

Table S2. The informations of samples and transcriptome data used in this study.

Samples ID	Species	Family	Clean data (G)	Total reads (clean)	Q30 (%)	Number of contigs	N50 (bp)	Mean (bp)
RS11	<i>Vandenboschia radicans</i>	Hymenophyllaceae	4.8	38639790	90.3	273743	625	486.12
RS18	<i>Dicranopteris pedata</i>	Gleicheniaceae	4.2	33942120	92.04	75259	1435	829.01
RS28	<i>Cheiropleuria bicuspis</i>	Dipteridaceae	5.1	41617294	91.35	143200	1954	1182.58
RS38	<i>Osmunda japonica</i>	Osmundaceae	4.1	33485274	92.05	66318	2109	1163.17
RS48	<i>AnGIOpteris fokiensis</i>	AnGIOpteridaceae	4.4	35120302	91.12	63003	1904	1188.75
RS77	<i>Marsilea quadrifolia</i>	Marsileaceae	4.3	34724432	91.76	85761	2045	1311.10
RS88	<i>Lygodium flexuosum</i>	Lygodiaceae	4.2	34098316	91.44	94774	2003	1253.49
RS107	<i>Equisetum diffusum</i>	Equisetaceae	4.4	35693238	90.21	117880	1704	908.40
RS116	<i>Schizaea dichotoma</i>	Schizaeaceae	4.5	36668734	89.6	70687	1585	1018.15
RS139	<i>Dipteris chinensis</i>	Dipteridaceae	9.4	63997114	94.65	126520	2117	1151.61
RS200	<i>Abrodictyum obscurum</i>	Hymenophyllaceae	9.3	63065130	94.77	119181	2273	1182.73
RS202	<i>Hymenophyllum digitatum</i>	Hymenophyllaceae	8.0	54129212	95.41	184930	867	553.72
RS207	<i>Dicranopteris ampla</i>	Gleicheniaceae	9.6	65013104	95.65	76029	1521	975.60
RS208	<i>Callistopteris apiifolia</i>	Hymenophyllaceae	8.5	58206276	95.27	685642	435	438.86
RS210	<i>Hymenophyllum denticulatum</i>	Hymenophyllaceae	9.1	61421476	95.18	124284	2144	1247.54
RS213	<i>Cephalomanes javanicum</i>	Hymenophyllaceae	8.1	54990600	95.07	92514	2196	1192.94
RS217	<i>Diplopterygium glaucum</i>	Gleicheniaceae	10.8	73301566	94.98	255509	1682	817.10
RS218	<i>Hymenophyllum badium</i>	Hymenophyllaceae	9.2	62303336	94.87	256540	1697	895.66
RS231	<i>Hymenophyllum osmundoides</i>	Hymenophyllaceae	10.0	67318452	95.54	161621	1618	795.13
RS240	<i>Hymenophyllum barbatum</i>	Hymenophyllaceae	9.0	60903248	95.14	257884	1536	759.24
RS242	<i>Diplopterygium laevissimum</i>	Gleicheniaceae	9.5	64492260	95.05	107038	2177	1278.81
RS243	<i>Crepidomanes minutum</i>	Hymenophyllaceae	9.2	61799022	95.47	183181	1882	927.47
RS244	<i>Diplopterygium chinense</i>	Gleicheniaceae	10.4	70702896	95.29	164858	2021	1022.95
RS251	<i>Sticherus laevigatus</i>	Gleicheniaceae	8.6	58197742	95.97	154701	2277	1240.72
RS253	<i>Abrodictyum obscurum</i> var. <i>siamense</i>	Hymenophyllaceae	7.5	51437264	91.96	98928	2119	1057.03
RS282	<i>Anemia phyllitidis</i>	Anemiaceae	7.4	49991062	95.86	186139	1813	900.36
RS294	<i>Gleichenia microphylla</i>	Gleicheniaceae	15.5	104739352	88.79	150169	1863	941.13
RS296	<i>Sticherus hirtus</i>	Gleicheniaceae	12.1	81606118	90.42	107200	2173	1274.65
RS299	<i>Dipteris lobbiana</i>	Dipteridaceae	12.9	86315908	92.33	391485	1461	790.88
RS304	<i>Matonia pectinata</i>	Matoniaceae	8.3	55132016	90.84	162856	2060	1023.26
RS305	<i>Cephalomanes singaporeanum</i>	Hymenophyllaceae	7.4	49190052	91.24	634401	746	568.78