

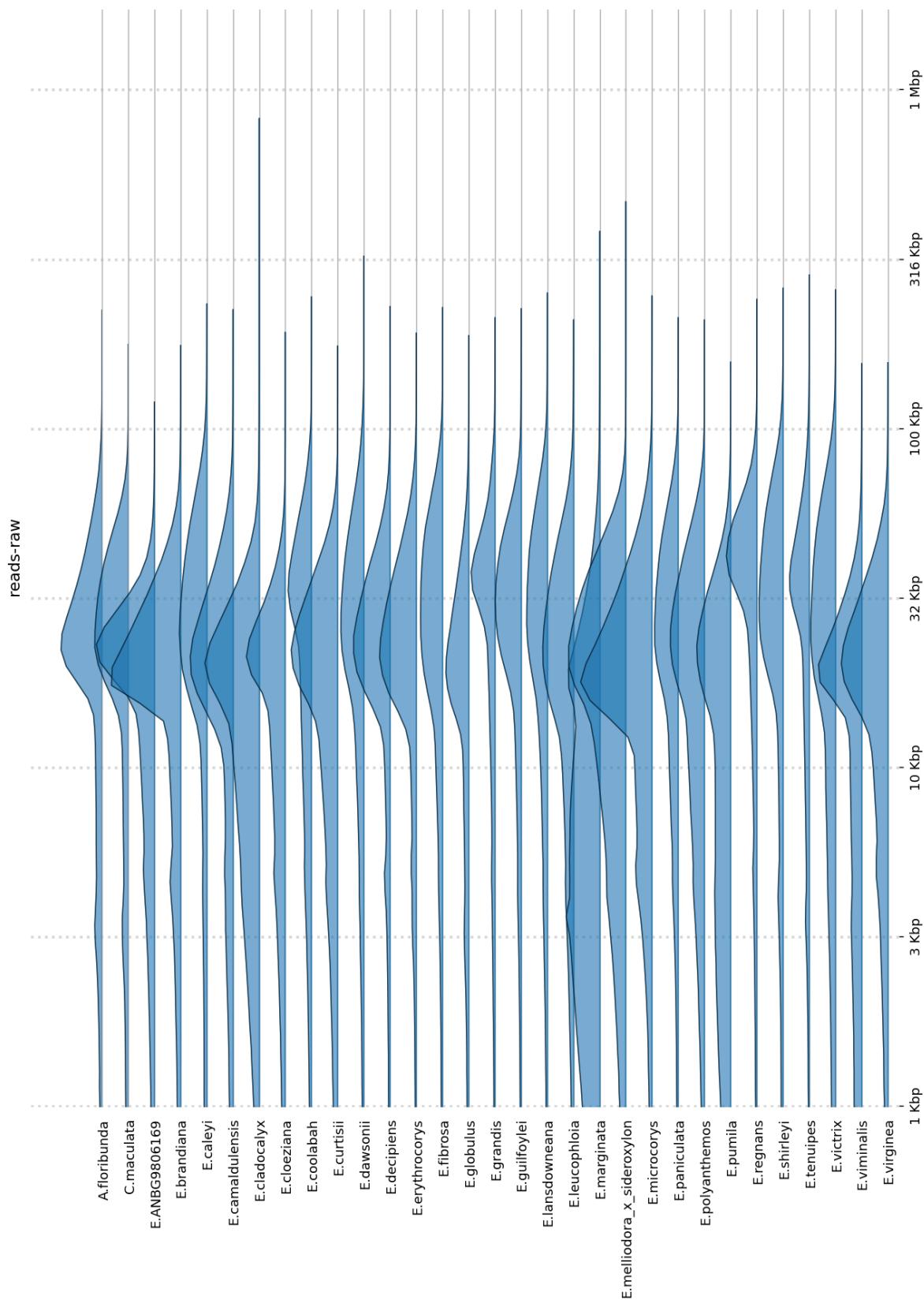
Supplementary Figures and Tables

Species	DNA extraction method	Size selection (kbp)	Actual Coverage	N50 (kbp)	Number of reads	Total size (Mbp)	Longest read (kbp)
<i>A. floribunda</i>	Nuclei	20	68.5	30,913	1,165,378	26,218.73	234.42
<i>C. maculata</i>	Nuclei	20	62.0	32,785	1,068,357	24,727.52	186.19
<i>E. brandiana</i>	Nuclei	20	59.0	25,064	1,572,473	29,661.57	185.11
<i>E. caleyi</i>	Sorbitol	20	44.2	38,986	981,871	25,568.27	245.74
<i>E. camaldulensis</i>	Nuclei	20	43.1	26,925	1,246,437	23,709.64	236.32
<i>E. cladocalyx</i>	Nuclei	20	44.3	22,608	1,603,737	23,813.99	871.14
<i>E. cloeziana</i>	Nuclei	20	35.8	23,441	1,106,171	16,977.71	202.46
<i>E. coolabah</i>	Nuclei	40	33.5	38,840	843,066	19,942.69	258.17
<i>E. curtisii</i>	Nuclei	20	61.2	26,200	1,482,403	26,364.96	184.51
<i>E. dawsonii</i>	Sorbitol	20	31.4	39,210	833,846	21,893.54	340.53
<i>E. decipiens</i>	Nuclei	20	36.9	29,788	937,250	21,488.84	241.66
<i>E. erythrocorys</i>	Nuclei	20	43.4	30,515	994,422	23,167.70	201.42
<i>E. fibrosa</i>	Sorbitol	20	39.1	40,269	808,634	22,664.55	239.76
<i>E. globulus</i>	Nuclei	20	27.5	26,580	789,684	14,775.47	196.77
<i>E. grandis</i>	Nuclei	40	26.6	40,622	566,332	16,120.84	223.69
<i>E. guilfoylei</i>	Sorbitol	20	44.9	37,750	748,484	21,030.20	238.04
<i>E. lansdowneana</i>	Sorbitol	20	33.5	40,454	766,963	20,885.35	264.89
<i>E. leucophloia</i>	Nuclei	20	42.3	31,376	1,112,561	23,719.81	220.51
<i>E. marginata</i>	Nuclei	20	37.6	19,330	2,030,612	18,996.49	403.50
<i>E. melliodora x E. sideroxylon</i>	Sorbitol	20	63.5	28,218	2,096,002	38,010.87	493.59
<i>E. microcorys</i>	Nuclei	20	83.8	26,233	1,891,415	36,501.91	259.59
<i>E. ANBG9806169</i>	Nuclei	20	45.0	23,768	1,361,586	22,622.88	125.92
<i>E. paniculata</i>	Sorbitol	20	37.5	36,669	878,971	21,750.73	223.73
<i>E. pauciflora</i>	NA	NA	72.3	26.93	2,583,680	35,691.93	537.11
<i>E. polyanthemos</i>	Sorbitol	20	43.8	30,700	1,317,377	26,018.59	220.24
<i>E. pumila</i>	Nuclei	20	40.7	25,051	1,632,628	21,358.64	165.40
<i>E. regnans</i>	Sorbitol	40	47.9	46,297	718,316	23,254.44	253.70
<i>E. shirleyi</i>	Sorbitol	20	44.3	44,993	862,028	26,095.39	273.96
<i>E. tenuipes</i>	Nuclei	40	48.7	41,950	663,327	19,070.76	296.92
<i>E. victrix</i>	Sorbitol	20	50.6	41,561	1,149,096	27,764.76	270.78
<i>E. viminalis</i>	Nuclei	20	32.0	22,308	1,535,956	17,640.60	163.61
<i>E. virginica</i>	Nuclei	20	47.7	25,319	1,406,739	25,089.92	164.74

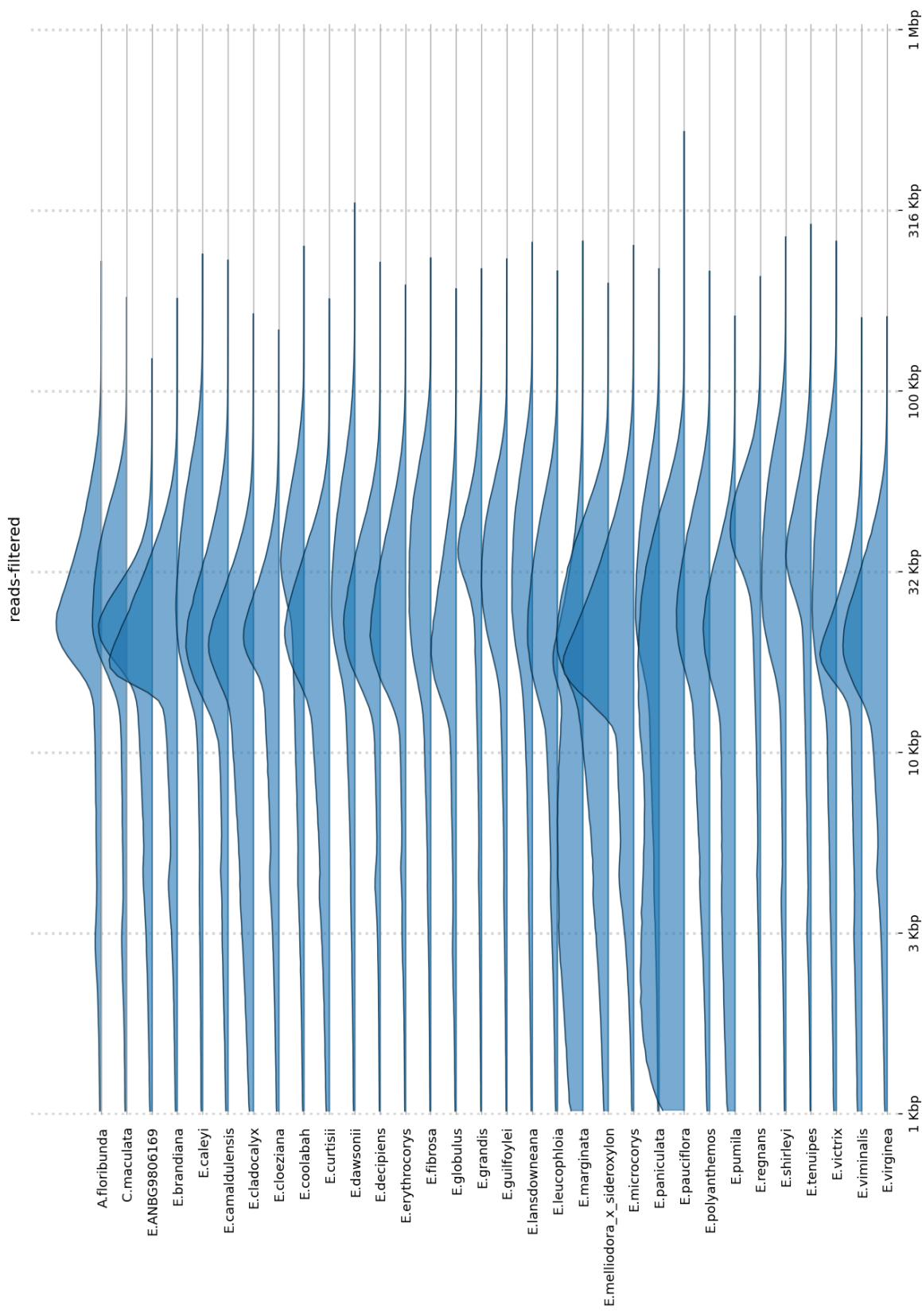
Supplementary Table S1. Raw read library statistics. Actual coverage is calculated after assembly from the final genome size.

Species	Coverage	Coverage lost	N50 (kbp)	Number of reads	Total size (Mbp)	Longest read (kbp)
<i>A. floribunda</i>	62.9	5.6	30,973	961,453	24,080.30	234.02
<i>C. maculata</i>	58.0	4	32,784	902,490	23,154.27	185.79
<i>E. brandiana</i>	54.7	4.3	24,964	1,318,778	27,465.22	184.71
<i>E. caleyi</i>	41.1	3.1	39,257	797,371	23,780.80	245.34
<i>E. camaldulensis</i>	39.8	3.3	26,890	1,036,444	21,912.23	235.92
<i>E. cladocalyx</i>	40.3	4	22,553	1,357,574	21,658.32	167.28
<i>E. cloeziana</i>	32.4	3.4	23,421	891,520	15,359.12	150.84
<i>E. coolabah</i>	31.1	2.4	39,047	696,864	18,498.71	257.77
<i>E. curtisii</i>	56.8	4.4	26,212	1,260,701	24,482.11	184.11
<i>E. dawsonii</i>	29.1	2.3	39,530	705,446	20,309.35	340.13
<i>E. decipiens</i>	34.8	2.1	29,702	818,918	20,220.97	232.70
<i>E. erythrocorys</i>	40.1	3.3	30,501	854,347	21,394.22	201.02
<i>E. fibrosa</i>	36.7	2.4	40,481	710,154	21,285.37	239.36
<i>E. globulus</i>	24.7	2.8	26,783	625,059	13,252.63	196.37
<i>E. grandis</i>	24.7	1.9	40,618	478,371	14,946.13	223.29
<i>E. guilfoylei</i>	41.8	3.1	37,759	663,545	19,576.72	237.64
<i>E. lansdowneana</i>	31.1	2.4	40,677	662,726	19,393.64	264.49
<i>E. leucophloia</i>	39.4	2.9	31,506	966,679	22,088.48	220.11
<i>E. marginata</i>	32.6	5	19,997	1,441,634	16,472.64	266.42
<i>E. melliodora x E. sideroxylon</i>	58.3	5.2	28,356	1,760,405	34,919.15	203.52
<i>E. microcorys</i>	78.0	5.8	26,255	1,628,396	33,963.49	259.19
<i>E. ANBG9806169</i>	41.3	3.7	23,609	1,134,657	20,769.73	125.52
<i>E. paniculata</i>	35.3	2.2	36,846	769,367	20,476.85	223.33
<i>E. pauciflora</i>	73.3	0	26,926	2,583,680	35,691.93	537.11
<i>E. polyanthemos</i>	40.4	3.4	30,888	1,121,971	24,048.44	219.84
<i>E. pumila</i>	36.8	3.9	25,254	1,217,779	19,269.00	165.00
<i>E. regnans</i>	45.6	2.3	46,254	611,946	22,142.04	212.45
<i>E. shirleyi</i>	41.7	2.6	45,127	740,464	24,593.44	273.56
<i>E. tenuipes</i>	46.0	2.7	41,997	574,526	18,007.59	296.52
<i>E. victrix</i>	46.9	3.7	42,005	923,073	25,731.32	266.30
<i>E. viminalis</i>	28.8	3.2	22,386	955,619	15,865.49	163.21
<i>E. virginica</i>	44.4	3.3	25,299	1,196,234	23,361.01	164.34

Supplementary Table S2. Filtered read library statistics. Statistics describing read libraries after trimming, length filtering, and quality filtering. Note: *E. pauciflora* reads were filtered and trimmed before being randomly down sampled, hence no loss of sequence.



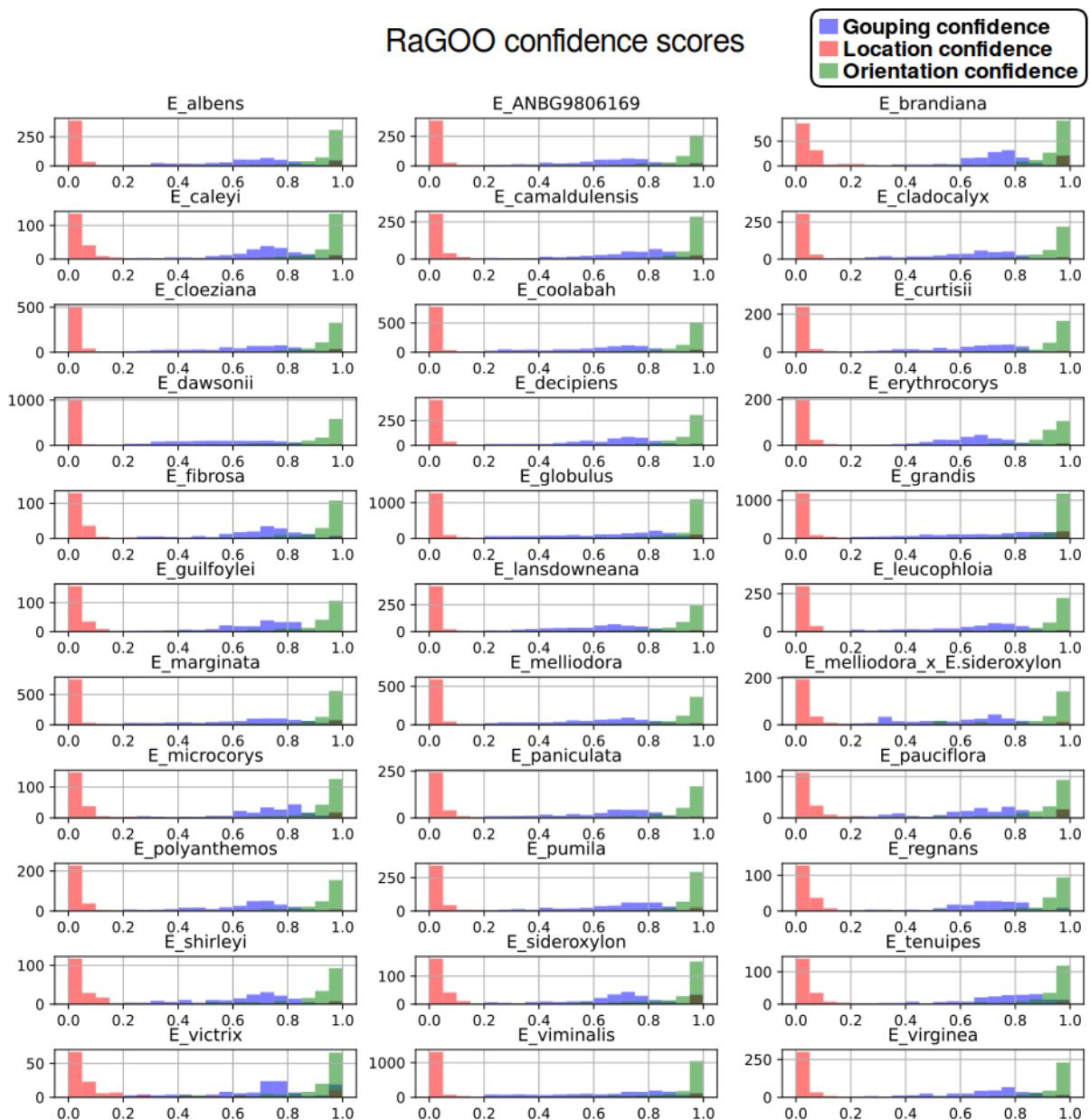
Supplementary Figures S1. Distribution of read lengths of raw read libraries



Supplementary Figures S2. Distribution of read lengths of read libraries after trimming, length filtering, and quality filtering.

Species	Contamination	Haplotigs		Assembly artifacts	
		Total Size (kbp)	Total Size (Mbp)	% of Genome	Total Size (Mbp)
<i>A. floribunda</i>	None	253.37	36.74%	53.73	7.79%
<i>C. maculata</i>	None	265.09	36.74%	57.48	7.97%
<i>E. brandiana</i>	161.18	38.62	7.01%	10.05	1.82%
<i>E. caleyi</i>	3,448.47	458.40	42.15%	46.71	4.29%
<i>E. camaldulensis</i>	None	394.82	39.70%	49.34	4.96%
<i>E. cladocalyx</i>	33.10	383.48	41.54%	1.86	0.20%
<i>E. cloeziana</i>	None	188.67	27.07%	33.94	4.87%
<i>E. coolabah</i>	None	381.48	38.25%	21.07	2.11%
<i>E. curtisii</i>	None	234.46	35.06%	3.51	0.53%
<i>E. dawsonii</i>	18,227.31	426.59	37.01%	9.88	0.86%
<i>E. decipiens</i>	40.93	384.89	37.82%	51.03	5.02%
<i>E. erythrocorys</i>	None	115.73	16.78%	40.38	5.86%
<i>E. fibrosa</i>	1.38	553.42	48.66%	3.49	0.31%
<i>E. globulus</i>	None	228.73	29.17%	18.52	2.36%
<i>E. grandis</i>	None	280.46	30.84%	23.47	2.58%
<i>E. guilfoylei</i>	None	93.14	16.44%	4.66	0.82%
<i>E. lansdowneana</i>	7.00	463.32	42.41%	5.02	0.46%
<i>E. leucophloia</i>	241.53	446.00	44.08%	4.61	0.46%
<i>E. marginata</i>	34.66	290.90	35.09%	32.13	3.88%
<i>E. melliodora x E. sideroxylon</i>	133.04	507.89	45.74%	3.94	0.36%
<i>E. microcorys</i>	133.10	228.43	30.66%	81.15	10.89%
<i>E. ANBG9806169</i>	None	231.78	30.09%	36.05	4.68%
<i>E. paniculata</i>	249.95	501.04	46.14%	4.47	0.41%
<i>E. pauciflora</i>	107.77	441.32	47.36%	3.62	0.39%
<i>E. polyanthemos</i>	None	552.62	48.03%	3.35	0.29%
<i>E. pumila</i>	42.45	272.67	34.07%	3.18	0.40%
<i>E. regnans</i>	267.24	370.84	40.60%	56.32	6.17%
<i>E. shirleyi</i>	None	442.43	42.74%	3.67	0.35%
<i>E. tenuipes</i>	None	204.32	31.75%	47.28	7.35%
<i>E. victrix</i>	None	482.44	46.63%	3.68	0.36%
<i>E. viminalis</i>	43.43	296.85	34.18%	20.42	2.35%
<i>E. virginaea</i>	None	281.01	32.69%	52.26	6.08%
Average	724.14	334.23	36.15%	24.70	3.04%

Supplementary Table S3. Amount and proportion of sequence removed from genomes during contamination filtering, haplotype purging, and artifact filtering.



