

# FOUR CORNERS TBNRM PROJECT -- BIODIVERSITY OF THE FOUR CORNERS

BFA / ZAMBEZI SOCIETY SUBGRANT FROM AWF

## PANDA MASUIE MONITORING PLOT

### ADDENDUM TO PLANT REPORT

During a training course held at Panda Masuie Forest Land near Victoria Falls, in January 2004, a biodiversity monitoring plot was established by the BFA under a grant from the AWF Four Corners project. However, at that time in only one out of four subplots were the woody plants measured for size and position. Results of the plant and other biological recording were presented in a report "Biodiversity of the Four Corners Area. Monitoring: A Regional Overview and Establishment of a Monitoring Plot" (compiled by S.L. Childes, Occasional Publications in Biodiversity No. 14, BFA, Bulawayo), available as hardcopy or on a CD-ROM.

In order to complete the baseline study, the remaining three subplots were revisited from 26-28 June 2004 and recording of woody plants was completed.

This addendum provides the full woody plant data set for the whole one hectare plot, and an update on the main findings, as given in Section 3.1 of the main report (specifically Section 3.1.2).

#### Results

The full data for woody plants is given below in three tables. Table A1 gives the raw data of tree diameters by numbered stem, with calculated total basal areas. Table A2 rearranges these data by species to show species totals. Table A3 gives the positions of each stem, as measured from numbered pegs shown in Figure A1. There are still some uncertainties as into which subplot some of the trees recorded in June fell, and the baselines used were not consistent.

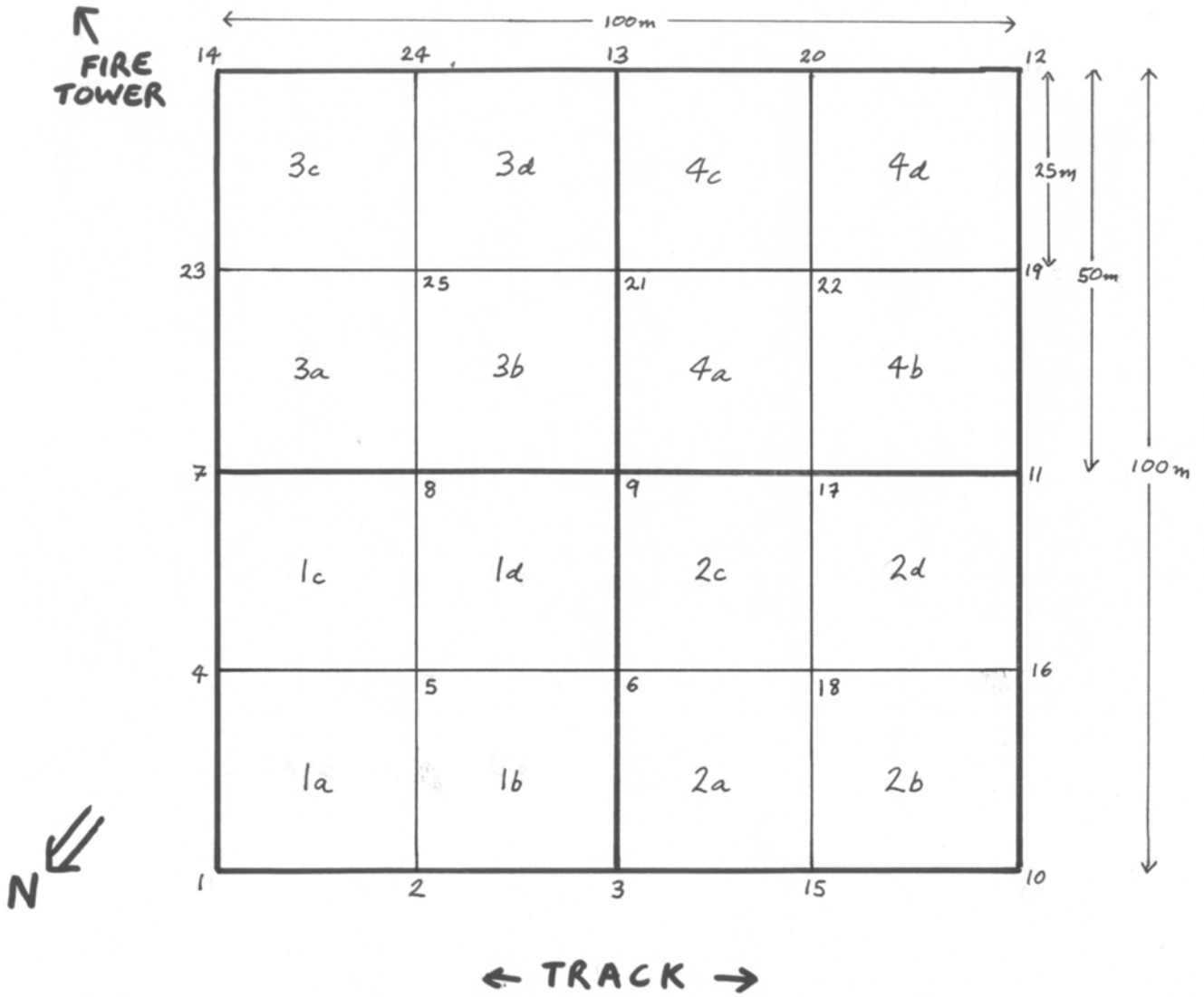
All these data pertain to the full one hectare plot, and are an update of data given in the main report in Appendices 2, 3 and 4, respectively.

There were 263 trees over 5 cm DBH (some with multiple stems) that were labelled in an area of 1 ha, belonging to 18 different species. Of these, four were recorded as dead

The total basal area of the plot was 10.412 m<sup>2</sup>, which is less than had been estimated based on measurements from subplot A1 alone. Obviously, subplot A1 had a slightly greater basal area than the other areas.

Of this basal area, 6.5 m<sup>2</sup> (62.4% of total BA) was *Baikiaea plurijuga*, with 82 individual trees (31.2% of total). The basal area of *Baikiaea* was greater proportionally in subplots 2, 3 and 4 combined than in subplot 1. The other significant species in terms of basal area was *Julbernardia globiflora* (1.50 m<sup>2</sup>, or 14.4% of total). Two large individuals of *Pterocarpus angolensis* were recorded in subplot A1, totalling 0.87 m<sup>2</sup> (8.4% of total BA).

Figure A1. Layout of biodiversity monitoring plat, Panda Masuie Forest Land, Zimbabwe.



