

Appendices

Appendix 1: Number of individuals of each species originally planted per ha in each compartment, compartment size (ha) and median planting month. Asterisks indicate the planted species (≥ 1 cm DBH) that were seen in 2013. Species in bold are the two most commonly planted species found in 2013.

Compartment	101	102	103	107	108	109	113	114	Mean stems planted (per ha)
Compartment area (ha)	62.5	225	65	75	84	56.5	75	86	
Median Planting month	03/95	03/95	03/95	09/95	09/95	03/06	03/06	09/96	
Species									
Markhamia platycalyx *	76.7	76.8	74.9	82.2	32.9	47.4	48.5	39.7	59.9
Uvariopsis congensis *	38.6	38.4	37.1	44.2	58.9	95.6	98.5	18.8	53.8
Prunus africana *	59.2	59.4	59.0	57.6	10.1	16.3	7.8	99.2	46.1
Mimusops bagshawei *	65.3	65.8	62.8	63.5	69.0	-	1.5	3.9	47.4
Lavoa brownii	23.6	23.5	16.5	22.9	93.8	42.5	43.3	11.9	34.8
Chrysophyllum albidum	10.4	10.4	8.1	10.1	45.3	25.4	26.5	2.3	17.3
Blaghia wildmaniana	13.0	13.0	12.5	18.6	18.4	30.5	27.8	3.9	17.2
Warbugia ugandensis *	0.9	0.9	2.4	0.9	19.2	21.4	41.5	58.5	18.2
Strombosia scheffleri	18.6	18.9	17.4	18.1	1.4	10.1	9.4	-	13.4
Albizia gummifera *	19.4	19.3	24.8	18.9	-	-	0.2	-	16.5
Bridelia micrantha *	13.0	0.0	-	-	4.3	0.4	0.4	73.9	15.3
Diospyros mespiliformis	-	0.2	0.2	0.2	7.6	35.4	32.9	24.2	14.4
Antiaris toxicaria	1.6	14.4	14.0	14.1	9.3	-	-	-	10.7
Spathodea campanulata *	13.4	13.4	12.9	17.1	-	1.6	1.7	-	10.0
Pancovia turbinata	9.3	9.2	8.6	9.0	-	-	12.5	3.9	8.8
Dasylepsis egglingii	-	-	-	-	-	11.6	12.1	38.4	20.7
Funtumia elastica	0.4	0.4	0.4	0.4	0.6	15.9	16.8	15.5	6.3
Celtis durandii *	9.5	9.5	9.5	2.7	-	-	-	-	7.8
Aphania senegalensis	5.2	5.2	5.0	5.1	-	1.7	1.3	-	3.9

Blaghia unijugata *	6.1	6.1	5.7	-	-	-	-	-	6.0
Trichilia dregeana	4.7	4.7	3.0	4.6	-	-	0.5	-	3.5
Monodora myristica	2.3	2.3	1.8	2.2	7.2	-	-	-	3.2
Tabernamontana holstii *	-	-	-	-	17.5	-	-	-	17.5
Balanites wilsoniana	3.6	3.3	2.3	3.5	-	-	0.4	-	2.6
Albizia cerria	-	0.0	-	-	10.3	0.2	0.2	-	2.7
Cordia mellenii	0.1	0.1	0.2	0.1	1.3	1.1	1.1	6.0	1.3
Trichilia africana	0.7	0.7	0.7	0.7	-	5.5	5.7	-	2.3
Fagaropsis angolensis	1.0	1.0	1.3	0.9	-	-	1.4	-	1.1
Phonix	0.8	0.8	1.0	0.8	-	-	-	-	0.8
Dictyandra arborescens	0.8	0.8	0.8	0.2	-	-	-	-	0.6
Pariniri excelsa	0.4	0.4	0.3	0.4	-	1.2	4.0	-	1.1
Aningeria altissima	0.3	0.3	0.3	0.3	-	?	1.2	-	0.5
Zanha golungensis	-	-	-	-	-	-	2.8	-	2.8
Newtonia buchannii	0.3	0.3	0.8	0.3	-	-	-	-	0.4
? Unknown Sp1	-	-	-	-	-	2.7	-	-	2.7
Cola gigantai	-	-	-	-	-	2.6	-	-	2.6
? Unknown Sp2	-	-	-	-	-	1.7	-	-	1.7
? Unknown Sp3	-	-	-	-	-	1.5	-	-	1.5
Teclea nobilis	0.2	0.2	0.2	0.2	-	-	-	-	0.2
? Unknown Sp4	-	-	-	-	-	1.3	-	-	1.3
Olea hostii	0.2	0.2	0.2	0.2	-	-	-	-	0.2
? Unknown Sp5	-	-	-	-	-	1.2	-	-	1.2
Moros leaves	0.1	0.1	0.1	0.1	-	-	-	-	0.1
Diospyros abyssinica	0.2	-	-	-	-	-	-	-	0.2
? Unknown Sp6	-	-	-	-	-	0.2	-	-	0.2
? Unknown Sp7	-	-	-	-	-	?	-	-	0.0
? Unknown Sp8	-	-	-	-	-	?	-	-	0.0
Trees planted (per ha)	400	400	385	400	407	375	400	400	480.7

Appendix 2: Number of planted individuals (per ha) encountered in 2013 per compartment.

