K.Schum.	negi	S	III			819,824,834
	Vaccinium cyclopense J.J.Sm.		E	III			802
	Vaccinium fissiflorum (Sleum.) P.F. Stevens	tani	S	III			820
	Vaccinium horizontale Sleum.	bononi	E	I	Fm		582
EUPHORB.	*Acalypha insulana* Muell. Arg.	meri	T/S	I			537
	Antidesma cf. *moluccanum* Airy Shaw	ongaru	T	I	Fb		573
	Aporosa sp.	mera	T				JS
	Breynia cernua(Poir.) Muell.Arg.		T/S	I			726
	**Euphorbia hirta* L.	amipe nosai	H	I	M,D	L,E	661
	Glochidion sp.	gosene	T				JS
	Homalanthus arfakiensis Hutch.	abo	T	I	M,Fbm	B,E	633
	Macaranga chrysotricha Laut.& K.Schum.	hano, yabapage	T	I	C,Fb	W	539,550
	Macaranga chrysotricha Laut.& K.Schum. var. *glaucescens* Mansf.	hano	T	I	C	W	720

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
EUPHORB. (cont.)	*Macaranga* cf. *magnifolia* Perry	hano	T	I	T	E	576
	Macaranga quadriglandulosa Warb.	keli hano	T	I			721
	Macaranga tanarius (L.) Muell. Arg.	hano	T	I	Fb		613
	Macaranga sp.nov.	seli	T/S	I	S,Fb		665
	Macaranga sp.	hano	T/S	I			520
	Mallotus floribundus (Bl.) Muell. Arg.	seli	T/S	I	S		552
	Mallotus panniculatus (Lmk.) Muell. Arg.	kugulu abo	T	I			710
	Phyllanthus flaviflorus (Laut. & K.Schum.) Airy Shaw	we	T/S	I	M,T,Fb	L	554
	Pimeleodendron sp.	?unu	T				JS
EUPOMAT.	*Eupomatia laurina* R.Br.	soli	T/S	I	M,F	L,L	542
FAG.	*Castanopsis* sp.	horabu, ungabe	T	I	F	S	nc.
	Lithocarpus celebicus (Miq.) Rehd.	kali	T	I	Fm		577
	Lithocarpus schlecteri Markgr.	hoya	T	I	Fm		611
	Nothofagus sp.	melagi	T	II-III	C	W	JS
FLACOURTI.	*Pangium edule* Reinw.	siburu	T	I	F,Fm	Fr	732
GESNER.	*Cyrtandra brachteata* Warb.	hanamu	T/S	I	F,R	L,E	650
	Cyrtandra ?pulleana Laut.	nene	S	I	Dy	B	688

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
GESNER. (cont.)	*Cyrtandra schumannia* Schltr.	nene	S	I			642
	Dichrotrichum amabile S. Moore	bobi	V	II			755
GRAM.	*Bambusa* spp.	genagi	H	I-III	F,C,T	Sh,W	nc.
	Coix lachryma-jobi (L.)	sia	H	I	D	S	nc.
	Cyrtococcum patens (L.) A.Camus	sigi nosai	H	I			657
	Digitaria ciliaris (Retz.) Koel.	awio nosai	H	I			570
	Eleusine indica (L.) Gaertn.	sigi nosai	H	I			561
	**Eragrostis tenuifolia* (Rich.) Hochst. ex. Steud.		H	I			559
	Ichnanthus vicinus (F.M.Bail.) Merr.	pipisan	H	I			640
	Imperata cylindrica (L.)	kala	H	I			nc.
	Nastus productus (Pilg.) Holtt.	yobi	H	II			754,809
	Miscanthus floridulus (Labill.) Warb.	sigi	H	I-III			805
	Oplismenus hirtellus (L.) Beauv.	pipisan	H	I			639
	**Paspalum conjugatum* Berg.	kanama nosai	H	I			663
	Pennisetum purpureum Schumach.	inaunu	H	I			723
	Setaria palmifolia	osobidi	H	I			nc.
GUTTIF.	*Calophyllum* sp.	pagi	T				JS
	Garcinia cf. *assugu* Laut.	ponogo	T	I	Fb		531
	Garcinia sp.	ponogo	T	I	C,Fb	W	608
	Mammea Cordata Stevens	bena ni	T	I	F,Fb,T	S,W	670