PANDAMASUIE - BAIKIAEA PLOT

Date: Jan / June 2004

Plot	subplot	Tree no.	Species	dbh 1 (cm)	dbh 2 (cm)	dbh 3 (cm)	dbh4 (cm)	basal area @ dbh (m2)	notes
A	1	1	Comb moll	14.0				0.0196	leaning
A	1	2	Baph mass	6.5				0.0042	@1.2m
A	1	3	Baik plur	19.8				0.0392	
A	1	4	Baik plur	8.7	5.6			0.0107	
A	1	5	Grew mont	5.0				0.0025	
A	1	6	Baph mass	6.5				0.0042	
A	1	7	Ptero ango	53.7				0.2884	
A	1	8	Comb apic	8.7	9.3	8.0	6.0	0.0254	also 5.6cm
A	1	9	Julb glob	28.9				0.0835	DEAD
A	1	10	Baik plur	45.5				0.2070	
A	1	11	Baik plur	18.8	9.5	18.6		0.0790	@1.4m
A	1	12	Comm moss	7.6				0.0058	
A	1	13	Comb apic	5.1				0.0026	
A	1	14	Baph mass	5.1				0.0026	
A	1	15	Baph mass	5.5				0.0030	
A	1	16	Comb apic	6.0	7.6			0.0094	
A	1	17	Comm moss	13.7				0.0188	
A	1	18	Baik plur	53.6				0.2873	
A	1	19	Baik plur	36.8				0.1354	
A	1	20	Baik plur	20.1	14.2			0.0606	
A	1	21	Baik plur	9.3				0.0086	
A	1	22	Baph mass	5.4				0.0029	
A	1	23	Julb glob	16.4				0.0269	@1.2m
A	1	24	Pseudo mapr	8.1				0.0066	
A	1	25	Julb glob	17.2				0.0296	
A	1	26	Diplo cond	8.3				0.0069	
A	1	27	Julb glob	27.9				0.0778	DEAD
A	1	28	Julb glob	10.7				0.0114	
A	1	29	Baik plur	25.4				0.0645	
A	1	30	Baik plur	30.1	33.2			0.2008	
A	1	31	Marg disc	15.4	16.4	12.2	11.8	0.0764	
A	1	32	Baik plur	18.1	33.0			0.1417	
A	1	33	Baik plur	19.0				0.0361	
A	1	34	Baik plur	5.6				0.0031	
A	1	35	Julb glob	18.5				0.0342	
A	1	36	Baph mass	6.3				0.0040	
A	1	37	Marg disc	18.2	9.0			0.0412	
A	1	38	Marg disc	27.6	15.2	18.8		0.1346	
A	1	39	Pter ango	54.5	53.4			0.5822	
A	1	40	Comm moss	5.7				0.0032	
A	1	41	Baik plur	5.5	5.3			0.0058	
A	1	42	Comm moss	8.4	6.6			0.0114	
A	1	43	Baph mass	9.5	7.2	5.8		0.0176	
A	1	44	Comb apic	5.5				0.0030	
A	1	45	Comm moss	6.2				0.0038	DEAD
A	1	46	Comm moss	6.7				0.0045	
A	1	47	Baph mass	5.4				0.0029	DEAD
A	1	48	Grew mont	5.5				0.0030	
A	1	49	Baph mass	5.9	6.4			0.0076	
A	1	50	Comb apic	5.7				0.0032	
A	1	51	Comb apic	5.9				0.0035	
A	1	52	Comm moss	5.5				0.0030	
A	1	53	Baik plur	5.8				0.0034	
A	1	54	Baik plur	11.3				0.0128	
A	1	55	Comm moss	6.4				0.0041	

A	1	56	Julb glob	26.6				0.0708	
A	1	57	Baph mass	5.6				0.0031	
A	1	58	Baik plur	19.4				0.0376	
A	1	59	Comm moss	5.8				0.0034	
A	1	60	Comb apic	13.0				0.0169	
A	1	61	Baik plur	5.9	18.2			0.0366	@1.0m
A	1	62	Erythro afri	5.7				0.0032	
A	1	63	Baph mass	5.4				0.0029	
A	1	64	Julb glob	9.2				0.0085	
A	1	65	Baik plur	5.2				0.0027	
A	1	66	Baik plur	6.4				0.0041	
A	2	67	Comb apic	6.5				0.0042	JUNE 2004
A	2	68	Julb glob	16.5				0.0272	leaning over
A	2	69	Comb zeyh	14.0				0.0196	coppicing
A	2	70	Baik plur	23.3	11.5	18.7	7.8	0.1068	multi-stemmed
A	2	71	Baik plur	6.9				0.0048	
A	2	72	Baik plur	22.0				0.0484	leaning
A	2	73	Julb glob	19.0				0.0361	
A	2	74	Diplo cond	7.6				0.0058	@40cm, broken
A	2	75	Baik plur	35.0				0.1225	
A	2	76	Baik plur	7.9				0.0062	
A	2	77	Baik plur	29.5				0.0867	
A	2	78	Baik plur	9.1				0.0083	
A	2	79	Comb apic	5.5				0.0030	
A	2	80	Comb apic	6.0				0.0036	
A	2	81	Baik plur	31.3				0.0980	
A	2	82	Baik plur	26.8				0.0718	
A	2	83	Comm afric	6.5				0.0042	
A	2	84	Comm afric	5.4				0.0029	
A	2	85	Julb glob	26.5				0.0702	
A	2	86	Baph mass	6.1				0.0037	leaning
A	2	87	Baik plur	40.4				0.1632	
A	2	88	Baph mass	6.2				0.0038	
A	2	89	Baph mass	6.5				0.0042	@60cm, broken
A	2	90	Julb glob	21.5				0.0462	
A	2	91	Julb glob	5.0				0.0025	
A	2	92	Julb glob	38.5				0.1482	
A	2	93	Marg disc	13.4				0.0180	
A	2	94	Julb glob	15.6	12.6			0.0402	twisting stems
A	2	95	Baik plur	30.1				0.0906	
A	2	96	Baik plur	24.5				0.0600	
A	2	97	Baik plur	13.8				0.0190	
A	2	98	Baik plur	31.5	31.9			0.2010	
A	2	99	Marg disc	11.4				0.0130	
A	2	100	Marg disc	12.9				0.0166	
A	2	101	Baik plur	24.5				0.0600	
A	2	102	Julb glob	26.8				0.0716	
A	2	103	Baph mass	9.9				0.0098	
A	2	104	Baph mass	5.7	6.2			0.0071	
A	2	105	Baph mass	7.5				0.0056	@1m
A	2	106	Ochn pulc	15.3				0.0234	
A	2	107	Comm afric	5.0				0.0025	
A	2	108	Julb glob	22.3				0.0497	
A	2	109	Baik plur	32.2	19.3			0.1409	
A	2	110	Baph mass	7.1				0.0050	@70cm
A	2	111	Julb glob	21.4				0.0458	
A	2	112	Baik plur	23.7				0.0562	
A	2	113	Baph mass	5.3				0.0028	
A	2	114	Julb glob	19.5				0.0380	
A	2	115	Julb glob	23.4				0.0548	

