

Table S1: Statistical features of dominant trees

Plot	Elevation (m)	Slope degree	Slope position	Soil Thick ness (cm)	Aspect	Texture	Soil density (g·cm ⁻³)	Litter thick ness (cm)	Dominant height(m)	DBH (cm)
1	994	16	Lower slope	40–80	Sunny slope	Middle loam	1.57	<5	22.1	14.7
2	1592	23	Lower slope	40–80	Half-sunny slope	Middle loam	0.93	5–10	19.5	14.1
3	1591	30	Upper slope	>80	Sunny slope	Middle loam	1.64	5–10	21	17.1
4	1532	25	Upper slope	<40	Sunny slope	Heavy loam	1.14	<5	18.3	15.1
5	1607	27	Upper slope	40–80	Sunny slope	Heavy loam	1.16	<5	21.3	17.7
6	1355	13	Upper slope	<40	Sunny slope	Heavy loam	1.44	>10	24.3	18.1
7	1400	14	Upper slope	<40	Half-shady slope	Heavy loam	1.23	>10	21.1	17
8	1132	23	Lower slope	>80	Half-shady slope	Middle loam	1.41	5–10	22.1	14.7
9	1468	22	Upper slope	<40	Sunny slope	Middle loam	1.06	<5	19.2	19.2
10	1272	30	Lower slope	>80	Shady slope	Middle loam	1.14	5–10	22.9	15.3
11	1167	32	Upper slope	<40	Half-sunny slope	Sandy loam	1.22	5–10	16.6	14.5
12	1140	18	Upper slope	>80	Half-sunny slope	Sandy loam	1.30	>10	22.8	15.5
13	1409	39	Upper slope	<40	Half-sunny slope	Middle loam	1.83	5–10	17.8	14.1
14	1392	28	Lower slope	>80	Half-sunny slope	Middle loam	1.42	5–10	20.2	13.6
15	1435	0	Flat ground	40–80	Flat slope	Heavy loam	1.11	5–10	22.8	12.1
16	1462	0	Flat ground	40–80	Flat slope	Heavy loam	1.25	5–10	23	11.6
17	1228	16	Lower slope	>80	Half-shady slope	Middle loam	1.40	<5	23.7	15.7
18	1628	29	Upper slope	<40	Half-shady slope	Middle loam	1.22	<5	15.8	12.9
19	1594	17	Upper slope	<40	Sunny slope	Heavy loam	1.45	<5	22.1	17
20	969	25	Lower slope	40–80	Sunny slope	Middle loam	1.42	<5	21.9	16.2
21	1095	16	Upper slope	<40	Half-shady slope	Middle loam	1.46	<5	20.2	14.2
22	1364	13	Middle slope	40–80	Half-sunny slope	Heavy loam	1.57	5–10	22.7	19.2
23	1137	26	Middle slope	>80	Half-sunny slope	Heavy loam	1.38	>10	23.8	21.8
24	1257	17	Lower slope	>80	Half-sunny slope	Heavy loam	1.58	5–10	24.4	20.4
25	1192	27	Lower slope	>80	Half-sunny slope	Heavy loam	1.19	5–10	24.5	19.7
26	1165	10	Middle slope	>80	Half-sunny slope	Heavy loam	1.49	5–10	30.4	23.9
27	1149	18	Middle slope	40–80	Half-shady slope	Heavy loam	1.34	5–10	19.5	12.9
28	1140	19	Middle slope	40–80	Shady slope	Heavy loam	1.42	5–10	22.6	16
29	956	10	Lower slope	>80	Half-sunny slope	Sandy loam	1.65	5–10	24.8	17.9
30	1080	26	Middle slope	<40	Half-sunny slope	Middle loam	1.72	5–10	22.7	11.2
31	1137	26	Middle slope	<40	Half-sunny slope	Sandy loam	1.67	5–10	22.7	12.9
32	1157	26	Middle slope	40–80	Half-sunny slope	Heavy loam	1.52	5–10	21.4	12.4
33	1281	13	Middle slope	40–80	Half-sunny slope	Middle loam	1.35	5–10	21	13.5
34	1303	12	Upper slope	<40	Half-shady slope	Middle loam	1.36	5–10	22.3	17.6
35	1301	23	Lower slope	40–80	Half-sunny slope	Middle loam	1.57	5–10	24.4	19
36	1305	22	Lower slope	>80	Shady slope	Middle loam	1.43	5–10	28.2	19.3
37	1348	23	Middle slope	40–80	Sunny slope	Middle loam	1.75	5–10	23.1	17.6
38	1345	15	Middle slope	40–80	Half-sunny slope	Middle loam	1.54	<5	20.5	15.7
39	1217	16	Lower slope	>80	Half-shady slope	Middle loam	1.32	5–10	25.4	18.2
40	1268	6	Upper slope	<40	Half-sunny slope	Middle loam	1.14	<5	23.8	21.8

