

Appendix 3 Mature leaf trait results

Table A3.1 Mature leaf characteristics for plant species found in Royal National Park (RNP) and Ku-ring-gai Chase National Park (KCNP)

Variable		Bola Ck RNP	Dyke KCNP	Bundeena Rd RNP	Challenger KCNP
Total phenols (mg/ g fresh weight)	Mean	32	58	87	90
	N	61	60	72	60
	SE	21.0	22.5	26.4	32.7
	Range	3 - 81	29 - 115	42 - 126	40 – 149
Condensed Tannins (Absorbances _{550nm} /g dw)	Mean	2.55	3.84	5.79	5.79
	N	15	15	15	15
	SE	2.99	3.05	3.49	4.01
	Range	0.04-10.97	0.41-13.19	0.3-11.23	0.53-12.92
Toughness (N m ⁻¹)	Mean	2165.94	1568	1697	2016
	N	375	375	424	375
	SE	1428.90	1597	1328	1622
	Range	146-11118	109-9631	55-5640	58-6790
Force of Fracture (N)	Mean	0.65	0.69	1.05	1.14
	N	375	375	424	374
	SE	0.72	1.16	0.89	1.02
	Range	0.02-4.97	0.02-8.86	0.03-4.01	0.05-4.33
Water Content (%)	Mean	61.86	54.37	49.74	50.74
	N	375	375	424	375
	SE	8.24	15.23	9.62	7.92
	Range	28.38-79.09	16-89	14.29-78.10	25.00-69.23
Nitrogen %dry biomass	Mean	1.17	1.49	0.82	0.77
	N	60	60	60	60
	SE	0.27	0.54	0.31	0.20
	Range	0.63-1.82	0.53-3.05	0.26-1.75	0.32-1.44
Lamina thickness (mm)	Mean	0.27	0.34	0.68	0.58
	N	375	375	424	375
	SE	.09	0.16	0.45	0.38
	Range	0.12-0.71	0.11-1.05	0.25-2.33	0.19-2.02
Specific Leaf Area (cm ² /g dry biomass)	Mean	131.82	99.45	46.66	53.16
	N	375	375	424	375
	SE	75.52	40.93	19.73	21.55
	Range	45.4-981.6	24-248	14.8-146.0	19.29-181
Leaf Area (mm ²)	Mean	146577	103468	2022	807
	N	15	15	17	15
	SE	545682	243231	5171	1106
	Range	45.29-2118974	48.3-878424	2.7-21747	2.6-2904
Lignin	Mean	14.6	14.8	16.9	16.9
	N	15	15	18	18
	SE	4.9	5.4	4.3	4.3
	Range	6.2-23.0	4.7-25.1	5.1-23.1	5.1-23.1
Hemicellulose (%)	Mean	12.4	14.6	11.5	11.5
	N	15	15	18	18
	SE	3.6	7.1	6.6	6.6
	Range	5.3-22.5	5.6-30.4	3.9-31.7	3.9-31.7
Cellulose (%)	Mean	23.9	19.0	16.7	16.7
	N	15	15	18	18
	SE	8.4	7.7	7.9	7.9
	Range	8.2-38.2	8.2-37.1	5.9-31.0	5.9-31.0

Table A3.2 Mature leaf traits for dry sclerophyll plant species found in Ku-ring-gai Chase National Park

