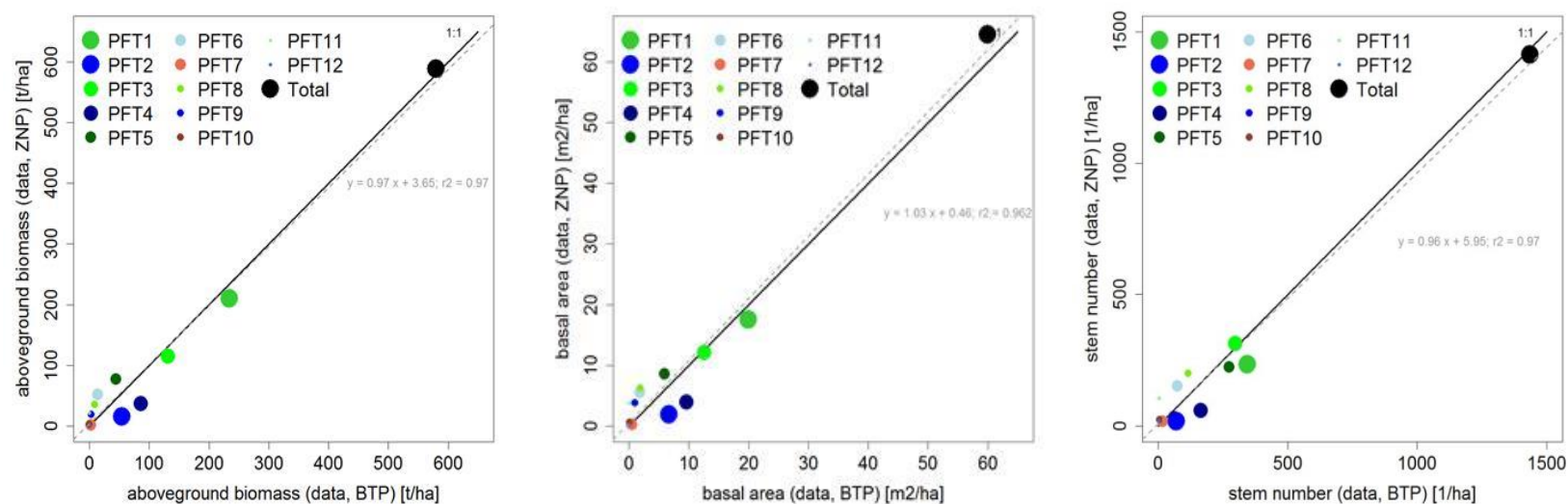


## Supplementary Material

### Supplementary A: BTP/ZNP comparison

Betampona is an isolated fragment of the once continuous Zahamena corridor forest, which extended from the coast to the central highlands of Madagascar until it was deforested over the last century. We expected species composition and structure within the study regions of these two forests to be similar given their similar elevational ranges. A comparison of aboveground biomass, basal area and stem counts per PFT between these two sites indicates that they are closely related (Figure A1). Though the total stem number for trees >10cm DBH was similar (1296 and 1444 for BNP and ZNP respectively), BTP had higher stem numbers of the largest PFTs (PFTs 1 and 2), as well as PFT 4. ZNP had greater numbers of sub-canopy and smaller trees (PFT 6, 8 and 11).



**Figure A1.** A comparison of key variables: aboveground biomass (left), basal area (middle) and stem number per hectare (right) for Betampona (BTP – x-axis) and Zahamena National Park (ZNP – y-axis). Dot colors correspond to shade tolerance class as shown in chart above, and dot sizes correspond to size class (canopy emergent, canopy, sub-canopy, understory, woody treelet) Shade tolerant plant functional types are color coded in greens, intermediate tolerance is in blues and shade tolerant species are in red.

To assess the differences in the comparative accuracies through time, Figure 6 shows successional groups related to light requirements for BTP and ZNP. It is interesting to note that there are relatively few shade intolerant trees overall in the forest, but especially in the initial colonization of the forest simulation. Initially, only a small number of shade intolerant trees colonize the bare ground, the overwhelming majority of the biomass is from to intermediate tree growth. In both forests (Figure 4), shade tolerant trees are underestimated by FORMIND, but both are within the margin of the range in biomass seen throughout the simulation. Intermediate trees are overestimated at both sites, though the simulation numbers do match the field numbers at around year 375 of the simulation, when shade tolerant trees account for the highest percentage of biomass and intolerant trees are at their lowest. However, these forests are both very old and have not been clearcut in the past 400 years. Rather, the cause is more likely that a number of species were placed in the wrong plant functional groups. With regard to the composition of stems, the size classes were slightly underestimated in the numbers of smaller trees found in Zahamena (Figure A1). The diameter size class of 0.3-0.4m had the greatest under-representation by the model, followed by larger 0.4-0.5 and 0.5-0.6 stems. The model slightly overestimates the 0.1-0.2m sapling numbers. However, there is strong agreement between the simulation forest and field data with respect to the smaller numbers of larger trees.

### Supplementary B: Model Parameter Values

**Table B-1** The FORMIND Model Madagascar parameterization global variables, where  $t_{end}$  is the end of simulation time,  $t_y$  is the time step (i.e. 1 year),  $A_{area}$  is the simulation forest area,  $A_{patch}$  is a the smallest unit of forest within the model,  $MaxGrp$  is the number of plant functional types,  $\Delta h$  is the stepwidth of vertical discretization of the canopy, and AET is actual evapotranspiration (mm). A full description of Model parameters and their associated equations can be found in Fischer et al [17].

	Parameter	Unit	Value
General	$t_{end}$	yr	1000
	$t_y$	yr	1
	$A_{area}$	ha	50
	$A_{patch}$	m <sup>2</sup>	400
	MaxGrp		12
	$\Delta h$	m	0.5
Carbon cycle	AET	mm yr <sup>-1</sup>	1350

**Table B-2** The FORMIND Model Madagascar parameterization plant functional type specific variable values. A full description of Model parameters can be found in Fischer et al [17].

	Parameter	Unit	Plant functional type (PFT)											
			1	2	3	4	5	6	7	8	9	10	11	12
allometry	$H_{\max}$	m	47	47	33	33	24	24	24	16	16	16	10	10
	$h_0$		40.5	39.2	37.7	33.8	39.2	37.3	29.7	19	22.3	23.1	16.4	15.9
	$h_1$		0.56	0.71	0.53	0.48	0.56	0.54	0.39	0.34	0.41	0.36	0.31	0.3
	$c_{l0}$		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	$c_{d0}$		15	15	15	15	15	15	15	15	15	15	15	15
	$c_{d1}$		0	0	0	0	0	0	0	0	0	0	0	0
	$q$	$\text{tODM m}^{-3}$	0.53	0.48	0.53	0.48	0.48	0.5	0.35	0.49	0.31	0.32	0.51	0.48
	$\sigma$		0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	$f_0$		0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
	$f_1$		-0.11	-0.11	-0.11	-0.11	-0.11	-0.11	-0.11	-0.11	-0.11	-0.11	-0.11	-0.11
recruitment	$l_0$		3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49
	$l_1$		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	$N_{\text{seed}}$	$\text{ha}^{-1} \text{yr}^{-1}$	155	50	150	12	50	10	3	40	8	5	1	1
	$I_{\text{seed}}$		0	0.04	0	0.04	0	0.04	0.07	0	0	0.07	0	0.04
	$D_{\text{min}}$	m	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
mortality	$M_B$	$\text{yr}^{-1}$	0.01	0.021	0.02	0.02	0.015	0.02	0.09	0.02	0.03	0.09	0.01	0.02
	$m_{i0}$		-7.7175	-7.7175	-7.7175	-7.7175	-7.7175	-7.7175	-7.7175	-7.7175	-7.7175	-7.7175	-7.7175	-7.7175
	$m_{i1}$		1553.7	1553.7	1553.7	1553.7	1553.7	1553.7	1553.7	1553.7	1553.7	1553.7	1553.7	1553.7
	$m_{i2}$		-	-	-	-	-113150	-	-	-113150	-113150	-	-113150	-
			113150	113150	113150	113150		113150	113150		113150	113150	113150	113150
photosynthesis	$f_{\text{fall}}$		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	$I_0$	$\mu\text{mol}_{\text{photon}} \text{m}^{-2} \text{s}^{-1}$	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	$k$		0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	$l_{\text{day}}$	h	12	12	12	12	12	12	12	12	12	12	12	12
	$p_{\text{max}}$	$\mu\text{mol}_{\text{CO}_2} \mu\text{mol}_{\text{photon}}^{-1}$	2.4	6.2	4.1	7.1	4.3	7.1	17.5	4.3	7.1	17.5	4.3	7.1
	$\alpha$	$\mu\text{mol}_{\text{CO}_2} \text{m}^{-2} \text{s}^{-1}$	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
	$m$		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	$g_0$		23.58	14	45.45	10.49	50.34	19.82	8.47	114.2	31.94	10	26.31	7.37
$g_1$		4.4	4.29	7.01	3.1	11.39	4.8	4.37	23.23	11.36	8.27	16.7	6.01	

**Table B-3** The FORMIND model variable description. A full description of all model parameters can be found in Fischer et al [17].

<b>Parameter</b>	<b>Description</b>
$H_{\max}$	maximum tree height
$h_0, h_1$	coefficients of height-stem diameter-relationship
$c_{l0}$	coefficient of crown length-height-relationship
$c_{d0}, c_{d1}$	coefficients of crown diameter-stem diameter-relationship
$\rho$	wood density
$\sigma$	ratio of total aboveground biomass to stem biomass
$f_0, f_1$	coefficients of form factor-stem diameter-relationship
$l_0, l_1$	coefficients of LAI-stem diameter-relationship
$N_{\text{seed}}$	global in-growth rate of seeds
$I_{\text{seed}}$	fraction of incoming radiation at floor required for germination
$D_{\min}$	initial stem diameter of a germinated seedlings
$M_B$	basic mortality rate
$m_{i0}, m_{i1}, m_{i2}$	mortality rate dependent on stem diameter increment
$f_{\text{fall}}$	probability for a dead tree to fall
$I_0$	incoming irradiance on top of canopy
$k$	light extinction coefficient
$l_{\text{day}}$	day length
$p_{\max}$	maximum leaf gross photosynthetic rate
$\alpha$	initial slope of light response curve
$m$	transmission coefficient
$g_0, g_1$	coefficients of the growth function

### Supplementary C: RNI Betampona Inventory Plot Summary

**Table C-1.** This RNI Betampona inventory plot summary table lists the Family, Scientific Name and Malagasy name for each species of tree measured within the 100 small inventory plots in 2004 and 2005. For each species, the FORMIND model plant functional type number is listed, as well as stem count per hectare, diameter growth in centimeters and height growth measured in meters. Unknown species are denoted by an asterix. In addition, species that were only measured during one of the years and thus growth could not be calculated were denoted by a dash. .