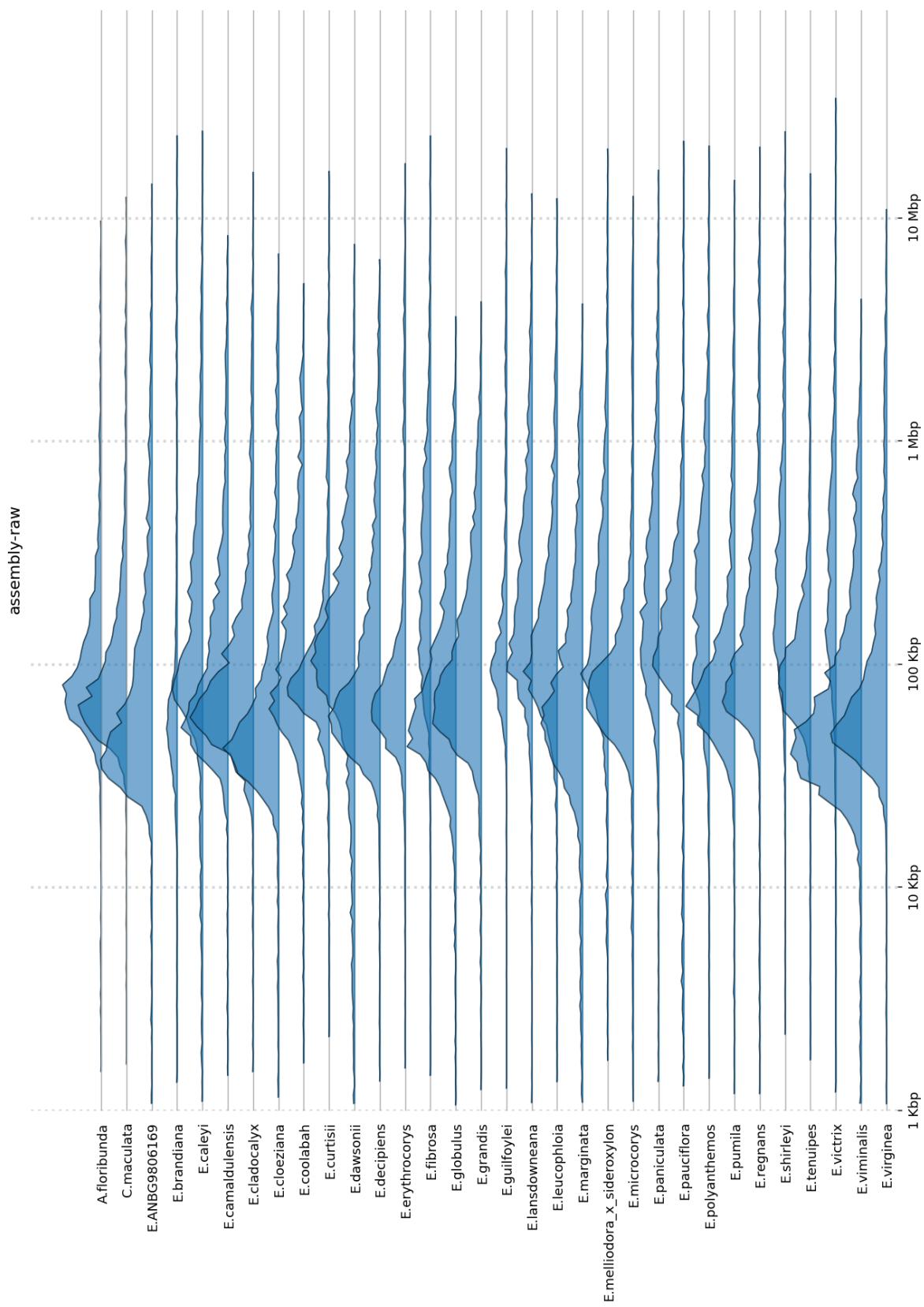
Supplementary Figure S3. Confidence scores reported by RaGOO during scaffolding of genomes. Grouping confidence = assigning contigs to a chromosome; location confidence = ordering contigs relative to each other along the scaffold; orientation confidence = orienting contigs within scaffolds.

species	Complete (single-copy + duplicated)	single-copy	duplicated	fragmented	missing	LAI
<i>A. floribunda</i>	96.82%	92.78%	4.04%	1.33%	1.85%	14.5
<i>C. maculata</i>	97.25%	94.93%	2.32%	1.12%	1.63%	15.92
<i>E. brandiana</i>	98.11%	95.06%	3.05%	1.03%	0.86%	23.85
<i>E. caleyi</i>	96.47%	90.80%	5.67%	1.59%	1.93%	18.24
<i>E. camaldulensis</i>	96.73%	92.09%	4.64%	1.33%	1.93%	16.99
<i>E. cladocalyx</i>	97.59%	93.29%	4.30%	1.12%	1.29%	18.53
<i>E. cloeziana</i>	97.12%	93.55%	3.57%	1.59%	1.29%	19.06
<i>E. coolabah</i>	95.44%	88.52%	6.92%	2.15%	2.41%	15.9
<i>E. curtisii</i>	97.29%	93.21%	4.08%	1.42%	1.29%	18.34
<i>E. dawsonii</i>	97.51%	83.10%	14.40%	0.95%	1.55%	17.01
<i>E. decipiens</i>	96.99%	91.49%	5.50%	1.33%	1.68%	18.87
<i>E. erythrocorys</i>	97.55%	94.41%	3.14%	0.95%	1.50%	20.18
<i>E. fibrosa</i>	96.73%	87.96%	8.77%	1.63%	1.63%	17.49
<i>E. globulus</i>	96.69%	91.87%	4.82%	1.25%	2.06%	17.46
<i>E. grandis</i>	96.09%	90.11%	5.98%	1.59%	2.32%	17.11
<i>E. guilfoylei</i>	98.02%	94.84%	3.18%	0.90%	1.07%	16.39
<i>E. lansdowneana</i>	97.12%	86.76%	10.36%	1.12%	1.76%	19.46
<i>E. leucophloia</i>	96.99%	90.58%	6.41%	1.29%	1.72%	17.91
<i>E. marginata</i>	96.17%	90.93%	5.25%	1.72%	2.11%	19.58
<i>E. melliodora x E. sideroxylon</i>	97.72%	91.70%	6.02%	1.03%	1.25%	17.96
<i>E. microcorys</i>	97.21%	93.90%	3.31%	1.25%	1.55%	16.2
<i>E. ANBG9806169</i>	96.86%	93.29%	3.57%	1.29%	1.85%	22.16
<i>E. paniculata</i>	97.12%	90.58%	6.53%	1.20%	1.68%	18.58
<i>E. pauciflora</i>	97.25%	93.29%	3.96%	1.25%	1.50%	20.29
<i>E. polyanthemos</i>	96.82%	89.85%	6.96%	1.55%	1.63%	17.52
<i>E. pumila</i>	97.38%	93.29%	4.08%	1.42%	1.20%	17.74
<i>E. regnans</i>	97.25%	93.47%	3.78%	1.25%	1.50%	20.18
<i>E. shirleyi</i>	97.29%	88.99%	8.30%	1.16%	1.55%	19.89
<i>E. tenuipes</i>	96.39%	92.56%	3.83%	1.81%	1.81%	15.07
<i>E. victrix</i>	96.65%	91.32%	5.33%	1.46%	1.89%	18.71
<i>E. viminalis</i>	96.47%	91.83%	4.64%	1.29%	2.24%	16.5
<i>E. virginea</i>	97.08%	92.30%	4.77%	1.16%	1.76%	17.69

Supplementary Table S4. BUSCO and LAI scores for all genomes.

	N50 (kbp)	Number of contigs	Size (Mbp)	Longest contig (Mbp)
<i>A. floribunda</i>	1,139.19	2,857	689.71	10.21
<i>C. maculata</i>	1,540.02	3,174	721.55	12.94
<i>E. brandiana</i>	6,578.56	802	551.18	24.53
<i>E. caleyi</i>	1,805.12	2,810	1,087.60	25.88
<i>E. camaldulensis</i>	939.69	4,219	994.59	8.75
<i>E. cladocalyx</i>	953.07	4,591	923.15	16.82
<i>E. cloeziana</i>	855.51	4,172	697.06	7.22
<i>E. coolabah</i>	552.28	4,066	997.21	5.38
<i>E. curtisii</i>	1,332.99	2,628	668.67	16.95
<i>E. dawsonii</i>	474.20	4,951	1,152.64	8.02
<i>E. decipiens</i>	747.03	4,718	1,017.59	6.82
<i>E. erythrocorys</i>	2,931.08	2,208	689.47	18.40
<i>E. fibrosa</i>	1,730.72	1,790	1,137.28	24.72
<i>E. globulus</i>	317.08	5,378	784.04	3.78
<i>E. grandis</i>	321.42	5,311	909.45	4.43
<i>E. guilfoylei</i>	3,303.65	1,041	566.64	21.44
<i>E. lansdowneana</i>	1,031.71	2,572	1,092.36	13.56
<i>E. leucophloia</i>	1,038.45	3,108	1,011.89	12.88
<i>E. marginata</i>	458.19	5,121	828.93	4.33
<i>E. melliodora x E. sideroxylon</i>	1,719.77	2,555	1,110.47	21.42
<i>E. microcorys</i>	1,549.62	3,462	745.17	13.19
<i>E. ANBG9806169</i>	1,006.91	4,115	770.36	14.88
<i>E. paniculata</i>	1,259.10	2,337	1,085.95	17.29
<i>E. pauciflora</i>	1,379.37	2,654	931.94	23.39
<i>E. polyanthemos</i>	1,287.56	2,369	1,150.67	22.17
<i>E. pumila</i>	1,064.83	3,313	800.22	15.45
<i>E. regnans</i>	1,571.93	2,834	913.33	22.03
<i>E. shirleyi</i>	2,635.00	1,462	1,035.28	25.64
<i>E. tenuipes</i>	1,548.79	2,406	643.48	16.67
<i>E. victrix</i>	3,210.46	1,298	1,034.58	36.56
<i>E. viminalis</i>	289.36	7,315	868.55	4.50
<i>E. virginea</i>	1,222.18	3,963	859.54	11.49

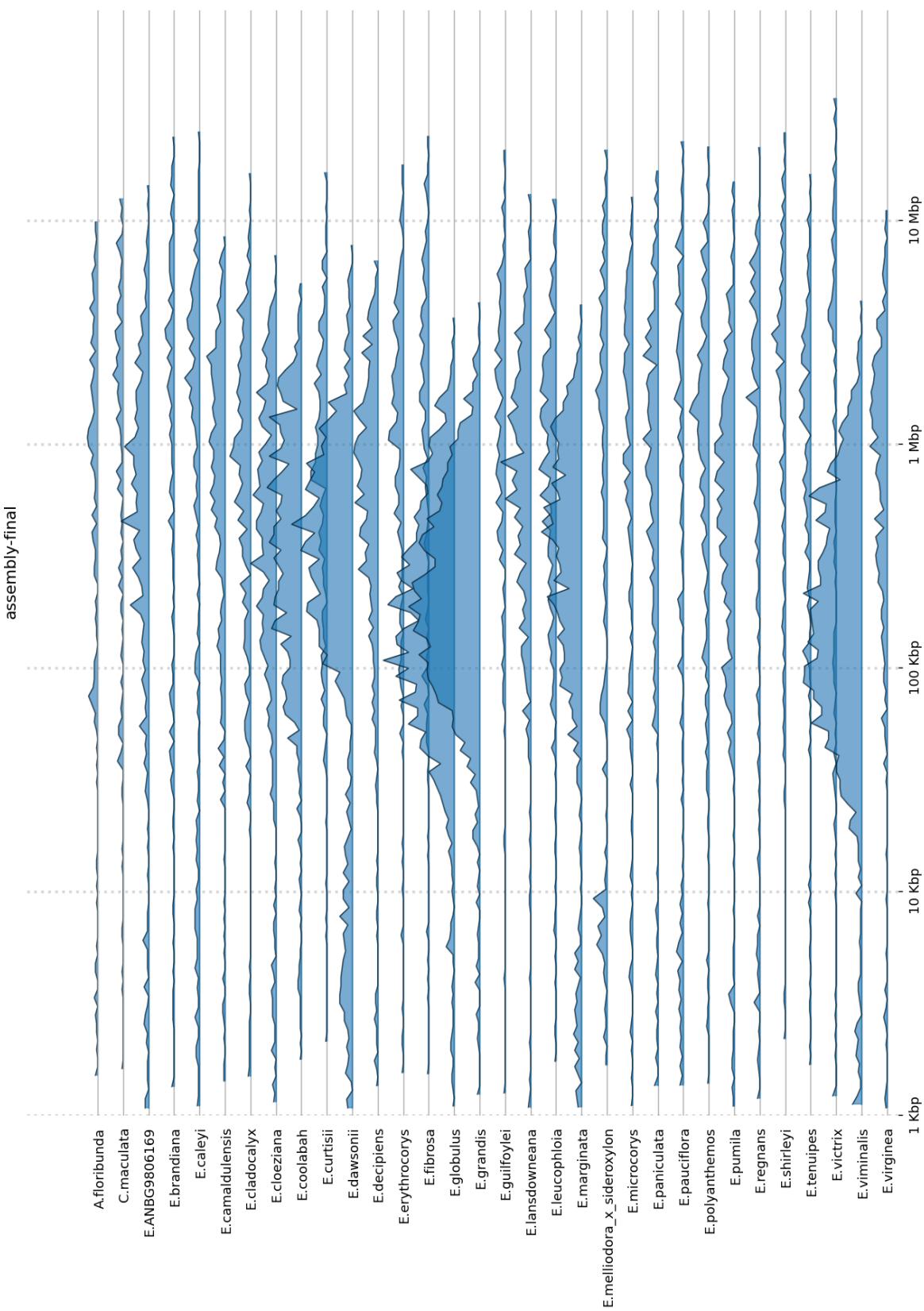
Supplementary Table S5. Raw genome statistics. Genomes have not been curated in any way.



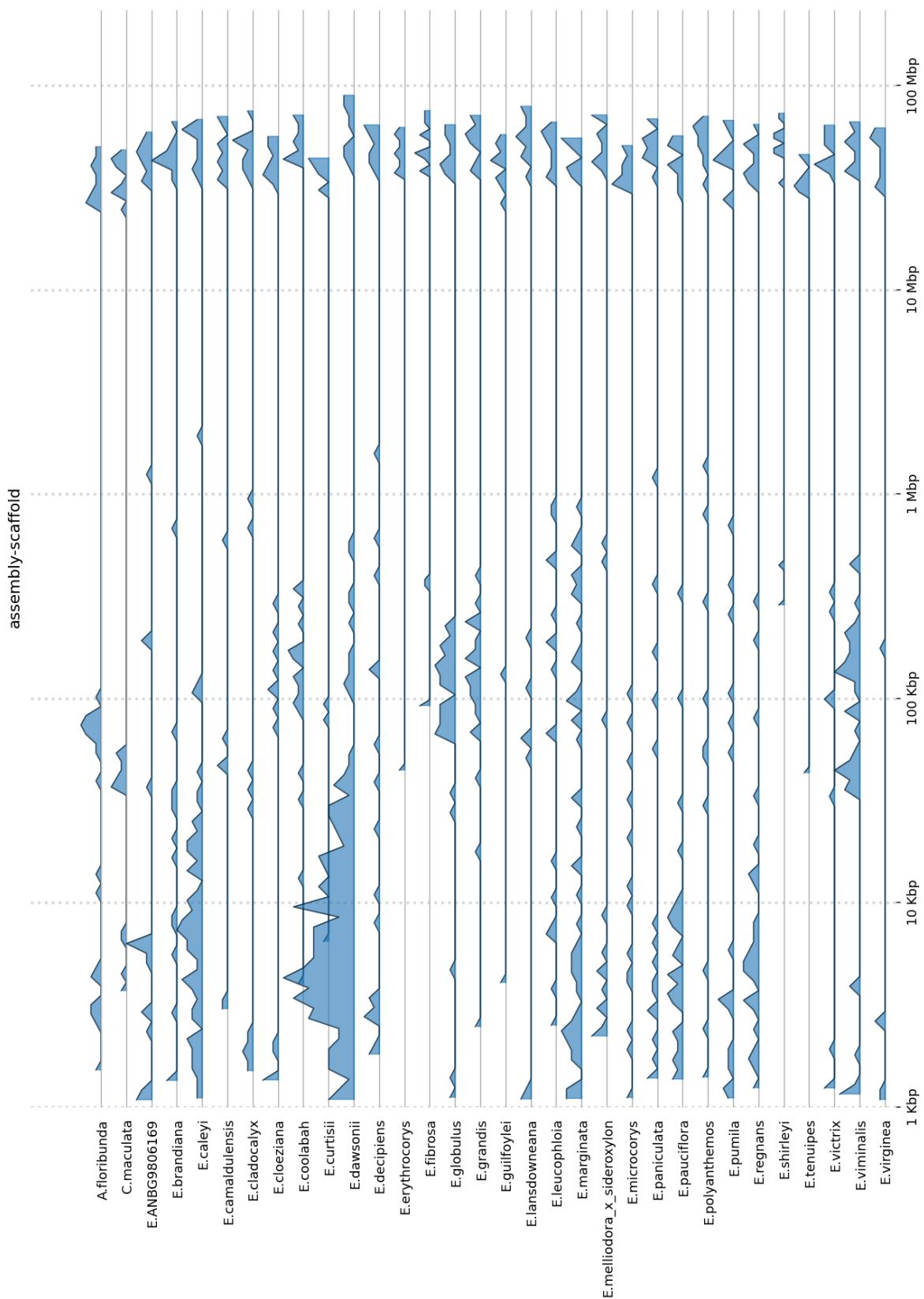
Supplementary Figure S4. Raw genome contig distributions. Genomes have not been curated in any way.

	N50 (kbp)	Number of contigs	Size (Mbp)	Longest contig (Mbp)
<i>A. floribunda</i>	4,011.83	225	388.67	10.21
<i>C. maculata</i>	4,690.14	176	404.38	12.94
<i>E. brandiana</i>	7,278.40	170	507.20	24.53
<i>E. caleyi</i>	4,769.92	276	589.30	25.88
<i>E. camaldulensis</i>	2,481.60	420	558.53	8.75
<i>E. cladocalyx</i>	2,796.55	390	544.04	16.82
<i>E. cloeziana</i>	1,739.94	626	480.25	7.22
<i>E. coolabah</i>	1,289.21	937	606.36	5.38
<i>E. curtisii</i>	2,961.00	288	435.23	16.95
<i>E. dawsonii</i>	985.62	1,343	706.79	8.02
<i>E. decipiens</i>	1,985.74	553	590.96	6.82
<i>E. erythrocorys</i>	4,024.36	253	539.36	18.40
<i>E. fibrosa</i>	6,447.41	192	589.89	24.72
<i>E. globulus</i>	636.15	1,750	545.00	3.78
<i>E. grandis</i>	613.64	1,749	616.23	4.43
<i>E. guilfoylei</i>	4,251.44	209	472.34	21.44
<i>E. lansdowneana</i>	2,352.90	489	633.47	13.56
<i>E. leucophloia</i>	2,659.36	382	568.44	12.88
<i>E. marginata</i>	1,011.74	991	513.33	4.33
<i>E. melliodora x E. sideroxylon</i>	6,217.05	282	603.80	21.42
<i>E. microcorys</i>	4,004.79	234	440.96	13.19
<i>E. ANBG9806169</i>	2,396.19	477	507.94	14.88
<i>E. paniculata</i>	3,699.06	330	588.82	17.29
<i>E. pauciflora</i>	6,583.95	216	494.01	23.39
<i>E. polyanthemos</i>	4,657.75	300	603.25	22.17
<i>E. pumila</i>	2,492.89	473	529.71	15.45
<i>E. regnans</i>	5,259.26	206	495.05	22.03
<i>E. shirleyi</i>	6,912.49	181	597.16	25.64
<i>E. tenuipes</i>	3,433.87	211	398.08	16.67
<i>E. victrix</i>	11,095.62	120	557.15	36.56
<i>E. viminalis</i>	652.95	1,759	558.84	4.50
<i>E. virginea</i>	2,391.64	379	532.97	11.49

Supplementary Table S6. Final genome statistics. Genomes have been fully curated, i.e. all contaminate, haplotig, plastid, and artifact contigs have been removed. Genomes have also been polished.



Supplementary Figure S5. Final genome contig distributions. Genomes have been fully curated, i.e. all contaminant, haplotig, plastid, and artifact contigs have been removed. Genomes have also been polished.



Supplementary Figure S6. Scaffolded genome contig distributions.