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
HAMAM.	*Distyliopsis dunnii (Hemsl.) Endress		T	I	F	Fr	562
HIMAN.	*Galbulimima* sp.	?tilu	T				JS
ICAC.	*Gonocaryum litorale* (Bl.) Sleum.	onogo	T	T	I	W	675
	Rhyticaryum longifolium K.Schum. & Laut.	kare ni	T	II			758
LAB.	*Coleus scutellarioides* (L.) Benth.	dogon	H	I			659
LAUR.	*Cinnamomum* sp.	unu	T	I			JS
	Cryptocarya timoriana Span.	unu, gaburu	T	I			708
	Endiandra cf. *altissima* Kost.	sobale	T	I	C,Fb	W	580
	Litsea sp.	gaburu, guma, siwe	T				JS
LEEAC.	*Leea indica* (Burm.f.) Merr.	ganga dogoni	T	I	S		538,568,718
LEG.	*Desmodium intortum* (Mill.) Urb.	buruga yabe nosai	V	I			654
	Desmodium cf. *laxum* DC.	idabi bono	V	I	Ro	B	610
	Desmodium ormocarpoides DC.	asge	V	I			556
	Desmodium repandum (Vahl.) DC.	kasge bono	V	I	F	L	699
	Mucuna pruriens (L.) DC.	idabi bono	V	I	Fb,Ro		628

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
LEG.(cont.)	*Pueraria pulcherrima* (Koord.) Koord. & Schum.	kasge	V	I	T	L	565
LIL.	*Cordyline fruticosa* (L.) A.Chev.	isibiri urago	S	I	Fb,M		677
	Dianella ensifolia (L.) DC.	kolobo kesababidi	H	III			835
LOGAN.	*Neuburgia kochii* (Val.) Leenh.	hasa tobaluai ni	T	I	R		679
MAGNOL.	*Elmerrillia papuana* (Schltr.) Dandy	dogoso	T	I	C,Fb	W	581
MALV.	**Sida rhombifolia*		H	I			nc.
	Urena lobata L.	tarabu	H	I			528
MELAS.	*Astronia atroviridis* Mansf.	malu konio	T	I	Fb		669
	Medinilla crassinervia Bl.	kibu hamago bono	V	I	Fb		648
	Medinilla teysmannii Miq.	homo bono	E,V	I	M,Fb	L	598,647
MELIAC.	*Aglaia goebeliana* Warb.	kia	T	I	C,Fm,b	W	604
	Aglaia palembanica Miq.	kuresawi	T	I	C,Fb	W	547
	Aglaia polyneura C. DC.	uliga	T	I	C,Fb	W	692
	Aphanamixis myrmecophila (Warb.) Harms.	puli	T	I			684
	Cedrella sp.	bon	T	I	C	W	JS

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
MELIAC. (cont.)	*Chisocheton novoguineensis* C.DC.	yagage	T	I	C,Fb, P,T	W,L	597
	Dysoxylum molle Miq.	dimiguria	T	I			567
MONIM.	*Anthobembix* sp.	hanamu	T/S	I	S		682
	Dryadodaphne sp.	solu	T				JS
	Levieria beccariana Perkins	keba ni	T	I	C,Fm,b	W	630
	Palmeria gracilis Perkins	solu bono	V	I	F	L	697
MORAC.	*Artocarpus vriesianus* Miq.	weyu	T	I	C,Fm,M	W,E	618
	Artocarpus vriesianus Miq. var. *refractus* (Becc.) Jarrett	weyu	T	I	C	W	656
	Ficus bernaysii King	hawa	T	I	Fm		740
	Ficus botryocarpa Miq.	hawa	T	I	F,Fm	L	605,724
	Ficus congesta Roxb.	peleba	T	I			715
	Ficus copiosa Steud.	kaia	T	I	F,Fm,M	L/ Fr,E	625
	Ficus odoardii King	dolobi bono	V	I	Fm,b; R,T		649
	Ficus primaria Corner	geli	T	I			704
	Ficus trichocerasa Diels	kungwabidi	T	I	A		599
	Ficus virgata Reinw. ex. Bl.	sesaga bono	V	I	Fb,m		601
	Ficus wassa Roxb.	isibiri kaia	T	I	F,Fm	L	702
	Ficus sp.	uga	T	I	T	B	nc.
	Ficus sp.	kema	T	I	F	E	nc.