Plant sp		Area (mm ²)	SLA (cm ² /g)	%W	Lam (mm)	FF (N)	T (Nm ⁻¹)	C (%dw)	N (%dw)	C:N
<i>Acacia suaveolens</i>	Mean	335	42.4	43	0.6	1.2	1874	50.9	0.9	61.4
	N	5	5	5	5.	5	5	5	5	5
	Sd	141	8.8	4.9	0.08	0.4	474	8.3	0.3	14.5
	Range	176-607	29-58	32-50	0.5- 0.8	0.8-2.4	1419- 3626	43.8- 65	0.6- 1.3	39.5- 75.7
<i>Angophora hispida</i>	Mean	2904	46	42.4	0.4	2.0	4733	49.2	0.7	67.4
	N	5	5	5	5.	5	5	5	5	5
	Sd	1124	9.1	7.0	0.02	0.53	1319	1.15	0.08	5.71
	Range	1583- 5857	35- 62.8	33.7- 56.2	0.4- 0.5	1.1-2.8	2541- 6790	48- 50.6	0.6- 0.9	58.5- 75.9
<i>Banksia serrata</i>	Mean	2082	36.6	46.5	0.5	2.3	4875	48.8	0.6	77.9
	N	5	5	5	5.	5	5	5	5	5
	Sd	464	3.3	2.9	0.04	0.5	767	1.38	0.04	5.31
	Range	1255- 3262	31-42	43-55.7	0.4- 0.6	1.2-3.1	2475- 5950	47-51	0.6- 0.7	70.8- 84.9
<i>Corymbia gummifera</i>	Mean	2270	42.2	45.2	0.38	1.2	3158	48.4	0.68	71.5
	N	5	5	5	5.	5	5	5	5	5
	Sd	716	7.3	3.4	0.02	0.23	517	1.5	0.03	3.97
	Range	1294- 4104	27-56	40-54.6	0.3- 0.4	0.8-1.6	2320- 4404	46- 50.7	0.6- 0.7	66.5- 74.83
<i>Eucalyptus haemastoma</i>	Mean	2782	29.4	43.6	0.6	2.36	3942	50.6	0.69	74.4
	N	5	5	5	5.	5	5	5	5	5
	Sd	929.6	3.0	4.6	0.05	0.59	976	1.1	0.08	8.19
	Range	1623- 5434	24-36	35.5-51	0.5- 0.7	1.4-3.8	2313- 6539	49-52	0.6- 0.8	58.5- 79.7
<i>Grevillea buxifolia</i>	Mean	58.8	67.3	53.1	0.37	0.56	1525	48.9	0.7	69.1
	N	5	5	5	5.	5	5	5	5	5
	Sd	16.1	6.7	4.0	0.03	0.11	338	3.2	0.1	6.65
	Range	32.5-89	55.5- 84	39.8- 57.6	0.3- 0.4	0.3-0.8	886-2549	43- 52.9	0.6- 0.9	61.2- 78.64
<i>Hakea teretifolia</i>	Mean	76.5	24.1	56.0	1.9	3.2	1705	49.9	0.5	104.4
	N	5	5	5	5.	5	5	5	5	5
	Sd	13.2	2.3	5.3	0.14	0.65	288	2.03	0.13	31.6
	Range	58-106	19-28	46-63	1.5- 2.0	1.6-4.3	837-2154	48-54	0.3- 0.7	68.4- 153.7
<i>Hemigenia purpurea</i>	Mean	8.2	48.1	62.2	0.8	0.08	101	52.5	0.8	64.8
	N	5	5	5	5.	5	5	5	5	5
	Sd	1.6	3.2	2.6	0.14	0.03	43.0	0.64	0.1	7.42
	Range	6.2-13.4	42-54	58-69	0.6- 1.1	0.05- 0.16	58-276	52-54	0.7- 1.0	55.8- 77.0
<i>Hibbertia monogyna</i>	Mean	47.6	73.6	60.1	0.36	0.13	349	45.3	1.0	46.7
	N	5	5	5	5.	5	5	5	5	5
	Sd	14.4	7.6	2.2	0.03	0.04	101	2.59	0.1	4.41
	Range	22-76	53-83	56-64	0.3- 0.4	0.05-0.2	148-523	42-48	0.8- 1.2	40.7- 52.7
<i>Leptospermum trinervium</i>	Mean	34.9	67.7	46.4	0.34	0.49	1454	49.2	0.7	67.7
	N	5	5	5	5.	5	5	5	5	5
	Sd	9.0	7.2	5.7	0.04	0.09	313	1.7	0.07	5.44
	Range	23-51	55-81	31-55	0.3- 0.4	0.3-0.6	774-2109	46-51	0.6- 0.8	61.4- 75.6
<i>Leucopogon microphyllus</i>	Mean	2.58	69.1	45.7	0.25	0.34	1348	51.2	0.7	70.1
	N	5	5	5	5.	5	5	5	5	5
	Sd	0.56	25.7	11.0	0.03	0.1	384	0.5	0.06	6.06
	Range	1.8-3.6	42-181	14-67	0.2- 0.3	0.1-0.6	494-2460	50-52	0.7- 0.8	62.4- 78.3
<i>Patersonia glabrata</i>	Mean	591	44.2	55.0	0.68	1.81	2758	47.5	0.77	63.5
	N	5	5	5	5.	5	5	5	5	5
	Sd	185	6.1	5.5	0.13	0.5	923	0.45	0.13	9.71
	Range	333-1085	32-53	36-64	0.5- 1.0	0.8-3.2	1060- 5872	47-48	0.6- 1.0	47.7- 74.0
<i>Persoonia lanceolata</i>	Mean	888	48.2	56.9	0.6	1.1	1721	47.2	0.67	70.2
	N	5	5	5	5.	5	5	5	5	5
	Sd	228	5.5	3.6	0.04	0.18	279	3.4	0.06	4.43
	Range	525-1389	37-58	50-63	0.6- 0.7	0.7-1.4	1157- 2267	41-50	0.6- 0.7	64.0- 77.0
<i>Pultenaea elliptica</i>	Mean	18.1	102.3	54.2	0.3	0.17	516.6	51.6	1.06	52.7
	N	5	5	5	5.	5	5	5	5	5
	Sd	5.1	14.6	4.9	0.02	0.03	87.5	3.4	0.27	15.9
	Range	8-29	69-130	42-62	0.3- 0.4	0.1-0.2	347-733	47-56	0.8- 1.4	34.4- 70.6

Table A3.3 Mature leaf traits for wet sclerophyll plant species found in Ku-ring-gai Chase National Park

