

附录 2 广西火桐和丹霞梧桐的叶绿体基因组 SSR 信息。p1 为单核苷酸重复类型；p2 为双核苷酸重复类型；p3 为三核苷酸重复类型；p4 为四核苷酸重复类型；p5 为五核苷酸重复类型；c 为复合核苷酸类型。

Appendix 2 SSR sequences identified in *Firmiana kwangsiensis* and *F. danxiaensis* chloroplast genome. p1, mononucleotide; p2, dinucleotide; p3, trinucleotide; p4, tetranucleotide; p5, pentanucleotide; c, composite nucleotide.

序号 Code	重复类型 SSR type	简单重复序列 SSR sequence	大小 Size	起始 Start	终止 End	分布位置 Location	分布区域 Region
广西火桐 <i>Firmiana kwangsiensis</i>							
1	p1	(T)11	11	1537	1547	IGS	LSC
2	p1	(A)11	11	3742	3752	<i>tRNA-Lys</i> (intron)	LSC
3	p1	(A)12	12	4264	4275	IGS	LSC
4	p1	(C)10	10	5403	5412	<i>rps16</i> (intron)	LSC
5	c	(A)12...(A)10	78	5567	5644	<i>rps16</i> (intron)	LSC
6	p1	(A)12	12	6785	6796	IGS	LSC
7	p1	(A)10	10	7486	7495	IGS	LSC
8	c	(A)10(G)10	20	7965	7984	<i>psbI</i> -IGS	LSC
9	p4	(TTAT)3	12	8223	8234	IGS	LSC
10	p1	(A)12	12	8436	8447	IGS	LSC
11	p1	(A)10	10	8756	8765	IGS	LSC
12	p1	(T)12	12	9357	9368	<i>tRNA-Gly</i> (intron)	LSC
13	p1	(T)11	11	9664	9674	<i>tRNA-Gly</i> (intron)	LSC
14	p4	(TCTA)3	12	9830	9841	IGS	LSC
15	p1	(T)11	11	12282	12292	<i>atpF</i> (intron)	LSC
16	p1	(C)11	11	14616	14626	IGS	LSC
17	p4	(ATAA)3	12	15037	15048	IGS	LSC
18	p1	(A)10	10	16047	16056	IGS	LSC
19	c	(T)12...(A)10	25	16966	16990	IGS	LSC
20	p1	(T)10	10	17325	17334	<i>rpoC2</i>	LSC
21	p1	(T)10	10	19236	19245	<i>rpoC2</i>	LSC
22	p1	(T)11	11	21663	21673	<i>rpoC1</i>	LSC
23	c	(C)11(A)11	22	23298	23319	<i>rpoC1</i> (intron)	LSC
24	p1	(T)12	12	26974	26985	<i>rpoB</i>	LSC
25	p1	(A)10	10	27909	27918	IGS	LSC
26	p1	(A)11	11	28533	28543	IGS	LSC
27	c	(A)11...(T)10	37	30246	30282	IGS	LSC
28	p2	(AT)5	10	30616	30625	IGS	LSC
29	p2	(TA)5	10	32371	32380	IGS	LSC
30	c	(A)10...(T)11	77	32557	32633	IGS	LSC
31	p2	(TA)5	10	32918	32927	IGS	LSC
32	c	(TGAAA)3...(AT)5	103	33909	34011	IGS	LSC
33	p1	(T)14	14	34331	34344	IGS	LSC
34	p1	(A)10	10	38021	38030	IGS	LSC