Family	Scientific Name	MalagasyName	PFT	Stem Count per hectare	Diameter Growth Increment (cm)	Height Growth Increment (m)
Malvaceae	Hildegardia perrieri	Afobonoa	8	3	-	-
Malvaceae	Grewia cuneifolia	Afopotsy	8	15	0.203	0.52
Malvaceae	Grewia sp.1	Afopotsy (B)	3	15	0.427	1.24
Malvaceae	Grewia sp.2	Afopotsy (M)	8	1	-	-
Malvaceae	Grewia sp.3	Afopotsy (S)	8	9	0.203	0.65
Malvaceae	Nesogordonia sp.1	Afotrakora	3	23	0.248	0.59
Apocynaceae	Voacanga thouarsii	Akangarano	5	11	0.231	0.60
Sarcolenaceae	Leptolaena sp.1	Amaninombilahy	5	3	0.000	1.08
Araliaceae	Polyscias sp.1	Ambona	8	1	0.270	1.54
Araliaceae	Polyscias sp.3	Ambonambona	3	74	0.364	0.81
Araliaceae	Polyscias sp.5	Ambonambona (B)	6	4	0.240	0.53
Monimiaceae	Ephippiandra sp.1	Ambora	8	18	0.178	0.75
Monimiaceae	Ephippiandra sp.2	Ambora (S)	11	1	0.090	0.93
Monimiaceae	Tambourissa madagascariensis	Amborambe	11	4	0.450	-0.23
Menispermaceae	Burasaia gracilis	Amborasaha	11	3	-	-
Menispermaceae	Burasaia sp.1	Amborasaha	8	9	0.015	0.73
Pittosporaceae	Pittosporum ochrosiaefolium	Ambovitsika	8	17	0.118	1.17
Moraceae	Ficus sorocoides	Ampalirano	11	6	0.023	0.18
Moraceae	Streblus mauritiana	Ampaly	9	8	0.548	0.75
Celtidaceae	Trema sp.1	Andrarazina	10	1	0.080	0.53
Arecaceae	Ravenea sambiranensis	Anivona	9	27	0.533	1.25
Rubiaceae	Fernelia sp.1	Ankahatra	5	41	0.138	0.70

Rubiaceae	Fernelia sp.2	Ankahatra (B)	11	4	0.407	1.04
Combretaceae	Terminalia catappa	Antafanala	6	4	0.000	-1.19
Apocynaceae	Petchia sp.2	Antafara	6	3	-	-
Apocynaceae	Petchia sp.6	Antafarana	9	1	-	-
Lauraceae	Ocotea recemosa	Antafonana	6	17	0.406	1.40
Lauraceae	Beilschmiedia sp.1	Antevaratra	1	56	0.206	0.93
Lauraceae	Beilschmiedia sp.2	Antevaratra (S)	11	1	-	-
Bignoniaceae	Phyllarthron ilicifolium	Antohiravina	8	4	0.203	0.99
Sarcolenaceae	Rhodolaena sp.2	Arina	8	14	0.187	1.19
*	*	Arongaparhihy	9	1	-	-
*	*	Asina	12	1	-	-
Combretaceae	Terminalia fatraea	Atafanala	4	10	0.336	0.64
Verbenaceae	Clerodendron aucubifolium	Atamba	9	15	0.168	0.38
Dilleniaceae	Dillenia triquert	Bararaty	5	43	0.092	0.89
*	*	Drehaethatera	11	1	-	-
Rutaceae	Zanthoxylum sp.1	Fahavalontrazo	3	10	0.216	1.22
Rutaceae	Zanthoxylum sp.2	Fahavalotrazana	11	1	-	-
Rutaceae	Zanthoxylum sp.3	Fahavalotrazo (M)	11	1	0.090	1.10
Sapotaceae	Chrysophyllum biovinianum	Famelona	5	13	0.074	0.75
Aphloiaceae	Aphloia theaformis	Fandramanana	5	24	0.153	0.59
Icacinacea	Cassinopsis chapelieri	Fandrianakanga	5	11	0.385	1.06
Fabaceae	Viguieranthus sp.1	Fanempoka	4	1	0.540	1.57
Fabaceae	Bauhinia humblotiana	Fanitokakolahy	11	4	0.225	1.22
Cyatheaceae	Cyathea sp.1	Fanzana	8	94	0.412	0.71
Rubiaceae	Mussaenda pervillei	Fatora	11	4	0.450	1.67
Rutaceae	Vepris fitoravy	Fitoravina	12	5	0.108	-0.06
Myrtaceae	Eugenia onivensis	Gavoala	9	4	0.207	0.57
Fabaceae	Baudouinia louvelii	Gavombazaha	12	4	-	-
Myrtaceae	Psidium cattleianum	Guavo	10	3	0.045	0.62
Malvaceae	Dombeya sp.2	Hafomena	7	20	0.094	0.52
Malvaceae	Dombeya sp.3	Hafotra	10	4	2.050	1.11
Euphorbiaceae	Bridelia tulasneana	Harina	5	1	0.000	-0.24

Clusiaceae	Psorospermum lamianum	Harongaparhihy	6	1	-	-
Convallariaceae	Dracaena sp.1	Hasina	8	27	0.135	0.18
Convallariaceae	Dracaena sp.2	Hasina (B)	9	25	0.238	0.51
Convallariaceae	Dracaena reflexa	Hasina (M)	11	34	0.049	0.71
Convallariaceae	Dracaena reflexa var linearifolia	Hasina (S)	8	5	0.168	0.38
Anacardiaceae	Faguetia falcata	Hasy	9	1	0.260	0.94
*	*	Havolena	5	1	-	-
Clusiaceae	Symphonia sp.1	Hazinina	1	31	0.139	0.89
Clusiaceae	Symphonia sp.2	Hazinina (B)	1	57	0.145	0.75
Clusiaceae	Symphonia louvelli	Hazinina (S)	3	32	0.255	0.70
Annonaceae	Xylophia buxifolia	Hazoambo	1	38	0.268	1.06
Annonaceae	Xylophia sp.1	Hazoambo (B)	1	1	0.000	1.43
Annonaceae	Xylophia sp.2	Hazoambomena	5	3	-	-
Anisophyllaceae	Anisophyllea fallax	Hazoharaka	3	4	0.360	2.02
Ebenaceae	Diospyros tetraclis	Hazomafana	8	5	0.000	1.10
Ebenaceae	Diospyros gracilipes	Hazomainty	5	85	0.146	0.82
Ebenaceae	Diospyros toxicaria	Hazomainty (M)	11	4	0.590	0.64
Ebenaceae	Diospyros haplostylis	Hazomainty (S)	5	1	-	-
Ebenaceae	Diospyros bernieriana	Hazomainty (VL)	8	3	0.045	1.36
Rhizophoraceae	Cassipourea sp.1	Hazomalany	5	22	0.398	1.11
Rhizophoraceae	Cassipourea lanceolata	Hazomalany (B)	3	78	0.287	0.95
Rhizophoraceae	Cassipourea sp.3	Hazomalany (M)	8	5	0.090	0.37
Rhizophoraceae	Cassipourea sp.2	Hazomalany (S)	5	11	0.137	0.86
*	*	Hazomamiala	3	11	0.139	0.73
*	*	Hazomamiala (B)	11	1	0.080	1.47
Anisophylleaceae	Anisophyllea fallax	Hazomamy	5	20	0.107	0.64
Anacardiaceae	Abrahamia sp.1	Hazombarorona	4	55	0.167	0.76
Anacardiaceae	Abrahamia sp.2	Hazombarorona (M)	6	1	-	-
Sapindaceae	Tina sp.1	Hazombato	3	8	0.178	0.72
Fabaceae	Albizia sp.	Hazomborona	2	3	0.910	0.09
Passifloraceae	Paropsia sp.1	Hazomitovo	9	9	0.090	0.38
Euphorbiaceae	Tannodia sp.1	Hazondomoina	3	1	-	-

Myrsinaceae	Oncostemum sp.1	Hazontoho	8	6	0.056	1.27
Myrsinaceae	Oncostemum sp.7	Hazontoho (B)	8	8	0.172	0.96
Myrsinaceae	Oncostemum sp.3	Hazontoho (M)	8	1	0.000	0.14
Myrsinaceae	Oncostemum sp.4	Hazontoho (S)	8	3	0.080	-0.14
Myrsinaceae	Oncostemon formosum	Hazontoho mena	8	8	-	-
Myrsinaceae	Oncostemum sp.5	Hazontoho potsy	8	3	-	-
Myrsinaceae	Oncostemum sp.6	Hazotoko fotsy	11	3	-	-
*	*	Hazotsiariana	8	4	-	-
Euphorbiaceae	Suregada sp.2	Hazovoangy	6	41	0.287	0.86
Euphorbiaceae	Suregada sp.5	Hazovoangy (S)	9	5	-	-
Fabaceae	Dalbergia graveana	Hazovola (Palissandre)	1	45	0.426	1.23
Fabaceae	Millettia sp.1	Hitsika	8	3	0.180	0.12
Icacinaceae	Grisollea myriantha	Hompa	5	3	0.090	1.00
Rubiaceae	Coffea sp.1	Kafe	12	5	-	-
Rubiaceae	Coffea millotii	Kafeala	9	14	0.273	0.48
Asteraceae	Brachylaena sp.1	Kisaka	3	5	0.040	0.92
Cunoniaceae	Weinmannia sp.1	Lalona	1	10	0.452	0.67
Euphorbiaceae	Anthostema madagascariensis	Lalotona	1	195	0.194	0.75
Meliaceae	Turraea sp.1	Lambafo	12	1	-	-
Euphorbiaceae	Croton nobilis	Lazalaza	9	20	0.118	0.12
Gentianaceae	Anthocleista amplexicaulis	Lendena	8	4	0.057	1.10
Hamamelidaceae	Dicoryphe sp.1	Longotra	1	23	1.135	1.02
Hamamelidaceae	Dicoryphe sp.2	Longotra (B)	8	1	0.270	0.61
Lauraceae	Aspidostemon perrieri	Longotra fotsy	5	6	-	-
Lauraceae	Aspidostemon elliotri	Longotra mena	8	3	-	-
Pittosporaceae	Pittosporum sp.1	Maimboloha	9	3	-	-
Euphorbiaceae	Macaranga sp.1	Makaranana	10	11	0.091	1.23
*	*	Mamoalava	8	9	0.090	0.54
Fabaceae	Cynometra sp.1	Mampay	3	27	0.249	0.68
Rubiaceae	Psychotria sp.1	Maporia	11	1	-	-
Sapindaceae	Begonia apetalia	Marakoditra	3	17	0.196	0.74
Euphorbiaceae	Blotia sp.1	Maroando	8	53	0.057	0.83