A	2	116	Baik plur	17.2				0.0296	
A	2	117	Ochn pulc	12.0				0.0144	
A	2	118	Comm afric	8.4	7.1			0.0121	
A	2	119	Baph mass	9.3				0.0086	
A	2	120	Baik plur	23.4				0.0548	
A	2	121	Marg disc	17.0				0.0289	
A	2	122	Baik plur	22.0	18.6			0.0830	stem 2 @1m
A	2	123	Baik plur	14.8				0.0219	
A	4	124	Ochn pulc	11.0				0.0121	leaning
A	4	125	Julb glob	20.9				0.0437	
A	4	126	Comb apic	6.2				0.0038	
A	4	127	Ocha pulc	8.3				0.0069	leaning
A	4	128	Ochn pulc	10.6				0.0112	
A	4	129	Julb glob	5.2				0.0027	@1m
A	4	130	Baik plur	5.4				0.0029	
A	4	131	Baik plur	35.4				0.1253	
A	4	132	Baik plur	22.0				0.0484	partly uprooted
A	4	133	Baik plur	24.0				0.0576	
A	4	134	Baik plur	16.2				0.0262	leaning
A	4	135	Baik plur	24.2				0.0583	
A	4	136	Julb glob	17.8				0.0317	
A	4	137	Marg disc	19.6	9.5			0.0474	
A	4	138	Comb apic	7.1				0.0050	
A	4	139	Comm afric	15.0				0.0225	@70cm
A	4	140	Comb apic	7.5				0.0056	
A	4	141	Comb apic	6.4	5.2			0.0068	
A	4	142	Julb glob	7.8	5.4			0.0090	
A	4	143	Baph mass	6.5				0.0042	@1m
A	4	144	Baph mass	5.4				0.0029	
A	4	145	Baph mass	5.7				0.0032	
A	4	146	Baph mass	5.1				0.0026	
A	4	147	Baph mass	10.6				0.0112	@1m
A	4	148	Comb apic	5.3				0.0028	
A	4	149	Julb glob	23.6				0.0557	@1m, damaged
A	4	150	Baik plur	30.6				0.0936	leaning
A	4	151	Dipl cond	8.1				0.0066	broken tip
A	4	152	Julb glob	20.2				0.0406	
A	4	153	Baik plur	27.9				0.0778	
A	4	154	Comm afric	10.3				0.0106	@30cm
A	4	155	Baph mass	9.5				0.0090	leaning
A	4	156	Baik plur	27.6				0.0759	
A	4	157	Baik plur	17.5				0.0306	
A	4	158	Baik plur	26.6	27.3			0.1450	
A	4	159	Baik plur	13.6	20.3			0.0597	
A	4	160	Comm afric	6.6				0.0043	@50cm
A	4	161	Baik plur	43.6				0.1897	large tree
A	4	162	Baik plur	28.1	14.8	6.6		0.1052	
A	4	163	Baph mass	6.4				0.0041	
A	4	164	Comm moss	11.2				0.0124	@1m
A	4	165	Comb apic	6.9				0.0047	@40cm
A	4	166	Baik plur	33.9	18.9	23.0		0.2035	leaning
A	4	167	Baik plur	32.8	19.6			0.1460	leaning
A	4	168	Baik plur	16.5	16.2			0.0535	
A	4	169	Baik plur	29.8				0.0888	
A	4	170	Julb glob	17.0				0.0289	@1m, broken tip
A	4	171	Baik plur	25.1				0.0630	
A	4	172	Comb moll	12.5				0.0156	@50cm, damaged
A	4	173	Comb apic	15.5				0.0240	
A	4	174	Julb glob	25.6				0.0655	leaning
A	4	175	Baik plur	36.2	15.5			0.1551	

A	4	176	Baik plur	10.3				0.0105	
A	4	177	Baph mass	6.5				0.0042	@1m
A	4	178	Comm afric	7.4				0.0055	@50cm
A	4	179	Comb apic	29.6				0.0876	
A	4	180	Baph mass	6.5				0.0042	
A	4	181	Baph mass	7.0				0.0049	
A	4	182	Baph mass	5.0				0.0025	
A	4	183	Baph mass	6.0				0.0036	
A	4	184	Julb glob	21.2	16.0			0.0703	
A	4	185	Erythro afri	6.6				0.0044	leaning
A	4	186	Baph mass	5.8				0.0034	
A	4	187	Baik plur	35.6	18.0			0.1591	
A	4	188	Baph mass	8.8				0.0077	damaged
A	4	189	Baik plur	5.2				0.0027	
A	4	190	Julb glob	26.0				0.0676	
A	4	191	Comm afric	6.0				0.0036	
A	3	192	Comm afric	6.8				0.0046	@20cm
A	3	193	Baik plur	5.5	5.0			0.0055	
A	3	194	Comb apic	6.0				0.0036	@20cm
A	3	195	Comm afric	5.0				0.0025	
A	3	196	Comm afric	8.0				0.0064	@70cm
A	3	197	Julb glob	5.0				0.0025	tip broken
A	3	198	Comb apic	8.0	6.1			0.0101	coppicing
A	3	199	Comb apic	5.8	6.3	8.3		0.0142	
A	3	200	Baph mass	5.5				0.0030	@1.1m
A	3	201	Comm afric	7.5				0.0056	
A	3	202	Comm afric	6.3				0.0040	
A	3	203	Baik plur	14.3	21.5			0.0667	
A	3	204	Comm afric	7.0	6.5			0.0091	@115cm
A	3	205	Baik plur	7.1				0.0050	
A	3	206	Comb apic	6.5	5.2			0.0069	
A	3	207	Baik plur	5.5				0.0030	burnt, coppicing
A	3	208	Comb apic	5.5				0.0030	
A	3	209	Comb zeyh	5.5				0.0030	
A	3	210	Julb glob	5.1	5.0			0.0051	
A	3	211	Comm afric	8.5				0.0072	@110cm
A	3	212	Comm afric	6.0				0.0036	@50cm
A	3	213	Comb apic	5.0	6.0			0.0061	
A	3	214	Comm afric	6.0				0.0036	@10cm
A	3	215	Baik plur	6.0				0.0036	
A	3	216	Baik plur	43.9	41.4			0.3641	
A	3	217	Comb apic	5.5				0.0030	@60cm
A	3	218	Comb apic	12.5	9.5			0.0247	leaning
A	3	219	Comm afric	7.2				0.0052	
A	3	220	Baik plur	14.0				0.0196	
A	3	221	Comb apic	5.3				0.0028	@40cm
A	3	222	Comm afric	7.0				0.0049	@70cm
A	3	223	Comm afric	10.6				0.0112	@45cm
A	3	224	Comb apic	17.1				0.0292	
A	3	225	Comb apic	8.0				0.0064	
A	3	226	Comb apic	6.0				0.0036	
A	3	227	Marg disc	5.0	5.0			0.0050	@60cm, coppicing
A	3	228	Baik plur	35.5				0.1260	
A	3	229	Bauh macr	6.5				0.0042	leaning
A	3	230	Marg disc	7.0				0.0049	@40cm
A	3	231	Baph mass	7.5				0.0056	
A	3	232	Baik plur	44.2				0.1954	
A	3	233	Baik plur	33.5	29.6			0.1998	
A	3	234	Baik plur	14.5				0.0210	
A	3	235	Baph mass	5.5				0.0030	