Compartment	101	102	103	107	108	109	113	114	Total
Area sampled (ha)	0.25	0.25	0.35	0.25	0.35	0.35	0.35	0.35	2.5
Species									
<i>Bridelia micrantha</i>	68	80	103	144	146	29	66	77	89
<i>Warbugia ugandensis</i>	36	24	37	20	37	57	51	54	40
<i>Sapium ellipticum</i>	8	12	0	0	3	20	14	23	10
<i>Mimusops bagshawei</i>	4	-	37	-	6	-	-	-	16
<i>Prunus africana</i>	8	8	-	-	3	20	-	-	10
<i>Tabernaemontana holstii</i>	-	-	-	-	-	14	-	11	13
<i>Croton macrostachyus</i>	-	4	-	-	17	-	3	-	8
<i>Markhamia lutea</i>	-	-	-	-	-	17	-	3	10
<i>Diospyros abyssinica</i>	-	-	-	-	-	-	-	9	9
<i>Uvariopsis congensis</i>	-	-	-	-	-	3	-	3	3
<i>Albizia grandibracteata</i>	-	-	-	-	-	-	3	-	3
<i>Allophyllus rubifolius</i>	-	4	-	-	-	-	-	-	4
<i>Blighia unijugata</i>	-	-	3	-	-	-	-	-	3
<i>Celtis durandii</i>	-	-	-	-	3	-	-	-	3
<i>Spathodea campanulata</i>	4	-	-	-	-	-	-	-	4
Total individuals in sampled area	128	132	180	164	214	160	137	180	162

Appendix 3. Full species list of trees and seedlings showing; wood density and taxonomic level of wood density (S=species, G=genus, F=family, P=plot averaged wood density). Species code used for NMDS is also show, species with no code were only measured as seedlings and therefore were not included in NMDS analysis. Planted species are shown in bold, *= Only local name known, no scientific name.

Family	Species	Species code (NMDS)	Wood density (g cm ³)	Wood density level
Fabaceae	<i>Acacia hokkii</i>	Ac Sp.	0.773	G
Fabaceae	<i>Acacia spp.</i>	Ac Sp.	0.773	G
Fabaceae	<i>Albizia grandibracteata</i>	A.gra	0.570	S
Fabaceae	<i>Albizia gummifera</i>	A.gum	0.500	S
Sapindaceae	<i>Allophyllus rubifolius</i>	A.rub	0.482	G
Sapotaceae	<i>Aningeria altissima</i>	A.alt	0.533	S
Moraceae	<i>Antiaris toxicaria</i>		0.390	S
Euphorbiaceae	<i>Antidesma membranaceum</i>	A.mem	0.663	G
Sapindaceae	<i>Aphania senegalensis</i>	A.sen	0.752	S
Icacinaceae	<i>Apodytes dimidiata</i>		0.600	S
Balanitaceae	<i>Balanites wilsoniana</i>		0.580	G
Fabaceae	<i>Baphiopsis parviflora</i>	B.par	0.678	F
Fabaceae	<i>Bequaertiodendron natalense</i>	B.nat	0.702	F
Milianthaceae	<i>Bersama abyssinica</i>		0.617	S
Sapindaceae	<i>Blighia unijugata</i>	B.uni	0.573	S
Moraceae	<i>Bosqueia phoberos</i>	B.pho	0.640	S
Phyllanthaceae	<i>Bridelia micrantha</i>	B.mic	0.510	S
Phyllanthaceae	<i>Bridelia mildbraedii</i>	B.mil	0.521	G
Meliaceae	<i>Carapa grandiflora</i>		0.550	S
Apocynaceae	<i>Carissa edulis</i>		0.834	S
Leguminosae	<i>Cassia spectabilis</i>	C.spe	0.480	S
Rhizophoraceae	<i>Cassipourea ruwensorens</i>	C.ruw	0.649	G
Cannabaceae	<i>Celtis africana</i>	C.afr	0.652	S
Cannabaceae	<i>Celtis durandii</i>	C.dur	0.559	G
Cannabaceae	<i>Celtis mildbraedii</i>	C.mil	0.391	S
Cannabaceae	<i>Celtis zenkeri</i>	C.zen	0.609	S
Unknown	<i>Cena *</i>	Cena	0.545-0.64	P
Ulmaceae	<i>Chaetacme aristata</i>	C.ari	0.559	S
Sapotaceae	<i>Chrysophyllum albidum</i>	C.alb	0.533	S
Rutaceae	<i>Citrus x lemon</i>		0.740	S
Rutaceae	<i>Clausena Spp</i>		0.573	S
Rubiaceae	<i>Coffea eugenoides</i>		0.633	S
Malvaceae	<i>Cola gigantea</i>		0.480	S
Combretaceae	<i>Combretum molle</i>	C.mol	0.758	S
Boraginaceae	<i>Cordia africana</i>		0.450	S
Leguminosae	<i>Craibia Spp</i>	Crab	0.619	G
Rubiaceae	<i>Craterisperum laurinum</i>		0.663	G
Euphorbiaceae	<i>Croton megalocarpus</i>	C.meg	0.633	S