41	1339	28	Upper slope	<40	Sunny slope	Middle loam	1.44	<5	20.5	13.3
42	1238	22	Middle slope	40–80	Half-sunny slope	Middle loam	1.23	5–10	22.2	13.9
43	1308	25	Upper slope	40–80	Half-sunny slope	Sandy loam	1.12	5–10	24.9	18.1
44	1089	28	Middle slope	40–80	Half-shady slope	Heavy loam	1.48	5–10	21.6	14.4
45	1497	27	Upper slope	40–80	Half-sunny slope	Middle loam	1.50	<5	26.3	21.5
46	1654	15	Upper slope	>80	Half-sunny slope	Middle loam	1.10	<5	25.6	14.6
47	1055	27	Middle slope	>80	Half-sunny slope	Sandy loam	1.14	<5	25.4	17.4
48	1005	28	Middle slope	>80	Half-sunny slope	Light loam	1.17	5–10	21.5	15
49	1375	20	Upper slope	<40	Half-shady slope	Middle loam	1.21	<5	21.6	18.5
50	1217	23	Middle slope	40–80	Half-shady slope	Light loam	1.30	<5	24.8	20
51	1413	18	Upper slope	40–80	Sunny slope	Middle loam	1.12	<5	16.5	16
52	1625	14	Upper slope	40–80	Sunny slope	Middle loam	1.28	<5	24.4	19.9
53	1309	19	Middle slope	40–80	Shady slope	Middle loam	1.34	<5	22.7	17.4
54	1786	34	Upper slope	40–80	Half-sunny slope	Middle loam	1.12	<5	25.1	22
55	1663	35	Upper slope	<40	Half-shady slope	Middle loam	1.12	<5	23.9	19.1
56	1020	32	Lower slope	>80	Half-sunny slope	Sandy loam	1.27	<5	19.8	16.4
57	1214	20	Upper slope	40–80	Half-shady slope	Middle loam	1.25	<5	24	19.8
58	1190	3	Upper slope	<40	Half-sunny slope	Middle loam	1.27	<5	22.5	16.9
59	1545	35	Middle slope	40–80	Half-sunny slope	Middle loam	1.20	<5	22.5	17.9
60	1385	15	Upper slope	>80	Half-shady slope	Middle loam	1.24	<5	25.4	16.3
61	1693	8	Middle slope	40–80	Half-shady slope	Sandy loam	1.03	<5	25.1	17.8
62	1736	15	Middle slope	>80	Half-sunny slope	Light loam	1.04	5–10	26.2	17.5
63	995	32	Lower slope	>80	Sunny slope	Middle loam	1.12	<5	25.3	18
64	1227	28	Middle slope	40–80	Half-shady slope	Middle loam	1.08	<5	25.4	12.4
65	1538	25	Upper slope	<40	Half-shady slope	Light loam	1.17	<5	23.5	16.8
66	1573	19	Upper slope	<40	Shady slope	Middle loam	1.14	5–10	22.7	19
67	1334	30	Upper slope	<40	Half-shady slope	Middle loam	1.11	5–10	21.8	11.9
68	1127	25	Upper slope	<40	Half-sunny slope	Middle loam	1.30	<5	21.9	12.2
69	1262	31	Middle slope	40–80	Shady slope	Middle loam	1.12	5–10	22.1	15.2
70	1335	21	Upper slope	40–80	Half-sunny slope	Middle loam	1.14	5–10	22.1	15.3
71	1550	34	Upper slope	<40	Half-shady slope	Middle loam	1.29	<5	19.3	14.3
72	1502	40	Upper slope	<40	Half-shady slope	Middle loam	1.58	<5	20.5	15.9
73	1057	29	Upper slope	40–80	Shady slope	Sandy loam	1.20	5–10	25.2	16.6
74	1595	20	Middle slope	40–80	Half-sunny slope	Middle loam	1.32	5–10	26	12.6
75	1055	12	Middle slope	>80	Sunny slope	Middle loam	1.20	5–10	24.2	14.6
76	1123	24	Middle slope	40–80	Sunny slope	Middle loam	1.20	<5	21.2	14.4
77	1177	31	Upper slope	<40	Half-sunny slope	Middle loam	1.38	5–10	21.2	11
78	1064	20	Middle slope	>80	Half-shady slope	Middle loam	1.28	<5	23.1	19.7
79	1074	10	Middle slope	40–80	Sunny slope	Middle loam	1.19	<5	21.4	15
80	1207	13	Middle slope	>80	Sunny slope	Middle loam	1.26	5–10	24.3	19.4
81	1421	2	Flat ground	40–80	Flat slope	Heavy loam	1.14	5–10	22.4	12.5
82	1478	5	Flat ground	40–80	Flat slope	Heavy loam	1.21	5–10	23.1	12.9
83	1523	2	Flat ground	40–80	Flat slope	Middle loam	1.19	5–10	21.9	11.7
84	1145	22	Middle slope	40–80	Sunny slope	Middle loam	1.21	<5	21.7	14.8
85	1478	5	Flat ground	40–80	Flat slope	Middle loam	1.24	5–10	23.5	13.1

3 **Figure S1:** Hierarchical agglomerative clustering of *E. urophylla* × *E. grandis* in different sites