A	3	236	Baph mass	6.3				0.0040	
A	3	237	Comb apic	6.5				0.0042	
A	3	238	Comb apic	5.5				0.0030	
A	3	239	Term seri	9.5				0.0090	top broken
A	3	240	Baik plur	5.5				0.0030	
A	3	241	Baik plur	6.2	5.1			0.0064	
A	3	242	Baik plur	8.2				0.0067	
A	3	243	Comb apic	11.1	6.5			0.0165	
A	3	244	Baik plur	6.0				0.0036	
A	3	245	Comb apic	8.0	5.2			0.0091	
A	3	246	Baph mass	6.0	5.1			0.0062	
A	3	247	Comb apic	5.8				0.0034	
A	3	248	Comb apic	7.0				0.0049	
A	3	249	Comb apic	6.7				0.0045	
A	3	250	Baik plur	7.9				0.0062	
A	3	251	Marg disc	14.1	16.6			0.0474	
A		252	TAG LOST						TAG LOST
A	3	253	Marg disc	22.0	20.1			0.0888	
A	3	254	Baik plur	48.6	33.6	26.0		0.4167	
A	3	255	Julb glob	16.5				0.0272	
A	3	256	Julb glob	27.4				0.0751	
A	3	257	Baph mass	6.5				0.0042	
A	3	258	Term seri	10.5				0.0110	
A	3	259	Baph mass	8.1				0.0066	leaning
A	3	260	Comb apic	17.1	7.3			0.0346	leaning, damaged
A	3	261	Fries obov	7.0				0.0049	coppicing
A	3	262	Fries obov	6.1				0.0037	
A	3	263	Term seri	7.3				0.0053	broken branches
A	3	264	Baik plur	39.1				0.1529	
n =		263					TOTAL B.A. @DBH (m2)	10.4121	

**PANDAMASUIE MONITORING PLOT - BY SPECIES**

Date: Jan / June 2004

Plot	subplot	Tree no.	Species	dbh 1 (cm)	dbh 2 (cm)	dbh 3 (cm)	dbh4 (cm)	basal area @ dbh (m2)	Total BA (m2)
A	4	189	Baik plur	5.2				0.0027	
A	1	65	Baik plur	5.2				0.0027	
A	4	130	Baik plur	5.4				0.0029	
A	3	207	Baik plur	5.5				0.0030	
A	3	240	Baik plur	5.5				0.0030	
A	1	34	Baik plur	5.6				0.0031	
A	1	53	Baik plur	5.8				0.0034	
A	3	215	Baik plur	6.0				0.0036	
A	3	244	Baik plur	6.0				0.0036	
A	1	66	Baik plur	6.4				0.0041	
A	2	71	Baik plur	6.9				0.0048	
A	3	205	Baik plur	7.1				0.0050	
A	3	193	Baik plur	5.5	5.0			0.0055	
A	1	41	Baik plur	5.5	5.3			0.0058	
A	2	76	Baik plur	7.9				0.0062	
A	3	250	Baik plur	7.9				0.0062	
A	3	241	Baik plur	6.2	5.1			0.0064	
A	3	242	Baik plur	8.2				0.0067	
A	2	78	Baik plur	9.1				0.0083	
A	1	21	Baik plur	9.3				0.0086	
A	4	176	Baik plur	10.3				0.0105	
A	1	4	Baik plur	8.7	5.6			0.0107	
A	1	54	Baik plur	11.3				0.0128	
A	2	97	Baik plur	13.8				0.0190	
A	3	220	Baik plur	14.0				0.0196	
A	3	234	Baik plur	14.5				0.0210	
A	2	123	Baik plur	14.8				0.0219	
A	4	134	Baik plur	16.2				0.0262	
A	2	116	Baik plur	17.2				0.0296	
A	4	157	Baik plur	17.5				0.0306	
A	1	33	Baik plur	19.0				0.0361	
A	1	61	Baik plur	5.9	18.2			0.0366	
A	1	58	Baik plur	19.4				0.0376	
A	1	3	Baik plur	19.8				0.0392	
A	4	132	Baik plur	22.0				0.0484	
A	2	72	Baik plur	22.0				0.0484	
A	4	168	Baik plur	16.5	16.2			0.0535	
A	2	120	Baik plur	23.4				0.0548	
A	2	112	Baik plur	23.7				0.0562	
A	4	133	Baik plur	24.0				0.0576	
A	4	135	Baik plur	24.2				0.0583	
A	4	159	Baik plur	13.6	20.3			0.0597	
A	2	101	Baik plur	24.5				0.0600	
A	2	96	Baik plur	24.5				0.0600	
A	1	20	Baik plur	20.1	14.2			0.0606	
A	4	171	Baik plur	25.1				0.0630	
A	1	29	Baik plur	25.4				0.0645	
A	3	203	Baik plur	14.3	21.5			0.0667	
A	2	82	Baik plur	26.8				0.0718	
A	4	156	Baik plur	27.6				0.0759	
A	4	153	Baik plur	27.9				0.0778	
A	1	11	Baik plur	18.8	9.5	18.6		0.0790	
A	2	122	Baik plur	22.0	18.6			0.0830	
A	2	77	Baik plur	29.5				0.0867	
A	4	169	Baik plur	29.8				0.0888	