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广西火桐 <i>Firmiana kwangsiensis</i>							
35	p4	(ATCT)3	12	44132	44143	IGS	LSC
36	c	(T)10...(A)12	95	46737	46831	<i>ycf3</i> (intron)	LSC
37	p2	(AT)8	16	47104	47119	IGS	LSC
38	p1	(A)10	10	50346	50355	IGS	LSC
39	p4	(AAAT)3	12	50618	50629	IGS	LSC
40	p2	(AT)5	10	51486	51495	IGS	LSC
41	c	(T)10...(TAT)4	65	51888	51952	IGS	LSC
42	c	(TATT)3...(TA)5	110	54619	54728	IGS	LSC
43	p1	(T)10	10	55001	55010	IGS	LSC
44	p1	(T)11	11	58571	58581	IGS	LSC
45	p1	(T)10	10	58921	58930	IGS	LSC
46	p4	(TAGT)3	12	63084	63095	IGS	LSC
47	p2	(AT)5	10	65694	65703	IGS	LSC
48	p2	(TC)5	10	65996	66005	<i>cemA</i>	LSC
49	p4	(AGGA)3	12	68124	68135	IGS	LSC
50	p1	(A)16	16	68576	68591	IGS	LSC
51	p1	(T)11	11	69157	69167	IGS	LSC
52	p1	(A)15	15	70244	70258	IGS	LSC
53	p1	(T)12	12	71046	71057	IGS	LSC
54	p4	(TATT)3	12	72353	72364	IGS	LSC
55	c	(TAT)4...(TAT)4	33	72855	72887	IGS	LSC
56	p4	(AAAT)3	12	73525	73536	IGS	LSC
57	c	(T)13...(T)10	103	75608	75710	<i>clpP</i> (intron)	LSC
58	p1	(A)10	10	75834	75843	<i>clpP</i> (intron)	LSC
59	p1	(T)10	10	76541	76550	<i>clpP</i> (intron)	LSC
60	p1	(A)12	12	76879	76890	<i>clpP</i> (intron)	LSC
61	p3	(ATT)4	12	79680	79691	<i>psbN</i>	LSC
62	p1	(A)10	10	80328	80337	<i>petB</i> (intron)	LSC
63	p1	(A)11	11	81702	81712	IGS	LSC
64	p1	(T)11	11	82061	82071	<i>petD</i> (intron)	LSC
65	p1	(A)10	10	83043	83052	IGS	LSC
66	p1	(T)14	14	83175	83188	IGS	LSC
67	p1	(T)11	11	85400	85410	IGS	LSC
68	p1	(A)10	10	86443	86452	IGS	LSC
69	p4	(TTTA)3	12	87529	87540	<i>rpl16</i> (intron)	LSC
70	p1	(T)11	11	88001	88011	<i>rpl16</i> (intron)	LSC
71	c	(T)13...(TA)5	115	89706	89820	IGS	IRb
72	p1	(T)11	11	104784	104794	IGS	IRb

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广西火桐 <i>Firmiana kwangsiensis</i>							
73	p5	(TATTA)3	15	105351	105365	IGS	IRb
74	p5	(TAAAG)3	15	110451	110465	IGS	IRb
75	p1	(A)15	15	113928	113942	IGS	IRb
76	p1	(A)11	11	115362	115372	IGS	SSC
77	c	(T)12...(T)11	68	118215	118282	IGS	SSC
78	p1	(T)10	10	118644	118653	IGS	SSC
79	p3	(AAT)4	12	118809	118820	IGS	SSC
80	p1	(T)11	11	121062	121072	IGS	SSC
81	p4	(TTGA)3	12	123353	123364	<i>ndhE</i>	SSC
82	p5	(TAGAA)3	15	123718	123732	IGS	SSC
83	p1	(T)12	12	124459	124470	IGS	SSC
84	c*	(AATA)2...(A)9	21	126167	126187	<i>ndhA</i> (intron)	SSC
85	p1	(A)11	11	126400	126410	<i>ndhA</i> (intron)	SSC
86	p1	(T)11	11	126914	126924	<i>ndhA</i> (intron)	SSC
87	p1	(T)10	10	131271	131280	<i>ycf1</i>	SSC
88	p4	(CATT)3	12	131445	131456	<i>ycf1</i>	SSC
89	p1	(T)11	11	132436	132446	<i>ycf1</i>	SSC
90	p1	(T)11	11	133686	133696	<i>ycf1</i>	SSC
91	p1	(T)10	10	134216	134225	<i>ycf1</i>	SSC
92	p1	(T)13	13	134335	134347	<i>ycf1</i>	SSC
93	p1	(C)11	11	134464	134474	<i>ycf1</i>	SSC
94	p1	(T)15	15	136595	136609	IGS	IRa
95	p5	(ACTTT)3	15	140071	140085	IGS	IRa
96	p5	(TAATA)3	15	145172	145186	IGS	IRa
97	p1	(A)11	11	145743	145753	IGS	IRa
98	c	(AT)5...(A)13	116	160716	160831	IGS	IRa
丹霞梧桐 <i>Firmiana danxiaensis</i>							
1	p1	(T)12	12	1535	1546	IGS	LSC
2	p1	(A)10	10	3752	3761	<i>tRNA-Lys</i> (intron)	LSC
3	p1	(A)10	10	4306	4315	IGS	LSC
4	p1	(T)10	10	4511	4520	IGS	LSC
5	c	(T)10...(TTTTTA)3	49	4779	4827	IGS	LSC
6	p1	(A)14	14	5606	5619	<i>rps16</i> (intron)	LSC
7	p1	(A)13	13	6754	6766	IGS	LSC
8	p1	(A)10	10	7445	7454	IGS	LSC
9	p4	(TTAT)3	12	8175	8186	IGS	LSC
10	p1	(T)10	10	9181	9190	<i>tRNA-Gly</i> (intron)	LSC
11	p1	(T)10	10	9587	9596	<i>tRNA-Gly</i> (intron)	LSC