Plant sp		Area (mm ²)	SLA (cm ² /g)	%W	Lam (mm)	FF (N)	T (Nm ⁻¹)	C (%dw)	N (%dw)	C:N
<i>Acacia floribunda</i>	Mean	182.7	99.5	43.2	0.29	0.27	962	46.4	2.8	16.51
	N	5	5	5	5.	5	5	5	5	5
	Sd	85.2	16.2	6.0	0.01	0.12	402.7	1.06	0.22	1.05
	Range	59-382	78-129	33-56	0.26-0.33	0.08-0.5	268-1669	45-48	2.5-3.1	15.4-18.2
<i>Breynia oblongifolia</i>	Mean	330.2	101.5	27.5	0.2	0.10	434.4	40.7	1.3	32.04
	N	5	5	5	5.	5	5	5	5	5
	Sd	119.6	20.6	16.4	0.02	0.03	143.0	3.1	0.14	3.91
	Range	115-602	79-141	17-89	0.2-0.3	0.06-0.21	228-824	35-44	1.2-1.5	26.5-37.3
<i>Cissus hypoglauca</i>	Mean	1805	121.6	64.8	0.26	0.32	1212	45.8	1.4	33.42
	N	5	5	5	5.	5	5	5	5	5
	Sd	714	19.2	2.7	0.02	0.12	390	0.64	0.05	1.34
	Range	568-2964	99-157	61-69	0.2-0.3	0.1-0.6	468-1906	45-46	1.3-1.4	31.8-35.5
<i>Citriobatus pauciflorus</i>	Mean	48.8	176.4	58.4	0.16	0.05	311.3	46.0	1.47	31.81
	N	5	5	5	5.	5	5	5	5	5
	Sd	23.0	36.1	5.4	0.03	0.01	100.4	1.56	0.22	4.31
	Range	17-95	107-245	49-68	0.1-0.2	0.02-0.07	109-462	44-48	1.3-1.9	24.3-36.45
<i>Hibbertia dentate</i>	Mean	859	127.1	73.9	0.45	0.32	706	37	1.4	26.26
	N	5	5	5	5.	5	5	5	5	5
	Sd	414	23.4	3.4	0.06	0.10	158	1.8	0.16	4.01
	Range	176-1895	96-182	65-79	0.35-0.58	0.14-0.52	355-989	34-39	1.3-1.6	20.9-29.8
<i>Lepidosperma laterale</i>	Mean	11476	44.1	50.5	0.7	3.8	5112	45.0	0.6	75.39
	N	5	5	5	5.	5	5	5	5	5
	Sd	2444	2.5	1.39	0.1	1.8	1584	0.7	0.08	9.61
	Range	8712-14750	41-48	49-53	0.57-1.05	1.9-8.9	2959-9631	44-46	0.5-0.7	61.1-85.7
<i>Livistona australis</i>	Mean	878424	98.6	61.5	0.18	0.59	3312	46.3	1.7	27.97
	N	5	5	5	5.	5	5	5	5	5
	Sd	339979	24.4	2.6	0.02	0.15	702	0.84	0.03	0.213
	Range	246694-1112810	76-133	57-65	0.15-0.21	0.41-1.11	2646-6268	45-47	1.6-1.69	27.6-28.27
<i>Macrozamia communis</i>	Mean	367941	41.1	55.8	0.6	2.7	4591	49.6	1.2	43.08
	N	5	5	5	5.	5	5	5	5	5
	Sd	139359	14.0	3.6	0.06	0.5	675	2.4	0.15	7.0
	Range	129705-540000	24-60	51-60	0.5-0.7	2.0-4.3	3692-6506	46-53	1.0-1.4	35.0-52.3
<i>Pomaderris ferruginea</i>	Mean	913	81.2	30.8	0.3	0.3	867	46.9	1.13	41.48
	N	5	5	5	5.	5	5	5	5	5
	Sd	238.7	9.0	4.7	0.02	0.04	109	1.39	0.07	1.95
	Range	384-1353	67-99	23-42	0.2-0.3	0.2-0.4	716-1140	45-49	1.0-1.2	39.9-45.0
<i>Pteridium esculentum</i>	Mean	285807	94.5	51.0	0.31	0.39	1284	43.0	1.37	31.71
	N	5	5	5	5.	5	5	5	5	5
	Sd	106138	3.5	1.4	0.03	0.16	555	3.2	0.15	3.25
	Range	181570-471727	89-99	49-53	0.25-0.36	0.25-0.76	778-2523	39-47	1.2-1.6	28.3-37.8
<i>Pultenaea daphnoides</i>	Mean	137.52	104.36	65.38	0.255	0.110	412.7	48.8	2.16	22.67
	N	5	5	5	5.	5	5	5	5	5
	Sd	39.0	9.0	2.1	0.02	0.03	91.9	2.9	0.2	1.07
	Range	58-209	86-123	61-70	0.2-0.3	0.07-0.2	279-602	46-54	2.0-2.6	21.0-24.0
<i>Pultenaea flexilis</i>	Mean	48.3	149.1	77.2	0.33	0.21	649.4	45.6	2.03	22.64
	N	5	5	5	5.	5	5	5	5	5
	Sd	7.8	32.7	3.4	0.06	0.07	248	2.2	0.2	2.27
	Range	30-64	111-248	72-86	0.2-0.4	0.06-0.32	175-1108	41-47	1.9-2.4	19.4-24.9
<i>Syncarpia glomulifera</i>	Mean	2910.3	73.9	37.3	0.29	0.67	2337.1	46.96	1.03	45.89
	N	5	5	5	5.	5	5	5	5	5
	Sd	1123	6.8	4.3	0.02	0.17	477	1.36	0.1	3.18
	Range	1250-6036	58-84	27-42	0.2-0.3	0.4-1.0	1600-3279	45-48	0.9-1.2	41.4-50.3
<i>Synoum glandulosum</i>	Mean	1036.9	124.0	64.4	0.31	0.18	554.7	46.65	1.66	28.16
	N	5	5	5	5.	5	5	5	5	5
	Sd	302.9	22.6	4.6	0.03	0.04	121.2	1.48	0.11	2.50
	Range	535-1630	99.6-174	58.7-73.5	0.2-0.37	0.06-0.23	231-731	45-49	1.5-1.8	24.8-32.4

Table A3.4 Leaf characteristics for mature dry sclerophyll plant species found at Bundeena turnoff, Royal National Park