A	2	95	Baik plur	30.1				0.0906	
A	4	150	Baik plur	30.6				0.0936	
A	2	81	Baik plur	31.3				0.0980	
A	4	162	Baik plur	28.1	14.8	6.6		0.1052	
A	2	70	Baik plur	23.3	11.5	18.7	7.8	0.1068	
A	2	75	Baik plur	35.0				0.1225	
A	4	131	Baik plur	35.4				0.1253	
A	3	228	Baik plur	35.5				0.1260	
A	1	19	Baik plur	36.8				0.1354	
A	2	109	Baik plur	32.2	19.3			0.1409	
A	1	32	Baik plur	18.1	33.0			0.1417	
A	4	158	Baik plur	26.6	27.3			0.1450	
A	4	167	Baik plur	32.8	19.6			0.1460	
A	3	264	Baik plur	39.1				0.1529	
A	4	175	Baik plur	36.2	15.5			0.1551	
A	4	187	Baik plur	35.6	18.0			0.1591	
A	2	87	Baik plur	40.4				0.1632	
A	4	161	Baik plur	43.6				0.1897	
A	3	232	Baik plur	44.2				0.1954	
A	3	233	Baik plur	33.5	29.6			0.1998	
A	1	30	Baik plur	30.1	33.2			0.2008	
A	2	98	Baik plur	31.5	31.9			0.2010	
A	4	166	Baik plur	33.9	18.9	23.0		0.2035	
A	1	10	Baik plur	45.5				0.2070	
A	1	18	Baik plur	53.6				0.2873	
A	3	216	Baik plur	43.9	41.4			0.3641	
A	3	254	Baik plur	48.6	33.6	26.0		0.4167	6.4949
A	4	182	Baph mass	5.0				0.0025	
A	1	14	Baph mass	5.1				0.0026	
A	4	146	Baph mass	5.1				0.0026	
A	2	113	Baph mass	5.3				0.0028	
A	4	144	Baph mass	5.4				0.0029	
A	1	47	Baph mass	5.4				0.0029	
A	1	63	Baph mass	5.4				0.0029	
A	1	22	Baph mass	5.4				0.0029	
A	3	235	Baph mass	5.5				0.0030	
A	3	200	Baph mass	5.5				0.0030	
A	1	15	Baph mass	5.5				0.0030	
A	1	57	Baph mass	5.6				0.0031	
A	4	145	Baph mass	5.7				0.0032	
A	4	186	Baph mass	5.8				0.0034	
A	4	183	Baph mass	6.0				0.0036	
A	2	86	Baph mass	6.1				0.0037	
A	2	88	Baph mass	6.2				0.0038	
A	1	36	Baph mass	6.3				0.0040	
A	3	236	Baph mass	6.3				0.0040	
A	4	163	Baph mass	6.4				0.0041	
A	4	180	Baph mass	6.5				0.0042	
A	1	2	Baph mass	6.5				0.0042	
A	2	89	Baph mass	6.5				0.0042	
A	4	177	Baph mass	6.5				0.0042	
A	4	143	Baph mass	6.5				0.0042	
A	1	6	Baph mass	6.5				0.0042	
A	3	257	Baph mass	6.5				0.0042	
A	4	181	Baph mass	7.0				0.0049	
A	2	110	Baph mass	7.1				0.0050	
A	3	231	Baph mass	7.5				0.0056	
A	2	105	Baph mass	7.5				0.0056	
A	3	246	Baph mass	6.0	5.1			0.0062	

A	3	259	Baph mass	8.1				0.0066	
A	2	104	Baph mass	5.7	6.2			0.0071	
A	1	49	Baph mass	5.9	6.4			0.0076	
A	4	188	Baph mass	8.8				0.0077	
A	2	119	Baph mass	9.3				0.0086	
A	4	155	Baph mass	9.5				0.0090	
A	2	103	Baph mass	9.9				0.0098	
A	4	147	Baph mass	10.6				0.0112	
A	1	43	Baph mass	9.5	7.2	5.8		0.0176	0.2064
A	3	229	Bauh macr	6.5				0.0042	0.0042
A	1	13	Comb apic	5.1				0.0026	
A	4	148	Comb apic	5.3				0.0028	
A	3	221	Comb apic	5.3				0.0028	
A	3	208	Comb apic	5.5				0.0030	
A	3	238	Comb apic	5.5				0.0030	
A	1	44	Comb apic	5.5				0.0030	
A	3	217	Comb apic	5.5				0.0030	
A	2	79	Comb apic	5.5				0.0030	
A	1	50	Comb apic	5.7				0.0032	
A	3	247	Comb apic	5.8				0.0034	
A	1	51	Comb apic	5.9				0.0035	
A	3	226	Comb apic	6.0				0.0036	
A	3	194	Comb apic	6.0				0.0036	
A	2	80	Comb apic	6.0				0.0036	
A	4	126	Comb apic	6.2				0.0038	
A	3	237	Comb apic	6.5				0.0042	
A	2	67	Comb apic	6.5				0.0042	
A	3	249	Comb apic	6.7				0.0045	
A	4	165	Comb apic	6.9				0.0047	
A	3	248	Comb apic	7.0				0.0049	
A	4	138	Comb apic	7.1				0.0050	
A	4	140	Comb apic	7.5				0.0056	
A	3	213	Comb apic	5.0	6.0			0.0061	
A	3	225	Comb apic	8.0				0.0064	
A	4	141	Comb apic	6.4	5.2			0.0068	
A	3	206	Comb apic	6.5	5.2			0.0069	
A	3	245	Comb apic	8.0	5.2			0.0091	
A	1	16	Comb apic	6.0	7.6			0.0094	
A	3	198	Comb apic	8.0	6.1			0.0101	
A	3	199	Comb apic	5.8	6.3	8.3		0.0142	
A	3	243	Comb apic	11.1	6.5			0.0165	
A	1	60	Comb apic	13.0				0.0169	
A	4	173	Comb apic	15.5				0.0240	
A	3	218	Comb apic	12.5	9.5			0.0247	
A	1	8	Comb apic	8.7	9.3	8.0	6.0	0.0254	
A	3	224	Comb apic	17.1				0.0292	
A	3	260	Comb apic	17.1	7.3			0.0346	
A	4	179	Comb apic	29.6				0.0876	0.4093
A	4	172	Comb moll	12.5				0.0156	
A	1	1	Comb moll	14.0				0.0196	0.0352
A	3	209	Comb zeyh	5.5				0.0030	
A	2	69	Comb zeyh	14.0				0.0196	0.0226
A	2	107	Comm afric	5.0				0.0025	
A	3	195	Comm afric	5.0				0.0025	
A	2	84	Comm afric	5.4				0.0029	