丹霞梧桐 *Firmiana danxiaensis*

序号 Code	重复类型 SSR type	简单重复序列 SSR sequence	大小 Size	起始 Start	终止 End	分布位置 Location	分布区域 Region
12	p4	(TCTA)3	12	9756	9767	IGS	LSC
13	p1	(T)11	11	12320	12330	<i>atpF</i> (intron)	LSC
14	p1	(T)10	10	12437	12446	<i>atpF</i> (intron)	LSC
15	p1	(T)10	10	12696	12705	<i>atpF</i> (intron)	LSC
16	p1	(T)10	10	13534	13543	IGS	LSC
17	p1	(C)14	14	14646	14659	IGS	LSC
18	c	(ATAA)4(A)10	24	15062	15085	IGS	LSC
19	p1	(A)11	11	16079	16089	IGS	LSC
20	p1	(A)13	13	17011	17023	IGS	LSC
21	p1	(T)10	10	17358	17367	<i>rpoC2</i>	LSC
22	p1	(T)11	11	19268	19278	<i>rpoC2</i>	LSC
23	p2	(AT)5	10	20647	20656	<i>rpoC2</i>	LSC
24	p1	(T)11	11	21696	21706	<i>rpoC1</i>	LSC
25	p1	(T)12	12	27009	27020	<i>rpoB</i>	LSC
26	p1	(A)11	11	27944	27954	IGS	LSC
27	p1	(T)10	10	30335	30344	IGS	LSC
28	p2	(AT)5	10	30672	30681	IGS	LSC
29	p1	(T)10	10	30921	30930	IGS	LSC
30	p1	(A)16	16	31947	31962	IGS	LSC
31	p2	(TA)6	12	32426	32437	IGS	LSC
32	p1	(T)17	17	32673	32689	IGS	LSC
33	p2	(TA)5	10	32974	32983	IGS	LSC
34	c	(TGAAA)3...(AT)5	112	33975	34086	IGS	LSC
35	p1	(T)12	12	34406	34417	IGS	LSC
36	p1	(T)10	10	37119	37128	IGS	LSC
37	p1	(A)10	10	37983	37992	IGS	LSC
38	p4	(ATCT)3	12	44185	44196	IGS	LSC
39	p2	(AT)5	10	44590	44599	IGS	LSC
40	p1	(A)10	10	46268	46277	<i>ycf3</i> (intron)	LSC
41	c	(T)14...(A)11	81	46804	46884	<i>ycf3</i> (intron)	LSC
42	p1	(T)17	17	47147	47163	IGS	LSC
43	p1	(A)10	10	47671	47680	IGS	LSC
44	p1	(T)10	10	49240	49249	IGS	LSC
45	p1	(T)11	11	50447	50457	IGS	LSC
46	p1	(A)10	10	50807	50816	IGS	LSC
47	p4	(AAAT)3	12	51079	51090	IGS	LSC
48	p1	(T)11	11	51510	51520	<i>rRNA-Leu</i> (intron)	LSC
49	p2	(AT)5	10	51953	51962	IGS	LSC
50	c	(T)15...(TAT)4	68	52355	52422	IGS	LSC