	Proportion of TE	Proportion of simple repeats	Total repeat proportion
<i>A. floribunda</i>	34.55%	1.26%	35.81%
<i>C. calophylla</i>	34.79%	1.14%	35.93%
<i>E. brandiana</i>	44.21%	1.24%	45.45%
<i>E. caleyi</i>	46.00%	1.19%	47.19%
<i>E. camaldulensis</i>	45.31%	1.25%	46.56%
<i>E. cladocalyx</i>	45.85%	1.28%	47.13%
<i>E. cloeziana</i>	42.57%	1.25%	43.82%
<i>E. coolabah</i>	45.89%	1.27%	47.16%
<i>E. curtisii</i>	41.66%	1.31%	42.97%
<i>E. dawsonii</i>	45.88%	1.17%	47.05%
<i>E. decipiens</i>	46.95%	1.19%	48.14%
<i>E. erythrocorys</i>	47.07%	1.30%	48.37%
<i>E. fibrosa</i>	45.10%	1.22%	46.32%
<i>E. globulus</i>	44.29%	1.23%	45.52%
<i>E. grandis</i>	46.53%	1.17%	47.70%
<i>E. guilfoylei</i>	41.22%	1.20%	42.42%
<i>E. lansdowneana</i>	46.10%	1.27%	47.37%
<i>E. leucophloia</i>	44.37%	1.28%	45.65%
<i>E. marginata</i>	43.43%	1.21%	44.64%
<i>E. melliodora x E. sideroxylon</i>	46.71%	1.19%	47.90%
<i>E. microcorys</i>	41.39%	1.31%	42.70%
<i>E. ANBG9806169</i>	44.00%	1.21%	45.21%
<i>E. paniculata</i>	44.92%	1.32%	46.24%
<i>E. pauciflora</i>	43.10%	1.23%	44.33%
<i>E. polyanthemos</i>	45.55%	1.23%	46.78%
<i>E. pumila</i>	44.17%	1.28%	45.45%
<i>E. regnans</i>	43.06%	1.20%	44.26%
<i>E. shirleyi</i>	45.85%	1.25%	47.10%
<i>E. tenuipes</i>	37.82%	1.34%	39.16%
<i>E. victrix</i>	44.34%	1.39%	45.73%
<i>E. viminalis</i>	44.57%	1.19%	45.76%
<i>E. virginea</i>	43.78%	1.29%	45.07%

Supplementary Table S7. Repeat content of all genomes.

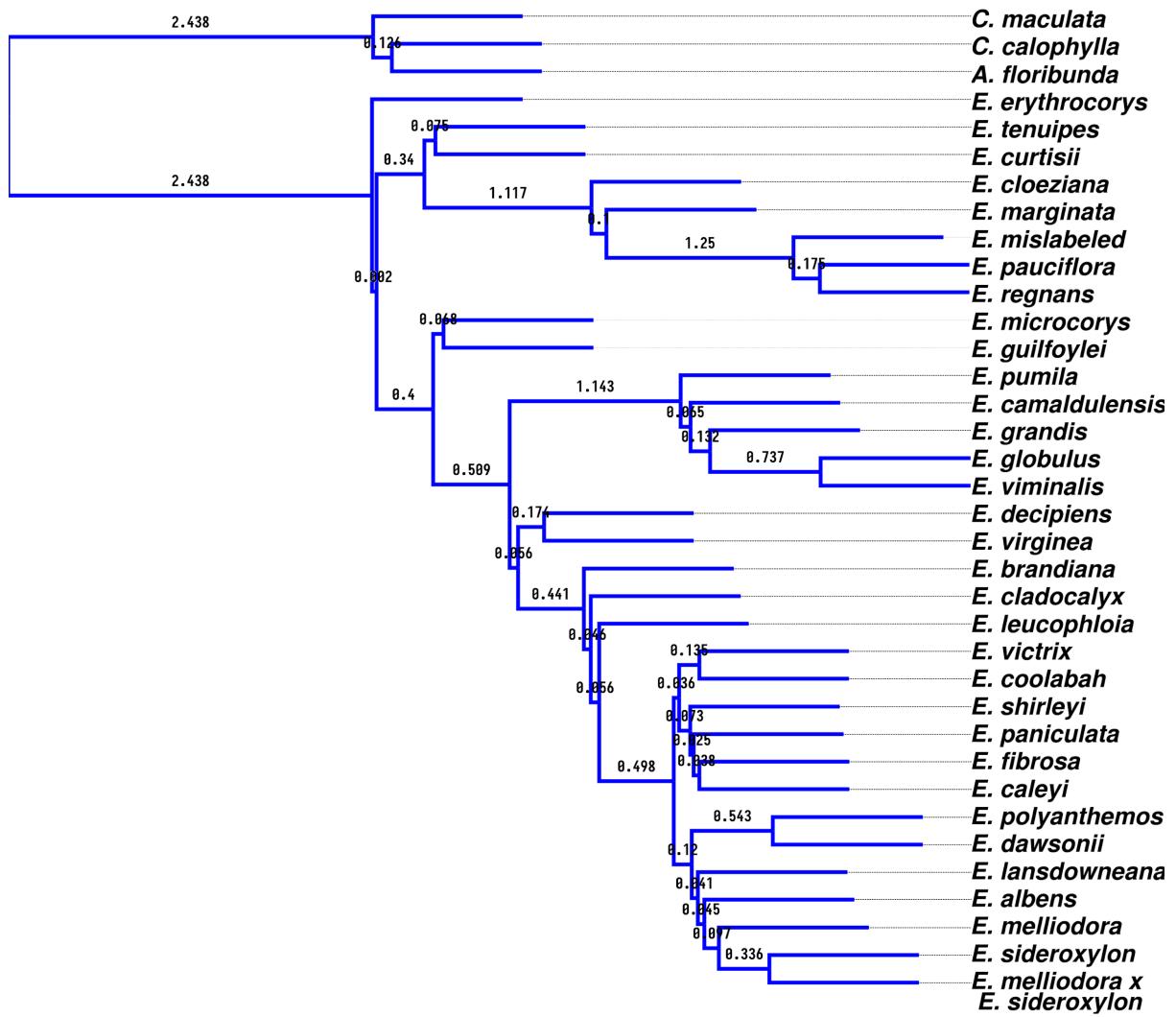
Species	Number of genes	Genes in orthogroup	Unassigned genes	Paralogue groups	Genes in paralogues
<i>E. albens</i>	65,121	63,903 (98.13%)	1,218 (1.87%)	43	94 (0.14%)
<i>E. brandiana</i>	46,176	45,632 (98.82%)	544 (1.18%)	20	44 (0.1%)
<i>E. caleyi</i>	62,000	60,606 (97.75%)	1,394 (2.25%)	59	143 (0.23%)
<i>E. camaldulensis</i>	51,855	50,949 (98.25%)	906 (1.75%)	33	80 (0.15%)
<i>E. cladocalyx</i>	48,487	47,797 (98.58%)	690 (1.42%)	30	68 (0.14%)
<i>E. cloeziana</i>	43,093	42,349 (98.27%)	744 (1.73%)	26	61 (0.14%)
<i>E. coolabah</i>	51,879	50,855 (98.03%)	1,024 (1.97%)	29	62 (0.12%)
<i>E. curtisii</i>	43,242	42,182 (97.55%)	1,060 (2.45%)	79	194 (0.45%)
<i>E. dawsonii</i>	77,763	73,579 (94.62%)	4,184 (5.38%)	207	481 (0.62%)
<i>E. decipiens</i>	49,909	49,012 (98.2%)	897 (1.8%)	43	101 (0.2%)
<i>E. erythrocorys</i>	47,392	45,659 (96.34%)	1,733 (3.66%)	299	966 (2.04%)
<i>E. fibrosa</i>	53,954	53,276 (98.74%)	678 (1.26%)	18	40 (0.07%)
<i>E. globulus</i>	51,735	50,781 (98.16%)	954 (1.84%)	23	47 (0.09%)
<i>E. grandis</i>	55,224	53,939 (97.67%)	1,285 (2.33%)	50	114 (0.21%)
<i>E. guilfoylei</i>	54,024	52,853 (97.83%)	1,171 (2.17%)	95	236 (0.44%)
<i>E. lansdowneana</i>	59,574	58,536 (98.26%)	1,038 (1.74%)	42	93 (0.16%)
<i>E. leucophloia</i>	53,950	52,869 (98%)	1,081 (2%)	43	101 (0.19%)
<i>E. marginata</i>	48,255	47,059 (97.52%)	1,196 (2.48%)	61	151 (0.31%)
<i>E. melliodora</i>	63,907	62,839 (98.33%)	1,068 (1.67%)	88	224 (0.35%)
<i>E. melliodora x E. sideroxylon</i>	64,299	63,447 (98.67%)	852 (1.33%)	35	73 (0.11%)
<i>E. microcorys</i>	44,367	43,578 (98.22%)	789 (1.78%)	34	88 (0.2%)
<i>E. ANBG9806169</i>	48,845	47,891 (98.05%)	954 (1.95%)	55	134 (0.27%)
<i>E. paniculata</i>	55,821	55,011 (98.55%)	810 (1.45%)	25	57 (0.1%)
<i>E. pauciflora</i>	47,634	46,796 (98.24%)	838 (1.76%)	59	156 (0.33%)
<i>E. polyanthemos</i>	56,111	55,253 (98.47%)	858 (1.53%)	21	44 (0.08%)
<i>E. pumila</i>	59,604	58,260 (97.75%)	1,344 (2.25%)	63	142 (0.24%)

<i>E. regnans</i>	45,608	44,753 (98.13%)	855 (1.87%)	49	120 (0.26%)
<i>E. shirleyi</i>	55,816	55,022 (98.58%)	794 (1.42%)	34	81 (0.15%)
<i>E. sideroxylon</i>	60,360	59,278 (98.21%)	1,082 (1.79%)	27	59 (0.1%)
<i>E. tenuipes</i>	41,622	40,587 (97.51%)	1,035 (2.49%)	50	123 (0.3%)
<i>E. victrix</i>	51,710	51,070 (98.76%)	640 (1.24%)	21	44 (0.09%)
<i>E. viminalis</i>	50,955	50,223 (98.56%)	732 (1.44%)	26	56 (0.11%)
<i>E. virginea</i>	51,559	50,667 (98.27%)	892 (1.73%)	35	74 (0.14%)

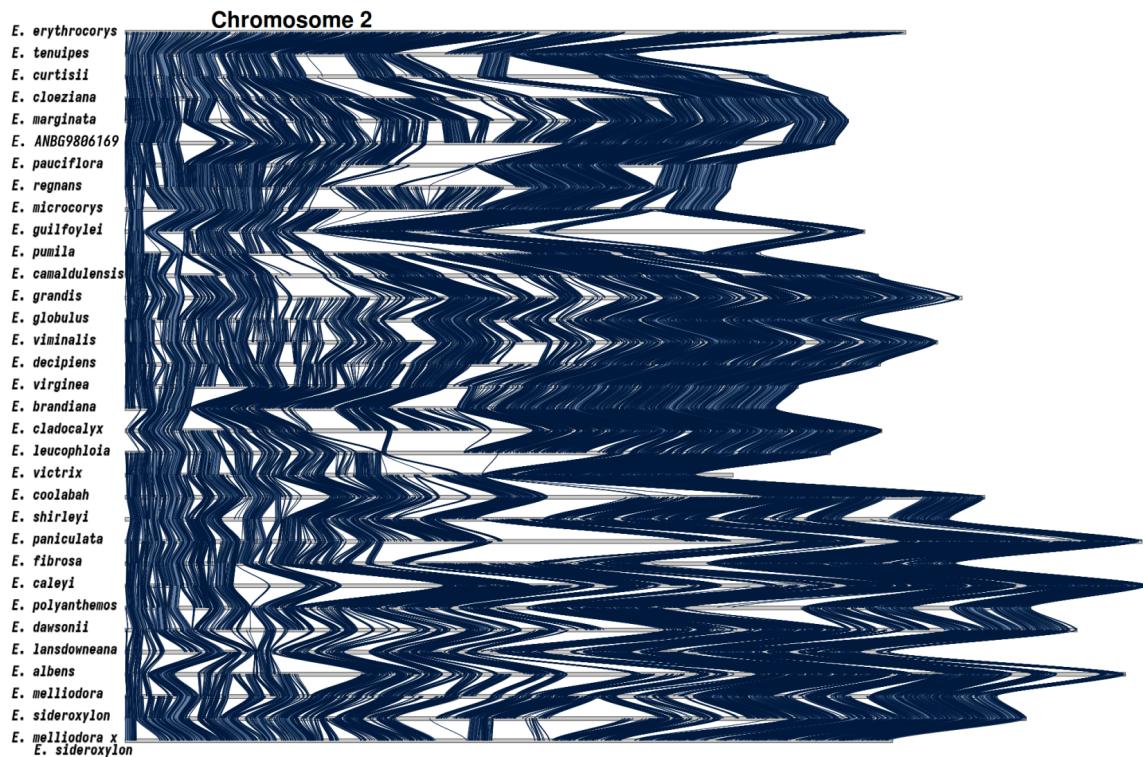
Supplementary Table S8. Genome orthogrouping statistics. For each genome lists the number of annotated genes, the number and proportion of genes placed within an orthogroup, the number and proportion of genes not placed within an orthogroup, the number and proportion of genes placed within a species-specific orthogroup, and the number of paralogues for each species.

Number of species	33
Number of genes	1,761,851
Number of genes in orthogroups	1,726,511
Number of unassigned genes	35,340
Percentage of genes in orthogroups	97.99%
Percentage of unassigned genes	2.01%
Number of orthogroups	68,245
Number of species-specific orthogroups	1,822
Number of genes in species-specific orthogroups	4,551
Percentage of genes in species-specific orthogroups	0.26%
Mean orthogroup size	25.3

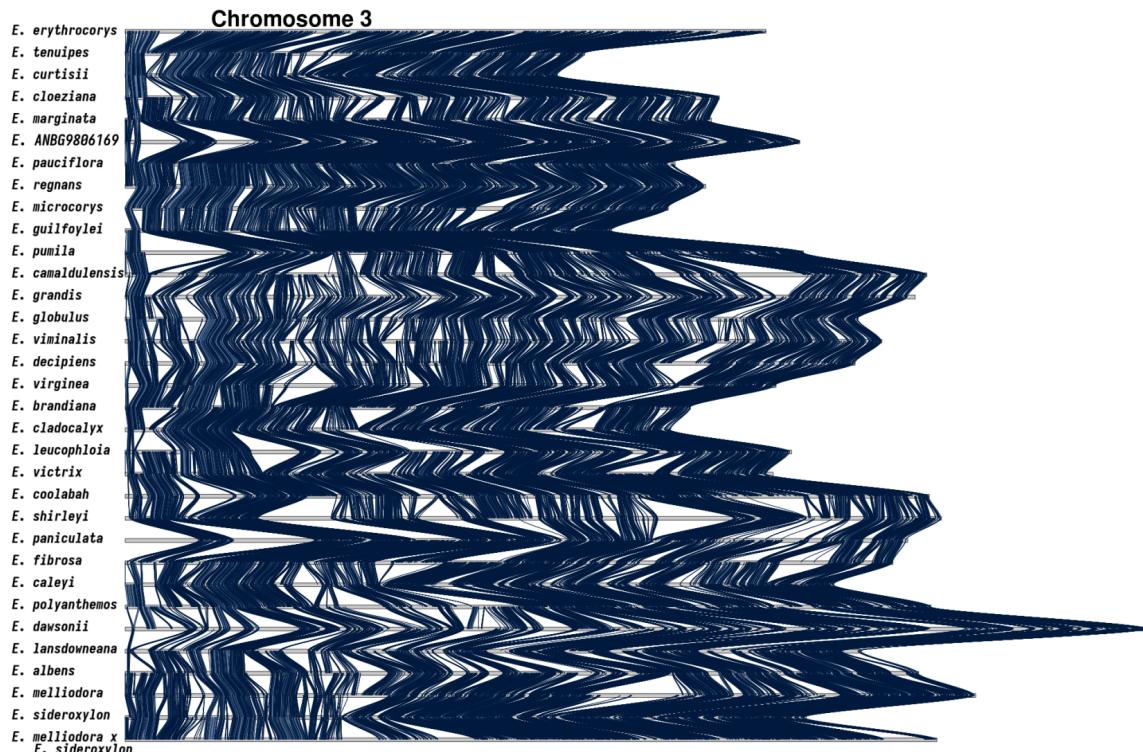
Supplementary Table S9. Orthogrouping summary statistics.



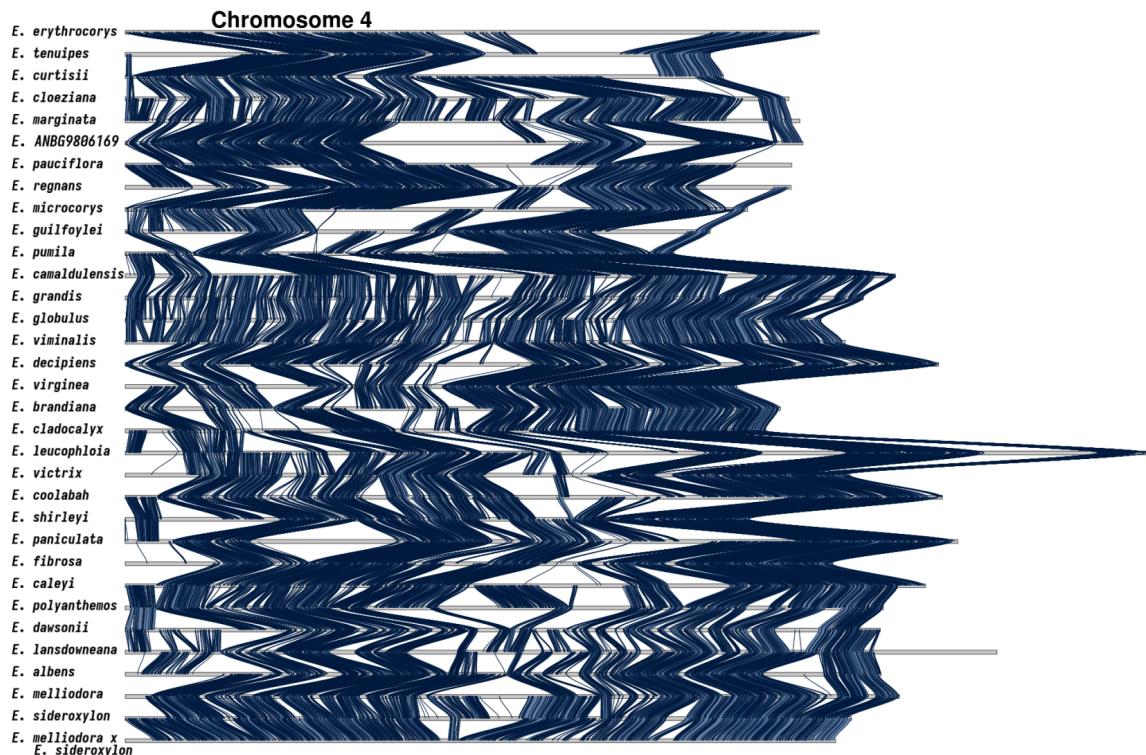
Supplementary Figure S7. Maximum likelihood species phylogeny estimated from 1,674 BUSCO genes. Branch lengths are in coalescent units, as calculated by Astral III. Astral doesn't calculate branch lengths for tips, as tips are a single genome.



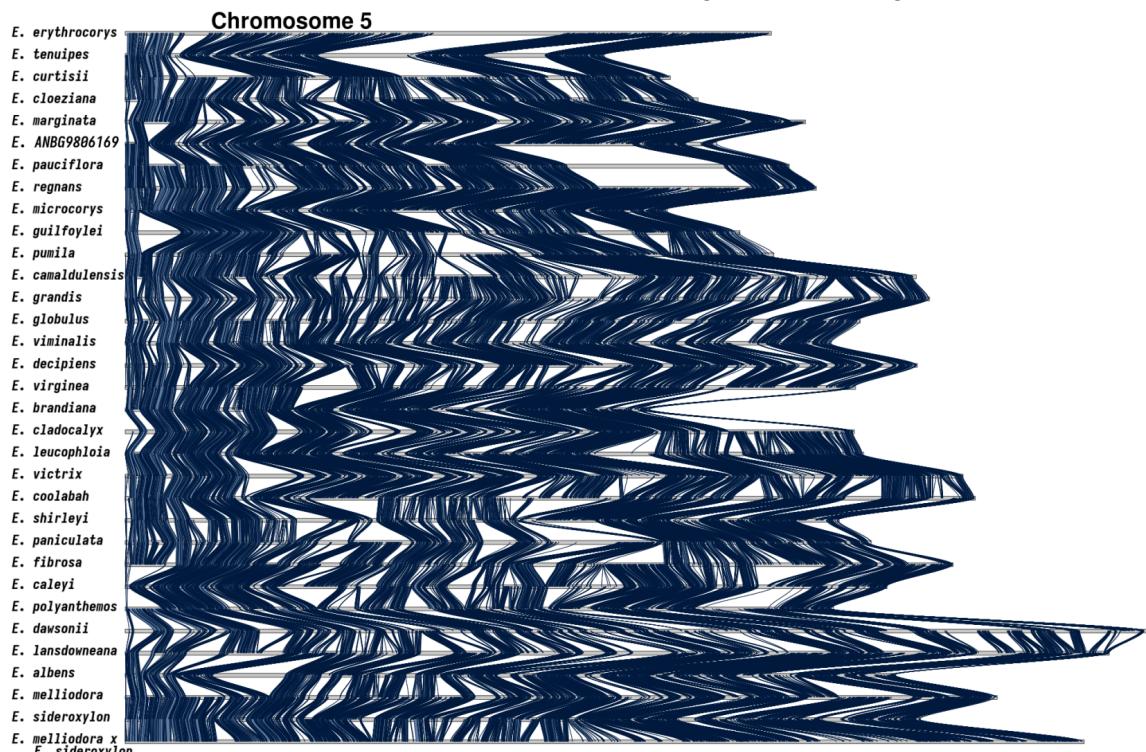
Supplementary Figure S8. Synteny karyotype of chromosome 2. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.