Anacardiaceae	Campylospermum sp.1	Menahihy	5	43	1.030	0.86
Anacardiaceae	Campylospermum obtusifolium	Menahihy (B)	5	56	0.156	0.87
Anacardiaceae	Campylospermum lanceolatum	Menahihy (M)	8	3	-	-
Erythroxylaceae	Campylospermum sp.2	Menahihy (S)	8	55	0.460	0.63
Arecaceae	Dypsis lastelliana	Menavozona	9	6	0.760	1.67
Malvaceae	Dombeya sp.4	Molanga	10	4	0.310	0.31
Elaeocarpaceae	Elaeocarpus sp.1	Molopangady	3	13	0.180	0.06
Elaeocarpaceae	Elaeocarpus sp.2	Molopangady (S)	5	1	-	-
Elaeocarpaceae	Elaeocarpus sp.3	Molopangady fotsy	3	56	0.267	0.83
Elaeocarpaceae	Elaeocarpus sp.4	Molopangady fotsy (S)	5	1	0.640	1.06
Elaeocarpaceae	Elaeocarpus sp.5	Molopangady mena	3	8	0.158	1.18
Euphorbiaceae	Macaranga sp.2	Mongy	12	3	0.000	-0.01
Sapotaceae	Capurodendron sp.1	Nanto	1	19	0.130	1.07
Anacardiaceae	Camptosperma parvifolium	Nanto (B)	3	1	0.000	2.42
Sapotaceae	Faucherea sp.1	Nanto (M)	5	1	-0.090	0.75
Sapotaceae	Faucherea thouvenotii	Nanto (S)	4	20	0.209	0.90
Sapotaceae	Faucherea sp.2	Nanto (VL)	5	3	0.000	0.45
Anacardiaceae	Michronychia tsiramiramy	Oditrovny	8	4	0.135	0.33
Annonaceae	Isolona sp.2	Ombary	11	1	-	-
Sapindaceae	Eugenia sp.1	Ompa	6	8	-	-
Arecaceae	Dypsis fasciculata	Ovana	9	71	0.146	0.46
Arecaceae	Ravenea sp.1	Ovatsarorona	12	1	-	-
Arecaceae	Oriana trispatha	Ovobola fotsy	5	27	0.103	0.83
Arecaceae	Dypsis sp.2	Ovodafa	9	8	0.210	0.61
Arecaceae	Dypsis sp.3	Ovotahitso	4	17	0.620	1.08
Pandanaceae	Pandanus sp.1	Pandanus	8	52	0.138	0.70
Burseraceae	Canarium madagascariensis	Ramy	1	55	0.641	1.00
Burseraceae	Canarium sp.3	Ramy (B)	3	4	0.270	1.34
Myrsinaceae	Maulouchia coriacea	Rara	3	70	0.230	0.89
Myristicaceae	Haematodendron glabrum	Rara fotsy	5	1	-	-
Myristicaceae	Mauloutchia humblotii	Rara mena	8	1	-	-
Strelitziaceae	Ravenala madagascariensis	Ravinala	2	136	0.795	0.74

Myrtaceae	Syzygyum emirnensis	Robary	6	5	-	-
Myrtaceae	Eugenia sp.2	Rodambo	12	3	-	-
Sapindaceae	Tinopsis urchii	Romendafa	5	3	0.450	1.77
Myrtaceae	Syzygyum sp.1	Rotra	5	13	0.480	0.86
Myrtaceae	Syzygyum sp.2	Rotra (B)	1	32	0.197	0.94
Myrtaceae	Syzygyum sp.3	Rotra (M)	3	3	0.270	-0.64
Myrtaceae	Syzygyum sp.4	Rotra (S)	5	17	0.267	1.20
Rubiaceae	Gaertnera sp.1	Sadoka	8	18	0.395	0.34
Rubiaceae	Gaertnera sp.2	Sadoka (B)	5	64	0.160	0.69
Rubiaceae	Gaertnera sp.3	Sadoka (M)	8	9	0.036	0.41
Rubiaceae	Gaertnera sp.4	Sadoka (S)	8	19	0.095	1.07
Rubiaceae	Gaertnera sp.5	Sadoka (V)	11	1	0.000	1.31
Apocynaceae	Cerbera manghas	Samata	8	14	0.010	0.85
*	*	Sandrohy	12	3	0.000	2.31
Bignoniaceae	Ophiocolea sp.1	Sefontsohiy	8	1	-	-
Sapindaceae	Filicum longifolium	Sohihy	8	1	-	-
Sapindaceae	Stadmania sp.2	Sombotorona	3	33	0.168	0.86
Sapindaceae	Stadmania sp.3	Sombotorona (B)	5	1	0.000	0.77
Sapindaceae	Stadmania sp.4	Sombotorona (S)	5	1	0.180	-0.23
Sapindaceae	Stadmania sp.1	Sombotorona fotsy	3	1	-	-
Sapindaceae	Stadmania sp.5	Sombotorona mena	3	1	-	-
*	*	Tamboho	12	3	-	-
Sapindaceae	Allophyllus cobe	Taolambito	5	15	0.166	0.97
Anacardiaceae	Micronychia macrophilia	Tarantana	3	28	0.225	0.83
Lauraceae	Cryptocarya sp.1	Tavolo	4	32	0.238	1.06
Lauraceae	Cryptocarya sp.2	Tavolo (B)	6	13	0.251	0.91
Lauraceae	Cryptocarya sp.3	Tavolo (L)	6	48	0.376	0.90
Lauraceae	Cryptocarya sp.4	Tavolo (M)	8	4	-	-
Lauraceae	Cryptocarya sp.5	Tavolo mena	5	6	0.193	1.09
Proteaceae	Dilobeia thouarsii	Tavolohazo	1	3	0.265	0.93
Lauraceae	Cryptocaria thovenotii	Tavolopika	5	52	0.248	0.84
Rhamnaceae	Bathiorhamnus louvelii	Telotritry	11	3	0.090	0.57

*	*	Tendrofoniala	3	6	0.115	0.64
*	*	Toava	11	1	-	-
*	*	Tolanakoho	11	1	-	-
Apocynaceae	Mascarenhasia sp.1	Tongobitsy	11	3	0.360	1.22
Apocynaceae	Petchia sp.1	Tongobororona	11	1	0.000	1.40
Melastomaceae	Dichaetanthera sp.1	Trotroka	6	5	0.510	1.43
Moraceae	Treculia africana	Trova	3	38	0.147	0.86
Moraceae	Treculia sp.1	Trova (B)	5	19	0.152	0.64
Moraceae	Treculia sp.2	Trova (L)	5	1	0.170	1.62
Moraceae	Trilepisium madagascariense	Trova (S)	3	14	0.281	0.26
Moraceae	Treculia sp.4	Trova fotsy	8	3	0.000	0.23
Sarcolaenaceae	Rhodolaena sp.1	Tsiarinarina	3	31	0.111	0.76
Sarcolaenaceae	Rhodolaena sp.3	Tsiarinarina (B)	5	1	-	-
Rutaceae	Zanthoxylum madagascariensis	Tsihanihimposa	3	6	1.078	0.57
Oleaceae	Noronhia grandifolia	Tsilaitra (B)	12	1	-	-
Melastomataceae	Memecylon sp.1	Tsimahamasatsokina	8	25	0.263	0.56
Clusiaceae	Paramammea megaphylla	Tsimanotro	4	4	0.180	1.30
*	*	Tsinoronoro	5	13	0.211	0.80
Moraceae	Streblus sp.1	Tsipatika	5	92	0.371	0.73
*	*	Unknown	8	4	0.275	1.01
Arecaceae	Ravenea sp.2	Vakaka	9	3	0.000	1.45
Rubiaceae	Tarenna sp.1	Valanirana	6	5	0.090	0.65
Rutaceae	Vepris leandriana	Vatolongoala	12	1	-	-
Clusiaceae	Calophyllum sp.1	Vintanona	3	50	0.497	0.77
Lauraceae	Cryptocarya sp.9	Voadambo	11	1	-	-
Euphorbiaceae	Omphalea oppositifolia	Voalohakoho	8	20	0.203	0.80
Rubiaceae	Pyrostria sp.1	Voantalalina	8	6	-	-
Rubiaceae	Pyrostria sp.2	Voantalalina (B)	3	43	0.248	0.94
Rubiaceae	Pyrostria sp.3	Voantalalina (M)	8	4	0.090	0.70
Rubiaceae	Pyrostria sp.4	Voantalalina (S)	5	9	0.000	0.87
Rubiaceae	Rothmannia sp.3	Voantalanina	8	19	-	-
Rubiaceae	Rothmannia sp.1	Voantalanina (B)	8	3	0.000	1.76

Rubiaceae	Rothmannia sp.2	Voantalanina (M)	11	3	-	-
Rubiaceae	Rothmannia foliacea	Voantalanina (S)	11	1	-	-
Araliaceae	Polyscias sp.2	Voantsilana	8	10	0.102	0.99
Araliaceae	Polyscias sp.4	Voantsilana (B)	8	3	0.000	0.42
Araliaceae	Polyscias sp.6	Voantsilana (S)	8	1	1.230	0.71
Euphorbiaceae	Uapaca louvellii	Voapaka	4	160	0.552	1.00
Euphorbiaceae	Uapaca amplifolia	Voapaka (B)	9	5	0.273	0.42
Moraceae	Ficus sp.2	Voara	6	13	0.474	0.86
*	*	Voariana	12	1	-	-
Myrtaceae	Syzygium sp.5	Voarotra	6	34	0.240	0.79
Fabaceae	Albizia guminifera	Volomborona	1	17	0.385	0.92
*	bamboo	Volosy (bamboo)	7	1	-	-
Clusiaceae	Rheedia dalleizettei	Vongo	5	20	0.321	0.75
Arecaceae	Dypsis crinata	Vonitra	9	52	0.177	0.73
Malvaceae	Hildegardia sp.1	Vonoa	7	4	0.260	1.18
Salicaceae	Homalium sp.1	Zamalotra	7	11	0.060	1.10
Clusiaceae	Mammea bongo	Zambo	11	1	-	-
Clusiaceae	Mammea sp.1	Zambo (B)	11	1	-	-
Fabaceae	Dialium unifoliolatum	Zanamena	3	15	0.023	0.40

**Table C-2.** Sorting by the Malagasy tree name, this table presents RNI Betampona inventory plot summary for 2004 and 2005. For each species in each year, the FORMIND model plant functional type number is listed, as well as mean DBH (cm), minimum DBH (cm), maximum DBH (cm), mean height (m), minimum height (m) and maximum height (m) are listed. Unknown species are denoted with an asterisk. In addition, species that were only measured during one of the years and thus growth could not be calculated were denoted with a dash.