序号 Code	重复类型 SSR type	简单重复序列 SSR sequeunce	大小 Size	起始 Start	终止 End	分布位置 Location	分布区域 Region
51	p4	(TATT)3	12	55063	55074	IGS	LSC
52	p2	(TA)5	10	55222	55231	IGS	LSC
53	p1	(T)10	10	55446	55455	IGS	LSC
54	p1	(T)13	13	59379	59391	IGS	LSC
55	c	(TAGT)3...(T)10	115	63557	63671	IGS	LSC
56	p1	(T)10	10	64443	64452	IGS	LSC
57	p1	(T)12	12	65531	65542	IGS	LSC
58	p2	(AT)5	10	66134	66143	IGS	LSC
59	p2	(TC)5	10	66436	66445	<i>cemA</i>	LSC
60	p1	(T)10	10	67186	67195	IGS	LSC
61	p1	(A)11	11	69013	69023	IGS	LSC
62	p1	(T)20	20	71482	71501	IGS	LSC
63	p1	(T)10	10	72467	72476	IGS	LSC
64	p4	(TATT)3	12	72801	72812	IGS	LSC
65	c	(TAT)4...(TA)6	80	73261	73340	IGS	LSC
66	p4	(AAAT)3	12	73909	73920	IGS	LSC
67	p1	(A)12	12	75762	75773	<i>clpP</i> (intron)	LSC
68	p1	(T)10	10	75916	75925	<i>clpP</i> (intron)	LSC
69	p1	(A)11	11	76031	76041	<i>clpP</i> (intron)	LSC
70	c	(A)10...(A)10	25	76213	76237	<i>clpP</i> (intron)	LSC
71	p1	(A)11	11	77258	77268	<i>clpP</i> (intron)	LSC
72	p3	(ATT)4	12	80059	80070	<i>psbN</i>	LSC
73	p1	(A)11	11	80707	80717	IGS	LSC
74	p1	(A)10	10	82077	82086	IGS	LSC
75	p1	(A)14	14	83424	83437	IGS	LSC
76	p1	(T)14	14	83560	83573	IGS	LSC
77	p1	(T)11	11	85806	85816	IGS	LSC
78	p1	(T)10	10	86315	86324	IGS	LSC
79	p1	(A)10	10	86851	86860	IGS	LSC
80	p5	(AAAAT)3	15	87990	88004	IGS	LSC
81	p1	(T)10	10	88423	88432	IGS	LSC
82	p2	(TA)7	14	90205	90218	IGS	LSC
83	p1	(T)12	12	105151	105162	IGS	IRb
84	p5	(TATTA)3	15	105719	105733	IGS	IRb
85	p5	(TAAAG)3	15	110818	110832	IGS	IRb
86	p1	(A)19	19	114289	114307	<i>rm5</i>	IRb
87	p5	(AGAAA)3	15	115599	115613	IGS	IRb
88	c	(A)10...(T)18	34	118309	118342	IGS	SSC
89	p5	(TAGAA)3	15	118721	118735	IGS	SSC

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90	c	(AT)6(T)10	21	119151	119171	IGS	SSC
91	c	(T)10...(T)15	60	121528	121587	IGS	SSC
92	p4	(TTGA)3	12	123799	123810	<i>ndhE</i>	SSC
93	p5	(TAGAA)3	15	124164	124178	IGS	SSC
94	c	(AATA)(A)10	21	126610	126630	<i>ndhA</i> (intron)	SSC
95	c	(A)10...(A)10	95	126759	126853	<i>ndhA</i> (intron)	SSC
96	p1	(T)10	10	131719	131728	<i>ycf1</i>	SSC
97	p4	(CATT)3	12	131893	131904	<i>ycf1</i>	SSC
98	p1	(T)11	11	132884	132894	<i>ycf1</i>	SSC
99	p1	(T)11	11	134161	134171	<i>ycf1</i>	SSC
100	p1	(T)10	10	134691	134700	<i>ycf1</i>	SSC
101	p1	(T)13	13	134810	134822	<i>ycf1</i>	SSC
102	p5	(TTTTTC)3	15	135782	135796	IGS	SSC
103	p1	(T)19	19	137089	137107	<i>rrn5</i>	IRa
104	p5	(ACTTTT)3	15	140563	140577	IGS	IRa
105	p5	(TAATA)3	15	145663	145677	IGS	IRa
106	p1	(A)12	12	146234	146245	IGS	IRa
107	p2	(AT)7	14	161177	161190	IGS	IRa