Plant sp		Area (mm ²)	SLA (cm ² /g)	%W	Lam (mm)	FF (N)	T (Nm ⁻¹)	C (%dw)	N (%dw)	C:N
<i>Acacia suaveolens</i>	Mean	305	38.6	57.5	0.6	1.06	1709	49.7	1.4	35.89
	N	5	5	5	5.	5	5	5	5	5
	Sd	79.9	7.1	3.3	0.08	0.25	397	1.7	0.07	2.47
	Range	175-509	28-50.6	54-64.7	0.5-0.8	0.6-1.5	780- 2274	47-51.7	1.3-1.5	32.7- 39.7
<i>Allocasuarina distyla</i>	Mean	395	18	37.6	1.5	2.4	1654	48.5	0.69	72.01
	N	5	5	5	5.	5	5	5	5	5
	Sd	97.5	1.3	6.3	0.15	0.64	330	0.43	0.12	12.24
	Range	185-547	16-20.8	25-47.6	1.2-1.8	1.5-4.0	1214- 2236	48-48.9	0.5-0.8	58.6- 91.4
<i>Angophora hispida</i>	Mean	3004	38.9	43.8	0.49	2.1	4270	49.7	1.2	49.50
	N	5	5	5	5.	5	5	5	5	5
	Sd	1201	4.7	3.3	0.03	0.3	649	0.9	0.5	22.87
	Range	910- 6293	31-48.5	37-47.9	0.4-0.6	1.6-2.7	3104- 5341	48-50.9	0.6-1.7	28.7- 80.0
<i>Banksia serrata</i>	Mean	1829	39.8	45.1	0.5	2.1	4329	50	0.6	83.7
	N	5	5	5	5.	5	5	5	5	5
	Sd	565	2.6	2.5	0.04	0.39	654	0.5	0.05	7.69
	Range	990- 3082	36-44.6	40-52.5	0.4-0.5	1.3-2.8	3047- 5543	49-50.5	0.5-0.7	75.0-95
<i>Corymbia gummifera</i>	Mean	1886	44.3	48.3	0.35	0.93	2630	48	0.9	56.49
	N	5	5	5	5.	5	5	5	5	5
	Sd	412	4.3	2.4	0.02	0.14	297	0.52	0.13	6.97
	Range	1271- 2941	37.7- 52.9	45-52	0.3-0.4	0.7-1.3	2122- 3245	47.4- 48.8	0.7-1.1	43.6- 63.9
<i>Eucalyptus haemastoma</i>	Mean	2488	42.4	50.1	0.4	0.95	2177	50.6	0.69	74.39
	N	5	5	5	5.	5	5	5	5	5
	Sd	649	11.8	11.5	0.06	0.2	321	1.06	0.08	8.19
	Range	1438- 3717.4	24-86	25-78	0.4-0.5	0.7-1.5	1643- 2979	49.5- 52.2	0.6-0.8	58.5- 79.7
<i>Grevillea sphacelata</i>	Mean	42.0	60.6	46.3	0.4	0.7	1698	48.7	0.77	65.65
	N	5	5	5	5.	5	5	5	5	5
	Sd	10.8	8.6	3.5	0.03	0.09	253	0.68	0.16	11.76
	Range	21.6- 58.3	49-76	40-51	0.4-0.5	0.5-0.8	1068- 2087	48-49.7	0.6-1.1	45.5- 78.3
<i>Hakea teretifolia</i>	Mean	83.6	18.1	57.3	2.08	2.38	1143	48.8	0.6	87.43
	N	5	5	5	5.	5	5	5	5	5
	Sd	21.2	1.79	2.7	0.1	0.38	184	1.96	0.17	23.27
	Range	45.7- 131	15-23.7	53-62.1	1.8-2.3	1.6-3.1	743- 1485	45.6- 51.2	0.4-0.9	59.5- 123.55
<i>Hemigenia purpurea</i>	Mean	7.76	70.5	56.9	0.8	0.1	125	52.1	0.79	67.05
	N	5	5	5	5.	5	5	5	5	5
	Sd	1.68	18.3	8.3	0.1	0.03	40.5	0.42	0.09	8.17
	Range	4.7-11.5	39-141	25-68	0.5-1.0	0.1-0.2	72-256	52-53	0.6-0.9	56.8- 81.0
<i>Leptospermum trinervium</i>	Mean	20.6	62.6	49.1	0.4	0.4	1099	48.8	0.9	55.49
	N	5	5	5	5.	5	5	5	5	5
	Sd	5.5	5.4	3.0	0.05	0.08	231	0.9	0.06	3.8
	Range	14-35.3	51.6-75	41-54	0.3-0.5	0.3-0.6	758- 1698	48-50.4	0.8-0.9	51.8- 61.7
<i>Leucopogon microphyllus</i>	Mean	2.7	76.8	37.1	0.37	0.4	1099	50.7	0.72	71.32
	N	5	5	5	5.	5	5	5	5	5
	Sd	0.4	25.1	15.2	0.05	0.08	231	1.85	0.07	7.14
	Range	1.7-3.4	42-146	14-66.7	0.3-0.5	0.3-0.6	758- 1698	48-52.6	0.6-0.8	62.0- 80.0
<i>Patersonia glabrata</i>	Mean	1126	40.0	44.5	0.69	2.5	3554	47.5	0.77	63.48
	N	5	5	5	5.	5	5	5	5	5
	Sd	260	8.7	8.7	0.08	0.48	688	0.45	0.13	9.71
	Range	669- 1707	31-75.8	26-63.4	0.6-0.9	1.8-3.8	2283- 5640	47-48	0.6-1.0	47.7- 74.0
<i>Persoonia lanceolata</i>	Mean	516	45.8	58.8	0.6	0.85	1490	48.1	0.6	87.72
	N	5	5	5	5.	5	5	5	5	5
	Sd	166	8.6	2.9	0.05	0.17	247	0.4	0.06	11.31
	Range	325- 1106	39-71	54-66	0.5-0.7	0.6-1.2	1047- 1977	48-49	0.4-0.6	76.3- 106.9
<i>Platysace linearifolia</i>	Mean	9.5	57.3	53.4	0.6	0.1	164	51.5	1.18	47.04
	N	5	5	5	5.	5	5	5	5	5
	Sd	2.9	6.0	3.3	0.07	0.04	62.1	0.16	0.34	12.92
	Range	5.7-16	45-66	45-58.3	0.5-0.8	0.1-0.2	55-326	51-51.7	0.9-1.5	33.9- 59.2

Table A3.5 Mature leaf characteristics for temperate rainforest plants found at Bola Creek in Royal National Park