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
MUSA.	*Musa* sp.	tolu	T	I-II	F	St	nc.
	Musa sp.	oyo	T	I-II	R	S	nc.
	Musa sp. or spp.	guraiyo, buru	T				nc.
MYRIST.	*Horsfieldia spicata* (Roxb.) J. Sinclair	busi	T	I	M	L	606
	Myristica globosa Warb.	busi	T	II			759
MYRS.	*Conandrium* cf. Megacarpa Merr.	tolisaga	T/S	I			690
	Maesa cf. *aneiteensis* Mez	wabi bono	V	I			709
	Maesa tetrandra (Roxb.) DC.	ni bono	V	I	Fb		636
	Rapanea acuminatifolia Kan. & Hat.	hasa dilini	T	I	C	W	544
MYRT.	*Decaspermum fruiticosum* Forster	konio	T	I	C,Fb	W	541
	Decaspermum neurophyllum Laut. & K.Schum.	sani	T	I			703
	Metrosideros cordata (White & Francis) Dawson		S	III			808
	Rhodamnia latifolia (Benth.) Miq.	konio	T	I			712
	Syzygium attenuatum (Miq.) Merr. & Perry	togo	T	I	C,Fb	W	620
	Syzygium ?sambogense Hartley & Perry	naunau	T	I			674
	Syzygium subalatum (Ridl.) Merr. & Perry	koresawi	T	I	C,Fb	W	600
	Syzygium sp.	koresawi	T	I	C,Fb	W	607

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
MYRT. (cont.)	*Tristania* sp.	horu	T				JS
ORCH.	*Adenocos* sp.	wadirua	H	I			586
	Agrostophyllum ?biflorum Ridley	kolobo kagi	H	III			818,827,840
	Calenthe chrysanthe Schltr.	keluabidi	H	I	F,Fm	R	641
	Dendrobium cuthbertsonii F.Muell.		H	III			806,843-46
	Dendrobium dollinianum Hawkes & Heller sect. *Calyptrochilus*		H	III			807,837,
	Dendrobium lobii T. & B. sect. *Conostalix*		H	III			825
	Dendrobium subclausum Rolfe sect. *Calyptrochilus*		H	III			841
	Dendrobium wentianum		H	III			848
	Dendrobium sect. *Grastidium*	wadirua	E	I	D	St	587
	Eulophia emarginata (Bl.) Schltr.	arau	H	I	R	E	701
	Diplocaulobium regale (Schltr.) A.D. Hawkes	donomo	H	III			749
	Glomeria bambusiformis Schltr.		H	III			838
	Glomeria stenocentron (Schltr.) J.J.Sm.	ara	H	III			815,839
	Habenaria trichoglossa Kewns.	pego	H	I	F	R	698
	Mediocalcar vanikorense Ames		H	III			829
	Mediocalcar sp. nov.		H	III			842
	Oberonia kanjensis Schltr.	waidirua	E	I	Fb		583
	Oberonia sp.		E	I			533

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
ORCH. (cont.)	*Pedilochilus alpinum* Van Royen		E	II			756
	Phreatia laxa Schltr.		H	III			847
OXAL.	*Oxalis corniculata* L.		H	I			571
PALMAE.	*Calamus setiger* Burrett	bibono	V	I	D	St	736
	Caryota ?rumphiana var. *papuana* Becc.	sabo	T	I	F	P	nc.
	Nengella rhomboidea Burret	sesemoyaga	T	I	T	St	696
PANDAN.	*Freycinetia macrostachya* Martelli vel aff.	koia	V	I	D,Fb	L	621
	Pandanus ?brosimos	agia	T	II-III	F	S	nc.
	Pandanus sp.	sogobi	T	I			nc.
PIP.	*Piper celtidiformae* Opiz. forma. *celtidiformae*	wago	V	I	Fi	St	593
	Piper gibbilimbum C.DC.	hogobia	T/S	I	D	L	575
	Piper mestonii Bailey	wago	V	I	M	L	551
	Piper cf. *wilhemense* Chew	wago bono	V	I	M	L	683
PITTOS.	*Pittosporum pullifolium* Burkill		S	III			813
	Pittosporum sinuatum Bl.	eleni	T/S	I	M	L	555
PODOCARP.	*Podocarpus neriifolius* D.Don	kolobo pagi, ?yu	T	III			849