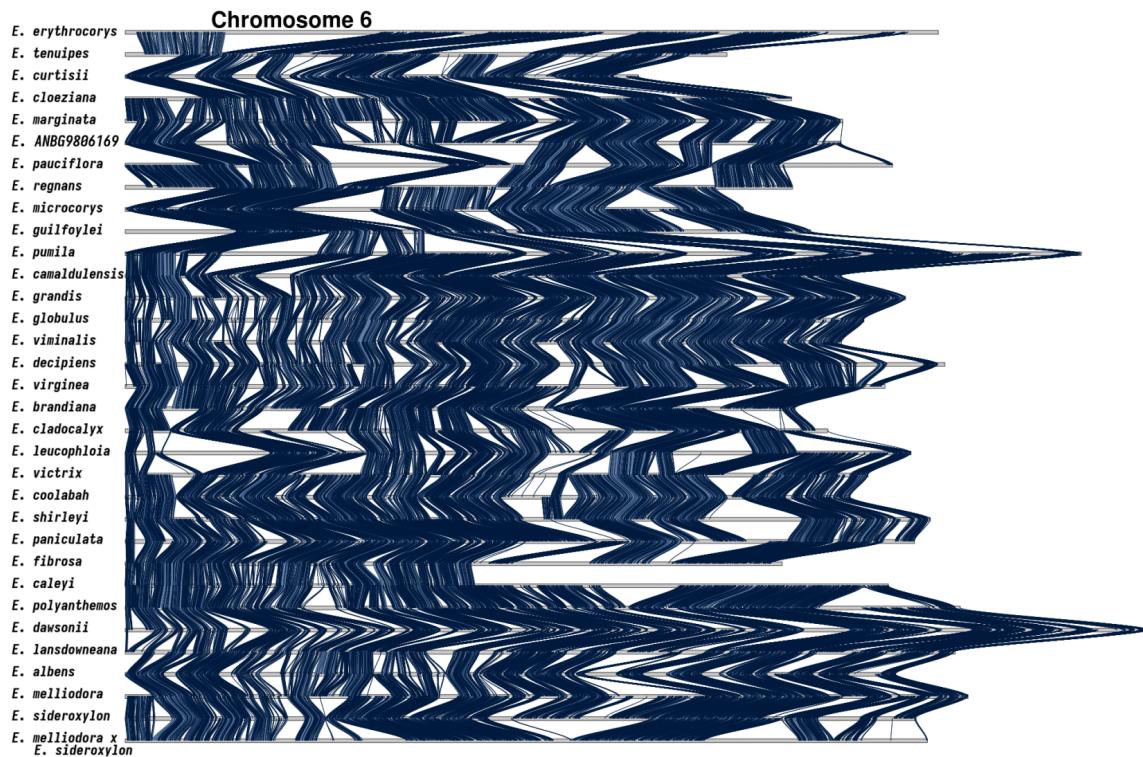
Supplementary Figure S9. Synteny karyotype of chromosome 3. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.



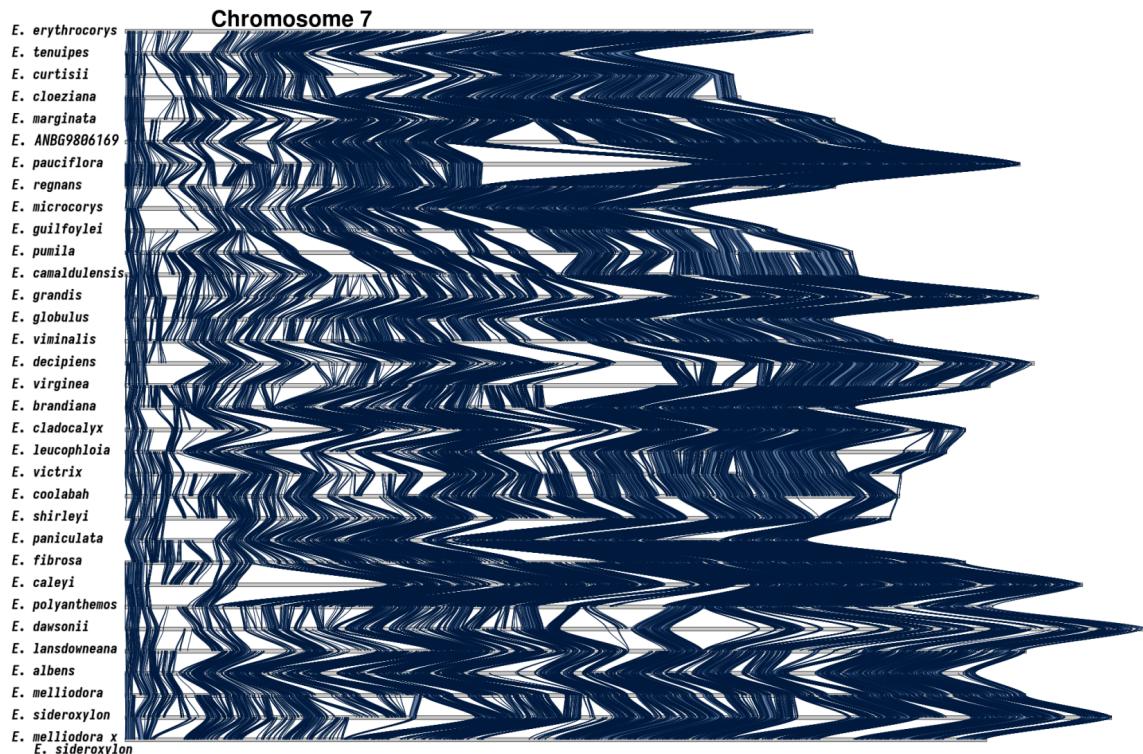
Supplementary Figure S10. Synteny karyotype of chromosome 4. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.



Supplementary Figure S11. Synteny karyotype of chromosome 5. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.



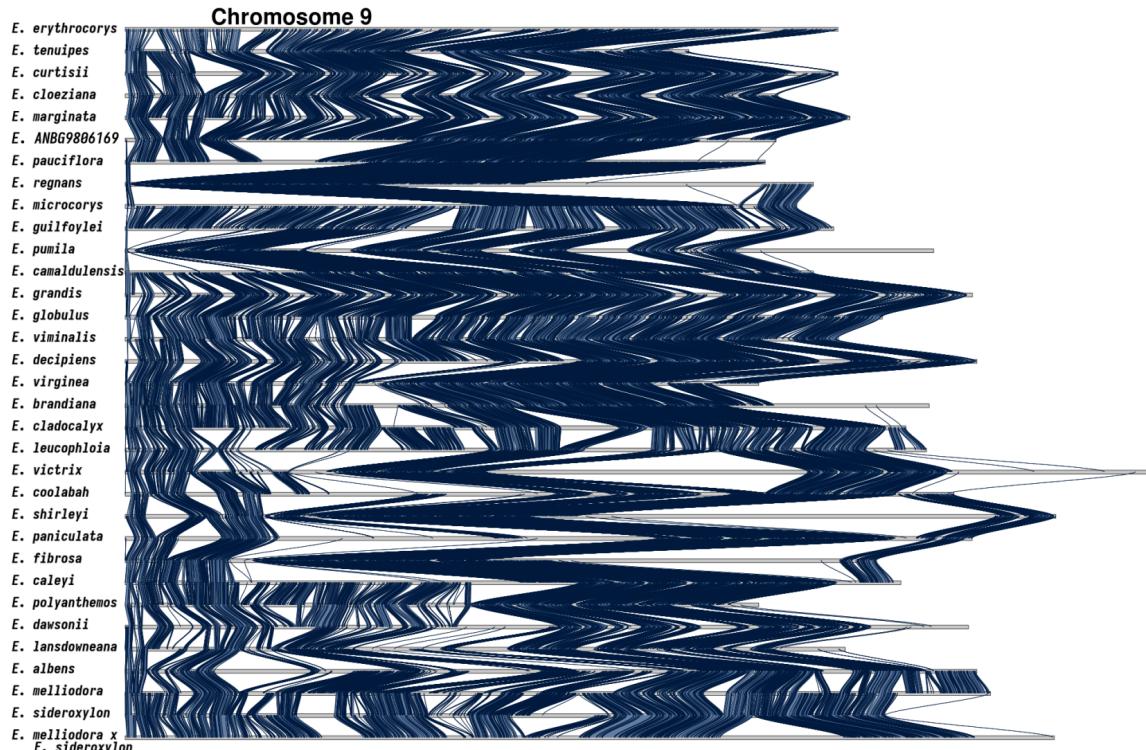
Supplementary Figure S12. Synteny karyotype of chromosome 6. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.



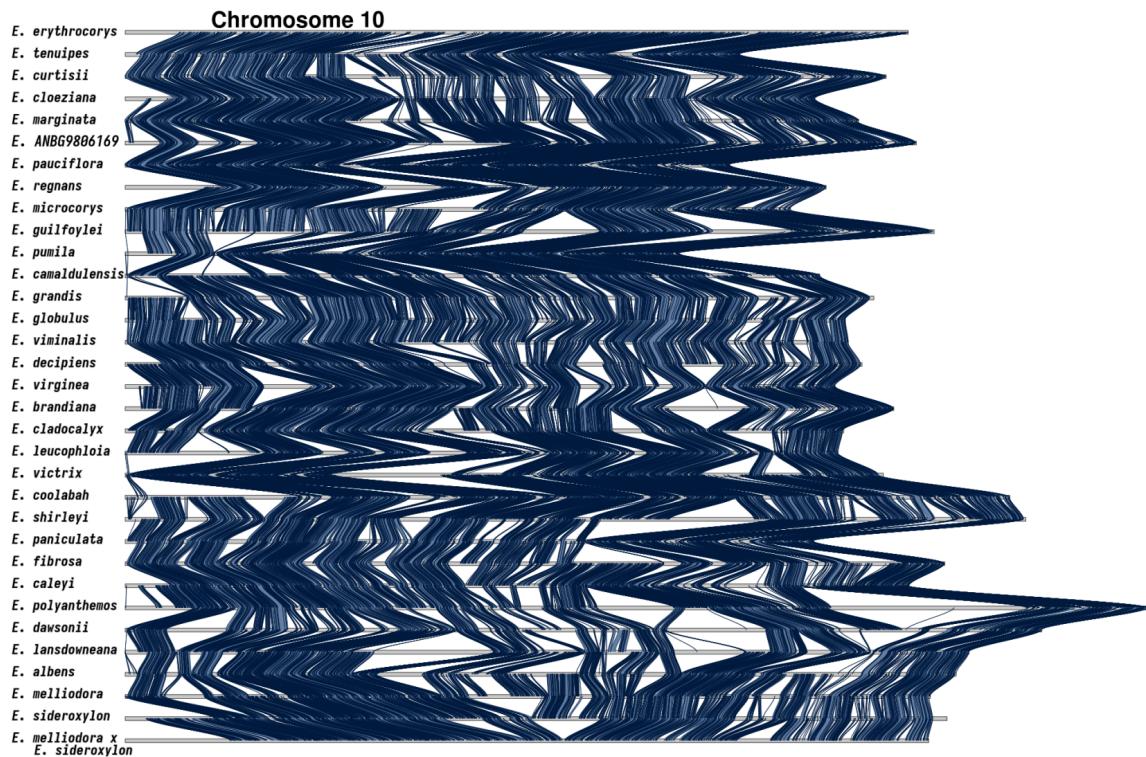
Supplementary Figure S13. Synteny karyotype of chromosome 7. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.



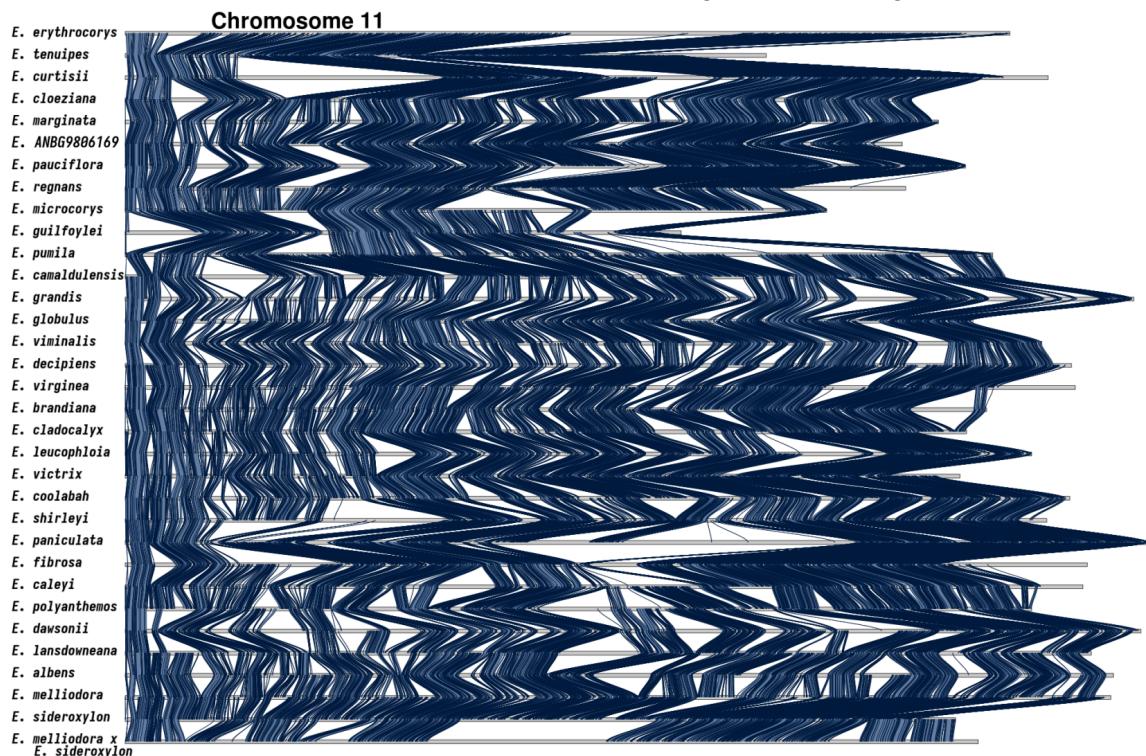
Supplementary Figure S14. Synteny karyotype of chromosome 8. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.



Supplementary Figure S15. Synteny karyotype of chromosome 9. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.



Supplementary Figure S16. Synteny karyotype of chromosome 10. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.



Supplementary Figure S17. Synteny karyotype of chromosome 11. The blue ribbons between karyotypes indicate the presence of syntenic sequences between species pairs. In all other regions synteny has become lost. Synteny is lost to either rearrangements (inverted, translocated, or duplicated), sequence divergence, loss or gain.

	<i>albens</i>	<i>brandiana</i>	<i>caleyi</i>	<i>camaldulensis</i>	<i>cladocalyx</i>	<i>cloeziana</i>	<i>coolabah</i>	<i>curtisii</i>	<i>dawsonii</i>	<i>decipiens</i>	<i>erythrocorys</i>
<i>albens</i>		39.2%	43.1%	35.8%	36.8%	32.0%	43.8%	28.9%	37.5%	36.9%	28.4%
<i>brandiana</i>	46.7%		49.2%	45.5%	46.9%	41.8%	50.2%	36.6%	42.5%	48.2%	36.5%
<i>caleyi</i>	44.6%	42.6%		38.6%	40.5%	35.0%	47.5%	29.5%	40.3%	39.9%	29.3%
<i>camaldulensis</i>	38.7%	41.5%	40.6%		39.1%	38.4%	42.1%	32.9%	35.3%	42.3%	32.1%
<i>cladocalyx</i>	41.3%	44.0%	43.8%	40.3%		36.7%	44.2%	31.4%	37.9%	41.5%	30.9%
<i>cloeziana</i>	39.7%	43.8%	42.1%	43.8%	40.6%		44.1%	40.5%	36.5%	43.6%	37.2%
<i>coolabah</i>	44.0%	42.4%	46.3%	39.1%	39.7%	35.9%		31.0%	40.1%	40.2%	30.4%
<i>curtisii</i>	39.0%	41.6%	38.9%	41.3%	38.5%	44.4%	41.8%		34.7%	41.3%	37.8%
<i>dawsonii</i>	32.3%	30.7%	33.7%	28.0%	29.2%	25.7%	34.4%	22.1%		28.8%	21.3%
<i>decipiens</i>	38.1%	41.9%	40.1%	40.3%	38.4%	36.5%	41.3%	31.3%	34.7%		31.7%
<i>erythrocorys</i>	32.9%	36.1%	33.1%	34.7%	32.5%	35.3%	35.2%	32.8%	28.7%	35.8%	
<i>fibrosa</i>	43.9%	42.7%	45.2%	38.2%	38.5%	34.2%	47.0%	30.3%	39.2%	39.2%	29.5%
<i>globulus</i>	41.2%	44.1%	43.0%	53.3%	41.6%	40.2%	44.7%	34.5%	37.7%	44.8%	33.9%
<i>grandis</i>	34.6%	36.9%	35.8%	45.4%	34.6%	34.0%	37.6%	29.0%	32.0%	37.8%	28.4%
<i>guilfoylei</i>	38.0%	41.2%	40.5%	40.8%	38.7%	39.8%	41.8%	36.2%	34.9%	41.9%	35.3%
<i>lansdowneana</i>	40.9%	38.8%	40.7%	34.1%	36.6%	31.1%	42.1%	27.1%	36.7%	35.5%	26.4%
<i>leucophloia</i>	40.5%	41.6%	42.0%	38.1%	39.0%	34.5%	44.2%	30.9%	36.0%	39.4%	29.5%
<i>marginata</i>	37.8%	41.6%	40.0%	40.9%	37.9%	50.8%	41.6%	38.6%	34.1%	41.5%	35.9%
<i>melliodora</i>	45.5%	41.5%	46.2%	38.1%	39.0%	34.5%	46.9%	30.0%	40.2%	39.3%	29.1%
<i>melliodora x sideroxylon</i>											
<i>sideroxylon</i>	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%
<i>microcorys</i>	46.6%	50.5%	49.7%	49.7%	46.9%	48.6%	50.4%	42.6%	42.4%	50.5%	41.9%
ANBG9806169	35.1%	38.0%	36.5%	38.1%	35.0%	48.9%	38.4%	36.4%	31.4%	38.0%	33.6%
<i>paniculata</i>	42.0%	39.8%	44.2%	36.5%	37.5%	33.2%	44.6%	29.0%	38.2%	37.9%	28.2%
<i>pauciflora</i>	34.2%	38.9%	34.9%	36.4%	34.1%	46.5%	36.8%	34.7%	30.3%	37.3%	32.7%
<i>polyanthemos</i>	43.1%	40.8%	45.4%	36.6%	38.1%	32.9%	45.0%	29.1%	45.1%	38.2%	28.3%
<i>pumila</i>	37.2%	40.0%	38.3%	47.9%	37.8%	36.6%	40.2%	30.9%	34.4%	40.4%	30.5%
<i>regnans</i>	34.8%	39.2%	37.2%	37.8%	35.8%	46.7%	38.2%	36.6%	31.8%	37.9%	34.1%
<i>shirleyi</i>	40.8%	39.7%	44.2%	35.8%	37.3%	33.0%	44.8%	28.5%	37.2%	37.4%	28.1%
<i>sideroxylon</i>	45.9%	43.1%	47.6%	38.6%	41.3%	35.4%	47.7%	30.9%	41.6%	40.3%	30.5%
<i>tenuipes</i>	45.6%	49.7%	48.0%	49.0%	46.0%	52.5%	49.3%	48.0%	40.8%	50.2%	46.0%
<i>victrix</i>	45.6%	45.6%	47.2%	40.7%	41.6%	36.9%	52.5%	32.8%	40.6%	41.6%	32.3%
<i>viminalis</i>	39.9%	42.5%	41.5%	51.4%	39.9%	39.1%	43.4%	33.8%	36.6%	43.2%	32.8%
<i>virginea</i>	41.4%	45.5%	43.4%	43.7%	41.0%	38.5%	44.7%	34.1%	37.2%	48.0%	32.6%