A	3	212	Comm afric	6.0				0.0036	
A	3	214	Comm afric	6.0				0.0036	
A	4	191	Comm afric	6.0				0.0036	
A	3	202	Comm afric	6.3				0.0040	
A	2	83	Comm afric	6.5				0.0042	
A	4	160	Comm afric	6.6				0.0043	
A	3	192	Comm afric	6.8				0.0046	
A	3	222	Comm afric	7.0				0.0049	
A	3	219	Comm afric	7.2				0.0052	
A	4	178	Comm afric	7.4				0.0055	
A	3	201	Comm afric	7.5				0.0056	
A	3	196	Comm afric	8.0				0.0064	
A	3	211	Comm afric	8.5				0.0072	
A	3	204	Comm afric	7.0	6.5			0.0091	
A	4	154	Comm afric	10.3				0.0106	
A	3	223	Comm afric	10.6				0.0112	
A	2	118	Comm afric	8.4	7.1			0.0121	
A	4	139	Comm afric	15.0				0.0225	0.1362
A	1	52	Comm moss	5.5				0.0030	
A	1	40	Comm moss	5.7				0.0032	
A	1	59	Comm moss	5.8				0.0034	
A	1	45	Comm moss	6.2				0.0038	
A	1	55	Comm moss	6.4				0.0041	
A	1	46	Comm moss	6.7				0.0045	
A	1	12	Comm moss	7.6				0.0058	
A	1	42	Comm moss	8.4	6.6			0.0114	
A	4	164	Comm moss	11.2				0.0124	
A	1	17	Comm moss	13.7				0.0188	0.0705
A	2	74	Diplo cond	7.6				0.0058	
A	4	151	Diplo cond	8.1				0.0066	
A	1	26	Diplo cond	8.3				0.0069	0.0192
A	1	62	Eryth afri	5.7				0.0032	
	4	185	Eryth afri	6.6				0.0044	0.0076
A	3	262	Fries obov	6.1				0.0037	
A	3	261	Fries obov	7.0				0.0049	0.0086
A	1	5	Grew mont	5.0				0.0025	
A	1	48	Grew mont	5.5				0.0030	0.0055
A	2	91	Julb glob	5.0				0.0025	
A	3	197	Julb glob	5.0				0.0025	
A	4	129	Julb glob	5.2				0.0027	
A	3	210	Julb glob	5.1	5.0			0.0051	
A	1	64	Julb glob	9.2				0.0085	
A	4	142	Julb glob	7.8	5.4			0.0090	
A	1	28	Julb glob	10.7				0.0114	
A	1	23	Julb glob	16.4				0.0269	
A	3	255	Julb glob	16.5				0.0272	
A	2	68	Julb glob	16.5				0.0272	
A	4	170	Julb glob	17.0				0.0289	
A	1	25	Julb glob	17.2				0.0296	
A	4	136	Julb glob	17.8				0.0317	
A	1	35	Julb glob	18.5				0.0342	
A	2	73	Julb glob	19.0				0.0361	
A	2	114	Julb glob	19.5				0.0380	
A	2	94	Julb glob	15.6	12.6			0.0402	

A	4	152	Julb glob	20.2				0.0406	
A	4	125	Julb glob	20.9				0.0437	
A	2	111	Julb glob	21.4				0.0458	
A	2	90	Julb glob	21.5				0.0462	
A	2	108	Julb glob	22.3				0.0497	
A	2	115	Julb glob	23.4				0.0548	
A	4	149	Julb glob	23.6				0.0557	
A	4	174	Julb glob	25.6				0.0655	
A	4	190	Julb glob	26.0				0.0676	
A	2	85	Julb glob	26.5				0.0702	
A	4	184	Julb glob	21.2	16.0			0.0703	
A	1	56	Julb glob	26.6				0.0708	
A	2	102	Julb glob	26.8				0.0716	
A	3	256	Julb glob	27.4				0.0751	
A	1	27	Julb glob	27.9				0.0778	
A	1	9	Julb glob	28.9				0.0835	
A	2	92	Julb glob	38.5				0.1482	1.4989
A	3	230	Marg disc	7.0				0.0049	
A	3	227	Marg disc	5.0	5.0			0.0050	
A	2	99	Marg disc	11.4				0.0130	
A	2	100	Marg disc	12.9				0.0166	
A	2	93	Marg disc	13.4				0.0180	
A	3	251	Marg disc	14.1	16.6			0.0474	
A	2	121	Marg disc	17.0				0.0289	
A	1	37	Marg disc	18.2	9.0			0.0412	
A	4	137	Marg disc	19.6	9.5			0.0474	
A	1	31	Marg disc	15.4	16.4	12.2	11.8	0.0764	
A	3	253	Marg disc	22.0	20.1			0.0888	
A	1	38	Marg disc	27.6	15.2	18.8		0.1346	0.5224
A	4	127	Ochn pulc	8.3				0.0069	
A	4	128	Ochn pulc	10.6				0.0112	
A	4	124	Ochn pulc	11.0				0.0121	
A	2	117	Ochn pulc	12.0				0.0144	
A	2	106	Ochn pulc	15.3				0.0234	0.0680
A	1	24	Pseud mapr	8.1				0.0066	0.0066
A	1	7	Ptero ango	53.7				0.2884	
A	1	39	Ptero ango	54.5	53.4			0.5822	0.8706
A	3	263	Term seri	7.3				0.0053	
A	3	239	Term seri	9.5				0.0090	
A	3	258	Term seri	10.5				0.0110	0.0254
n =		263			TOTAL B.A. @DBH (m2)			10.4121	<b>10.4121</b>

**TREE POSITIONS - PANDAMASUIE**

PLOT A, January / June 2004

Tree No.	Species	S/Plot	Peg no.	Dist B (m)	Peg no.	Dist A (m)
1	Comb moll	1a	1	8.80	2	24.20
2	Baph mass	1a	1	7.20	2	22.56
3	Baik plur	1a	1	7.00	2	22.25
4	Baik plur	1a	1	7.15	2	22.40
5	Grew mont	1a	1	11.16	2	18.81
6	Baph mass	1a	1	16.06	2	14.78
7	Ptero ango	1a	1	18.60	2	11.60
8	Comb apic	1a	1	25.77	2	3.50
9	Julb glob	1b	3	26.06	2	7.90
10	Baik plur	1b	3	9.48	2	24.80
11	Baik plur	1b	3	18.85	2	30.40
12	Comm moss	1b	3	20.35	2	25.80
13	Comb apic	1b	3	25.32	2	32.55
14	Baph mass	1b	3	21.47	2	19.90
15	Baph mass	1b	3	26.10	2	17.95
16	Comb apic	1b	3	19.90	2	14.10
17	Comm moss	1b	3	22.37	2	11.00
18	Baik plur	1a	1	27.76	2	16.40
19	Baik plur	1a	1	27.80	2	17.20
20	Baik plur	1a	1	26.80	2	16.60
21	Baik plur	1a	1	17.79	2	26.67
22	Baph mass	1a	1	14.52	2	25.60
23	Julb glob	1c	4	1.50	5	24.15
24	Pseu mapr	1c	4	3.42	5	23.25
25	Julb glob	1c	4	3.38	5	22.40
26	Diplo cond	1c	4	3.42	5	22.20
27	Julb glob	1c	4	11.61	5	14.90
28	Julb glob	1a	1	27.40	2	26.50
29	Baik plur	1a	1	30.16	2	27.28
30	Baik plur	1a	1	29.65	2	26.43
31	Marg disc	1a	1	30.47	2	24.26
32	Baik plur	1a	1	29.25	2	21.50
33	Baik plur	1a	1	30.60	2	20.25
34	Baik plur	1a	1	30.90	2	20.13
35	Julb glob	1b	3	29.10	2	27.80
36	Baph mass	1b	3	29.17	2	29.29
37	Marg disc	1b	3	25.40	2	29.68
38	Marg disc	1b	3	21.10	2	32.85
39	Ptero ango	1d	6	14.40	5	24.00
40	Comm moss	1d	6	16.96	5	20.95
41	Baik plur	1d	6	17.20	5	20.60
42	Comm moss	1d	6	18.50	5	12.10
43	Baph mass	1d	6	21.60	5	10.19
44	Comb apic	1c	4	25.99	5	9.73
45	Comm moss	1c	4	21.65	5	7.25
46	Comm moss	1c	4	21.21	5	7.04
47	Baph mass	1c	4	23.40	5	12.86
48	Grew mont	1c	4	15.00	5	20.56
49	Baph mass	1c	4	16.83	5	22.40
50	Comb apic	1c	4	15.51	5	24.45
51	Comb apic	1c	4	21.17	5	26.45
52	Comm moss	1c	4	21.70	5	24.55
53	Baik plur	1c	4	27.68	5	28.90
54	Baik plur	1c	4	27.27	5	28.40
55	Comm moss	1c	4	25.53	5	25.50
56	Julb glob	1c	4	24.30	5	26.60