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
POLYGAL.	**Polygala paniculata* L.		H	I	R	L	558
PROT.	*Helicia hypoglauca* Diels	tani	T/S	III			831
RHAM.	*Alphitonia moluccana* T.&B.	yabalyia	T	I	Fi	B	615
ROS.	*Prunus gazelle-peninsulae* (Kan. & Hat.) Kalkm.	guma	T	I	A		616
	Prunus sclerophylla Kalkm.	tani	T/S	III			823,832
RUB.	*Argostemma bryophilum* K. Schum.	meli	H	III			746
	Flindersia sp.	nesigi	T				JS
	Ixora sp.nov.	kenago	T	I	T,Fb	W	645
	Mussaenda ferruginia K.Schum.	talabu bono	V	I	Fm		655
	Myrmecodia pendula Merr. & Perry	ideweli	E	I			595
	Myrmecodia sp.	ideweli	E	I			596
	Neonauclea sp.	tage	T				JS
	Mastixiodendron sp.	tage	T				JS
	Ophiorrhiza tenelliflora Val.	dinam dogon	H	I	R	L	579
	Ophiorrhiza nervosa Val.	meli	H	I	Fm		589
	Psychotria dolichosepala Merr. & Perry	seli	S	I	Fb		667
	Psychotria dieniensis Merr. & Perry	tobalu wai	S	I	Fb		545

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
RUB.(cont.)	*Psychotria diplococca* (Laut. & K.Schum.) Val. var. *brevifolia* Sohmer	seli	S	I	Fb		546
	Psychotria kerengiana Sohmer	keba ni	S	III			743
	Psychotria leucococca Laut. & K.Schum.	seli	T	I			671
	Randia sp.nov.	kenago	T/S	II	T	W	753
	Timonius densiflorus Val.	hasa dili	T	I			706
	Timonius sp.nov.	pi	T	III			747
	Versteegia cauliflora (Laut. & K.Schum.) Val.	tangi	T	I	C,Fb,m	W	672
	Versteegia sp.nov.	hanamu	H/S	I			738
RUT.	*Evodia coriacea* Laut.	pesole	T	I	C,T, Fb	W,L	651
	Evodia vitiflora F.v.Muell.	ina	T	I	C,D	W,L	687
SAB.	*Sabia pauciflora* Bl.	sisi bono	V	I	Fb,m		644
SANTAL.	*Dendromyza reinwardtiana* (Bl. ex Korth.) Danser	inowoli	E	I	R	L	624
	Scleropyrum aurantiacum (Laut. & K.Schum.) Pilger	kerau	T	I-II	F	Fr	673,757
SAPIND.	*Cupianopsis macropetala* Radlk.	bari	T	I	M	L	543

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
SAPIND. (cont.)	*Harpullia crustacea* Radlk						
	Lepisanthes rubiginosa (Roxb.) Leenk	yagage	T	I	C	W	691
	Lepisanthes senegalensis (Poir.) Leenh.	hasa niburu	T	I	R		626
	Mischocarpus largifolius Radlk.	diluai ni	T/S	I	F,M,T	S,L.W	643
	Toechima livescens Radlk.	kia	T	I			714
	Pometia sp.	bari	T	I	C	W	535
		wa	T	I			JS
SAPOT.	*Palaquium* sp.	dinini, ?ogu	T				JS
	Planchonella macropoda H.J.Lam.	ogu	T	I	Fb,m		686
	Planchonella obovata (R.Br.) Pierre	baribe	T	I			711
	Planchonella sp.	dai	T				JS
SAUR.	*Saurauia* holotricha Diels.	orabu	T	I	P,Fb	L	617
	Saurauia calyptrata Laut.	orabu dogoi	T	I	Fm		627
	Saurauia conferta Warb.	orabu	T	I			717,722
	Saurauia sp.nov.	orabu	T	I			713
	Saurauia sp.	tobaluaina	T	I	C,Fb	W	574
SAX.	*Dichroa febrifuga* Lour.	bogoni	S	I	M	L	594
SOL.	*Datura* sp.		S	I			nc.
	Physalis minima L.	amuna	H	I			564