	<i>fibrosa</i>	<i>globulus</i>	<i>grandis</i>	<i>guilfoylei</i>	<i>lansdowneana</i>	<i>leucophloia</i>	<i>marginata</i>	<i>mellioidora</i>	<i>mellioidora x sideroxylon</i>	<i>microcorys</i>	ANBG98061 69
<i>albens</i>	42.7%	37.0%	34.9%	30.5%	42.6%	37.6%	32.5%	47.5%	43.7%	34.9%	30.1%
<i>brandiana</i>	49.7%	47.3%	44.6%	39.0%	48.3%	46.4%	42.5%	51.7%	48.3%	44.8%	38.8%
<i>caleyi</i>	45.4%	39.8%	37.4%	33.4%	43.7%	40.3%	35.5%	49.9%	45.3%	38.2%	32.3%
<i>camaldulensis</i>	40.3%	51.9%	49.8%	35.4%	38.6%	38.6%	38.4%	43.2%	40.0%	40.4%	35.5%
<i>cladocalyx</i>	41.9%	41.8%	39.2%	34.6%	42.7%	40.7%	36.5%	45.6%	42.7%	39.2%	33.6%
<i>cloeziana</i>	41.1%	45.1%	42.7%	39.4%	40.0%	39.9%	54.1%	44.4%	40.9%	45.2%	52.1%
<i>coolabah</i>	45.9%	40.2%	38.2%	33.9%	44.1%	41.4%	36.2%	49.2%	44.7%	37.9%	33.2%
<i>curtisii</i>	39.9%	42.3%	39.9%	39.4%	38.0%	38.9%	45.3%	42.4%	40.7%	43.5%	42.2%
<i>dawsonii</i>	32.8%	29.2%	27.9%	24.2%	33.0%	28.9%	25.1%	36.2%	33.7%	27.4%	23.3%
<i>decipiens</i>	39.4%	41.5%	39.5%	34.4%	38.2%	37.9%	36.7%	42.4%	39.9%	38.6%	33.5%
<i>erythrocorys</i>	33.3%	36.0%	33.7%	33.3%	32.0%	32.4%	36.3%	35.3%	33.5%	36.7%	33.3%
<i>fibrosa</i>		39.3%	37.2%	32.7%	44.2%	39.2%	34.4%	48.6%	45.3%	36.9%	32.5%
<i>globulus</i>	42.6%		53.7%	37.2%	41.1%	41.1%	40.5%	45.4%	42.1%	42.5%	37.0%
<i>grandis</i>	35.7%	47.7%		31.4%	34.1%	34.0%	33.6%	38.3%	35.5%	35.9%	31.0%
<i>guilfoylei</i>	39.9%	41.9%	39.9%		38.0%	38.0%	40.6%	42.0%	39.8%	45.6%	38.0%
<i>lansdowneana</i>	41.4%	35.5%	33.1%	29.4%		36.2%	31.3%	44.5%	41.8%	33.3%	28.7%
<i>leucophloia</i>	40.9%	39.6%	37.1%	32.7%	40.7%		35.0%	44.7%	41.6%	37.1%	31.9%
<i>marginata</i>	39.0%	42.4%	39.8%	37.8%	37.8%	38.0%		41.9%	39.2%	42.6%	49.0%
<i>mellioidora</i>	45.2%	39.0%	37.1%	32.3%	44.5%	39.9%	34.7%		35.9%	35.9%	35.9%
<i>mellioidora x sideroxylon</i>	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%		40.7%	40.7%
<i>microcorys</i>	48.2%	51.7%	48.9%	48.9%	46.5%	46.5%	49.0%	51.5%	47.7%		45.0%
ANBG9806169	37.2%	39.1%	36.8%	35.6%	35.1%	34.8%	49.2%	38.9%	36.5%	39.5%	
<i>paniculata</i>	44.5%	37.6%	35.5%	30.4%	41.9%	38.4%	33.0%	46.8%	43.2%	34.7%	30.1%
<i>pauciflora</i>	37.6%	37.6%	35.3%	35.7%	34.5%	33.9%	47.0%	37.7%	36.1%	38.7%	50.7%
<i>polyanthemos</i>	43.7%	37.8%	36.0%	31.7%	43.7%	38.4%	33.3%	48.5%	44.9%	36.5%	30.4%
<i>pumila</i>	38.4%	48.7%	46.1%	33.2%	38.0%	37.0%	36.4%	41.2%	37.7%	38.3%	33.9%
<i>regnans</i>	39.3%	39.4%	36.3%	36.5%	35.3%	35.4%	47.2%	38.5%	36.9%	39.8%	52.0%
<i>shirleyi</i>	45.1%	37.2%	35.3%	32.1%	41.3%	38.3%	33.2%	45.4%	42.3%	35.4%	30.6%
<i>sideroxylon</i>	46.8%	40.1%	37.7%	33.9%	46.6%	40.8%	35.8%	53.1%	53.4%	38.3%	32.6%
<i>tenuipes</i>	49.1%	50.7%	47.6%	45.9%	44.8%	45.0%	53.1%	50.6%	47.7%	51.2%	49.3%
<i>victrix</i>	50.6%	41.9%	39.4%	36.2%	46.2%	42.6%	37.5%	50.2%	46.1%	40.1%	34.5%
<i>viminalis</i>	41.1%	59.0%	52.2%	36.3%	39.6%	39.7%	39.2%	43.8%	40.8%	41.4%	36.2%
<i>virginea</i>	43.6%	44.8%	42.2%	37.3%	41.7%	41.4%	39.1%	45.8%	42.6%	41.8%	35.8%

	<i>paniculata</i>	<i>pauciflora</i>	<i>polyanthemos</i>	<i>pumila</i>	<i>regnans</i>	<i>shirleyi</i>	<i>sideroxylon</i>	<i>tenuipes</i>	<i>victrix</i>	<i>viminalis</i>	<i>virginea</i>
<i>albens</i>	40.6%	28.7%	42.7%	32.6%	29.2%	40.1%	44.8%	31.4%	41.8%	36.7%	36.6%
<i>brandiana</i>	46.1%	38.6%	48.2%	41.9%	39.0%	46.6%	50.2%	40.3%	49.8%	46.5%	47.9%
<i>caleyi</i>	44.2%	30.1%	46.5%	34.6%	32.2%	44.9%	47.9%	34.0%	44.7%	39.3%	39.5%
<i>camaldulensis</i>	38.3%	33.1%	39.3%	45.6%	34.5%	38.2%	40.9%	36.6%	40.4%	51.2%	41.9%
<i>cladocalyx</i>	40.5%	31.9%	42.2%	37.0%	33.6%	41.0%	45.0%	35.1%	42.6%	41.0%	40.5%
<i>cloeziana</i>	39.8%	48.4%	40.4%	39.9%	48.6%	40.2%	42.4%	44.3%	42.0%	45.0%	43.0%
<i>coolabah</i>	43.3%	31.1%	44.8%	35.4%	32.5%	44.3%	46.7%	34.2%	48.4%	40.0%	39.7%
<i>curtisii</i>	38.3%	39.4%	38.9%	37.0%	41.5%	37.9%	40.8%	44.4%	40.9%	42.4%	41.5%
<i>dawsonii</i>	31.8%	21.8%	38.6%	26.0%	23.1%	31.5%	34.9%	24.2%	32.0%	28.9%	28.3%
<i>decipiens</i>	38.1%	32.2%	39.1%	36.6%	32.8%	38.2%	40.6%	35.4%	39.3%	40.9%	43.6%
<i>erythrocorys</i>	31.5%	31.9%	32.4%	31.3%	33.2%	32.2%	34.4%	36.8%	34.2%	35.5%	34.0%
<i>fibrosa</i>	44.4%	32.2%	44.4%	34.7%	33.6%	45.7%	46.8%	34.5%	47.6%	38.7%	39.6%
<i>globulus</i>	40.5%	34.8%	41.7%	47.4%	36.4%	40.7%	43.5%	38.1%	42.7%	60.4%	44.1%
<i>grandis</i>	33.9%	28.9%	35.1%	39.8%	29.8%	34.3%	36.3%	32.1%	35.7%	47.5%	36.9%
<i>guilfoylei</i>	36.7%	37.3%	39.2%	36.5%	38.0%	39.3%	40.9%	39.1%	41.3%	41.8%	41.7%
<i>lansdowneana</i>	38.8%	27.8%	41.6%	31.9%	28.4%	39.1%	43.5%	29.4%	40.5%	34.9%	35.3%
<i>leucophloia</i>	39.8%	30.4%	40.7%	34.7%	31.9%	40.5%	42.7%	33.1%	41.9%	39.0%	39.1%
<i>marginata</i>	37.2%	45.8%	38.4%	37.2%	46.2%	38.1%	40.5%	41.8%	39.6%	42.1%	40.7%
<i>mellioidora</i>	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%
<i>mellioidora x sideroxylon</i>	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%	40.7%
<i>microcorys</i>	44.8%	43.1%	48.2%	45.3%	44.6%	46.7%	49.6%	46.7%	49.1%	51.2%	49.9%
ANBG9806169	34.1%	49.6%	35.0%	35.0%	50.9%	35.3%	37.0%	39.4%	36.9%	39.2%	37.5%
<i>paniculata</i>		29.8%	43.5%	32.8%	28.4%	41.7%	44.2%	31.6%	40.5%	37.3%	37.2%
<i>pauciflora</i>	34.5%		35.9%	33.3%	54.0%	34.9%	36.7%	38.5%	38.4%	37.0%	37.2%
<i>polyanthemos</i>	42.5%	30.5%		33.5%	30.6%	41.9%	46.5%	32.1%	43.2%	37.7%	37.9%
<i>pumila</i>	36.4%	31.4%	37.9%		33.4%	36.9%	39.2%	34.3%	38.2%	48.3%	39.3%
<i>regnans</i>	32.8%	54.0%	36.1%	35.4%		36.7%	37.6%	40.9%	38.7%	38.6%	38.2%
<i>shirleyi</i>	41.1%	29.5%	42.2%	32.8%	31.1%		43.1%	32.9%	44.3%	36.7%	37.1%
<i>sideroxylon</i>	43.8%	31.8%	47.3%	35.4%	32.5%	43.6%		34.4%	45.6%	39.3%	39.5%
<i>tenuipes</i>	44.8%	47.2%	46.1%	44.2%	50.2%	47.3%	48.7%		48.9%	50.1%	48.0%
<i>victrix</i>	42.8%	35.1%	46.8%	36.7%	35.6%	47.6%	48.6%	36.9%		41.1%	41.6%
<i>viminalis</i>	39.3%	33.6%	40.6%	46.1%	34.9%	39.5%	41.7%	36.9%	41.0%		42.6%
<i>virginea</i>	40.9%	34.6%	42.5%	39.2%	35.6%	41.5%	43.7%	36.8%	43.1%	44.4%	

Supplementary Tables S10. Matrix of pairwise shared synteny. Shows the proportion of the genome that is syntenic for all genome pairs. Read down the genome list (far left column) and extend across until the comparison genome is found. As genomes are different lengths the proportion that species X has syntenic to species Y is different to the proportion that species Y has syntenic to species X.

	<i>albens</i>	<i>brandiana</i>	<i>caleyi</i>	<i>camaldulensis</i>	<i>cladocalyx</i>	<i>cloeziana</i>	<i>coolabah</i>	<i>curtisii</i>	<i>dawsonii</i>	<i>decipiens</i>	<i>erythrocorys</i>
<i>albens</i>		35.2%	39.5%	34.5%	40.0%	22.9%	36.3%	26.8%	45.8%	34.5%	20.9%
<i>brandiana</i>	33.1%		31.6%	28.2%	32.3%	18.5%	28.3%	24.9%	38.8%	29.1%	19.1%
<i>caleyi</i>	37.9%	32.1%		33.4%	36.6%	21.4%	34.1%	28.0%	43.5%	33.5%	22.6%
<i>camaldulensis</i>	32.6%	27.6%	31.3%		31.3%	18.3%	27.1%	24.1%	36.9%	27.7%	20.4%
<i>cladocalyx</i>	39.2%	33.1%	36.7%	32.0%		21.4%	33.9%	27.9%	43.1%	33.6%	22.6%
<i>cloeziana</i>	23.2%	18.4%	21.7%	18.4%	21.3%		18.3%	27.4%	26.1%	19.9%	20.6%
<i>coolabah</i>	36.6%	30.6%	35.5%	29.1%	34.9%	18.7%		23.7%	40.9%	30.2%	19.5%
<i>curtisii</i>	28.2%	25.4%	29.6%	25.7%	28.8%	27.7%	24.6%		32.0%	26.9%	24.5%
<i>dawsonii</i>	48.3%	42.0%	46.9%	40.2%	45.1%	27.5%	43.4%	30.3%		40.8%	25.3%
<i>decipiens</i>	34.2%	29.9%	32.3%	29.0%	32.7%	20.2%	28.7%	26.1%	37.6%		18.6%
<i>erythrocorys</i>	22.6%	19.2%	22.7%	20.2%	22.1%	20.2%	18.9%	22.2%	24.3%	18.7%	
<i>fibrosa</i>	40.3%	33.6%	40.1%	34.6%	39.9%	22.8%	36.0%	27.4%	44.9%	35.1%	21.8%
<i>globulus</i>	30.9%	26.3%	30.0%	28.6%	29.2%	17.6%	25.1%	23.6%	34.8%	26.7%	18.3%
<i>grandis</i>	36.1%	31.6%	35.8%	35.2%	34.8%	21.6%	30.8%	26.3%	38.3%	32.4%	21.0%
<i>guilfoylei</i>	32.4%	30.1%	30.8%	29.4%	31.5%	27.8%	27.6%	32.5%	35.5%	30.1%	26.4%
<i>lansdowneana</i>	43.4%	36.6%	42.9%	36.9%	40.6%	24.3%	39.2%	28.4%	47.0%	37.5%	23.7%
<i>leucophloia</i>	39.8%	34.9%	38.9%	33.5%	37.3%	23.2%	34.9%	27.1%	43.3%	33.3%	23.1%
<i>marginata</i>	23.8%	19.6%	22.7%	20.2%	23.2%	30.4%	19.3%	28.1%	27.2%	20.3%	20.6%
<i>melliodora</i>	37.9%	32.3%	35.5%	31.1%	36.0%	18.9%	32.4%	24.6%	42.6%	31.7%	20.0%
<i>melliodora x sideroxylon</i>	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%
<i>microcorys</i>	25.9%	21.5%	22.8%	21.6%	25.0%	19.4%	20.9%	27.4%	30.2%	23.1%	21.6%
<i>ANBG9806169</i>	25.2%	22.7%	25.4%	23.0%	25.2%	35.0%	21.7%	29.9%	28.1%	23.2%	23.4%
<i>paniculata</i>	42.2%	36.9%	41.4%	36.3%	41.6%	25.0%	37.8%	29.2%	46.0%	35.8%	22.9%
<i>pauciflora</i>	28.4%	22.3%	28.5%	26.2%	28.3%	40.3%	24.8%	33.1%	31.7%	26.0%	24.9%
<i>polyanthemos</i>	40.1%	34.2%	37.8%	34.2%	39.1%	22.9%	35.9%	26.6%	42.7%	33.8%	22.3%
<i>pumila</i>	36.4%	32.1%	35.8%	35.1%	35.1%	22.7%	31.0%	28.5%	39.0%	33.2%	23.6%
<i>regnans</i>	26.9%	22.9%	24.9%	23.4%	24.6%	39.2%	22.1%	29.9%	28.6%	24.5%	21.9%
<i>shirleyi</i>	42.8%	35.8%	40.4%	35.8%	39.9%	23.6%	37.7%	29.1%	45.7%	35.3%	24.4%
<i>sideroxylon</i>	38.1%	31.7%	35.5%	32.4%	34.8%	20.3%	33.2%	24.7%	42.2%	32.0%	19.6%
<i>tenuipes</i>	24.3%	19.0%	22.7%	20.4%	23.0%	22.1%	19.0%	30.4%	27.7%	19.7%	19.7%
<i>victrix</i>	37.1%	29.9%	36.2%	31.1%	35.8%	20.3%	31.8%	24.6%	42.5%	31.7%	19.7%
<i>viminalis</i>	31.0%	26.8%	30.2%	29.1%	29.7%	17.4%	25.9%	23.1%	34.4%	27.1%	19.1%
<i>virginea</i>	34.0%	28.6%	32.7%	29.4%	33.4%	21.9%	28.5%	27.3%	38.8%	31.5%	23.1%

	<i>fibrosa</i>	<i>globulus</i>	<i>grandis</i>	<i>guilfoylei</i>	<i>lansdowneana</i>	<i>leucophloia</i>	<i>marginata</i>	<i>mellioidora</i>	<i>mellioidora x sideroxylon</i>	<i>microcorys</i>	ANBG98061 69
<i>albens</i>	41.0%	32.5%	37.0%	32.4%	41.4%	41.0%	23.1%	36.1%	41.0%	27.4%	23.7%
<i>brandiana</i>	31.5%	25.7%	30.5%	30.3%	32.5%	34.5%	18.8%	27.7%	33.2%	22.6%	21.8%
<i>caleyi</i>	39.3%	31.5%	36.0%	31.3%	39.8%	39.8%	22.5%	32.8%	38.5%	25.0%	24.1%
<i>camaldulensis</i>	32.8%	28.7%	33.7%	29.1%	33.1%	32.8%	19.2%	27.4%	33.3%	22.9%	21.6%
<i>cladocalyx</i>	39.9%	30.3%	35.2%	32.3%	38.2%	38.2%	22.8%	34.0%	39.2%	26.5%	23.9%
<i>cloeziana</i>	22.4%	17.0%	21.1%	27.7%	22.6%	23.4%	28.6%	17.2%	24.2%	19.9%	32.2%
<i>coolabah</i>	37.1%	27.8%	32.2%	28.4%	37.7%	36.9%	19.5%	31.3%	37.8%	23.7%	21.2%
<i>curtisii</i>	28.2%	24.5%	28.4%	33.3%	29.0%	28.7%	27.9%	24.0%	28.8%	27.5%	29.4%
<i>dawsonii</i>	48.6%	38.6%	41.7%	36.5%	48.7%	47.0%	28.7%	45.3%	48.5%	32.6%	29.1%
<i>decipiens</i>	35.0%	28.4%	32.4%	30.9%	35.1%	33.7%	20.5%	29.8%	33.8%	25.7%	23.1%
<i>erythrocorys</i>	22.2%	18.7%	21.9%	25.1%	23.0%	22.3%	19.0%	18.7%	23.2%	21.1%	22.1%
<i>fibrosa</i>		32.7%	37.3%	33.9%	39.6%	41.9%	23.7%	35.4%	40.0%	28.3%	23.6%
<i>globulus</i>	31.0%		31.3%	29.0%	32.0%	30.1%	17.7%	25.8%	32.6%	22.2%	20.6%
<i>grandis</i>	36.2%	33.0%		32.0%	37.2%	36.0%	23.0%	31.8%	37.4%	27.4%	24.9%
<i>guilfoylei</i>	32.2%	28.5%	31.8%		33.1%	33.6%	27.7%	28.4%	32.9%	28.5%	28.0%
<i>lansdowneana</i>	42.3%	35.0%	39.2%	34.4%		43.2%	25.2%	39.8%	43.8%	30.1%	26.1%
<i>leucophloia</i>	40.8%	30.8%	35.9%	33.2%	39.5%		23.2%	34.7%	39.5%	27.7%	25.6%
<i>marginata</i>	23.4%	18.3%	23.1%	28.8%	24.0%	23.9%		18.9%	24.9%	21.4%	34.1%
<i>mellioidora</i>	37.2%	29.9%	34.0%	29.9%	38.2%	36.7%	20.1%		39.6%	39.6%	39.6%
<i>mellioidora x sideroxylon</i>	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%			22.9%	22.9%
<i>microcorys</i>	25.6%	19.8%	24.8%	27.9%	26.5%	26.9%	19.6%	19.4%	26.4%		23.1%
ANBG9806169	24.0%	21.3%	25.9%	28.6%	25.4%	26.4%	34.7%	21.1%	26.7%	24.0%	
<i>paniculata</i>	41.7%	34.5%	38.2%	35.0%	42.2%	41.0%	25.8%	37.0%	42.3%	30.6%	26.8%
<i>pauciflora</i>	25.7%	24.8%	28.0%	30.9%	27.9%	27.8%	39.2%	22.7%	27.2%	26.8%	41.1%
<i>polyanthemos</i>	40.3%	32.4%	36.2%	31.9%	39.7%	39.7%	23.0%	35.1%	39.5%	26.1%	25.1%
<i>pumila</i>	36.1%	33.0%	37.5%	35.0%	36.2%	36.0%	23.5%	31.7%	38.2%	28.3%	24.2%
<i>regnans</i>	23.1%	21.1%	25.9%	30.4%	26.3%	26.3%	38.3%	21.4%	26.5%	24.9%	39.3%
<i>shirleyi</i>	39.6%	33.7%	37.8%	32.7%	41.8%	41.4%	24.6%	38.0%	41.9%	29.7%	26.1%
<i>sideroxylon</i>	37.3%	29.4%	33.9%	29.9%	37.4%	37.7%	20.9%	31.7%	34.8%	24.1%	22.9%
<i>tenuipes</i>	21.7%	18.7%	23.2%	29.2%	24.8%	25.2%	21.7%	17.0%	22.6%	21.5%	24.2%
<i>victrix</i>	32.9%	29.4%	33.8%	29.4%	36.5%	38.1%	20.4%	32.0%	37.6%	23.9%	22.7%
<i>viminalis</i>	32.3%	26.5%	31.5%	28.4%	31.8%	30.4%	17.8%	26.1%	32.5%	22.0%	20.5%
<i>virginea</i>	33.1%	28.3%	32.9%	31.6%	34.2%	33.7%	22.2%	28.8%	34.8%	26.5%	24.6%