Plant sp		Area (mm ²)	SLA (cm ² /g)	%W	Lam (mm)	FF (N)	T (Nm ⁻¹)	C (%dw)	N (%dw)	CN
<i>Acmena smithii</i>	Mean	3734	143.9	63.1	0.3	0.4	1672	49.4	1.2	40.21
	N	5	5	5	5.	5	5	5	5	5
	Sd	824	11.6	2.7	0.02	0.1	191.6	0.5	0.1	2.06
	Range	2371-5507	122-161	57-67	0.2-0.3	0.3-0.6	1352-2045	48.7-50.2	1.2-1.3	37.5-42.7
<i>Blechnum cartilagineum</i>	Mean	24288	130.4	64.5	0.2	0.3	1194	42.1	1.0	43.6
	N	5	5	5	5.	5	5	5	5	5
	Sd	6871	25.4	4.9	0.04	0.04	185	1.6	0.06	3.4
	Range	12799-33399	100-164	57-69	0.2-0.25	0.2-0.4	914-1667	40.4-44.54	0.9-1.0	38.5-49.1
<i>Ceratopetalum apetalum</i>	Mean	4597	123.6	66.59	0.28	0.49	1765	45.4	0.91	50.45
	N	5	5	5	5.	5	5	5	5	5
	Sd	1006	15.0	2.62	0.03	0.09	238	0.4	0.09	5.39
	Range	3072-6559	98-157	61.7-71.33	0.23-0.34	0.35-0.7	1492-2531	45.0-46.2	0.8-1.0	45.4-59.34
<i>Citriobatus pauciflorus</i>	Mean	45.3	227.8	50.5	0.15	0.07	440	46.5	1.5	32.15
	N	5	5	5	5.	5	5	5	5	5
	Sd	12.0	36.9	4.1	0.009	0.02	139	1.5	0.13	2.14
	Range	28-71	162-315	40.9-58.3	0.14-0.17	0.02-0.11	147-48	44.1-48.2	1.3-1.6	29.4-34.5
<i>Diospyros australis</i>	Mean	2599	87.5	60.2	0.3	0.5	1560	47.3	1.3	35.45
	N	5	5	5	5.	5	5	5	5	5
	Sd	454	8.7	3.2	0.02	0.07	183.1	0.2	0.1	3.44
	Range	1806-3471	66-107	52.8-65.96	0.3-0.4	0.4-0.7	1182-1933	47.1-47.2	1.2-1.6	29.6-39.0
<i>Doryphora sassafras</i>	Mean	4619	143	69.6	0.3	0.5	1693	42.7	1.4	29.58
	N	5	5	5	5.	5	5	5	5	5
	Sd	1222	23.8	3.3	0.03	0.08	221	3.4	0.1	1.64
	Range	2978-6869	109-193	62.9-75.5	0.2-0.3	0.3-0.6	1347-2077	38.5-46.0	1.3-1.58	27.8-32.6
<i>Gymnostachys anceps</i>	Mean	15407	51.8	64.2	0.5	3.05	6230	43.7	1.0	43.76
	N	5	5	5	5.	5	5	5	5	5
	Sd	3098	4.7	0.8	0.1	0.98	2055	0.4	0.2	9.49
	Range	11528-20789	45.4-57.5	63.0-65.2	0.3-0.7	1.1-5.0	2731-11119	42.9-44.0	0.7-1.3	32.7-59.3
<i>Livistona australis</i>	Mean	2118974	108	63.8	0.17	0.57	3364	42.4	1.1	40.0
	N	5	5	5	5.	5	5	5	5	5
	Sd	336088	23	5.1	0.03	0.17	551	1.6	0.2	9.6
	Range	1460588-2292787	82-147	56-70	0.12-0.23	0.29-0.95	2200-4216	40-44.2	0.7-1.3	33.1-54.3
<i>Lomatia myriocoides</i>	Mean	3495	171	57.2	0.3	0.5	1739	47.2	0.8	58.45
	N	5	5	5	5.	5	5	5	5	5
	Sd	4375	220	5.9	0.02	0.09	303	0.2	0.1	8.44
	Range	835-19445	77-982	45.9-66.5	0.2-0.3	0.3-0.7	1201-2242	46.9-47.5	0.7-1.0	46.0-69.0
<i>Palmeria scandens</i>	Mean	5365	234	75.3	0.2	0.2	1213	44	1.7	26.41
	N	5	5	5	5.	5	5	5	5	5
	Sd	1989	29.9	2.7	0.02	0.06	261	0.1	0.1	2.3
	Range	2798-9695	189-273	70.1-79.1	0.2-0.3	0.1-0.3	743-1603	43.9-44.2	1.4-1.8	24.2-30.5
<i>Ripogonum album</i>	Mean	3881	128	66.1	0.28	0.69	2513	47.0	1.1	41.6
	N	5	5	5	5.	5	5	5	5	5
	Sd	930	17.7	3.5	0.02	0.10	319	0.18	0.08	2.72
	Range	2197-5691	107-180	61.4-75.4	0.25-0.3	0.5-0.9	1993-3269	46.8-47.3	1.06-1.23	38.4-44.6
<i>Syncarpia glomulifera</i>	Mean	2886	84.6	50.9	0.2	0.6	2261.84	50.7	1.2	41.41
	N	5	5	5	5.	5	5	5	5	5
	Sd	712	13.1	4.9	0.04	0.1	401.69	0.4	0.1	3.57
	Range	1335-3955	62-120	39.6-56.7	0.2-0.3	0.28-0.83	1583-3050	50.3-51.4	1.11-1.45	34.9-95.3
<i>Trochocarpa laurina</i>	Mean	1236	119	48	0.26	0.82	3134	46.9	0.9	53.54
	N	5	5	5	5.	5	5	5	5	5
	Sd	300	15.38	7.9	0.03	0.12	409	0.74	0.16	10.46
	Range	793-1984	95.72	28.4-60.6	0.2-0.4	0.62-1.01	2255-3820	45.8-47.7	0.63-1.11	43.1-72.9
<i>Wilkea huegelianna</i>	Mean	4205	105	62.8	0.3	0.7	2028	43.3	1.2	38.71
	N	5	5	5	5.	5	5	5	5	5
	Sd	946	10.9	2.7	0.03	0.2	353	0.3	0.3	10.25
	Range	2735-7485.2	88-131	58.1-69.1	0.3-0.4	0.5-1.1	1596-3015	42.9-43.6	0.8-1.6	28.0-56.1