MalagasyName	PFT	2004						2005					
		Mean DBH (cm)	Minimum DBH (cm)	Maximum DBH (cm)	Mean Height (m)	Minimum Height (m)	Maximum Height (m)	Mean DBH (cm)	Minimum DBH (cm)	Maximum DBH (cm)	Mean Height (m)	Minimum Height (m)	Maximum Height (m)
Afobonoa	8	13.15	10.90	15.40	-	-	-	-	-	-	9.89	7.95	11.82
Afopotsy	8	11.24	5.00	24.90	12.55	6.61	16.37	14.32	5.00	25.5	10.59	4.80	16.72
Afopotsy (B)	3	10.83	5.30	34.10	12.99	6.38	28.35	10.89	5.40	34.2	12.21	5.05	26.93
Afopotsy (M)	8	-	-	-	11.68	11.68	11.68	17.50	17.50	17.5	-	-	-
Afopotsy (S)	8	7.70	5.40	14.00	8.86	7.93	10.18	7.54	5.20	14.3	8.25	7.12	9.92
Afotrakora	3	14.54	5.30	42.40	16.55	6.62	32.93	15.82	5.40	42.9	12.64	4.65	31.68
Akangarano	5	9.53	5.20	16.10	9.68	5.33	17.30	9.80	5.20	16.1	9.01	5.07	15.72
Amaninombilahy	5	36.30	36.30	36.30	18.21	11.98	24.43	23.75	11.20	36.3	23.16	23.16	23.16
Ambona	8	5.90	5.90	5.90	11.49	11.49	11.49	6.20	6.20	6.2	9.78	9.78	9.78
Ambonambona	3	12.79	5.10	41.50	11.98	6.21	24.29	13.08	5.10	42.3	11.57	4.76	23.47

Ambonambona (B)	6	17.80	6.90	31.40	14.86	10.43	18.42	18.07	6.90	31.7	14.27	10.23	17.89
Ambora	8	9.14	5.00	12.50	9.97	5.88	13.98	9.69	5.80	12.8	8.90	3.71	13.52
Ambora (S)	11	7.50	7.50	7.50	9.62	9.62	9.62	7.60	7.60	7.6	8.60	8.60	8.60
Amborambe	11	6.03	5.10	7.50	4.80	4.80	4.80	6.00	6.00	6	5.16	4.12	6.30
Amborasa	11	5.60	5.00	6.20	-	-	-	-	-	-	8.39	5.94	10.84
Amborasaha	8	8.53	5.40	14.40	9.34	6.06	12.60	9.07	5.70	14.5	8.31	5.81	10.76
Ambovitsika	8	7.51	5.20	10.40	7.87	4.64	10.15	6.98	5.00	10.5	8.03	4.98	12.68
Ampalirano	11	5.86	5.10	6.50	5.90	3.88	7.26	5.83	5.10	6.5	5.81	3.67	7.11
Ampaly	9	6.68	5.20	9.10	8.60	7.09	11.19	6.90	5.80	8.5	9.00	5.10	12.55
Andrarazina	10	8.10	8.10	8.10	11.05	11.05	11.05	8.20	8.20	8.2	10.42	10.42	10.42
Anivona	9	7.37	0.00	17.40	7.97	6.13	9.75	15.33	13.90	17.6	7.05	1.87	14.89
Ankahatra	5	8.07	5.10	13.90	10.64	4.75	21.23	8.19	5.00	14.1	9.22	3.39	20.17
Ankahatra (B)	11	5.87	5.20	7.10	7.79	7.20	8.25	6.33	5.30	7.4	6.60	5.42	8.01
Antafanala	6	25.67	6.40	54.50	7.23	7.23	7.23	6.40	6.40	6.4	16.69	8.64	26.27
Antafara	6	15.75	13.90	17.60	-	-	-	-	-	-	14.34	10.93	17.75
Antafarana	9	5.10	5.10	5.10	-	-	-	-	-	-	2.75	2.75	2.75
Antafonana	6	9.68	5.40	18.90	12.35	8.70	18.04	10.15	5.70	20.4	10.77	6.06	16.02
Antevaratra	1	14.64	5.10	75.90	15.55	5.23	44.82	15.29	5.10	75.9	14.11	5.01	42.46
Antevaratra (S)	11	6.80	6.80	6.80	-	-	-	-	-	-	6.92	6.92	6.92
Antohiravina	8	8.53	5.40	11.00	11.81	8.01	13.97	8.77	5.50	11.1	10.68	6.81	12.68
Arina	8	12.82	5.50	30.50	12.04	6.46	15.95	12.32	5.60	30.5	10.61	0.00	15.62
Arongaparhihy	9	28.50	28.50	28.50	-	-	-	-	-	-	14.48	14.48	14.48
Asina	12	-	-	-	8.17	8.17	8.17	5.50	5.50	5.5	-	-	-

Atafanala	4	16.89	6.00	40.10	12.36	6.79	23.24	17.28	6.00	40.1	11.63	5.21	21.87
Atamba	9	7.39	5.10	8.80	8.10	4.94	14.95	7.44	5.70	8.9	7.78	4.89	14.43
Bararaty	5	12.18	5.20	26.90	11.86	4.98	20.57	12.98	5.20	27.3	10.55	3.49	20.04
Drehaethatera	11	11.80	11.80	11.80	-	-	-	-	-	-	8.68	8.68	8.68
Fahavalontrazo	3	10.13	6.40	14.90	13.87	9.00	17.94	10.98	6.60	14.9	12.65	6.94	22.63
Fahavalotrazana	11	8.10	8.10	8.10	-	-	-	-	-	-	9.36	9.36	9.36
Fahavalotrazo (M)	11	6.30	6.30	6.30	6.58	6.58	6.58	6.40	6.40	6.4	5.37	5.37	5.37
Famelona	5	11.12	5.10	25.40	12.67	5.40	21.68	13.13	5.10	25.7	10.62	5.29	20.21
Fandramanana	5	8.35	5.00	13.00	9.21	3.47	21.96	8.72	5.20	13.3	8.32	3.45	20.13
Fandrianakanga	5	20.12	5.70	37.70	14.94	8.37	20.48	21.78	5.70	39.1	12.52	2.49	19.72
Fanempoka	4	49.90	49.90	49.90	30.81	30.81	30.81	50.50	50.50	50.5	29.08	29.08	29.08
Fanitokakolahy	11	7.77	6.10	9.40	8.77	8.37	9.17	8.85	8.20	9.5	6.77	5.44	8.28
Fanzana	8	10.72	5.00	46.80	5.31	1.83	10.93	10.32	5.00	33.5	5.07	0.00	16.46
Fatora	11	5.73	5.20	6.20	9.01	9.01	9.01	6.30	6.30	6.3	7.58	5.95	9.65
Fitoravina	12	5.30	5.00	5.80	7.39	4.88	8.44	5.43	5.20	5.8	7.45	5.36	8.80
Gavoala	9	11.20	8.40	15.00	12.30	5.92	15.50	11.43	8.40	15.7	11.65	5.92	14.92
Gavombazaha	12	7.43	7.00	8.20	-	-	-	-	-	-	5.76	4.49	7.83
Guavo	10	8.35	8.10	8.60	11.30	9.95	12.65	8.40	8.10	8.7	10.60	8.59	12.61
Hafomena	7	11.91	6.20	27.10	12.75	6.59	21.26	11.91	5.10	27.1	12.26	5.79	20.28
Hafotra	10	9.50	6.20	12.80	9.30	6.04	11.06	9.57	5.20	12.8	9.72	9.14	10.30
Harina	5	22.20	22.20	22.20	19.25	19.25	19.25	22.20	22.20	22.2	19.51	19.51	19.51
Harongaparhihy	6	42.60	42.60	42.60	-	-	-	-	-	-	19.06	19.06	19.06
Hasina	8	8.79	0.00	21.00	6.66	3.71	8.50	6.97	5.80	8.4	7.27	2.86	19.01

Hasina (B)	9	10.44	5.20	20.90	5.64	1.10	10.42	9.82	5.10	21.3	5.26	0.94	10.14
Hasina (M)	11	6.97	5.00	9.60	7.03	4.46	9.45	6.95	5.20	9.6	6.48	3.10	10.48
Hasina (S)	8	7.93	5.80	9.80	8.46	6.01	14.27	8.13	5.80	10.5	8.01	5.52	13.91
Hasy	9	29.00	29.00	29.00	15.89	15.89	15.89	29.30	29.30	29.3	14.82	14.82	14.82
Havolena	5	24.80	24.80	24.80	-	-	-	-	-	-	17.40	17.40	17.40
Hazinina	1	11.69	5.20	60.80	16.91	5.87	46.43	17.33	5.70	61.6	12.54	5.65	44.48
Hazinina (B)	1	10.26	5.10	35.30	11.08	2.55	37.17	10.32	5.10	35.4	9.98	0.00	36.47
Hazinina (S)	3	11.34	5.00	43.40	11.97	4.41	24.98	11.38	5.10	43.6	10.44	0.00	23.96
Hazoambo	1	19.62	5.50	61.20	16.70	8.53	27.12	17.57	5.50	40	16.86	6.89	33.55
Hazoambo (B)	1	14.90	14.90	14.90	19.33	19.33	19.33	14.90	14.90	14.9	17.76	17.76	17.76
Hazoambomena	5	19.45	16.20	22.70	-	-	-	-	-	-	12.30	7.19	17.41
Hazoharaka	3	8.67	5.70	14.30	8.80	8.80	8.80	6.10	6.10	6.1	7.38	6.55	8.48
Hazomafana	8	15.25	5.00	33.00	10.44	7.51	16.11	9.33	5.00	17.9	10.07	5.31	14.66
Hazomainty	5	8.65	5.00	23.10	10.66	4.34	23.21	8.86	5.10	23.1	9.52	3.02	22.25
Hazomainty (M)	11	6.53	5.10	7.80	7.13	6.08	8.17	7.90	7.00	8.8	6.16	5.63	6.71
Hazomainty (S)	5	5.80	5.80	5.80	-	-	-	-	-	-	8.56	8.56	8.56
Hazomainty (VL)	8	7.60	7.40	7.80	11.75	10.27	13.23	7.65	7.50	7.8	10.24	7.70	12.77
Hazomalany	5	13.63	5.30	42.50	14.72	8.42	19.14	18.05	5.10	44.5	10.34	1.39	18.12
Hazomalany (B)	3	9.32	5.10	25.50	10.54	2.41	25.42	9.57	5.10	25.7	9.49	2.12	24.47
Hazomalany (M)	8	10.25	6.60	14.10	13.96	13.96	13.96	14.20	14.20	14.2	9.81	7.46	13.56
Hazomalany (S)	5	12.97	5.10	24.50	13.55	6.31	17.73	13.12	5.20	24.7	12.58	5.88	17.36
Hazomamiala	3	12.54	5.80	22.10	14.09	6.73	24.18	12.80	5.80	22.4	13.39	4.98	23.11
Hazomamiala (B)	11	7.00	7.00	7.00	6.19	6.19	6.19	7.10	7.10	7.1	4.45	4.45	4.45