	<i>paniculata</i>	<i>pauciflora</i>	<i>polyanthemos</i>	<i>pumila</i>	<i>regnans</i>	<i>shirleyi</i>	<i>sideroxylon</i>	<i>tenuipes</i>	<i>victrix</i>	<i>viminalis</i>	<i>virginea</i>
<i>albens</i>	43.3%	27.8%	40.3%	37.4%	24.2%	42.7%	38.4%	24.1%	38.6%	32.7%	36.1%
<i>brandiana</i>	36.0%	20.3%	31.5%	32.4%	20.4%	34.4%	29.2%	20.3%	28.8%	27.1%	29.9%
<i>caleyi</i>	41.8%	26.9%	36.3%	37.0%	22.6%	39.8%	34.7%	23.7%	36.8%	31.4%	34.7%
<i>camaldulensis</i>	34.8%	23.6%	31.9%	35.4%	20.6%	34.5%	29.9%	21.8%	30.0%	29.0%	30.2%
<i>cladocalyx</i>	41.3%	25.8%	38.4%	36.3%	23.0%	39.7%	34.4%	23.3%	36.0%	30.8%	35.4%
<i>cloeziana</i>	24.3%	35.9%	22.2%	22.5%	35.8%	23.0%	20.1%	23.4%	20.0%	17.3%	21.9%
<i>coolabah</i>	39.2%	24.0%	36.1%	32.8%	20.4%	38.4%	33.5%	19.8%	34.0%	27.7%	31.4%
<i>curtisii</i>	30.6%	32.7%	27.9%	30.3%	29.6%	30.5%	26.1%	31.7%	25.9%	24.3%	28.0%
<i>dawsonii</i>	49.4%	31.9%	46.9%	41.6%	28.1%	48.6%	46.3%	28.7%	46.4%	38.2%	42.3%
<i>decipiens</i>	35.2%	23.8%	32.4%	34.3%	22.6%	34.1%	31.1%	20.8%	31.9%	29.2%	34.6%
<i>erythrocorys</i>	23.5%	23.0%	22.0%	23.2%	19.5%	22.2%	19.9%	19.5%	20.1%	18.1%	22.2%
<i>fibrosa</i>	42.1%	24.8%	39.8%	37.8%	21.7%	39.1%	37.0%	23.2%	34.2%	33.8%	35.6%
<i>globulus</i>	33.5%	23.5%	30.3%	34.1%	19.6%	32.4%	28.0%	19.6%	28.7%	26.0%	29.3%
<i>grandis</i>	38.3%	26.2%	35.3%	39.5%	23.8%	37.6%	33.8%	23.6%	34.6%	33.7%	34.9%
<i>guilfoylei</i>	35.6%	29.4%	31.5%	34.8%	28.5%	32.0%	29.3%	29.2%	29.1%	28.1%	30.8%
<i>lansdowneana</i>	45.6%	27.7%	42.0%	39.2%	25.5%	44.6%	40.8%	26.5%	40.6%	35.6%	38.7%
<i>leucophloia</i>	41.0%	26.7%	38.6%	36.7%	24.3%	40.9%	36.3%	26.0%	38.5%	31.5%	35.4%
<i>marginata</i>	26.4%	37.5%	23.1%	24.5%	36.6%	24.4%	21.3%	24.4%	21.2%	18.9%	22.9%
<i>mellioidora</i>	39.6%	39.6%	39.6%	39.6%	39.6%	39.6%	39.6%	39.6%	39.6%	39.6%	39.6%
<i>mellioidora x sideroxylon</i>	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%
<i>microcorys</i>	29.8%	24.3%	24.1%	27.4%	22.6%	27.0%	22.2%	22.7%	22.7%	20.0%	24.7%
ANBG9806169	27.5%	39.3%	25.4%	25.1%	38.4%	26.0%	23.6%	26.9%	23.3%	21.3%	25.0%
<i>paniculata</i>		26.5%	40.3%	39.5%	30.6%	43.3%	39.9%	25.6%	42.8%	34.7%	38.6%
<i>pauciflora</i>	27.2%		24.6%	29.4%	37.7%	28.4%	25.8%	28.2%	23.5%	25.6%	28.6%
<i>polyanthemos</i>	41.4%	23.1%		37.5%	23.3%	41.0%	37.0%	24.3%	37.8%	32.4%	34.9%
<i>pumila</i>	38.5%	27.8%	36.2%		24.5%	37.7%	33.9%	25.9%	34.5%	33.7%	35.9%
<i>regnans</i>	31.8%	36.9%	24.6%	25.9%		26.5%	23.4%	25.3%	22.2%	22.1%	25.8%
<i>shirleyi</i>	44.2%	27.7%	40.6%	39.0%	25.2%		40.2%	25.0%	37.8%	34.6%	37.2%
<i>sideroxylon</i>	40.4%	23.2%	36.0%	34.9%	21.3%	39.9%		21.4%	35.4%	30.4%	33.7%
<i>tenuipes</i>	25.6%	25.4%	22.9%	25.8%	22.3%	23.3%	20.4%		19.7%	18.7%	23.5%
<i>victrix</i>	41.7%	21.8%	35.2%	35.0%	20.4%	35.8%	33.5%	20.6%		30.2%	32.4%
<i>viminalis</i>	33.4%	23.5%	30.0%	34.2%	19.9%	32.2%	28.6%	19.7%	28.8%		29.3%
<i>virginea</i>	36.2%	26.0%	32.2%	35.5%	23.5%	34.7%	31.0%	24.7%	31.1%	28.1%	

Supplementary Tables S11. Matrix of pairwise rearrangements. Shows the proportion of the genome that is rearranged for all genome pairs. Read down the genome list (far left column) and extend across until the comparison genome is found. As genomes are different lengths the proportion that species X has rearranged to species Y is different to the proportion that species Y has rearranged to species X.

	<i>albens</i>	<i>brandiana</i>	<i>caleyi</i>	<i>camaldulensis</i>	<i>cladocalyx</i>	<i>cloeziana</i>	<i>coolabah</i>	<i>curtisii</i>	<i>dawsonii</i>	<i>decipiens</i>	<i>erythrocorys</i>
<i>albens</i>		74.4%	82.6%	70.3%	76.8%	54.9%	80.1%	55.6%	83.3%	71.4%	49.3%
<i>brandiana</i>	79.9%		80.7%	73.8%	79.1%	60.4%	78.6%	61.5%	81.3%	77.3%	55.6%
<i>caleyi</i>	82.5%	74.7%		71.9%	77.1%	56.4%	81.6%	57.6%	83.8%	73.4%	51.9%
<i>camaldulensis</i>	71.4%	69.0%	71.9%		70.3%	56.7%	69.2%	57.0%	72.1%	70.0%	52.5%
<i>cladocalyx</i>	80.5%	77.1%	80.5%	72.3%		58.1%	78.1%	59.3%	80.9%	75.0%	53.4%
<i>cloeziana</i>	63.0%	62.2%	63.7%	62.2%	61.9%		62.4%	68.0%	62.6%	63.5%	57.8%
<i>coolabah</i>	80.6%	73.0%	81.8%	68.2%	74.6%	54.6%		54.7%	81.1%	70.3%	49.9%
<i>curtisii</i>	67.2%	67.0%	68.5%	67.0%	67.3%	72.1%	66.4%		66.7%	68.2%	62.4%
<i>dawsonii</i>	80.6%	72.7%	80.7%	68.3%	74.2%	53.2%	77.8%	52.4%		69.6%	46.7%
<i>decipiens</i>	72.3%	71.8%	72.4%	69.3%	71.1%	56.7%	70.0%	57.4%	72.3%		50.4%
<i>erythrocorys</i>	55.4%	55.3%	55.8%	54.9%	54.5%	55.4%	54.2%	55.0%	53.0%	54.5%	
<i>fibrosa</i>	84.2%	76.3%	85.3%	72.8%	78.4%	57.0%	83.0%	57.7%	84.1%	74.3%	51.4%
<i>globulus</i>	72.1%	70.4%	73.0%	81.9%	70.9%	57.8%	69.8%	58.1%	72.4%	71.6%	52.2%
<i>grandis</i>	70.7%	68.5%	71.7%	80.6%	69.4%	55.6%	68.4%	55.4%	70.3%	70.3%	49.5%
<i>guilfoylei</i>	70.4%	71.3%	71.4%	70.2%	70.1%	67.6%	69.4%	68.7%	70.3%	72.0%	61.7%
<i>lansdowneana</i>	84.3%	75.5%	83.6%	71.0%	77.2%	55.4%	81.3%	55.5%	83.7%	73.0%	50.1%
<i>leucophloia</i>	80.3%	76.5%	80.8%	71.6%	76.2%	57.7%	79.1%	58.0%	79.4%	72.7%	52.7%
<i>marginata</i>	61.6%	61.2%	62.7%	61.1%	61.1%	81.2%	60.9%	66.7%	61.2%	61.9%	56.5%
<i>melliodora</i>	83.4%	73.8%	81.7%	69.2%	74.9%	53.4%	79.3%	54.6%	82.7%	70.9%	49.1%
<i>melliodora x sideroxylon</i>											
<i>sideroxylon</i>	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%
<i>microcorys</i>	72.5%	72.0%	72.5%	71.3%	72.0%	68.0%	71.3%	70.0%	72.7%	73.6%	63.5%
ANBG9806169	60.3%	60.7%	61.9%	61.1%	60.2%	84.0%	60.1%	66.3%	59.5%	61.2%	56.9%
<i>paniculata</i>	84.1%	76.7%	85.6%	72.8%	79.1%	58.2%	82.3%	58.2%	84.3%	73.7%	51.1%
<i>pauciflora</i>	62.6%	61.2%	63.4%	62.7%	62.4%	86.7%	61.6%	67.8%	62.0%	63.3%	57.5%
<i>polyanthemos</i>	83.2%	75.0%	83.3%	70.8%	77.2%	55.7%	81.0%	55.7%	87.8%	72.0%	50.5%
<i>pumila</i>	73.6%	72.1%	74.1%	83.1%	72.9%	59.3%	71.2%	59.4%	73.4%	73.6%	54.1%
<i>regnans</i>	61.7%	62.1%	62.2%	61.2%	60.4%	85.9%	60.2%	66.5%	60.4%	62.4%	56.0%
<i>shirleyi</i>	83.6%	75.5%	84.6%	71.6%	77.1%	56.6%	82.5%	57.6%	82.9%	72.7%	52.5%
<i>sideroxylon</i>	84.0%	74.8%	83.0%	71.0%	76.1%	55.7%	80.9%	55.7%	83.9%	72.2%	50.1%
<i>tenuipes</i>	70.0%	68.7%	70.7%	69.4%	68.9%	74.6%	68.3%	78.4%	68.5%	69.9%	65.7%
<i>victrix</i>	82.7%	75.5%	83.5%	71.7%	77.4%	57.1%	84.3%	57.5%	83.1%	73.3%	52.0%
<i>viminalis</i>	70.9%	69.4%	71.7%	80.4%	69.6%	56.5%	69.3%	56.8%	71.0%	70.3%	51.9%
<i>virginea</i>	75.3%	74.2%	76.1%	73.1%	74.4%	60.4%	73.2%	61.4%	76.0%	79.5%	55.7%

	<i>fibrosa</i>	<i>globulus</i>	<i>grandis</i>	<i>guilfoylei</i>	<i>lansdowneana</i>	<i>leucophloia</i>	<i>marginata</i>	<i>mellioidora</i>	<i>mellioidora x sideroxylon</i>	<i>microcorys</i>	ANBG98061 69
<i>albens</i>	83.7%	69.6%	72.0%	63.0%	84.0%	78.6%	55.6%	83.6%	84.7%	62.3%	53.8%
<i>brandiana</i>	81.2%	73.0%	75.1%	69.3%	80.8%	80.9%	61.3%	79.4%	81.6%	67.4%	60.6%
<i>caleyi</i>	84.8%	71.4%	73.5%	64.6%	83.5%	80.0%	57.9%	82.7%	83.8%	63.3%	56.3%
<i>camaldulensis</i>	73.2%	80.6%	83.5%	64.6%	71.7%	71.4%	57.6%	70.6%	73.3%	63.2%	57.1%
<i>cladocalyx</i>	81.8%	72.1%	74.4%	66.9%	80.9%	78.9%	59.3%	79.6%	81.8%	65.7%	57.5%
<i>cloeziana</i>	63.4%	62.1%	63.8%	67.1%	62.6%	63.3%	82.7%	61.5%	65.1%	65.1%	84.3%
<i>coolabah</i>	83.0%	68.0%	70.4%	62.3%	81.7%	78.2%	55.7%	80.6%	82.4%	61.6%	54.5%
<i>curtisii</i>	68.1%	66.9%	68.3%	72.7%	67.0%	67.6%	73.2%	66.4%	69.4%	71.0%	71.7%
<i>dawsonii</i>	81.5%	67.8%	69.5%	60.7%	81.7%	75.8%	53.8%	81.5%	82.2%	60.0%	52.4%
<i>decipiens</i>	74.4%	70.0%	71.8%	65.3%	73.3%	71.6%	57.2%	72.2%	73.7%	64.3%	56.7%
<i>erythrocorys</i>	55.5%	54.7%	55.5%	58.5%	55.0%	54.8%	55.4%	54.0%	56.7%	57.8%	55.4%
<i>fibrosa</i>		72.0%	74.5%	66.6%	83.8%	81.1%	58.1%	84.0%	85.3%	65.1%	56.1%
<i>globulus</i>	73.6%		85.0%	66.2%	73.1%	71.2%	58.2%	71.2%	74.7%	64.7%	57.6%
<i>grandis</i>	71.9%	80.7%		63.4%	71.2%	70.1%	56.6%	70.1%	72.9%	63.3%	55.8%
<i>guilfoylei</i>	72.1%	70.4%	71.7%		71.1%	71.5%	68.3%	70.4%	72.7%	74.1%	66.0%
<i>lansdowneana</i>	83.7%	70.4%	72.4%	63.8%		79.5%	56.5%	84.3%	85.7%	63.4%	54.8%
<i>leucophloia</i>	81.8%	70.4%	72.9%	65.8%	80.2%		58.2%	79.4%	81.1%	64.8%	57.5%
<i>marginata</i>	62.4%	60.7%	62.8%	66.7%	61.8%	61.9%		60.8%	64.1%	63.9%	83.1%
<i>mellioidora</i>	82.4%	69.0%	71.2%	62.2%	82.7%	76.7%	54.8%		75.5%	75.5%	75.5%
<i>mellioidora x sideroxylon</i>	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%		63.5%	63.5%
<i>microcorys</i>	73.7%	71.5%	73.8%	76.9%	73.0%	73.4%	68.6%	70.9%	74.1%		68.1%
ANBG9806169	61.2%	60.5%	62.7%	64.2%	60.4%	61.2%	83.9%	59.9%	63.1%	63.5%	
<i>paniculata</i>	86.2%	72.1%	73.8%	65.4%	84.0%	79.4%	58.8%	83.9%	85.5%	65.2%	56.9%
<i>pauciflora</i>	63.3%	62.4%	63.3%	66.6%	62.4%	61.7%	86.2%	60.4%	63.3%	65.5%	91.9%
<i>polyanthemos</i>	84.0%	70.2%	72.2%	63.6%	83.4%	78.1%	56.3%	83.5%	84.4%	62.6%	55.5%
<i>pumila</i>	74.5%	81.6%	83.6%	68.2%	74.3%	73.0%	59.9%	72.9%	75.9%	66.6%	58.1%
<i>regnans</i>	62.4%	60.6%	62.3%	66.9%	61.7%	61.8%	85.5%	59.9%	63.4%	64.7%	91.3%
<i>shirleyi</i>	84.7%	70.9%	73.1%	64.7%	83.1%	79.7%	57.8%	83.3%	84.2%	65.1%	56.7%
<i>sideroxylon</i>	84.1%	69.6%	71.6%	63.8%	84.0%	78.5%	56.7%	84.8%	88.2%	62.4%	55.6%
<i>tenuipes</i>	70.8%	69.3%	70.8%	75.1%	69.5%	70.2%	74.8%	67.6%	70.3%	72.7%	73.5%
<i>victrix</i>	83.5%	71.3%	73.2%	65.6%	82.7%	80.7%	57.9%	82.2%	83.7%	64.0%	57.2%
<i>viminalis</i>	73.3%	85.5%	83.7%	64.7%	71.4%	70.1%	57.0%	70.0%	73.3%	63.3%	56.7%
<i>virginea</i>	76.7%	73.1%	75.1%	68.9%	75.9%	75.1%	61.3%	74.5%	77.4%	68.3%	60.4%

	<i>paniculata</i>	<i>pauciflora</i>	<i>polyanthemos</i>	<i>pumila</i>	<i>regnans</i>	<i>shirleyi</i>	<i>sideroxylon</i>	<i>tenuipes</i>	<i>victrix</i>	<i>viminalis</i>	<i>virginea</i>
<i>albens</i>	84.0%	56.5%	83.0%	69.9%	53.4%	82.8%	83.2%	55.5%	80.4%	69.3%	72.6%
<i>brandiana</i>	82.1%	58.8%	79.7%	74.3%	59.4%	81.0%	79.4%	60.6%	78.6%	73.6%	77.7%
<i>caleyi</i>	86.0%	57.0%	82.7%	71.7%	54.8%	84.7%	82.6%	57.7%	81.5%	70.7%	74.1%
<i>camaldulensis</i>	73.0%	56.7%	71.2%	81.0%	55.2%	72.7%	70.8%	58.4%	70.5%	80.3%	72.1%
<i>cladocalyx</i>	81.8%	57.7%	80.5%	73.2%	56.5%	80.6%	79.3%	58.4%	78.6%	71.8%	75.9%
<i>cloeziana</i>	64.1%	84.3%	62.6%	62.4%	84.5%	63.2%	62.6%	67.7%	62.0%	62.3%	64.9%
<i>coolabah</i>	82.5%	55.2%	80.9%	68.2%	52.9%	82.8%	80.2%	54.0%	82.4%	67.7%	71.1%
<i>curtisii</i>	68.8%	72.1%	66.8%	67.3%	71.1%	68.5%	66.9%	76.1%	66.8%	66.6%	69.5%
<i>dawsonii</i>	81.3%	53.7%	85.5%	67.6%	51.1%	80.2%	81.3%	52.9%	78.3%	67.0%	70.7%
<i>decipiens</i>	73.2%	56.1%	71.5%	70.9%	55.4%	72.2%	71.7%	56.2%	71.2%	70.1%	78.2%
<i>erythrocorys</i>	55.0%	54.9%	54.5%	54.5%	52.7%	54.5%	54.3%	56.3%	54.3%	53.6%	56.3%
<i>fibrosa</i>	86.5%	57.0%	84.2%	72.5%	55.4%	84.9%	83.8%	57.7%	81.8%	72.4%	75.2%
<i>globulus</i>	74.1%	58.3%	72.0%	81.5%	56.0%	73.1%	71.4%	57.7%	71.3%	86.5%	73.4%
<i>grandis</i>	72.3%	55.1%	70.3%	79.3%	53.6%	71.9%	70.2%	55.7%	70.2%	81.1%	71.8%
<i>guilfoylei</i>	72.4%	66.7%	70.7%	71.3%	66.6%	71.4%	70.2%	68.3%	70.4%	69.9%	72.5%
<i>lansdowneana</i>	84.4%	55.5%	83.6%	71.1%	54.0%	83.7%	84.3%	55.9%	81.1%	70.5%	74.0%
<i>leucophloia</i>	80.8%	57.1%	79.4%	71.4%	56.2%	81.5%	79.0%	59.2%	80.4%	70.5%	74.5%
<i>marginata</i>	63.6%	83.3%	61.5%	61.7%	82.8%	62.5%	61.9%	66.3%	60.8%	61.0%	63.5%
<i>melliadora</i>	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%
<i>melliadora x sideroxylon</i>	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%	63.5%
<i>microcorys</i>	74.6%	67.4%	72.3%	72.8%	67.2%	73.7%	71.8%	69.4%	71.7%	71.2%	74.6%
ANBG9806169	61.5%	88.9%	60.4%	60.0%	89.3%	61.3%	60.6%	66.3%	60.2%	60.4%	62.6%
<i>paniculata</i>		56.3%	83.8%	72.3%	59.0%	85.0%	84.1%	57.2%	83.4%	72.0%	75.8%
<i>pauciflora</i>	61.8%		60.4%	62.7%	91.7%	63.3%	62.5%	66.7%	61.8%	62.6%	65.8%
<i>polyanthemos</i>	83.9%	53.6%		71.0%	53.9%	82.8%	83.6%	56.4%	81.0%	70.1%	72.8%
<i>pumila</i>	74.9%	59.2%	74.1%		57.9%	74.6%	73.1%	60.3%	72.7%	82.0%	75.3%
<i>regnans</i>	64.6%	90.9%	60.7%	61.4%		63.2%	61.0%	66.3%	60.9%	60.8%	64.0%
<i>shirleyi</i>	85.3%	57.3%	82.8%	71.9%	56.2%		83.3%	57.9%	82.1%	71.3%	74.3%
<i>sideroxylon</i>	84.2%	55.0%	83.2%	70.3%	53.8%	83.5%		55.8%	81.0%	69.7%	73.3%
<i>tenuipes</i>	70.4%	72.5%	69.0%	70.1%	72.5%	70.6%	69.1%		68.6%	68.8%	71.5%
<i>victrix</i>	84.5%	56.9%	82.0%	71.7%	55.9%	83.4%	82.1%	57.5%		71.3%	74.0%
<i>viminalis</i>	72.8%	57.1%	70.6%	80.3%	54.7%	71.7%	70.4%	56.6%	69.8%		71.9%
<i>virginea</i>	77.0%	60.6%	74.7%	74.7%	59.1%	76.2%	74.7%	61.5%	74.2%	72.5%	