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
SOL.(cont.)	*Solanum amafractum* Symon (ined.)	koloba haua	S	I	F,Fm	Fr	700
STAPHYL.	*Turpinia pentandra* (Schltr.) v.d. Linden	keba ni	T	I	Fb		631
STERC.	*Argyrodendron* sp.	kewase	T				JS
	Sterculia sp.	sabi	T	I	S		534
STYR.	*Bruinsmia* sp.	wo	T				JS
SYMP.	*Symplocos cochinchinensis* (Lour.) S.Moore *ssp. leptophylla* (Brand) Noot. var. *leptophylla*	kale ni	S	III			803,833
THE.	*Gordonia* sp.	?mogali	T				JS
THYM.	*Wikstroemia indica* (L.) C.A.Mey.	koiko	S	II	Ro	B	751
TIL.	*Microcos* sp.	gorogobe	T	I			707
	Trichospermum pleiostigma (F.V. Muell.)		T				JS
	Triumfetta pilosa Roth	darabu	H	I	D	S	629
ULM.	*Aphananthe philippinensis* Planch.	dili bono	V	I	Fb		540

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
ULM.(cont.)	*Celtis nymanii*	ga	T	I			JS
	Parasponia rigida Merr. & Perry	wanu	T	I			705
URT.	*Cypholophus macrocephalus* Wedd.	bon taroa	S	I			536
	Cypholophus cf. *trapula* Winkl.	dugusu	H	I	Dy	Fr	729
	Dendrochnide carriana Chew	posi	T	I	Fb		662
	Dendrochnide corallodesme (Laut.) Chew	poposi	V	I	M	B	529
	Elatostema beccarii Schroeter	seli	H	I			532
	Elatostema macrophyllum Brongn.	seni tami	H	II	F	St	760
	Elatostema novoguineense Warb.	ai nosai	H	I	F	St	578
	Laportea decumana (Roxb.) Wedd.	hai	S	I	M	L	602
	Pilea papuana Winkl.		H	III			745
	Pipturus sp.	taroa	T	I	T,M,Fb	B	527
	Poikilospermum amboinense Zipp. ex Miq.	poposi bono	V	I	Fb,m		609
VERB.	*Geunsia farinosa* Bl.	amuna	T	I	D	L	525,572
	**Stachytarpheta jamaicensis* L.	'plaua'	H	I			730
VIT.	*Vitis mollissima* Wall.	dini bono	V	I	Ro,Fb		634
WINT.	*Bubbia calothyrsa* (Diels) A.C.Sm.	saluabe	T	II			750

Family	Genus and species	Daribi name	Form	Altitudinal zone	Use	Part	Collection Number
ZING.	*Alpinia oceanica* Burk.	danemia ono	H	I	Fb		694
	Alpinia odontonema K.Schum.	ungabesili somi	H	I	Fb,S		693
	Alpinia pulchella (K.Schum.) K.Schum.	ono somi	H	I	Fb		678
	Riedelia corallina (K.Schum.) Val.	bogolabe	H	I	F,P	L	680,681
	Riedelia ?microbotrya Val.	kolobo ono	H	III	F	L	812
	Riedelia monticola Val.	kolobo somi	H	III			821,828
	Riedelia nymanii K.Schum.	somi	EH	I	D,Fb	F	584
Ferns and fern-allies							
ASPLEN.	*Asplenium acrobryum* Christ.	tamu	F	I-II	F (salt)	L	765
GLEICHEN.	*Sticherus* (Gleichenia) *venosu* Copel.	bonung	F	III			811
GRAMMIT.	*Grammitis ?loculosa* (v.A.v.R.) Copel.	kolobo perabu	F	III			817
LYCOPOD.	*Lycopodium nummularifolium* Bl.	gurawari	F	I	D	L	588
	Lycopodium ?cernum L.		F	III			810
MARATT.	*Marattia novoguineensis* Ros.		F	I	M	E	553
POLYPOD.	*Dipteris conjugata* Reinw.	sau	F	III			830
	Selliguea sp.nov.		F	III			851

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