Hazomamy	5	10.96	5.10	26.10	12.46	7.30	19.24	11.21	5.10	26.7	11.80	6.76	18.84
Hazombarorona	4	11.42	5.00	32.90	12.03	5.01	28.86	12.44	5.40	33.8	10.69	0.00	26.59
Hazombarorona (M)	6	16.30	16.30	16.30	-	-	-	-	-	-	13.33	13.33	13.33
Hazombato	3	17.03	5.10	30.10	14.87	6.31	32.79	14.62	5.20	27.5	14.24	6.13	30.85
Hazomborona	2	7.80	6.30	9.30	4.23	0.00	8.46	7.30	7.30	7.3	12.83	8.37	17.28
Hazomitovo	9	6.85	5.00	9.80	7.24	3.77	10.43	6.75	5.20	9.8	7.34	6.41	9.65
Hazondomoina	3	42.50	42.50	42.50	-	-	-	-	-	-	28.02	28.02	28.02
Hazontoho	8	9.76	5.10	19.70	9.00	4.28	15.58	9.05	5.10	19.7	8.17	4.22	14.44
Hazontoho (B)	8	7.93	5.00	13.50	9.58	6.70	12.95	8.13	5.00	13.6	8.48	5.87	10.59
Hazontoho (M)	8	5.60	5.60	5.60	6.27	6.27	6.27	5.60	5.60	5.6	6.12	6.12	6.12
Hazontoho (S)	8	5.00	5.00	5.00	7.54	4.34	10.74	5.50	5.10	5.9	4.50	4.50	4.50
Hazontoho mena	8	6.65	5.00	9.90	-	-	-	-	-	-	8.82	4.67	13.36
Hazontoho potsy	8	10.40	9.70	11.10	-	-	-	-	-	-	8.88	7.48	10.28
Hazotoko fotsy	11	5.55	5.20	5.90	-	-	-	-	-	-	8.51	7.28	9.73
Hazotsiariana	8	19.83	8.10	35.90	-	-	-	-	-	-	9.01	5.48	13.67
Hazovoangy	6	10.14	5.00	24.10	10.94	1.09	18.97	10.65	5.30	24.7	9.16	0.00	17.77
Hazovoangy (S)	9	7.78	5.20	10.40	-	-	-	-	-	-	10.00	6.47	13.93
Hazovola	1	22.07	7.30	92.30	17.21	6.34	33.08	22.57	6.90	94.6	15.10	0.00	31.35
Hitsika	8	5.90	5.00	6.80	9.30	9.30	9.30	5.20	5.20	5.2	4.59	0.00	9.17
Hompa	5	10.60	6.10	15.10	13.72	10.54	16.89	10.70	6.30	15.1	12.62	8.50	16.73
Kafe	12	6.73	5.00	9.50	-	-	-	-	-	-	5.76	2.84	8.46
Kafeala	9	7.71	5.00	11.70	9.05	7.27	15.41	7.82	5.70	13	8.58	5.05	14.23
Kisaka	3	32.35	7.50	97.50	16.71	8.84	31.34	32.40	7.40	97.5	15.67	7.43	31.34

Lalona	1	30.65	5.80	95.20	22.90	7.10	44.93	37.43	6.10	95.2	18.62	6.16	44.50
Lalotona	1	13.64	5.00	45.10	13.25	2.63	33.01	14.22	5.20	45.1	12.15	3.03	31.23
Lambafo	12	9.40	9.40	9.40	-	-	-	-	-	-	7.58	7.58	7.58
Lazalaza	9	8.27	5.00	16.40	8.07	4.35	13.10	7.68	5.00	14.2	7.20	3.45	12.49
Lendena	8	8.33	5.40	12.30	8.96	6.78	11.49	8.40	5.40	12.4	7.73	5.22	11.28
Longotra	1	22.41	6.20	51.30	17.09	5.92	45.06	23.32	6.20	55	16.31	7.82	42.65
Longotra (B)	8	6.20	6.20	6.20	9.25	9.25	9.25	6.50	6.50	6.5	8.57	8.57	8.57
Longotra fotsy	5	10.86	5.10	16.00	-	-	-	-	-	-	11.11	3.58	16.66
Longotra mena	8	6.15	5.20	7.10	-	-	-	-	-	-	7.01	5.68	8.34
Maimboloha	9	12.25	5.00	19.50	-	-	-	-	-	-	7.33	4.30	10.35
Makaranana	10	6.93	5.00	9.70	8.54	7.16	10.38	6.98	5.10	9.8	7.33	5.99	8.84
Mamoalava	8	5.98	5.00	7.40	9.21	6.79	14.41	6.34	5.00	7.9	8.77	5.62	13.17
Mampay	3	10.29	5.10	27.00	11.79	5.29	18.73	11.06	5.90	23.2	10.72	5.17	17.93
Maporia	11	5.60	5.60	5.60	-	-	-	-	-	-	5.78	5.78	5.78
Marakoditra	3	9.77	5.20	17.50	12.15	6.52	18.53	10.38	5.40	17.7	11.07	6.21	17.85
Maroando	8	8.04	5.00	44.80	8.40	5.86	13.96	7.02	5.10	15.1	7.50	1.02	26.98
Menahihy	5	8.57	5.00	21.50	9.84	6.47	12.83	11.11	6.30	19	8.38	3.66	17.58
Menahihy (B)	5	9.39	5.00	25.40	10.66	6.06	16.86	9.14	5.20	25.7	9.70	4.64	15.87
Menahihy (M)	8	6.90	6.90	6.90	7.79	7.79	7.79	7.40	7.40	7.4	8.82	8.82	8.82
Menahihy (S)	8	7.43	5.00	20.10	9.99	4.94	14.98	7.79	5.00	32.2	9.33	4.88	14.08
Menavozona	9	6.82	0.00	18.50	11.75	10.45	13.05	17.90	16.70	19.1	7.81	5.85	11.71
Molanga	10	8.10	5.10	11.00	9.86	7.75	13.16	8.47	5.10	11.9	9.50	7.66	12.63
Molopangady	3	11.61	5.50	32.30	9.25	9.25	9.25	6.40	6.40	6.4	11.56	1.96	29.24

Molopangady (S)	5	12.80	12.80	12.80	-	-	-	-	-	-	12.57	12.57	12.57
Molopangady fotsy	3	15.84	5.00	50.20	13.76	6.69	25.94	15.96	5.10	50.9	12.51	6.21	24.32
Molopangady fotsy (S)	5	7.50	7.50	7.50	10.17	10.17	10.17	8.20	8.20	8.2	9.00	9.00	9.00
Molopangady mena	3	33.12	7.20	85.00	19.95	12.98	24.35	41.03	7.40	85.4	16.50	9.40	22.36
Mongy	12	6.50	6.50	6.50	5.04	4.04	6.03	6.30	6.10	6.5	4.06	4.06	4.06
Nanto	1	41.04	5.90	85.20	22.88	11.18	37.71	41.19	5.90	85.5	21.67	11.10	35.48
Nanto (B)	3	9.10	9.10	9.10	11.63	11.63	11.63	9.10	9.10	9.1	8.96	8.96	8.96
Nanto (M)	5	6.60	6.60	6.60	8.89	8.89	8.89	6.50	6.50	6.5	8.05	8.05	8.05
Nanto (S)	4	16.16	5.80	39.70	14.22	6.64	31.38	15.61	5.70	39.7	13.66	5.40	29.60
Nanto (VL)	5	12.70	8.50	16.90	13.90	11.68	16.12	12.70	8.50	16.9	13.40	11.58	15.22
Oditrovny	8	10.90	7.70	13.80	10.25	9.21	11.28	12.65	11.20	14.1	10.49	9.05	11.73
Ombary	11	6.00	6.00	6.00	-	-	-	-	-	-	3.88	3.88	3.88
Ompa	6	19.17	8.90	30.30	-	-	-	-	-	-	12.29	2.89	19.82
Ovana	9	6.19	5.00	9.30	8.48	5.72	12.64	6.23	5.00	8.5	7.74	0.85	12.58
Ovatsarorona	12	25.20	25.20	25.20	-	-	-	-	-	-	5.27	5.27	5.27
Ovobola fotsy	5	14.49	10.80	20.40	13.04	6.70	16.28	14.49	10.80	20.4	12.13	5.12	15.17
Ovodafa	9	11.92	8.20	15.30	7.96	4.57	10.75	12.15	8.60	15.5	7.29	3.67	10.43
Ovotahitso	4	18.25	7.00	27.00	16.27	3.28	26.01	21.66	12.10	27	13.32	3.08	24.80
Pandanus	8	6.79	5.20	18.30	6.49	3.31	9.50	7.03	5.20	18.4	5.59	2.07	10.94
Ramy	1	22.86	5.20	77.60	17.37	6.51	39.68	23.96	5.20	77.8	16.00	4.55	37.24
Ramy (B)	3	17.93	6.20	40.20	14.90	9.36	20.44	24.10	7.40	40.8	10.91	5.99	18.72
Rara	3	10.93	5.20	43.90	12.35	6.39	26.18	11.70	5.20	43.9	10.84	5.30	24.53
Rara fotsy	5	21.00	21.00	21.00	-	-	-	-	-	-	23.02	23.02	23.02