Family	Species	Species code (NMDS)	Wood density (g cm ³)	Wood density level
Fabaceae	<i>Cynometra alexandri</i>	C.ale	0.744	S
Unknown	<i>Cytropsis</i> *		0.575-0.652	P
Flacourtiaceae	<i>Dasylepis eggelingii</i>	D.egg	0.679	S
Rubiaceae	<i>Dictyandra arborescens</i>	D.arb	0.619	S
Ebenaceae	<i>Diospyros abyssinica</i>	D.abby	0.702	S
Malvaceae	<i>Dombeya</i> Spp	D.mic	0.484	G
Flacourtiaceae	<i>Dovyalis microcarpa</i>	Dov.mic	0.579	G
Boraginaceae	<i>Ehretia cymosa</i>	E.cym	0.521	S
Fabaceae	<i>Erythrina abyssinica</i>	E.abby	0.426	S
Capparidaceae	<i>Euadenia eminens</i>	E.emi	0.419	S
Rutaceae	<i>Fagara angolensis</i>		0.592	S
Rutaceae	<i>Fagaropsis angolensis</i>		0.504	S
Moraceae	<i>Ficus capensis</i>	F.cap	0.288	S
Moraceae	<i>Ficus exasperata</i>	F.exa	0.344	S
Moraceae	<i>Ficus natalensis</i>	F.nat	0.442	G
Moraceae	<i>Ficus urceolaris</i>		0.442	G
Flacourtiaceae	<i>Flacourtia indica</i>		0.737	S
Apocynaceae	<i>Funtumia africana</i>	F.afr	0.500	S
Apocynaceae	<i>Funtumia latifolia</i>	F.lat	0.424	G
Rubiaceae	<i>Gardenia lanciloba</i>	G.lan	0.671	G
Tiliaceae	<i>Grewia occidentalis</i>	G.occ	0.426	G
Simaroubaceae	<i>Harrisonia abyssinica</i>	H.abby	0.785	G
Aquifoliaceae	<i>Ilex mitis</i>		0.468	S
Bignoniaceae	<i>Kigelia africana</i>	K.afr	0.464	S
Bignoniaceae	<i>Kigelia moosa</i>	k.moo	0.632	G
Olacaceae	<i>Lenosera</i> Spp		0.757	F
Sterculiaceae	<i>Leptonychia mildbreadii</i>	L.mil	0.598	S
Flacourtiaceae	<i>Lindackeria</i> Spp		0.669	S
Meliaceae	<i>Lovoa brownii</i>	L.bro	0.623	G
Myrsinaceae	<i>Maesa lanceolata</i>		0.676	S
Anacardiaceae	<i>Mangifera indica</i>	M.ind	0.536	S
Euphorbiaceae	<i>Margaritaria discoidea</i>	M.dis	0.618	S
Bignoniaceae	<i>Markhamia lutea</i>	M.lut	0.475	S
Bignoniaceae	<i>Markhamia platycalyx</i>	M.pla	0.500	S
Fabaceae	<i>Millettia dura</i>	M.dur	0.698	S
Sapotaceae	<i>Mimusops bagshawei</i>	M.bag	0.768	S
Unknown	<i>Mintnencea andata</i>	M.and	0.51-0.652	P
Rubiaceae	<i>Mitragyna rubrostipulata</i>	M.rub	0.537	S
Annonaceae	<i>Monodora myristica</i>	M.myr	0.490	G
Apocynaceae	<i>Motandra guineensis</i>	M.gui	0.567	F
Euphorbiaceae	<i>Neoboutonia melleri</i>		0.292	S
Fabaceae	<i>Newtonia buchananil</i>	New	0.496	S
Ochnaceae	<i>Ochna holstii</i>	O.ton	0.745	S

