

## Supplementary file S5

**Table C.** Comparisons of plot characteristics across habitats types in a seasonal rainforest in tropical China.

Variables	Valley	Low-slope	High-slope	High-gully	High-plateau	df	Statistic	<i>P</i>
DBH (cm)	14.3±14.8 <sup>a</sup>	14.3±14.9 <sup>a</sup>	13.3±11.8 <sup>b</sup>	14.3±13.6 <sup>a</sup>	12.8±10.9 <sup>c</sup>	4	<i>F</i> = 14.209	< <b>0.001</b>
RMS DBH (cm)	20.5±6.5 <sup>a</sup>	20.4±6.0 <sup>a</sup>	17.6±3.0 <sup>b</sup>	19.8±4.2 <sup>a</sup>	16.6±4.0 <sup>b</sup>	4	<i>F</i> = 11.532	< <b>0.001</b>
Tree density (trees per hectare)	1255.4±355 <sup>c</sup>	1319.0±312.3 <sup>c</sup>	1632.6±299.1 <sup>a</sup>	1484.3±320.1 <sup>b</sup>	1435.0±292.1 <sup>b</sup>	4	<i>F</i> = 21.548	< <b>0.001</b>
Tree density (trees per hectare) in DBH classes								
D 5-20 cm	1044.1±350.1 <sup>c</sup>	1098.4±297.5 <sup>c</sup>	1354.8±273.7 <sup>a</sup>	1216.1±301.8 <sup>b</sup>	1199.7±269.4 <sup>b</sup>	4	<i>F</i> = 15.844	< <b>0.001</b>
D 20-40 cm	148.8±65.0 <sup>c</sup>	156.6±67.4 <sup>bc</sup>	209.8±77.1 <sup>a</sup>	197.5±74.1 <sup>ab</sup>	191.4±89.1 <sup>ab</sup>	4	<i>H</i> = 45.449	< <b>0.001</b>
D 40-60 cm	34.1±30.0 <sup>bc</sup>	38.7±27.2 <sup>abc</sup>	50.56±32.6 <sup>a</sup>	46.2±31.8 <sup>ab</sup>	34.7±33.5 <sup>bc</sup>	4	<i>H</i> = 22.374	< <b>0.001</b>
D ≥ 60 cm	28.4±28.5 <sup>a</sup>	25.3±24.9 <sup>ab</sup>	17.4±22.1 <sup>bc</sup>	24.6±24.8 <sup>ab</sup>	9.2±17.4 <sup>c</sup>	4	<i>H</i> = 41.408	< <b>0.001</b>
Elevation (m)	738.0±12.2 <sup>d</sup>	744.5±12.5 <sup>c</sup>	796.3±26.8 <sup>a</sup>	784.5±22.1 <sup>b</sup>	785.8±23.0 <sup>b</sup>	4	<i>F</i> = 193.652	< <b>0.001</b>
Slope (°)	21.4±4.5 <sup>b</sup>	32.0±3.0 <sup>a</sup>	32.0±4.2 <sup>a</sup>	33.6±3.3 <sup>d</sup>	22.5±3.3 <sup>c</sup>	4	<i>F</i> = 227.040	< <b>0.001</b>
Aspect*	0.03±0.71	0.09±0.73	-0.18±0.71	-0.04±0.70	0.02±0.66	4	<i>F</i> = 1.853	0.118
Convexity (°)	-1.87±5.3 <sup>b</sup>	-2.29±5.2 <sup>b</sup>	3.15±4.1 <sup>a</sup>	-0.14±6.4 <sup>c</sup>	4.26±4.8 <sup>a</sup>	4	<i>F</i> = 32.236	< <b>0.001</b>

RMS DBH, root mean square diameter of trees at breast height in a given subplot. Values are means ± SD. Values in bold are significant results of one way ANOVA or Kruskal-Wallis ANOVA at  $\alpha = 0.05$ . Different superscript letters within rows indicate significantly different across habitat types as determined by post-hoc LSD test or post-hoc Dunn-Bonferroni test.

\*Cosine-transformed aspect.