Table A3.6

Fibre results for temperate rainforest and wet sclerophyll leaves

		%NDF	%ADF	%Lignin	Hemicellulose	%Cellulose
<i>Acmena smithii</i>	Mean	51.9	39.6	17.4	12.3	22.2
	stdev	1.31	1.80	1.72	0.49	0.09
<i>Ceratopetalum apetalum</i>	Mean	51.8	41.1	16.4	10.7	24.6
	Stdev	2.11	0.52	0.32	1.59	0.20
<i>Diospyros australis</i>	Mean	34.7	29.4	17.0	5.3	12.4
	Stdev	0.98	1.05	0.13	0.07	0.92
<i>Doryphora sassafras</i>	Mean	47.1	35.3	11.8	11.9	23.5
	Stdev	0.89	0.16	0.06	1.05	0.23
<i>Trochocarpa laurina</i>	Mean	61.5	48.6	12.7	12.8	35.9
	Stdev	2.60	1.96	0.17	0.64	2.13
<i>Tasmannia insipida</i>	Mean	45.1	36.5	23.0	8.6	13.5
	Stdev	2.18	6.96	2.66	4.78	4.30
<i>Wilkiea huegelianna</i>	Mean	51.2	36.6	11.5	14.6	25.1
	Stdev	2.89	2.15	0.89	0.74	1.25
<i>Livistona australis</i>	Mean	58.1	35.7	12.4	22.5	23.2
	Stdev	0.18	0.89	0.05	1.07	0.95
<i>Bursaria spinosa</i>	Mean	29.0	18.3	10.1	10.7	8.2
	Stdev	4.31	1.81	0.61	2.50	1.20
<i>Ripogonum album</i>	Mean	64.6	51.1	18.6	13.5	32.5
	Stdev	1.64	2.03	0.49	0.39	1.54
<i>Palmeria scandens</i>	Mean	61.4	46.5	16.4	14.9	30.1
	Stdev	3.62	2.47	0.89	1.14	1.58
<i>Lomatia myricoides</i>	Mean	57.9	46.2	21.8	11.7	24.4
	Stdev	7.71	6.50	5.12	1.21	1.38
<i>Gymnostachys anceps</i>	Mean	57.5	44.4	6.2	13.1	38.2
	Stdev	2.24	1.03	0.71	1.21	0.32
<i>Blechnum cartilagineum</i>	Mean	43.8	32.0	6.6	11.8	25.3
	Stdev	5.30	7.38	4.49	2.09	2.90
<i>Syncarpia glomulifera</i>	Mean	47.5	35.9	16.7	11.7	19.2
	Stdev	3.30	3.11	1.76	0.19	4.87
<i>Synoum glandulosum</i>	Mean	35.3	23.6	10.8	11.7	12.9
	Stdev	1.19	1.52	2.03	0.33	0.51
<i>Acacia floribunda</i>	Mean	42.5	33.6	20.5	9.0	13.1
	Stdev	2.48	3.49	2.91	1.01	0.58
<i>Pultenaea daphnoides</i>	Mean	45.1	29.1	14.5	16.0	14.6
	Stdev	8.49	2.11	2.03	6.38	0.07
<i>Pultenaea flexilis</i>	Mean	55.4	25.0	13.6	30.4	11.4
	Stdev	9.09	3.13	2.75	5.96	0.39
<i>Pomaderris ferruginaea</i>	Mean	51.4	36.6	10.1	14.8	26.5
	Stdev	3.87	3.37	0.60	0.50	2.77
<i>Allocasuarina torulosa</i>	Mean	52.8	41.2	15.9	11.6	25.2
	Stdev	1.12	0.90	0.44	0.22	0.47
<i>Breynia oblongifolia</i>	Mean	41.1	35.5	25.1	5.6	10.4
	Stdev	0.18	1.17	0.50	1.36	0.68
<i>Macrozamia communis</i>	Mean	56.7	48.3	23.2	8.5	25.0
	Stdev	8.58	7.13	2.43	1.44	4.70
<i>Pteridium esculentum</i>	Mean	51.1	40.4	18.0	10.7	22.4
	Stdev	2.86	4.14	4.53	1.28	0.39
<i>Lepidosperma laterale</i>	Mean	69.0	41.8	4.7	27.2	37.1
	Stdev	1.00	1.74	0.05	0.74	1.69
<i>Cissus hypoglauca</i>	Mean	41.7	30.6	11.3	11.1	19.3
	Stdev	1.71	0.81	0.70	0.90	0.11
<i>Hibbertia dentata</i>	Mean	49.6	31.7	15.7	17.8	16.0
	stdev	15.88	2.51	1.86	13.37	4.37

Table A3.7 Fibre results for mature dry sclerophyll leaves.
(NDF - Neutral Detergent Fibre, ADF – Acid Detergent Fibre)

		%NDF	%ADF	%Lignin	%Hemicellulose	%Cellulose
<i>Grevillea buxifolia</i>	Mean	45.7	37.4	17.4	8.3	20.0
	stdev	1.58	1.02	0.20	0.56	1.22
<i>Angophora hispida</i>	Mean	49.0	36.7	20.4	12.3	16.3
	Stdev	3.06	1.55	0.14	1.51	1.69
<i>Pultenaea elliptica</i>	Mean	44.8	31.7	20.6	13.1	11.0
	Stdev	7.33	2.79	1.63	4.54	1.16
<i>Leptospermum trinervium</i>	Mean	41.9	33.4	20.7	8.5	12.7
	Stdev	1.66	2.08	2.68	0.43	0.59
<i>Hibbertia monogyna</i>	Mean	31.8	21.1	13.3	10.6	7.8
	Stdev	4.41	3.17	3.30	1.24	0.14
<i>Eucalyptus haematoma</i>	Mean	31.6	26.3	17.5	5.4	8.8
	Stdev	2.64	1.27	1.47	1.38	0.20
<i>Persoonia lanceolata</i>	Mean	32.6	26.5	13.3	6.1	13.2
	Stdev	0.58	0.43	0.29	0.15	0.15
<i>Corymbia gummifera</i>	Mean	38.5	30.9	18.4	7.7	12.5
	Stdev	3.09	1.35	1.78	1.74	0.43
<i>Hemigenia purpurea</i>	Mean	26.5	22.5	16.6	3.9	5.9
	Stdev	0.03	0.29	0.46	0.25	0.17
<i>Platysace linearifolia</i>	Mean	34.2	24.4	17.7	9.8	6.6
	Stdev	0.23	0.69	0.78	0.46	0.10
<i>Isopogon anethifolius</i>	Mean	48.1	37.2	18.9	10.9	18.4
	Stdev	4.78	2.88	0.63	1.90	3.51
<i>Patersonia glabrata</i>	Mean	64.8	41.8	10.8	23.1	31.0
	Stdev	5.27	3.35	0.88	1.92	2.47
<i>Caustis recurvata</i>	Mean	62.1	30.3	5.1	31.7	25.2
	Stdev	7.27	4.91	0.54	2.35	4.38
<i>Hakea teretifolia</i>	Mean	57.2	43.4	14.6	13.8	28.8
	Stdev	5.30	5.67	1.21	0.37	4.47
<i>Acacia suaveolens</i>	Mean	44.1	35.9	21.2	8.2	14.6
	Stdev	16.68	13.08	7.70	3.90	5.38
<i>Allocasuarina distyla</i>	Mean	60.1	47.5	19.0	12.6	28.5
	Stdev	0.35	0.24	1.57	0.11	1.33
<i>Banksia serrata</i>	Mean	59.0	46.7	23.1	12.3	23.6
	Stdev	2.02	1.30	0.17	0.72	1.46
<i>Leucopogon microphylla</i>	Mean	39.5	30.7	15.6	8.8	15.1
	Stdev	4.78	3.87	2.75	0.92	1.11