Rara mena	8	19.90	19.90	19.90	-	-	-	-	-	-	15.56	15.56	15.56
Ravinala	2	23.84	0.00	47.90	18.07	3.51	36.72	30.46	0.00	46.1	15.20	0.00	36.65
Robary	6	13.18	5.40	23.40	-	-	-	-	-	-	13.42	11.50	18.80
Rodambo	12	8.15	7.30	9.00	-	-	-	-	-	-	6.97	6.67	7.26
Romendafa	5	28.30	8.80	47.80	21.00	21.00	21.00	48.30	48.30	48.3	13.35	7.65	19.04
Rotra	5	12.93	5.10	31.10	12.15	8.08	18.23	15.22	6.70	31.3	10.48	3.76	16.99
Rotra (B)	1	15.17	5.00	62.20	13.56	5.71	46.88	15.57	5.10	62.4	12.59	5.33	45.59
Rotra (M)	3	11.85	5.80	17.90	8.43	8.43	8.43	6.10	6.10	6.1	10.31	9.14	11.47
Rotra (S)	5	11.33	5.10	28.70	11.98	6.17	20.56	11.63	5.50	29.6	10.65	5.61	18.69
Sadoka	8	6.96	5.10	12.00	10.66	10.12	11.19	10.55	8.60	12.5	7.50	5.43	10.63
Sadoka (B)	5	7.86	5.00	14.00	8.91	5.42	17.27	7.98	5.10	14.2	8.46	3.52	15.80
Sadoka (M)	8	7.41	5.20	9.80	9.07	6.93	13.55	7.74	6.20	9.8	8.52	6.51	13.14
Sadoka (S)	8	7.33	5.10	13.90	8.15	4.64	11.81	7.43	5.10	13.9	6.95	4.12	11.13
Sadoka (V)	11	6.90	6.90	6.90	8.78	8.78	8.78	6.90	6.90	6.9	7.32	7.32	7.32
Samata	8	8.04	5.40	11.00	10.08	6.51	13.84	8.33	5.40	11	8.58	4.97	13.15
Sandrohy	12	15.20	14.20	16.20	7.46	7.46	7.46	16.20	16.20	16.2	6.53	4.91	8.14
Sefontsohihy	8	27.50	27.50	27.50	-	-	-	-	-	-	11.88	11.88	11.88
Sohihy	8	10.30	10.30	10.30	-	-	-	-	-	-	11.73	11.73	11.73
Sombotorona	3	11.41	5.20	34.30	12.93	5.99	21.35	11.84	5.20	34.5	11.73	5.64	20.53
Sombotorona (B)	5	6.50	6.50	6.50	9.27	9.27	9.27	6.50	6.50	6.5	8.42	8.42	8.42
Sombotorona (S)	5	11.50	11.50	11.50	8.77	8.77	8.77	11.70	11.70	11.7	9.02	9.02	9.02
Sombotorona fotsy	3	28.50	28.50	28.50	-	-	-	-	-	-	19.94	19.94	19.94
Sombotorona mena	3	30.00	30.00	30.00	-	-	-	-	-	-	21.39	21.39	21.39

Tamboho	12	0.00	0.00	0.00	-	-	-	-	-	-	3.45	3.37	3.52
Taolambito	5	11.93	5.40	38.50	6.64	0.00	18.30	9.87	5.40	18.5	9.82	3.33	17.33
Tarantana	3	21.73	5.30	57.50	15.80	7.30	24.04	23.10	5.40	60.1	14.20	5.65	23.38
Tavolo	4	9.58	5.00	18.00	13.55	5.60	18.99	11.54	5.50	18.3	11.13	3.99	22.97
Tavolo (B)	6	12.34	5.80	24.80	12.57	7.93	19.10	12.40	5.80	25.2	10.97	7.31	18.07
Tavolo (L)	6	10.26	5.10	25.20	12.85	7.30	21.32	10.74	5.10	27.5	11.89	4.82	21.27
Tavolo (M)	8	11.23	7.50	14.80	-	-	-	-	-	-	10.10	7.68	13.55
Tavolo mena	5	16.68	8.90	36.30	14.46	9.80	17.95	17.58	9.40	36.4	12.78	8.33	16.72
Tavolohazo	1	25.25	17.30	33.20	29.72	18.51	40.92	25.55	17.90	33.2	28.65	17.62	39.68
Tavolopika	5	10.87	5.50	27.20	12.96	7.14	21.97	11.39	5.70	27.2	11.76	4.45	21.01
Telotritry	11	6.40	5.80	7.00	7.51	7.20	7.82	6.50	6.00	7	6.86	6.22	7.50
Tendrofoniala	3	23.45	5.70	34.20	16.41	6.60	27.06	20.76	6.00	34.2	16.47	6.48	25.25
Toava	11	17.50	17.50	17.50	-	-	-	-	-	-	9.84	9.84	9.84
Tolanakoho	11	7.00	7.00	7.00	-	-	-	-	-	-	5.54	5.54	5.54
Tongobitsy	11	5.00	5.00	5.00	8.76	8.58	8.93	5.40	5.40	5.4	7.41	6.65	8.17
Tongobororona	11	6.40	6.40	6.40	7.93	7.93	7.93	6.40	6.40	6.4	6.40	6.40	6.40
Trotroka	6	24.18	5.10	53.00	13.42	8.37	22.88	23.83	5.40	53.1	12.16	7.05	20.20
Trova	3	10.35	5.00	53.00	12.16	6.40	26.93	11.94	5.10	53	11.03	5.82	26.85
Trova (B)	5	11.13	5.30	24.70	12.28	3.92	21.48	11.62	5.30	24.9	11.46	3.78	20.47
Trova (L)	5	10.00	10.00	10.00	16.39	16.39	16.39	10.20	10.20	10.2	14.52	14.52	14.52
Trova (S)	3	14.78	5.20	37.90	13.57	5.81	24.05	15.69	5.20	39	12.33	5.49	27.36
Trova fotsy	8	6.30	6.30	6.30	9.59	9.24	9.94	6.30	6.30	6.3	9.34	8.96	9.72
Tsiarinarina	3	13.05	5.10	52.20	12.54	5.52	27.10	14.43	5.30	52.2	10.12	0.00	26.74

Tsiarinarina (B)	5	5.70	5.70	5.70	-	-	-	-	-	-	14.86	14.86	14.86
Tsihanihimposa	3	37.82	20.60	60.30	19.62	15.03	25.47	41.13	20.80	64.1	17.06	9.44	24.50
Tsilaitra (B)	12	5.00	5.00	5.00	-	-	-	-	-	-	5.26	5.26	5.26
Tsimahamasatsokina	8	7.95	5.20	17.20	10.19	5.62	14.58	8.18	5.30	16.7	9.16	4.45	14.21
Tsimanotro	4	28.27	5.00	69.00	27.26	27.26	27.26	69.20	69.20	69.2	17.80	11.27	25.82
Tsinoronoro	5	9.29	5.10	23.20	9.41	3.75	17.46	9.97	5.20	23.2	8.36	3.70	15.98
Tsipatika	5	8.72	5.00	31.60	9.97	4.22	22.83	9.46	5.10	42.7	8.39	0.00	19.83
Unknown	8	13.93	6.80	21.00	10.73	7.08	14.38	10.70	6.80	14.6	8.68	6.22	13.02
Vakaka	9	10.00	0.00	20.00	11.99	11.99	11.99	20.00	20.00	20	7.95	5.58	10.31
Valanirana	6	9.87	7.20	14.10	9.95	8.10	11.29	10.50	7.20	14.3	7.62	4.92	11.24
Vatolongoala	12	12.00	12.00	12.00	-	-	-	-	-	-	4.78	4.78	4.78
Vintanona	3	13.01	5.00	39.60	12.87	3.49	31.02	13.02	5.00	39.7	11.99	3.45	29.72
Voadambo	11	8.00	8.00	8.00	-	-	-	-	-	-	5.72	5.72	5.72
Voalohakoho	8	10.69	5.80	20.30	8.67	5.27	11.88	10.58	5.40	20.5	7.95	4.57	11.64
Voantalalina	8	10.84	5.90	25.80	-	-	-	-	-	-	8.66	6.37	12.08
Voantalalina (B)	3	10.24	5.10	45.00	10.47	5.87	26.79	10.46	5.10	45.2	9.40	4.83	25.01
Voantalalina (M)	8	10.20	6.10	15.90	8.32	5.41	11.22	11.10	6.10	16.1	8.39	5.40	10.09
Voantalalina (S)	5	13.14	5.50	34.90	10.83	7.92	19.23	7.47	5.50	10.5	9.77	6.91	15.00
Voantalanina	8	8.25	5.00	15.80	-	-	-	-	-	-	8.46	4.71	12.68
Voantalanina (B)	8	6.95	6.40	7.50	8.44	8.44	8.44	6.40	6.40	6.4	7.86	6.35	9.36
Voantalanina (M)	11	5.80	5.10	6.50	-	-	-	-	-	-	7.19	6.00	8.37
Voantalanina (S)	11	5.00	5.00	5.00	-	-	-	-	-	-	6.20	6.20	6.20
Voantsilana	8	8.98	5.00	18.10	10.27	7.69	13.69	8.85	5.00	18.3	8.74	4.64	11.90