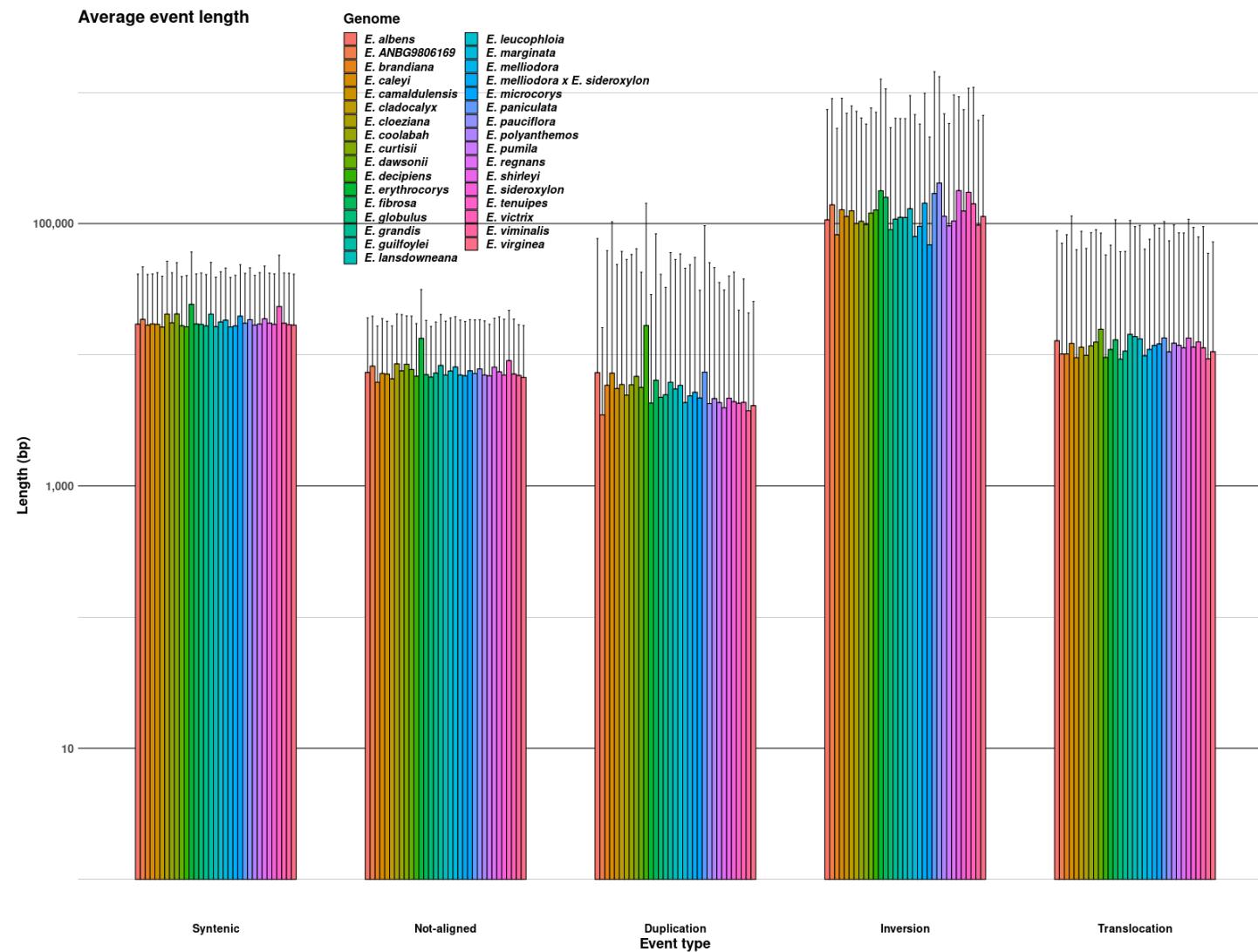
Supplementary Tables S12. Matrix of pairwise shared sequence (synteny + rearranged). Shows the proportion of the genome that is shared for all genome pairs. Read down the genome list (far left column) and extend across until the comparison genome is found. As genomes are different lengths the proportion that species X shares with species Y is different to the proportion that species Y shares with species X.

	<i>albens</i>	<i>brandiana</i>	<i>caleyi</i>	<i>camaldulensis</i>	<i>cladocalyx</i>	<i>cloeziana</i>	<i>coolabah</i>	<i>curtisii</i>	<i>dawsonii</i>	<i>decipiens</i>	<i>erythrocorys</i>
<i>albens</i>		25.6%	17.4%	29.7%	23.2%	45.1%	19.9%	44.4%	16.7%	28.6%	50.7%
<i>brandiana</i>	20.1%		19.3%	26.2%	20.9%	39.6%	21.4%	38.5%	18.7%	22.7%	44.4%
<i>caleyi</i>	17.5%	25.3%		28.1%	22.9%	43.6%	18.4%	42.4%	16.2%	26.6%	48.1%
<i>camaldulensis</i>	28.6%	31.0%	28.1%		29.7%	43.3%	30.8%	43.0%	27.9%	30.0%	47.5%
<i>cladocalyx</i>	19.5%	22.9%	19.5%	27.7%		41.9%	21.9%	40.7%	19.1%	25.0%	46.6%
<i>cloeziana</i>	37.0%	37.8%	36.3%	37.8%	38.1%		37.6%	32.0%	37.4%	36.5%	42.2%
<i>coolabah</i>	19.4%	27.0%	18.2%	31.8%	25.4%	45.4%		45.3%	18.9%	29.7%	50.1%
<i>curtisii</i>	32.8%	33.0%	31.5%	33.0%	32.7%	27.9%	33.6%		33.3%	31.8%	37.6%
<i>dawsonii</i>	19.4%	27.3%	19.3%	31.7%	25.8%	46.8%	22.2%	47.6%		30.4%	53.3%
<i>decipiens</i>	27.7%	28.2%	27.6%	30.7%	28.9%	43.3%	30.0%	42.6%	27.7%		49.6%
<i>erythrocorys</i>	44.6%	44.7%	44.2%	45.1%	45.5%	44.6%	45.8%	45.0%	47.0%	45.5%	
<i>fibrosa</i>	15.8%	23.7%	14.7%	27.2%	21.6%	43.0%	17.0%	42.3%	15.9%	25.7%	48.6%
<i>globulus</i>	27.9%	29.6%	27.0%	18.1%	29.1%	42.2%	30.2%	41.9%	27.6%	28.4%	47.8%
<i>grandis</i>	29.3%	31.5%	28.3%	19.4%	30.6%	44.4%	31.6%	44.6%	29.7%	29.7%	50.5%
<i>guilfoylei</i>	29.6%	28.7%	28.6%	29.8%	29.9%	32.4%	30.6%	31.3%	29.7%	28.0%	38.3%
<i>lansdowneana</i>	15.7%	24.5%	16.4%	29.0%	22.8%	44.6%	18.7%	44.5%	16.3%	27.0%	49.9%
<i>leucophloia</i>	19.7%	23.5%	19.2%	28.4%	23.8%	42.3%	20.9%	42.0%	20.6%	27.3%	47.3%
<i>marginata</i>	38.4%	38.8%	37.3%	38.9%	38.9%	18.8%	39.1%	33.3%	38.8%	38.1%	43.5%
<i>melliodora</i>	16.6%	26.2%	18.3%	30.8%	25.1%	46.6%	20.7%	45.4%	17.3%	29.1%	50.9%
<i>melliodora x sideroxylon</i>											
<i>sideroxylon</i>	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%
<i>microcorys</i>	27.5%	28.0%	27.5%	28.7%	28.0%	32.0%	28.7%	30.0%	27.3%	26.4%	36.5%
ANBG9806169	39.7%	39.3%	38.1%	38.9%	39.8%	16.0%	39.9%	33.7%	40.5%	38.8%	43.1%
<i>paniculata</i>	15.9%	23.3%	14.4%	27.2%	20.9%	41.8%	17.7%	41.8%	15.7%	26.3%	48.9%
<i>pauciflora</i>	37.4%	38.8%	36.6%	37.3%	37.6%	13.3%	38.4%	32.2%	38.0%	36.7%	42.5%
<i>polyanthemos</i>	16.8%	25.0%	16.7%	29.2%	22.8%	44.3%	19.0%	44.3%	12.2%	28.0%	49.5%
<i>pumila</i>	26.4%	27.9%	25.9%	16.9%	27.1%	40.7%	28.8%	40.6%	26.6%	26.4%	45.9%
<i>regnans</i>	38.3%	37.9%	37.8%	38.8%	39.6%	14.1%	39.8%	33.5%	39.6%	37.6%	44.0%
<i>shirleyi</i>	16.4%	24.5%	15.4%	28.4%	22.9%	43.4%	17.5%	42.4%	17.1%	27.3%	47.5%
<i>sideroxylon</i>	16.0%	25.2%	17.0%	29.0%	23.9%	44.3%	19.1%	44.3%	16.1%	27.8%	49.9%
<i>tenuipes</i>	30.0%	31.3%	29.3%	30.6%	31.1%	25.4%	31.7%	21.6%	31.5%	30.1%	34.3%
<i>victrix</i>	17.3%	24.5%	16.5%	28.3%	22.6%	42.9%	15.7%	42.5%	16.9%	26.7%	48.0%
<i>viminalis</i>	29.1%	30.6%	28.3%	19.6%	30.4%	43.5%	30.7%	43.2%	29.0%	29.7%	48.1%
<i>virginea</i>	24.7%	25.8%	23.9%	26.9%	25.6%	39.6%	26.8%	38.6%	24.0%	20.5%	44.3%

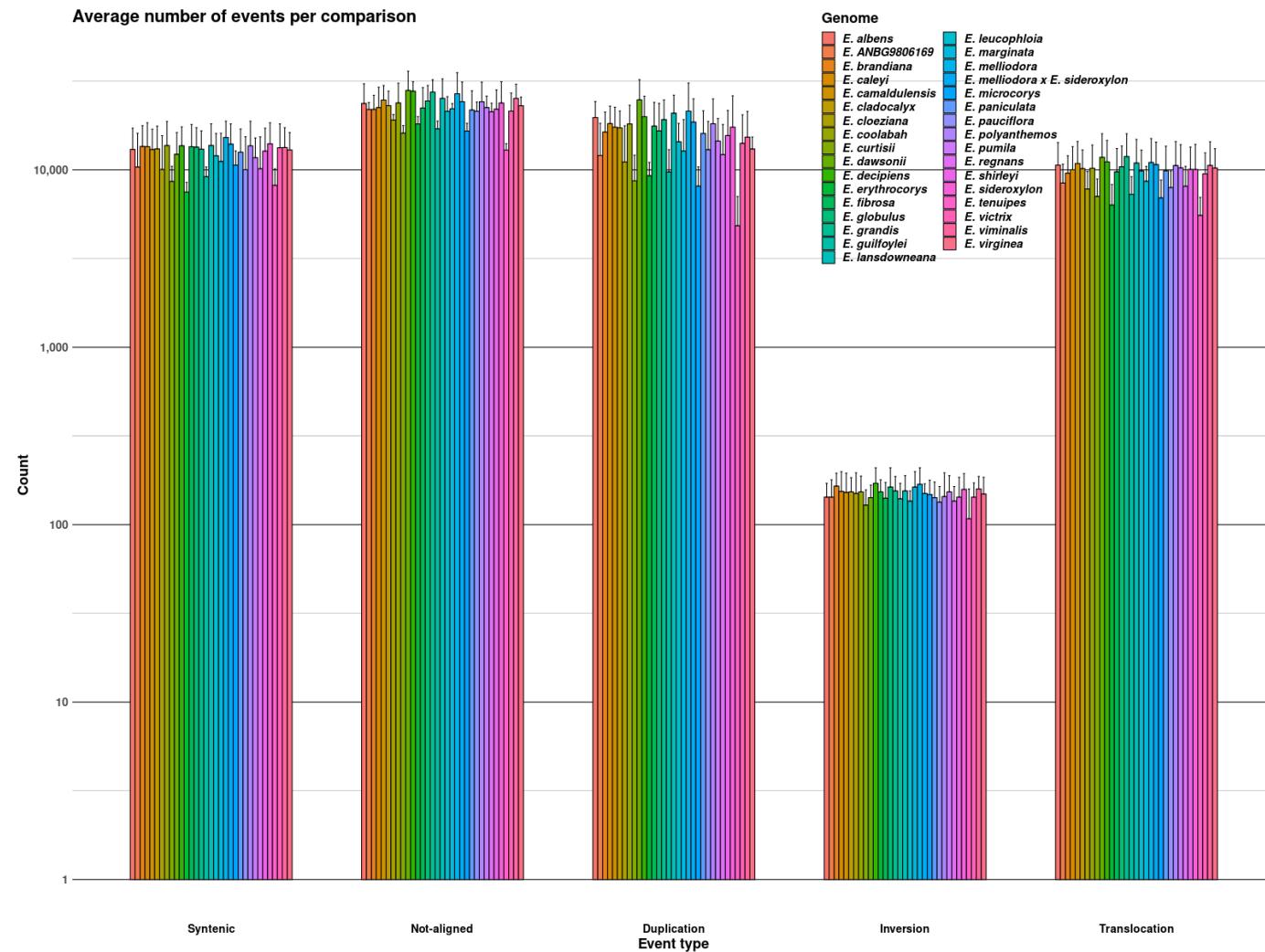
	<i>fibrosa</i>	<i>globulus</i>	<i>grandis</i>	<i>guilfoylei</i>	<i>lansdowneana</i>	<i>leucophloia</i>	<i>marginata</i>	<i>mellioidora</i>	<i>mellioidora x sideroxylon</i>	<i>microcorys</i>	ANBG98061 69
<i>albens</i>	16.3%	30.4%	28.0%	37.0%	16.0%	21.4%	44.4%	16.4%	15.3%	37.7%	46.2%
<i>brandiana</i>	18.8%	27.0%	24.9%	30.7%	19.2%	19.1%	38.7%	20.6%	18.4%	32.6%	39.4%
<i>caleyi</i>	15.2%	28.6%	26.5%	35.4%	16.5%	20.0%	42.1%	17.3%	16.2%	36.7%	43.7%
<i>camaldulensis</i>	26.8%	19.4%	16.5%	35.4%	28.3%	28.6%	42.4%	29.4%	26.7%	36.8%	42.9%
<i>cladocalyx</i>	18.2%	27.9%	25.6%	33.1%	19.1%	21.1%	40.7%	20.4%	18.2%	34.3%	42.5%
<i>cloeziana</i>	36.6%	37.9%	36.2%	32.9%	37.4%	36.7%	17.3%	38.5%	34.9%	34.9%	15.7%
<i>coolabah</i>	17.0%	32.0%	29.6%	37.7%	18.3%	21.8%	44.3%	19.4%	17.6%	38.4%	45.5%
<i>curtisii</i>	31.9%	33.1%	31.7%	27.3%	33.0%	32.4%	26.8%	33.6%	30.6%	29.0%	28.3%
<i>dawsonii</i>	18.5%	32.2%	30.5%	39.3%	18.3%	24.2%	46.2%	18.5%	17.8%	40.0%	47.6%
<i>decipiens</i>	25.6%	30.0%	28.2%	34.7%	26.7%	28.4%	42.8%	27.8%	26.3%	35.7%	43.3%
<i>erythrocorys</i>	44.5%	45.3%	44.5%	41.5%	45.0%	45.2%	44.6%	46.0%	43.3%	42.2%	44.6%
<i>fibrosa</i>		28.0%	25.5%	33.4%	16.2%	18.9%	41.9%	16.0%	14.7%	34.9%	43.9%
<i>globulus</i>	26.4%		15.0%	33.8%	26.9%	28.8%	41.8%	28.8%	25.3%	35.3%	42.4%
<i>grandis</i>	28.1%	19.3%		36.6%	28.8%	29.9%	43.4%	29.9%	27.1%	36.7%	44.2%
<i>guilfoylei</i>	27.9%	29.6%	28.3%		28.9%	28.5%	31.7%	29.6%	27.3%	25.9%	34.0%
<i>lansdowneana</i>	16.3%	29.6%	27.6%	36.2%		20.5%	43.5%	15.7%	14.3%	36.6%	45.2%
<i>leucophloia</i>	18.2%	29.6%	27.1%	34.2%	19.8%		41.8%	20.6%	18.9%	35.2%	42.5%
<i>marginata</i>	37.6%	39.3%	37.2%	33.3%	38.2%	38.1%		39.2%	35.9%	36.1%	16.9%
<i>mellioidora</i>	17.6%	31.0%	28.8%	37.8%	17.3%	23.3%	45.2%		24.5%	24.5%	24.5%
<i>mellioidora x sideroxylon</i>	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%		36.5%	36.5%
<i>microcorys</i>	26.3%	28.5%	26.2%	23.1%	27.0%	26.6%	31.4%	29.1%	25.9%		31.9%
ANBG9806169	38.8%	39.5%	37.3%	35.8%	39.6%	38.8%	16.1%	40.1%	36.9%	36.5%	
<i>paniculata</i>	13.8%	27.9%	26.2%	34.6%	16.0%	20.6%	41.2%	16.1%	14.5%	34.8%	43.1%
<i>pauciflora</i>	36.7%	37.6%	36.7%	33.4%	37.6%	38.3%	13.8%	39.6%	36.7%	34.5%	8.1%
<i>polyanthemos</i>	16.0%	29.8%	27.8%	36.4%	16.6%	21.9%	43.7%	16.5%	15.6%	37.4%	44.5%
<i>pumila</i>	25.5%	18.4%	16.4%	31.8%	25.7%	27.0%	40.1%	27.1%	24.1%	33.4%	41.9%
<i>regnans</i>	37.6%	39.4%	37.7%	33.1%	38.3%	38.2%	14.5%	40.1%	36.6%	35.3%	8.7%
<i>shirleyi</i>	15.3%	29.1%	26.9%	35.3%	16.9%	20.3%	42.2%	16.7%	15.8%	34.9%	43.3%
<i>sideroxylon</i>	15.9%	30.4%	28.4%	36.2%	16.0%	21.5%	43.3%	15.2%	11.8%	37.6%	44.4%
<i>tenuipes</i>	29.2%	30.7%	29.2%	24.9%	30.5%	29.8%	25.2%	32.4%	29.7%	27.3%	26.5%
<i>victrix</i>	16.5%	28.7%	26.8%	34.4%	17.3%	19.3%	42.1%	17.8%	16.3%	36.0%	42.8%
<i>viminalis</i>	26.7%	14.5%	16.3%	35.3%	28.6%	29.9%	43.0%	30.0%	26.7%	36.7%	43.3%
<i>virginea</i>	23.3%	26.9%	24.9%	31.1%	24.1%	24.9%	38.7%	25.5%	22.6%	31.7%	39.6%