Table A3.8 Total phenols and Condensed Tannins concentrations for plants growing in Royal National Park

Plant species Bundeena Rd		Total Phenols (mg/ g fw)	Condensed Tannins (Abs _{550nm} /g)	Plant species Bola Ck		Total Phenols (mg/ g fw)	Condensed Tannins (Abs _{550nm} /g)
<i>Acacia suaveolens</i>	Mean N Std	96.2 4 6.8	8.2 4 1.4	<i>Acmena smithii</i>	Mean N Std	42.0 5 20.3	0.7 4 0.2
<i>Allocasuarina distyla</i>	Mean N Std	62.2 4 7.6	11.2 4 1.7	<i>Ceratopetalum apetalum</i>	Mean N Std	11.2 4 6.9	0.8 4 0.4
<i>Angophora hispida</i>	Mean N Std	124.9 4 10.6	2.3 4 0.6	<i>Citriobatus pauciflorus</i>	Mean N Std	29.1 4 5.2	1.7 4 0.8
<i>Banksia serrata</i>	Mean N Std	73.1 4 9.1	6.9 4 1.8	<i>Blechnum cartilagineum</i>	Mean N Std	50.6 4 5.5	11.0 4 1.8
<i>Caustis recurvata</i>	Mean N Std	62.0 4 9.1	8.6 4 2.2	<i>Diospyros australis</i>	Mean N Std	24.8 4 2.6	0.2 4 0.09
<i>Corymbia gummifera</i>	Mean N Std	125.9 4 15.9	3.1 4 0.8	<i>Doryphora sassafras</i>	Mean N Std	11.7 4 2.4	0.1 4 0.06
<i>Eucalyptus haemastoma</i>	Mean N Std	111.9 4 6.2		<i>Gymnostachys anceps</i>	Mean N Std	3.5 4 0.4	0.04 4 0.02
<i>Grevillea sphacelata</i>	Mean N Std	92.4 4 5.8	10.0 4 6.1	<i>Lomatia myricoides</i>	Mean N Std	51.9 4 8.3	2.8 4 0.9
<i>Hakea teretifolia</i>	Mean N Std	41.6 4 11.56	3.4 4 0.6	<i>Livistona australis</i>	Mean N Std	47.4 4 5.6	4.1 4 0.3
<i>Hemigenia purpurea</i>	Mean N Std	46.7 4 17.9	1.6 4 0.4	<i>Palmeria scandens</i>	Mean N Std	27.3 4 4.0	3.8 4 0.8
<i>Isopogon anethifolius</i>	Mean N Std	116.9 4 14.3	5.2 4 3.1	<i>Ripogonum album</i>	Mean N Std	19.6 4 2.6	1.4 4 0.3
<i>Leptospermum trinervium</i>	Mean N Std	106.2 4 33.6	2.1 4 0.5	<i>Syncarpia glomulifera</i>	Mean N Std	80.6 4 8.0	2.3 4 0.5
<i>Leucopogon microphylla</i>	Mean N Std	97.7 4 18.1	9.2 4 0.5	<i>Tasmannia insipida</i>	Mean N Std	29.9 4 6.2	2.1 4 0.4
<i>Patersonia glabrata</i>	Mean N Std	59.5 4 4.1		<i>Trochocarpa laurina</i>	Mean N Std	47.9 4 7.8	6.9 4 0.5
<i>Persoonia lanceolata</i>	Mean N Std	85.2 4 3.9	5.6 4 1.9	<i>Wilkiea huegelianna</i>	Mean N Std	8.4 4 0.7	0.3 4 0.1
<i>Platysace linearifolia</i>	Mean N Std	101.2 4 10.8	0.3 2 0.2				
<i>Pultenaea elliptica</i>	Mean N Std	76.4 4 13.3	8.9 4 2.6				

Table A3.9 Total phenols and Condensed Tannins concentrations for plants growing in Ku-ring-gai Chase National Park