57	Baph mass	1c	4	27.83	5	26.00
58	Baik plur	1c	4	30.00	5	26.50
59	Comm moss	1c	4	30.40	5	21.40
60	Comb apic	1c	4	30.16	5	21.15
61	Baik plur	1c	4	32.10	5	22.30
62	Erythro afri	1c	4	26.50	5	15.75
63	Baph mass	1d	6	27.25	5	19.05
64	Julb glob	1d	6	20.20	5	19.01
65	Baik plur	1d	6	20.76	5	28.39
66	Baik plur	1d	6	19.65	5	26.95
67	Comb apic	2a	3	5.17	15	22.30
68	Julb glob	2a	3	22.10	15	3.02
69	Comb zeyh	2a	3	23.37	15	6.34
70	Baik plur	2a	3	25.60	15	3.79
71	Baik plur	2a	3	25.24	15	3.28
72	Baik plur	2a	3	25.74	15	4.00
73	Julb glob	2a	3	27.15	15	16.60
74	Diplo cond	2a	3	27.38	15	14.11
75	Baik plur	2a	3	24.59	15	17.40
76	Baik plur	2a	3	25.00	15	17.78
77	Baik plur	2a	3	24.54	15	18.20
78	Baik plur	2a	3	15.59	15	18.25
79	Comb apic	2a	3	14.67	15	25.05
80	Comb apic	2a	3	14.35	15	25.75
81	Baik plur	2a	3	18.50	15	29.00
82	Baik plur	2a	3	18.95	15	29.24
83	Comm afric	2c	6	4.20	18	22.80
84	Comm afric	2c	6	10.80	18	23.18
85	Julb glob	2c	6	7.50	18	14.62
86	Baph mass	2c	6	16.80	18	9.85
87	Baik plur	2c	6	20.24	18	6.70
88	Baph mass	2c	6	22.58	18	9.80
89	Baph mass	2c	6	19.20	18	15.00
90	Julb glob	2c	6	23.52	18	25.47
91	Julb glob	2c	6	14.90	18	23.33
92	Julb glob	2c	6	27.40	18	29.96
93	Marg disc	2c	6	26.45	18	31.56
94	Julb glob	2c	6	27.70	18	34.70
95	Baik plur	2d	17	26.49	18	2.33
96	Baik plur	2d	17	27.20	18	1.00
97	Baik plur	2d	17	27.75	18	0.90
98	Baik plur	2d	17	26.11	18	6.00
99	Marg disc	2d	17	26.73	18	7.86
100	Marg disc	2d	17	26.65	18	8.57
101	Baik plur	2d	17	18.12	18	16.87
102	Julb glob	2d	17	9.50	18	17.47
103	Baph mass	2d	17	23.60	18	31.10
104	Baph mass	2d	17	22.24	18	32.13
105	Baph mass	2d	17	22.42	18	32.44
106	Ochn pulc	2d	17	31.30	18	24.04
107	Comm afric	2d	17	32.20	18	19.32
108	Julb glob	2b	16	11.88	18	13.04
109	Baik plur	2b	16	14.32	18	11.63
110	Baph mass	2b	16	5.20	18	23.89
111	Julb glob	2b	16	8.40	18	23.97
112	Baik plur	2b	16	11.90	18	26.04
113	Baph mass	2b	16	23.20	18	3.26
114	Julb glob	2b	16	27.83	18	13.40
115	Julb glob	2b	16	28.10	18	18.50
116	Baik plur	2b	16	22.65	18	18.50

117	Ochn pulc	2b	16	16.55	18	18.78
118	Comm afric	2b	16	14.96	18	22.23
119	Baph mass	2b	16	19.50	18	29.65
120	Baik plur	2b	16	25.45	18	24.76
121	Marg disc	2b	16	25.44	18	24.30
122	Baik plur	2b	16	25.90	18	24.39
123	Baik plur	2b	16	27.30	18	27.30
124	Ochn pulc	4a	9	2.24	21	23.90
125	Julb glob	4a	9	2.75	21	23.60
126	Comb apic	4a	9	8.88	21	16.55
127	Ochn pulc	4a	9	12.00	21	21.60
128	Ochn pulc	4a	9	16.62	21	19.40
129	Julb glob	4a	9	16.84	21	19.50
130	Baik plur	4a	9	17.30	21	22.10
131	Baik plur	4a	9	17.90	21	25.00
132	Baik plur	4a	9	19.40	21	28.00
133	Baik plur	4a	9	14.50	17	7.70
134	Baik plur	4a	9	15.00	17	7.30
135	Baik plur	4a	9	21.20	17	3.60
136	Julb glob	4a	9	22.00	17	4.00
137	Marg disc	4a	9	21.70	17	2.85
138	Comb apic	4a	9	15.00	21	11.40
139	Comm afric	4a	9	17.70	21	10.60
140	Comb apic	4a	9	23.46	21	10.25
141	Comb apic	4a	9	23.16	21	10.26
142	Julb glob	4a	9	21.64	21	12.70
143	Baph mass	4a	9	23.10	21	17.10
144	Baph mass	4a	9	22.99	21	17.57
145	Baph mass	4a	9	23.20	21	17.63
146	Baph mass	4a	9	23.50	21	17.70
147	Baph mass	4a	9	29.20	22	4.95
148	Comb apic	4a	9	29.20	22	6.25
149	Julb glob	4b	17	3.58	11	21.50
150	Baik plur	4b	17	11.50	11	24.35
151	Diplo cond	4b	17	11.70	11	25.70
152	Julb glob	4b	17	11.20	11	22.75
153	Baik plur	4b	17	12.80	11	18.85
154	Comm afric	4b	17	21.70	11	11.80
155	Baph mass	4b	17	22.00	11	5.75
156	Baik plur	4b	17	28.10	19	10.25
157	Baik plur	4b	17	27.60	19	10.25
158	Baik plur	4b	17	28.71	19	8.15
159	Baik plur	4b	17	30.50	19	4.05
160	Comm afric	4b	17	18.92	19	17.40
161	Baik plur	4b	17	15.90	19	21.20
162	Baik plur	4b	17	14.10	19	23.05
163	Baph mass	4b	17	18.12	19	21.80
164	Comm moss	4b	17	16.36	19	23.55
165	Comb apic	4b	17	21.35	19	23.70
166	Baik plur	4d	22	13.18	19	17.00
167	Baik plur	4d	22	19.36	19	12.60
168	Baik plur	4d	22	20.70	19	14.60
169	Baik plur	4d	22	22.20	19	12.10
170	Julb glob	4d	22	22.34	19	6.10
171	Baik plur	4d	22	25.90	19	17.50
172	Comb moll	4d	22	21.00	19	27.20
173	Comb apic	4d	22	20.20	19	31.50
174	Julb glob	4d	22	21.90	19	32.45
175	Baik plur	4c	13	21.20	20	4.10
176	Baik plur	4c	13	21.66	20	3.80