	<i>paniculata</i>	<i>pauciflora</i>	<i>polyanthemos</i>	<i>pumila</i>	<i>regnans</i>	<i>shirleyi</i>	<i>sideroxylon</i>	<i>tenuipes</i>	<i>victrix</i>	<i>viminalis</i>	<i>virginea</i>
<i>albens</i>	16.0%	43.5%	17.0%	30.1%	46.6%	17.2%	16.8%	44.5%	19.6%	30.7%	27.4%
<i>brandiana</i>	17.9%	41.2%	20.3%	25.7%	40.6%	19.0%	20.6%	39.4%	21.4%	26.4%	22.3%
<i>caleyi</i>	14.0%	43.0%	17.3%	28.3%	45.2%	15.3%	17.4%	42.3%	18.5%	29.3%	25.9%
<i>camaldulensis</i>	27.0%	43.3%	28.8%	19.0%	44.8%	27.3%	29.2%	41.6%	29.5%	19.7%	27.9%
<i>cladocalyx</i>	18.2%	42.3%	19.5%	26.8%	43.5%	19.4%	20.7%	41.6%	21.4%	28.2%	24.1%
<i>cloeziana</i>	35.9%	15.7%	37.4%	37.6%	15.5%	36.8%	37.4%	32.3%	38.0%	37.7%	35.1%
<i>coolabah</i>	17.5%	44.8%	19.1%	31.8%	47.1%	17.2%	19.8%	46.0%	17.6%	32.3%	28.9%
<i>curtisii</i>	31.2%	27.9%	33.2%	32.7%	28.9%	31.5%	33.1%	23.9%	33.2%	33.4%	30.5%
<i>dawsonii</i>	18.7%	46.3%	14.5%	32.4%	48.9%	19.8%	18.7%	47.1%	21.7%	33.0%	29.3%
<i>decipiens</i>	26.8%	43.9%	28.5%	29.1%	44.6%	27.8%	28.3%	43.8%	28.8%	29.9%	21.8%
<i>erythrocorys</i>	45.0%	45.1%	45.5%	45.5%	47.3%	45.5%	45.7%	43.7%	45.7%	46.4%	43.7%
<i>fibrosa</i>	13.5%	43.0%	15.8%	27.5%	44.6%	15.1%	16.2%	42.3%	18.2%	27.6%	24.8%
<i>globulus</i>	25.9%	41.7%	28.0%	18.5%	44.0%	26.9%	28.6%	42.3%	28.7%	13.5%	26.6%
<i>grandis</i>	27.7%	44.9%	29.7%	20.7%	46.4%	28.1%	29.8%	44.3%	29.8%	18.9%	28.2%
<i>guilfoylei</i>	27.6%	33.3%	29.3%	28.7%	33.4%	28.6%	29.8%	31.7%	29.6%	30.1%	27.5%
<i>lansdowneana</i>	15.6%	44.5%	16.4%	28.9%	46.0%	16.3%	15.7%	44.1%	18.9%	29.5%	26.0%
<i>leucophloia</i>	19.2%	42.9%	20.6%	28.6%	43.8%	18.5%	21.0%	40.8%	19.6%	29.5%	25.5%
<i>marginata</i>	36.4%	16.7%	38.5%	38.3%	17.2%	37.5%	38.1%	33.7%	39.2%	39.0%	36.5%
<i>mellioidora</i>	24.5%	24.5%	24.5%	24.5%	24.5%	24.5%	24.5%	24.5%	24.5%	24.5%	24.5%
<i>mellioidora x sideroxylon</i>	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%
<i>microcorys</i>	25.4%	32.6%	27.7%	27.2%	32.8%	26.3%	28.2%	30.6%	28.3%	28.8%	25.4%
ANBG9806169	38.5%	11.1%	39.6%	40.0%	10.7%	38.7%	39.4%	33.7%	39.8%	39.6%	37.4%
<i>paniculata</i>		43.7%	16.2%	27.7%	41.0%	15.0%	15.9%	42.8%	16.6%	28.0%	24.2%
<i>pauciflora</i>	38.2%		39.6%	37.3%	8.3%	36.7%	37.5%	33.3%	38.2%	37.4%	34.2%
<i>polyanthemos</i>	16.1%	46.4%		29.0%	46.1%	17.2%	16.4%	43.6%	19.0%	29.9%	27.2%
<i>pumila</i>	25.1%	40.8%	25.9%		42.1%	25.4%	26.9%	39.7%	27.3%	18.0%	24.7%
<i>regnans</i>	35.4%	9.1%	39.3%	38.6%		36.8%	39.0%	33.7%	39.1%	39.2%	36.0%
<i>shirleyi</i>	14.7%	42.7%	17.2%	28.1%	43.8%		16.7%	42.1%	17.9%	28.7%	25.7%
<i>sideroxylon</i>	15.8%	45.0%	16.8%	29.7%	46.2%	16.5%		44.2%	19.0%	30.3%	26.7%
<i>tenuipes</i>	29.6%	27.5%	31.0%	29.9%	27.5%	29.4%	30.9%		31.4%	31.2%	28.5%
<i>victrix</i>	15.5%	43.1%	18.0%	28.3%	44.1%	16.6%	17.9%	42.5%		28.7%	26.0%
<i>viminalis</i>	27.2%	42.9%	29.4%	19.7%	45.3%	28.3%	29.6%	43.4%	30.2%		28.1%
<i>virginea</i>	23.0%	39.4%	25.3%	25.3%	40.9%	23.8%	25.3%	38.5%	25.8%	27.5%	

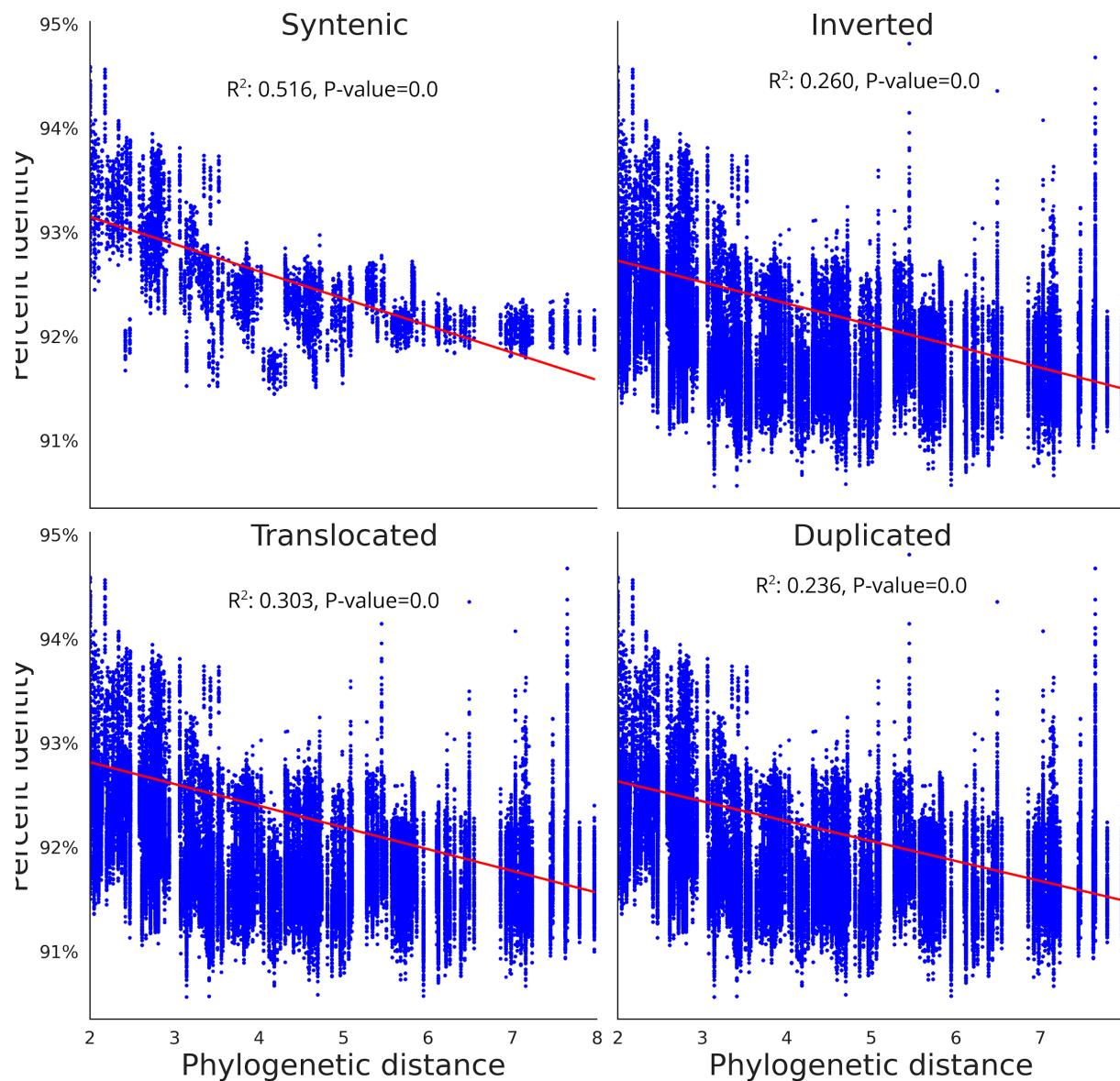
Supplementary Tables S13. Matrix of pairwise unaligned. Shows the proportion of the genome that is unaligned for all genome pairs. Read down the genome list (far left column) and extend across until the comparison genome is found.



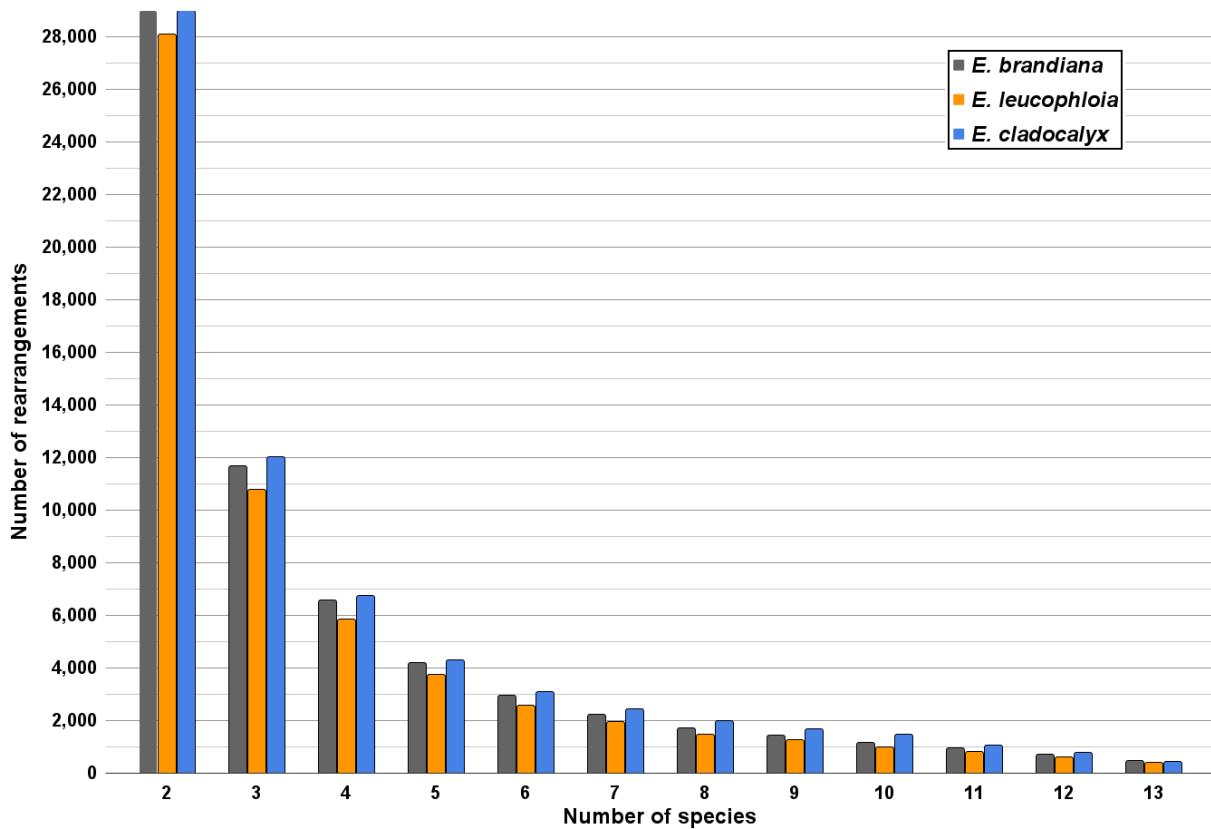
Supplementary Figure S18. Average length of syntenic, unaligned, rearrangement (combined duplications, inversions, and translocations), duplicated, inverted, and translocated regions, for all comparisons within each genome. Error bars show standard deviation of region lengths.



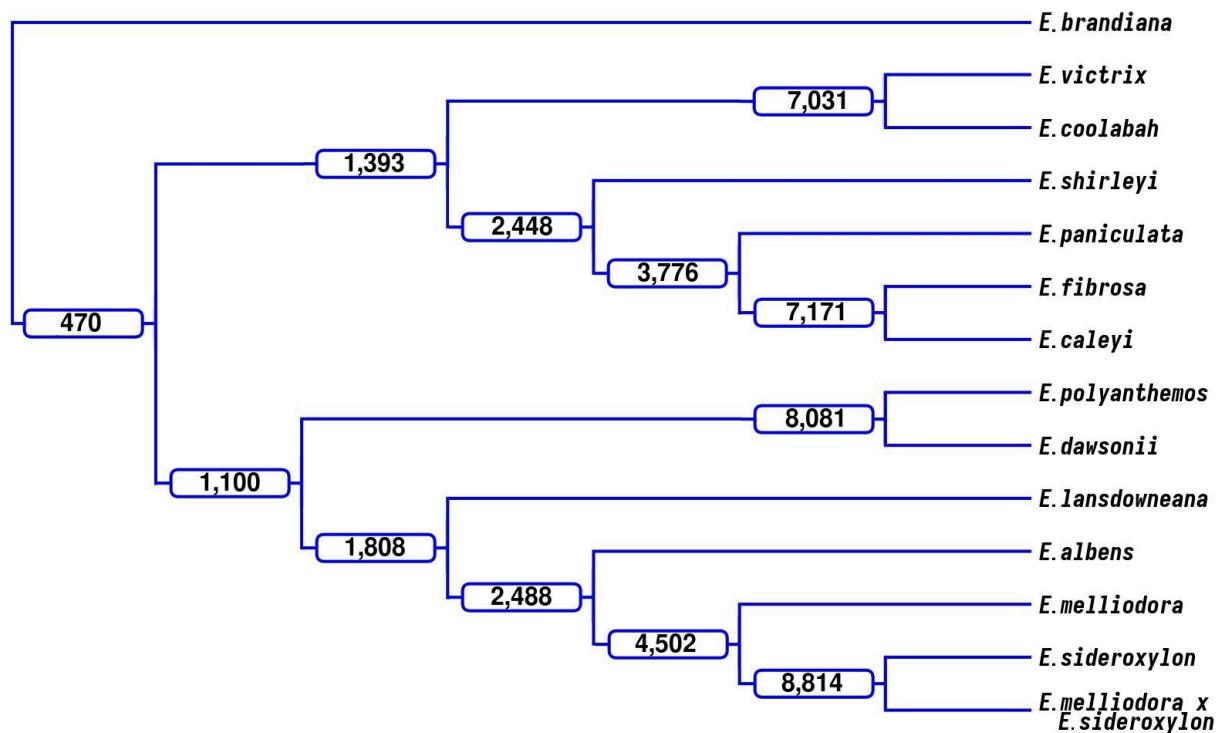
Supplementary Figure S19. Average number of syntenic, unaligned, rearrangement (combined duplications, inversions, and translocations), duplicated, inverted, and translocated regions, for all comparisons within each genome. Error bars show the minimum and maximum number of events counted within a comparison for each genome



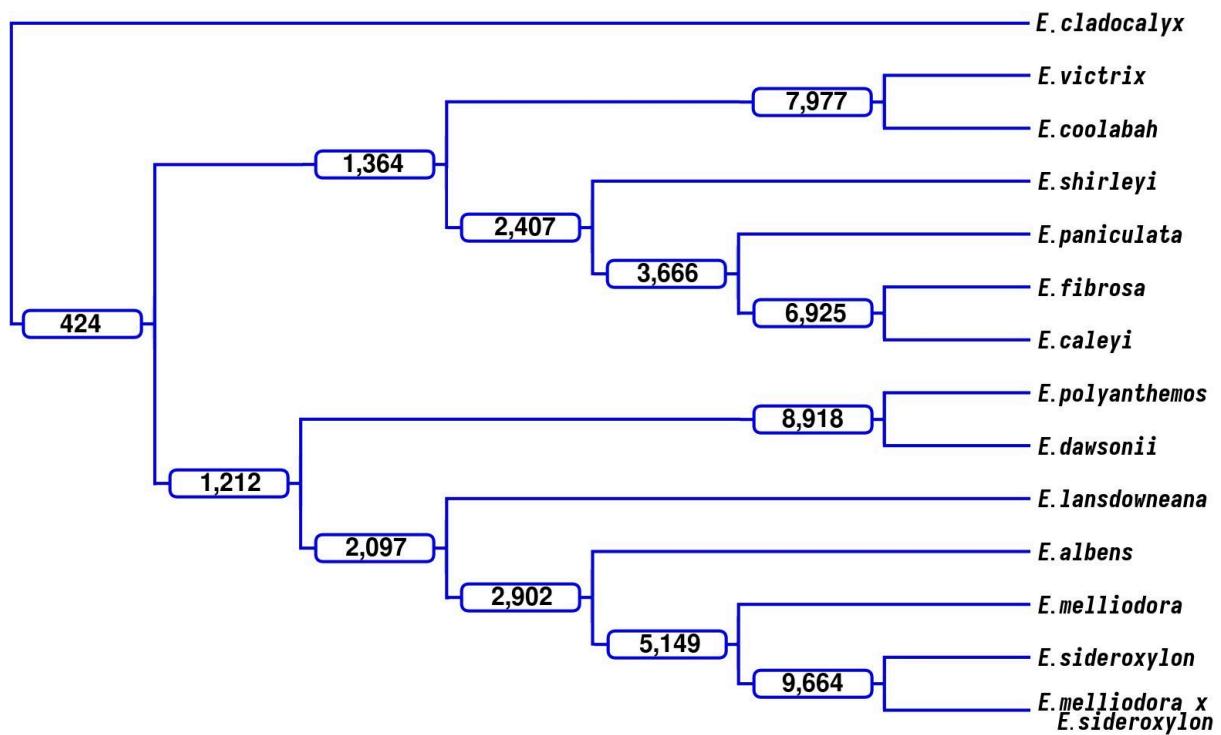
Supplementary Figure S20. MUMmer alignment percent identity regression and scatter plot.



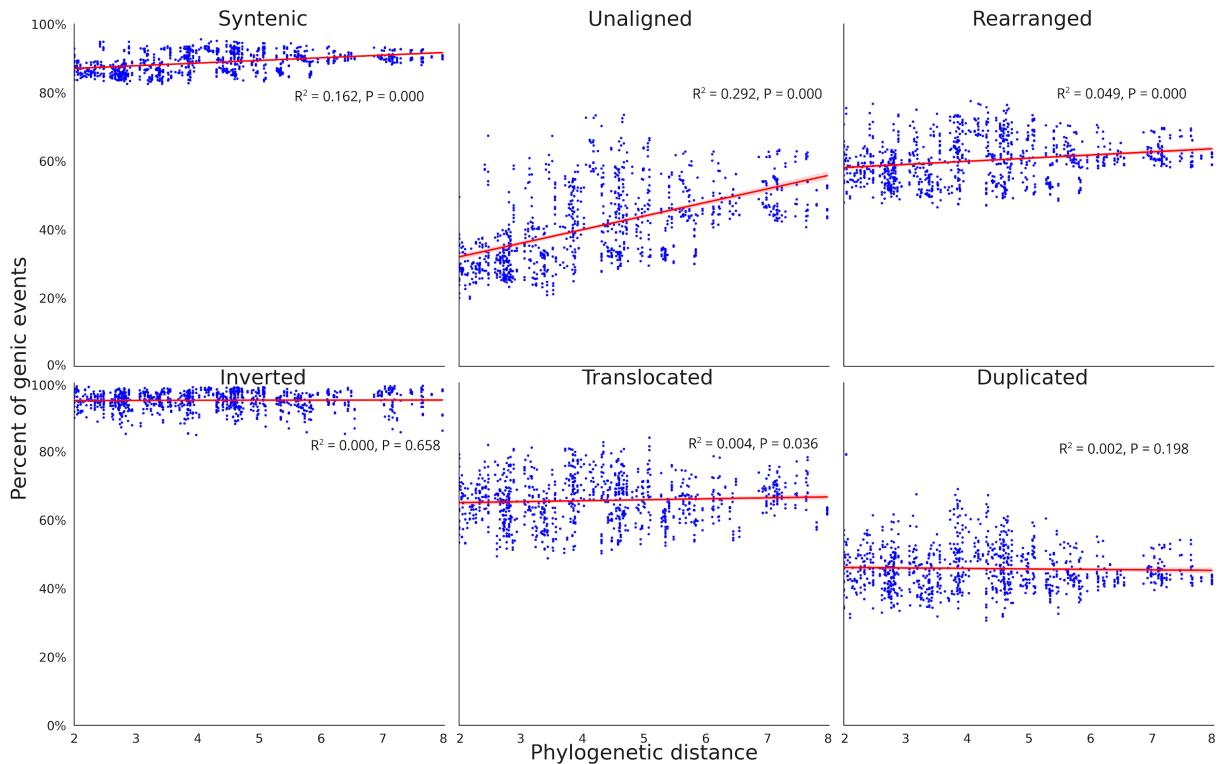
Supplementary Figure S21. Ignoring the phylogenetic relationships between genomes, shows the number of rearrangements shared by an increasing number of *Adnataria* genomes using *E. brandiana*, *E. cladocalyx*, and *E. leucophylla* as the outgroup/genetic architecture.



Supplementary Figures S22. Repeat of *Adnataria* phylogeny of common rearrangements. *E. brandiana* is the outgroup genome



Supplementary Figures S23. Repeat of Adnataria phylogeny of common rearrangements.
E. cladocalyx is the out genome.



Supplementary Figures S24. Phylogenetic distance and the number of events

syntenic, rearrangement, and unaligned events. Pairwise genome conservation and loss, as phylogenetic distance increases. The number of events between both *Eucalyptus* genomes with an alignment pair that was identified as syntetic, rearranged, or unaligned, plotted against the phylogenetic distance of the two genomes. The unaligned proportion is the species-specific fraction of the genome between genome pairs, resulting from either an insertion, deletion, differential inheritance, or sequence divergence. Rearranged events are broken down into inverted, translocated, and duplicated regions. Phylogenetic distance was calculated as the sum of branch lengths between each genome pair within phylogeny.