Family	Species	Species code (NMDS)	Wood density (g cm ³)	Wood density level
Oleaceae	<i>Olea capensis</i>		0.774	S
Oleaceae	<i>Olea wilwichai</i>		0.718	S
Flacourtiaceae	<i>Oncoba spinosa</i>		0.580	S
Rubiaceae	<i>Oxyanthus</i> Spp		0.525	S
Sapindaceae	<i>Pancovia turbinata</i>		0.783	S
Chrysobalanaceae	<i>Pariniri excelsa</i>	P.exc	0.605	S
Lauraceae	<i>Persea americana</i>	P.ame	0.523	S
Palmae	<i>Phoenix reclinata</i>	Phon	0.685	F
Leguminosae	<i>Piptadeniastrum</i>	Pipt	0.605	S
Pittosporaceae	<i>Pittosporum</i>		0.621	G
Apocynaceae	<i>Pleiocarpa pycnantha</i>	P.pyc	0.683	S
Lamiaceae	<i>Premna angolensis</i>	P.ang	0.525	S
Rosaceae	<i>Prunus africana</i>	P.afr	0.552	S
Anacardiaceae	<i>Pseudospondias microcarpa</i>		0.623	S
Myrtaceae	<i>Psidium guajava</i>		0.625	S
Unknown	<i>pterygota *</i>		0.550	G
Rubiaceae	<i>Randia</i> Spp		0.657	G
Apocynaceae	<i>Rauvolfia vomitoria</i>	R.vom	0.472	G
Rubiaceae	<i>Rothmannia</i> Spp		0.600	S
Euphorbiaceae	<i>Sapium ellipticum</i>	S.ell	0.551	S
Flacourtiaceae	<i>Scolopia rhamnophylla</i>		0.635	S
Bignoniaceae	<i>Spathodea campanulata</i>	S.cam	0.234	S
Unknown	<i>Spinosis *</i>		0.510	P
Olabaceae	<i>Strombosia scheffleri</i>	S.sch	0.699	S
Loganiaceae	<i>Strychnos mitis</i>	S.mit	0.722	S
Clusiaceae	<i>Symphonia globulifera</i>		0.756	S
Apocynaceae	<i>Tabernaemontana holstii</i>	T.hol	0.539	G
Apocynaceae	<i>Tabernaemontana johnsonii</i>		0.539	G
Rutaceae	<i>Teclea nobilis</i>	T.nob	0.745	S
Moraceae	<i>Treculia africana</i>	Trec	0.541	F
Cannabaceae	<i>Trema guineensis</i>	T.gui	0.336	G
Meliaceae	<i>Trichilia africana</i>	T.afr	0.512	G
Meliaceae	<i>Trichilia dregeana</i>	T.pri	0.482	S
Meliaceae	<i>Trichilia prieuriana</i>		0.663	S
Annonaceae	<i>Uvariopsis congensis</i>	U.con	0.661	S
Rubiaceae	<i>Vanguaoria apiculata</i>	V.api	0.657	G
Aquifoliaceae	<i>Vernonia mangandelena</i>	V.man	0.330	G
Canellaceae	<i>Warbugia ugandensis</i>	W.uga	0.689	G
Sapindaceae	<i>Zanha golungensis</i>	Z.gol	0.732	S

Mangifera indica	-	-	-	-	-	-	-	3	-	-	-	-	-	-	3	6
Mintnencea andata	-	-	-	-	-	-	-	-	-	-	-	-	-	3	6	-
Persea americana	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Premna angolensis	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-
Prunus africana	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
Rauvolfia vomitoria	-	4	6	-	-	3	3	3	-	4	6	-	3	6	6	3
Sapium ellipticum	20	44	3	4	3	29	40	20	52	64	43	16	20	77	66	57
Securinega virosa	-	-	-	-	-	-	-	-	-	-	3	-	11	3	-	9
Spathodea campanulata	-	-	-	-	-	-	-	-	-	-	-	-	6	6	3	-
Vanguoria apiculata	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	3
Vanonia Sp.	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-
Vernonia mangandelena	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warbugia ugandensis	-	-	-	-	-	-	-	-	4	-	-	-	-	-	14	-
Total individuals (per ha)	44	76	74	40	17	60	91	71	96	108	106	100	126	171	186	220

Figure S1. Model fit for asymptotic height (red line) for a. restoration forest 2005, b. restoration forest 2013 and c. old-growth forest.