Voantsilana (B)	8	5.20	5.20	5.20	7.24	6.00	8.47	5.45	5.20	5.7	5.54	5.54	5.54
Voantsilana (S)	8	7.50	7.50	7.50	9.21	9.21	9.21	8.90	8.90	8.9	8.40	8.40	8.40
Voapaka	4	20.14	5.00	67.10	15.63	6.08	30.06	21.10	5.10	67.1	14.19	4.79	28.25
Voapaka (B)	9	8.23	5.40	16.10	9.56	6.42	13.62	8.53	5.40	17.3	9.10	5.59	12.80
Voara	6	13.37	5.10	34.20	11.58	5.53	19.26	14.77	6.50	34.2	9.52	4.03	18.32
Voariana	12	5.80	5.80	5.80	-	-	-	-	-	-	-0.77	-0.77	-0.77
Voarotra	6	10.10	5.70	18.00	9.99	1.16	17.33	10.07	5.50	18	9.83	4.29	15.95
Volomborona	1	25.02	5.90	59.90	17.67	7.18	41.85	24.39	6.00	59.9	16.12	6.26	40.88
Volosy (bamboo)	7	-	-	-	17.82	17.82	17.82	6.80	6.80	6.8	-	-	-
Vongo	5	10.42	5.00	26.80	12.25	6.40	20.29	12.60	6.60	26.8	10.70	4.44	23.57
Vonitra	9	10.89	0.00	15.80	9.40	2.91	15.28	10.83	5.10	15.8	8.32	2.70	14.90
Vonoa	7	14.63	6.70	27.20	11.70	6.34	17.43	14.93	6.80	27.7	10.36	6.27	16.21
Zamalotra	7	12.46	6.40	38.60	16.92	13.42	22.32	19.27	9.20	38.8	11.80	1.04	21.58
Zambo	11	5.00	5.00	5.00	-	-	-	-	-	-	5.41	5.41	5.41
Zambo (B)	11	8.30	8.30	8.30	-	-	-	-	-	-	9.22	9.22	9.22
Zanamena	3	14.55	5.80	37.10	13.80	8.76	19.32	14.58	5.90	37.1	13.35	8.30	18.73

## Supplementary D: Zahamena National Park Inventory Plot Summary

**Table D-1.** Zahamena National Park (ZNP) forest inventory plot summary table lists the Family Name, Scientific Name and Malagasy Name for each species of tree measured within the 35 small inventory plots (10m-diameter) in 2008. For each species, the FORMIND model plant functional type number is listed, as well as stem count per hectare, mean diameter in centimeters, minimum diameter in centimeters, maximum diameter in centimeters, mean height in meters, minimum height in meters and maximum height in meters. Unknown species are denoted by an asterisk. Unknown or not measured numeric values are indicated by dashes. .

Family	Scientific Name	MalagasyName	PFT	Stem Count per ha	Mean DBH (cm)	Minimum DBH (cm)	Maximum DBH (cm)	Mean Height (m)	Minimum Height (m)	Maximum Height (m)
Malvaceae	Hildegardia perrieri	Afobonoa maintso (B)	8	4	12.40	12.40	12.40	16.97	16.97	15.97
*	*	Afomena	1	25	11.50	5.80	16.10	24.17	10.72	43.28
Malvaceae	Grewia cuneifolia	Afopotsy	8	7	19.05	7.80	30.30	9.50	9.50	9.50
Malvaceae	Grewia sp.1	Afopotsy (B)	3	4	5.40	5.40	5.40	26.16	26.16	26.16
Malvaceae	Grewia sp.3	Afopotsy (S)	8	7	7.67	5.10	12.00	11.42	8.47	14.08
Malvaceae	Nesogordonia sp.1	Afotrakora	3	15	5.65	5.40	6.10	9.95	8.01	11.01
Sarcolenaceae	Leptolaena sp.2	Amaninombilahy	1	55	19.93	5.70	49.30	20.10	4.73	45.16
Araliaceae	Polyscias sp.3	Ambonambona	3	4	7.30	7.30	7.30	6.30	6.30	6.30
Monimiaceae	Ehippiandra sp.3	Ambora	5	11	22.73	8.70	50.80	20.50	17.07	23.35
Monimiaceae	Ehippiandra sp.4	Ambora (S)	5	18	15.83	6.20	36.70	13.88	5.87	23.76
Menispermaceae	Burasaia sp.1	Amborasaha	8	7	9.27	7.90	10.20	12.94	10.49	17.12
Pittosporaceae	Pittosporum sp1	Ambovitsika (B)	8	4	5.90	5.90	5.90	22.77	22.77	22.77
Moraceae	Ficus sorocoides	Ampalirano	11	4	14.90	14.90	14.90	18.24	18.24	18.24
Rubiaceae	Fernelia sp.5	Ankahatra (B)	3	29	9.53	5.10	14.70	15.45	8.28	29.96
Rubiaceae	Fernelia sp.3	Ankahatra (M)	2	15	5.60	5.20	5.80	14.11	6.66	24.62
Rubiaceae	Fernelia sp.4	Ankahatra (S)	5	25	8.51	6.20	10.80	13.94	10.17	18.88
*	*	Antafara (B)	6	4	5.60	5.60	5.60	6.14	6.14	6.14
Lauraceae	Ocotea sp.3	Antafonana (B)	1	7	15.05	12.90	17.20	50.42	34.87	65.97
Lauraceae	Ocotea sp.1	Antafonana (M)	3	22	16.02	5.10	37.30	18.70	10.04	30.16
Lauraceae	Ocotea sp.2	Antafonana (S)	11	11	6.00	5.40	6.30	6.66	5.25	7.37
Lauraceae	Beilschmiedia sp.3	Antevaratra (B)	3	33	10.77	6.50	22.70	16.39	6.48	28.13
Lauraceae	Beilschmiedia sp.4	Antevaratra (M)	1	33	20.61	5.00	73.30	25.72	5.81	66.29



Lauraceae	Beilschmiedia sp.5	Antevaratra (S)	1	22	14.86	5.00	33.20	18.16	6.46	30.20
Bignoniaceae	Phyllarthron sp.1	Antohiravina (B)	3	7	7.85	6.30	9.40	21.44	16.60	26.28
Sarcolenaceae	Rhodolaena sp.2	Arina (B)	1	11	20.83	7.10	59.80	28.64	4.88	69.02
*	*	Arongaparnihy (B)	9	4	104.60	104.60	104.60	-	-	-
Combretaceae	Terminalia sp.1	Atafanala (B)	9	7	7.40	6.90	7.90	12.85	11.94	13.76
Combretaceae	Terminalia sp.2	Atafanala (M)	2	11	40.27	11.70	67.90	31.62	15.59	47.64
*	*	Azinina	6	7	7.97	5.20	10.20	15.52	10.62	21.54
*	*	Azinina (B)	1	25	10.44	5.70	26.60	20.16	5.32	46.65
*	*	Azinina (M)	8	7	5.50	5.50	5.50	9.80	9.20	10.40
*	*	Azinina (S)	3	40	13.80	5.10	45.40	15.10	6.19	25.25
Dilleniaceae	Dillenia sp.1	Bararaty	1	7	18.35	16.30	20.40	43.64	25.54	61.73
*	*	Bobaka/vahona	6	4	12.70	12.70	12.70	19.55	19.55	19.55
Rutaceae	Zanthoxylum sp.4	Fahavalotrazo	3	7	11.60	5.90	17.30	12.80	12.80	12.80
*	*	Famelona ravina maitso	5	15	8.40	7.20	10.50	14.90	10.74	19.99
Aphloiaceae	Aphloia theaformis	Fandramanana	5	4	26.50	26.50	26.50	30.98	30.98	30.98
Fabaceae	Bauhinia sp.1	Fanitokakolahy (S)	1	15	10.80	7.20	13.50	29.30	21.49	38.11
Cyatheaceae	Cyathea sp.1	Fanzana	8	22	8.18	5.40	11.50	8.29	3.24	17.50
Rutaceae	Vepris fitoravy	Fitoravina	12	4	5.10	5.10	5.10	6.85	6.85	6.85
Convallariaceae	Dracaena sp.2	Hasina (B)	9	18	9.18	5.10	17.70	9.32	1.62	23.63
Convallariaceae	Dracaena reflexa	Hasina (M)	11	22	7.86	5.20	10.40	10.95	5.05	9.73
Convallariaceae	Dracaena reflexa var linearifolia	Hasina (S)	8	18	7.88	5.90	9.90	7.07	3.55	10.43
Convallariaceae	Dracaena sp.3	Hasina (VL)	8	4	14.90	14.90	14.90	19.79	19.79	15.79
Euphorbiaceae	Suregada sp.2	Hazoboangy	6	11	14.50	5.30	21.70	15.93	5.36	23.28
*	*	Hazomafana (B)	1	7	22.05	16.50	27.60	41.12	38.19	44.04
*	*	Hazomafana (M)	8	4	6.40	6.40	6.40	14.60	14.60	14.60
Ebenaceae	Diospyros sp.1	Hazomainty	3	33	12.80	5.50	39.10	18.34	5.77	32.92
Rhizophoraceae	Cassipourea lanceolata	Hazomainty (B)	5	4	7.90	7.90	7.90	19.80	19.80	19.80
Rhizophoraceae	Cassipourea sp.4	Hazomainty (M)	1	29	13.40	5.30	86.70	15.04	4.21	32.62
Rhizophoraceae	Cassipourea sp.2	Hazomainty (S)	5	29	14.55	5.10	51.90	11.53	6.40	13.89
*	*	Hazomalany (B)	3	15	8.58	5.40	16.60	16.07	10.12	30.47

Anacardiaceae	Abrahamia sp.1	Hazombarorona (B)	6	18	11.72	5.80	25.40	16.10	8.21	21.29
Anacardiaceae	Abrahamia sp.2	Hazombarorona (M)	6	18	16.24	5.30	48.30	16.20	10.74	23.98
Sapindaceae	Tina sp.2	Hazombarorona (S)	2	18	12.50	5.30	40.20	20.76	11.43	40.13
Passifloraceae	Paropsia sp.1	Hazomitovo	9	4	5.60	5.60	5.60	9.95	9.95	9.95
Euphorbiaceae	Tannodia sp.1	Hazondomoina	3	29	7.30	5.00	13.80	14.01	4.80	34.87
Myrsinaceae	Oncostemum sp.2	Hazontoho (B)	1	15	10.80	5.30	16.10	21.71	8.11	43.67
Myrsinaceae	Oncostemum sp.3	Hazontoho (M)	8	36	8.67	5.20	13.10	11.72	5.95	15.79
Myrsinaceae	Oncostemum sp.4	Hazontoho (S)	8	11	8.73	7.90	10.30	10.31	9.22	10.93
Rubiaceae	Coffea sp.2	Kafeala (M)	6	4	11.80	11.80	11.80	21.98	21.98	21.98
*	*	Kijy	2	11	22.53	7.50	32.40	31.55	13.95	42.69
Euphorbiaceae	Anthostema madagascariensis	Lalotona	1	102	21.72	5.50	56.70	23.55	8.14	50.81
Euphorbiaceae	Croton nobilis	Lazalaza	9	11	6.37	5.40	7.60	5.70	4.50	6.44
*	*	Lombiro beravina matevina	1	11	24.10	5.90	38.50	24.33	19.51	33.11
Hamamelidaceae	Dicoryphe sp.3	Longotra (B)	5	7	29.70	18.90	40.50	22.30	22.30	22.30
Lauraceae	Aspidostemon perrieri	Longotra fotsy	5	7	13.90	12.00	15.80	22.53	17.30	27.75
Lauraceae	Aspidostemon sp.1	Longotra mena	5	11	16.87	6.60	25.40	21.38	19.82	22.94
Euphorbiaceae	Macaranga sp.3	Makaranana	10	22	13.78	6.40	29.00	14.23	2.15	15.62
*	*	Mampay (B)	1	73	16.45	5.20	47.00	22.63	6.30	58.13
*	*	Mampay (S)	1	33	15.67	5.20	37.40	18.87	7.44	44.78
Sapindaceae	Beguea apetalia	Marankoditra	3	15	9.06	6.30	16.00	10.85	4.75	17.12
Euphorbiaceae	Blotia sp.2	Maroando	5	65	7.11	5.10	12.30	11.35	4.81	28.02
Anacardiaceae	Campylopermum obtusifolium	Menahihy (B)	5	18	10.70	6.50	18.70	15.52	7.87	35.28
Anacardiaceae	Campylopermum sp.4	Menahihy (M)	5	15	10.86	6.30	13.60	19.35	11.39	28.31
Erythroxylaceae	Campylopermum sp.3	Menahihy (S)	1	44	9.53	5.50	16.10	18.02	1.98	39.52
Arecaceae	Dypsis lastelliana	Menavozona	9	15	22.02	12.30	30.20	12.30	8.98	15.62
Malvaceae	Dombeya sp.4	Molanga	10	4	15.80	15.80	15.80	-	-	-