Plant species Challenger Tk		Total Phenols (mg/ g fw)	Condensed Tannins (Abs _{550nm} /g)	Plant species Dyke		Total Phenols (mg/ g fw)	Condensed Tannins (Abs _{550nm} /g)
<i>Persoonia lanceolata</i>	Mean N Std	79.3 4 5.3	4.0 4 1.3	<i>Synoum glandulosum</i>	Mean N Std	46.9 4 7.23	2.1 4 0.7
<i>Pultenaea elliptica</i>	Mean N	63.8 4	9.9 4	<i>Citriobatus pauciflorus</i>	Mean N Std	56.5 4 8.5	0.4 4 0.2
<i>Leptospermum trinervium</i>	Mean N Std	90.6 4 19.9	2.3 4 0.4	<i>Syncarpia glomulifera</i>	Mean N Std	68.5 4 13.1	2.7 4 1.1
<i>Hakea teretifolia</i>	Mean N Std	39.8 4 7.0	3.2 4 1.0	<i>Pultenaea daphnoides</i>	Mean N Std	45.6 4 0.8	2.3 4 0.5
<i>Eucalyptus haemastoma</i>	Mean N Std	105.3 4 21.0	2.7 4 0.4	<i>Pultenaea flexilis</i>	Mean N Std	40.8 4 8.8	3.6 4 2.4
<i>Angophora hispida</i>	Mean N Std	101.2 4 11.0	2.7 4 0.3	<i>Livistona australis</i>	Mean N Std	62.8 4 18.8	2.5 4 1.0
<i>Banksia serrata</i>	Mean N Std	57.2 4 16.7	7.7 4 1.0	<i>Hibbertia dentata</i>	Mean N Std	28.9 4 9.6	1.3 4 0.7
<i>Grevillea buxifolia</i>	Mean N Std	89.9 4 7.12	11.2 4 1.2	<i>Pomaderris ferruginea</i>	Mean N Std	48.9 4 14.7	5.9 4 0.6
<i>Acacia suaveolens</i>	Mean N Std	111.5 4 28.3	6.2 4 1.8	<i>Breynia oblongifolia</i>	Mean N Std	115.5 4 1.66	5.8 4 1.2
<i>Hemigenia purpurea</i>	Mean N Std	50.8 4 16.4	0.6 4 0.1	<i>Macrozamia communis</i>	Mean N Std	86.7 4 5.4	13.2 4 1.8
<i>Platysace linearifolia</i>	Mean N Std	90.7 4 8.0	0.5 4 0.2	<i>Pteridium esculentum</i>	Mean N Std	80.0 4 4.0	4.4 4 2.1
<i>Leucopogon microphylla</i>	Mean N Std	116.8 4 15.3	12.9 4 0.4	<i>Lepidosperma laterale</i>	Mean N Std	38.3 4 2.3	2.5 4 0.7
<i>Hibbertia monogyna</i>	Mean N Std	144.4 4 16.9	11.1 4 1.3	<i>Acacia floribunda</i>	Mean N Std	58.6 4 13.4	4.3 4 2.0
<i>Patersonia glabrata</i>	Mean N Std	57.5 4 4.4	6.2 4 0.7	<i>Cissus hypoglauca</i>	Mean N Std	37.5 4 10.0	1.6 4 0.8
<i>Corymbia gummifera</i>	Mean N Std	148.9 4 13.27	5.715 4 1.524	<i>Allocasuarina torulosa</i>	Mean N Std	54.2 4 18.1	4.974 4 1.871
<i>Isopogon anethifolius</i>	Mean N Std	105.2 4 14.3					

Table A3.10

Presence/ absence of nitrogen based chemical defences in 45 plant species found in Ku-ring-gai Chase National Park and Royal NP

Plant species	Family	Plant type	Alkaloids (Dragondorff's/Mayer's)	Cyanogenic glycosides
<i>Blechnum cartilagineum</i>	Blechnaceae	Mesic	-ve / -ve	-ve
<i>Pteridium esculentum</i>	Dennstaedtiaceae	Mesic	-ve / -ve	-ve
<i>Gymnostachys anceps</i>	Araceae	Mesic	-ve / -ve	+ve
<i>Citriobatus pauciflorus</i>	Pittosporaceae	Mesic	-ve / -ve	-ve
<i>Doryphora sassafras</i>	Atherospermataceae	Mesic	+ve / +ve	-ve
<i>Acmena smithii</i>	Myrtaceae	Mesic	-ve / -ve	-ve
<i>Syncarpia glomulifera</i>	Myrtaceae	Mesic	-ve / -ve	-ve
<i>Diospyros australis</i>	Ebenaceae	Mesic	-ve / -ve	-ve
<i>Trochocarpa laurina</i>	Epacridaceae	Mesic	-ve / -ve	-ve
<i>Ceratopetalum apetalum</i>	Cunoniaceae	Mesic	-ve / -ve	-ve
<i>Tasmannia insipida</i>	Winteraceae	Mesic	-ve / -ve	+ve
<i>Livistona australis</i>	Arecaceae	Mesic	-ve / -ve	-ve
<i>Wilkiea huegelianna</i>	Monimiaceae	Mesic	-ve / -ve	-ve
<i>Ripogonum album</i>	Smilacaceae	Mesic	-ve / -ve	-ve
<i>Palmeria scandens</i>	Monimiaceae	Mesic	-ve / -ve	+ve
<i>Lomatia myricoides</i>	Proteaceae	Mesic	-ve / -ve	-ve
<i>Acacia floribunda</i>	Mimosaceae	Mesic	+ve / +ve	-ve
<i>Synoum glandulosum</i>	Meliaceae	Mesic	-ve / -ve	-ve
<i>Allocasuarina torulosa</i>	Casuarinaceae	Mesic	-ve / -ve	-ve
<i>Pultenaea flexilis</i>	Fabaceae	Mesic	-ve / -ve	-ve
<i>Pultenaea daphnoides</i>	Fabaceae	Mesic	-ve / -ve	-ve
<i>Breynia oblongifolia</i>	Euphorbia	Mesic	-ve / -ve	-ve
<i>Pomaderris ferruginea</i>	Rhamnaceae	Mesic	-ve / -ve	-ve
<i>Macrozamia communis</i>	Zamiaceae	Mesic	-ve / -ve	-ve
<i>Cissus hypoglauca</i>	Vitaceae	Mesic	-ve / -ve	-ve
<i>Hibbertia dentate</i>	Dilleniaceae	Mesic	-ve / -ve	-ve
<i>Lepidosperma laterale</i>	Cyperaceae	Mesic	-ve / -ve	-ve
<i>Platysace linearifolia</i>	Apiaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Hemigenia purpurea</i>	Lamiaceae	Dry sclerophyll	-ve / -ve	+ve
<i>Leucopogon microphylla</i>	Epacridaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Caustis recurvata</i>	Cyperaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Corymbia gummifera</i>	Myrtaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Eucalyptus haemastoma</i>	Myrtaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Angophora hispida</i>	Myrtaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Leptospermum trinervium</i>	Myrtaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Pultenaea elliptica</i>	Fabaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Hakea teretifolia</i>	Proteaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Persoonia lanceolata</i>	Proteaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Banksia serrata</i>	Proteaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Grevillea buxifolia</i>	Proteaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Patersonia glabrata</i>	Iridaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Hibbertia monogyna</i>	Dilleniaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Acacia suaveolens</i>	Mimosaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Allocasuarina distyla</i>	Casuarinaceae	Dry sclerophyll	-ve / -ve	-ve
<i>Isopogon anethifolius</i>	Proteaceae	Dry sclerophyll	-ve / -ve	-ve