177	Baph mass	4c	13	18.50	20	9.85
178	Comm afric	4c	13	15.18	20	11.20
179	Comb apic	4c	13	9.90	20	19.40
180	Baph mass	4c	13	12.28	20	21.80
181	Baph mass	4c	13	13.31	20	21.30
182	Baph mass	4c	13	13.32	20	21.65
183	Baph mass	4c	13	13.24	20	22.35
184	Julb glob	4c	13	16.30	20	21.80
185	Erythro afri	4c	13	18.80	22	20.10
186	Baph mass	4c	13	21.45	22	20.30
187	Baik plur	4c	13	18.90	22	24.00
188	Baph mass	4c	13	22.00	22	14.65
189	Baik plur	4c	13	28.95	22	9.10
190	Julb glob	4c	13	25.20	22	10.20
191	Comm afric	4c	13	26.00	22	10.25
192	Comm afric	3a	7	2.86	23	22.43
193	Baik plur	3a	7	5.43	23	20.72
194	Comb apic	3a	7	6.31	23	25.90
195	Comm afri	3a	7	8.17	23	26.58
196	Comm afric	3a	7	10.50	23	18.19
197	Julb glob	3a	7	11.61	23	21.30
198	Comb apic	3a	7	16.41	23	18.61
199	Comb apic	3a	7	16.70	23	18.42
200	Baph mass	3a	7	19.64	23	20.21
201	Comm afric	3a	7	18.89	23	23.10
202	Comm afric	3a	7	12.61	23	26.50
203	Baik plur	3a	7	25.62	23	28.30
204	Comm afric	3a	7	26.66	23	26.99
205	Baik plur	3a	7	27.45	23	28.00
206	Comb apic	3a?	25	3.41	23	23.81
207	Baik plur	3a?	25	9.41	23	18.40
208	Comb apic	3a?	25	10.22	23	19.97
209	Comb zeyh	3a?	25	11.00	23	19.93
210	Julb glob	3a?	25	12.43	23	17.82
211	Comm afric	3a?	25	16.57	23	14.36
212	Comm afric	3a?	25	17.02	23	12.80
213	Comb apic	3a?	25	21.85	23	9.24
214	Comm afric	3a?	25	24.33	23	8.46
215	Baik plur	3c	24	28.88	23	5.98
216	Baik plur	3c	24	28.24	23	6.00
217	Comb apic	3c	24	28.16	23	5.26
218	Comb apic	3c	24	19.90	23	13.50
219	Comm afric	3c	24	16.72	23	17.77
220	Baik plur	3c	24	18.46	23	17.80
221	Comb apic	3c	24	20.84	23	22.00
222	Comm afric	3c	24	24.16	23	21.68
223	Comm afric	3c	24	25.15	23	17.55
224	Comb apic	3c	24	23.83	14	4.00
225	Comb apic	3c	24	16.60	14	9.35
226	Comb apic	3c	24	18.34	14	12.32
227	Marg disc	3c	24	14.55	14	13.90
228	Baik plur	3c	24	15.40	14	17.90
229	Bauh macr	3c	24	14.55	14	21.68
230	Marg disc	3c	24	12.25	14	20.70
231	Baph mass	3c	24	6.33	14	19.20
232	Baik plur	3c	24	10.75	14	14.46
233	Baik plur	3c	24	11.35	14	13.80
234	Baik plur	3d	24	11.40	13	17.90
235	Baph mass	3d	24	11.75	13	16.84
236	Baph mass	3d	24	20.48	13	12.18



237	Comb apic	3d	24	13.35	13	24.24
238	Comb apic	3d	24	15.50	13	22.70
239	Term seri	3d	24	18.14	13	23.56
240	Baik plur	3d	24	19.23	13	23.74
241	Baik plur	3d	24	20.05	13	23.70
242	Baik plur	3d	24	18.42	13	21.20
243	Comb apic	3d	24	17.72	13	19.75
244	Baik plur	3d	24	21.49	13	20.17
245	Comb apic	3d	24	22.63	13	19.34
246	Baph mass	3d	24	25.44	13	22.75
247	Comb apic	3d	24	24.71	13	16.20
248	Comb apic	3d	24	24.91	13	16.01
249	Comb apic	3d	24	24.01	13	14.94
250	Baik plur	3d	24	29.23	13	19.90
251	Marg disc	3d	24	30.20	13	17.70
252	TAG LOST					
253	Marg disc	3b	9	28.21	21	24.10
254	Baik plur	3b	9	21.35	21	18.80
255	Julb glob	3b	9	26.82	21	17.74
256	Julb glob	3b	9	23.76	21	5.60
257	Baph mass	3b	9	13.97	21	9.90
258	Term seri	3b	9	23.10	21	29.04
259	Baph mass	3b	9	22.66	21	26.47
260	Comb apic	3b	9	22.27	21	25.12
261	Fries obov	3b	9	18.74	21	19.92
262	Fries obov	3b	9	18.78	21	19.89
263	Term seri	3b	9	17.13	21	27.70
264	Baik plur	3b	9	9.61	21	19.43