Elaeocarpaceae	Elaeocarpus sp.6	Molopangady (S)	1	11	15.70	12.30	20.70	30.18	17.55	42.81
Elaeocarpaceae	Elaeocarpus sp.7	Molopangady fotsy (S)	1	11	17.03	12.00	26.50	24.80	10.97	49.26
Elaeocarpaceae	Elaeocarpus sp.8	Molopangady mena	1	7	21.53	13.40	30.00	30.93	23.08	38.78
Anacardiaceae	Camptosperma sp.1	Nanto (B)	1	15	29.85	12.10	54.20	26.87	10.35	40.80
Sapotaceae	Faucherea sp.3	Nanto (M)	3	7	49.60	34.60	64.60	30.14	30.14	30.14
Sapotaceae	Faucherea sp.4	Nanto (S)	1	22	17.44	7.70	44.30	21.43	11.97	49.73
Sapotaceae	Faucherea sp.2	Nanto (VL)	5	4	9.40	9.40	9.40	20.96	20.96	20.96
Anacardiaceae	Michronychia tsiramiramy	Oditrovy	5	18	10.28	5.10	14.60	14.88	6.71	23.45
Annonaceae	Isolona sp.1	Ombavy	1	15	10.40	5.20	21.50	22.02	7.50	49.90
Sapindaceae	Eugenia sp.3	Ompa	1	25	11.81	5.10	24.80	22.91	10.51	55.51
Arecaceae	Dypsis fasciculata	Ovana	9	7	6.15	5.80	6.50	14.46	12.43	16.49
Arecaceae	Oriana trispatha	Ovobola fotsy	5	4	9.50	9.50	9.50	11.28	11.28	11.28
Arecaceae	Dypsis sp.2	Ovodafa	9	4	34.30	34.30	34.30	-	-	-
Burseraceae	Canarium madagascariensis	Ramy	1	47	26.96	5.80	81.50	18.94	4.24	34.18
Burseraceae	Canarium sp.2	Ramy (B)	1	7	56.30	31.10	81.50	48.30	30.16	66.43
Myrsinaceae	Maulouchia sp.1	Rara (M)	1	98	12.89	5.00	43.50	17.46	5.32	42.53
Strelitziaceae	Ravenala madagascariensis	Ravinala	2	18	35.62	26.50	43.70	27.98	17.87	44.22
Sapindaceae	Tinopsis urchii	Romendafa (S)	5	4	9.30	9.30	9.30	15.42	15.42	15.42
Myrtaceae	Syzygium sp.2	Rotra (B)	1	7	18.25	5.90	30.60	32.71	32.71	32.71
Myrtaceae	Syzygium sp.3	Rotra (M)	3	7	10.85	8.80	12.90	10.11	9.00	11.22
Rubiaceae	Gaertnera sp.2	Sadoka (B)	5	22	9.66	6.50	12.40	13.68	7.29	23.23
Rubiaceae	Gaertnera sp.6	Sadoka (M)	11	11	7.53	5.40	10.00	6.31	4.72	8.36
Rubiaceae	Gaertnera sp.4	Sadoka (S)	8	33	6.66	5.20	9.20	9.12	4.81	18.61
*	*	Sakoanala	6	4	7.50	7.50	7.50	17.02	17.02	17.02
Apocynaceae	Cerbera sp.1	Samata	12	4	7.70	7.70	7.70	11.36	11.36	9.36
Bignoniaceae	Ophiocolea sp.2	Sefontsohihy	12	7	5.90	5.50	6.30	10.28	9.42	9.14
Bignoniaceae	Ophiocolea sp.3	Sefontsoy	12	4	5.50	5.50	5.50	11.14	11.14	9.14
Sapindaceae	Stadmania sp.3	Sombotorona (B)	5	7	6.85	5.10	8.60	15.29	6.17	23.90
Sapindaceae	Stadmania sp.7	Sombotorona (M hairy)	8	7	6.35	5.10	7.60	14.85	14.08	15.61

Sapindaceae	Stadmania sp.6	Sombotorona (M smooth)	8	7	6.15	5.20	7.10	14.08	13.73	14.43
*	*	Tafara	1	58	8.73	5.30	20.80	14.66	3.61	75.16
*	*	Tafara (B)	8	4	9.20	9.20	9.20	13.05	13.05	13.05
*	*	Tanantanampotsy	4	4	6.60	6.60	6.60	30.60	30.60	30.60
Anacardiaceae	Micronychia sp1	Tarantana	1	15	24.93	15.90	32.80	39.73	26.93	61.73
*	*	Tavia	7	15	7.40	5.10	9.10	15.81	10.87	19.32
Lauraceae	Cryptocarya sp.6	Tavolo (B)	2	47	18.51	5.20	56.40	27.16	3.85	51.58
Lauraceae	Cryptocarya sp.7	Tavolo (L)	2	29	7.74	6.30	12.30	26.69	12.47	43.75
Lauraceae	Cryptocarya sp.4	Tavolo (S)	2	44	16.18	5.10	64.70	23.66	9.80	48.08
Lauraceae	Cryptocaria thovenotii	Tavolopika	5	4	8.10	8.10	8.10	24.50	24.50	23.50
Rhamnaceae	Bathiorhamnus louvelii	Telotritry	11	4	5.20	5.20	5.20	8.94	8.94	8.94
Melastomaceae	Dichaetanthera sp.1	Trotroka	6	4	9.50	9.50	9.50	17.66	17.66	17.66
Moraceae	Treculia sp.3	Trova (B)	1	44	10.83	5.20	30.20	15.70	6.97	35.70
Moraceae	Treculia sp.5	Trova (M)	3	25	11.57	7.20	25.20	14.78	8.30	22.55
Moraceae	Trilepisium madagascariense	Trova (S)	3	22	9.37	5.20	15.20	15.82	10.78	22.53
Moraceae	Treculia sp.4	Trova fotsy	8	11	7.57	5.70	9.50	14.56	12.34	17.14
*	*	Tsaravoasira	4	7	15.40	10.20	20.60	17.12	9.23	25.00
*	*	Tsiarinarina fotsy	12	4	5.10	5.10	5.10	9.00	9.00	9.00
Rutaceae	Zanthoxylum madagascariensis	Tsihanihimposa	3	4	27.80	27.80	27.80	21.67	21.67	21.67
Oleaceae	Noronhia sp.1	Tsilaitra (B)	4	22	12.33	2.10	24.20	18.67	10.85	27.90
Clusiaceae	Paramammea sp.1	Tsilaitra (S)	7	15	7.33	5.30	10.20	13.58	6.99	19.80
Clusiaceae	Paramammea sp.2	Tsimahamasatsokina (BL)	5	15	10.90	7.40	18.10	14.55	11.00	23.27
Clusiaceae	Paramammea sp.3	Tsimahamasatsokina (BS)	8	11	12.27	5.90	17.10	11.28	8.67	13.28
Clusiaceae	Paramammea sp.4	Tsimahamasatsokina (SL)	5	11	10.30	5.10	18.10	13.98	9.33	22.66
Clusiaceae	Paramammea sp.5	Tsimahamasatsokina (SS)	11	4	7.60	7.60	7.60	8.30	8.30	8.30
*	*	Tsipatika	1	51	10.07	5.10	39.90	17.82	6.01	52.18
*	*	unknown	5	7	21.55	9.10	34.00	16.51	9.88	23.13
*	*	Vadiandro	11	4	7.10	7.10	7.10	8.28	8.28	8.28

Arecaceae	Ravenea sp.2	Vakaka	9	22	6.69	5.40	8.40	6.77	3.56	8.91
Clusiaceae	Calophyllum sp.1	Vintanona	3	11	11.30	5.20	27.50	12.52	5.67	19.78
Rubiaceae	Rothmannia sp.1	Voantalanina (B)	3	33	11.53	6.20	19.40	22.26	11.85	32.24
Rubiaceae	Rothmannia sp.2	Voantalanina (M)	8	4	6.10	6.10	6.10	8.40	8.40	8.40
Rubiaceae	Rothmania foliacea	Voantalanina (S)	5	11	9.43	7.10	12.80	11.90	9.47	13.44
Araliaceae	Polyscias sp.2	Voantsilana	8	7	9.03	6.30	14.10	16.47	13.49	18.04
Euphorbiaceae	Uapaca sp.1	Voapaka (M)	2	47	13.03	5.00	50.40	19.90	8.11	61.25
Fabaceae	Albizia guminifera	Volomborona	7	7	16.25	10.50	22.00	19.94	16.52	23.36
*	*	Volosy (bamboo)	10	62	6.10	5.10	7.40	23.14	3.52	15.01
*	*	Vongo (B)	5	15	9.22	5.20	16.30	15.05	7.90	26.38
Salicaceae	Homalium sp.2	Zamalotra	2	11	32.63	19.20	52.00	29.46	25.68	33.24
Fabaceae	Dialium unifoliolatum	Zanamena	2	7	20.80	12.50	29.10	55.40	54.08	56.71

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