

Table S3. Posterior estimates of the parameters of the hierarchical models for tree height allometry. Table entries correspond to the mean and 90% posterior central intervals for the community level parameters of each allometric function (see Eq. 5 in Methods).

<i>Posterior parameter estimates for tree height models</i>					
Functional form	Covariate		α (Mean)	β (Slope)	σ (Variation)
gMM	Growth	a	57.05 (54.48, 59.97)	-0.09332 (-0.133, -0.04791)	0.1075 (0.08175, 0.1373)
		b	0.7348 (0.7176, 0.7524)	0.0374 (0.01427, 0.06038)	0.09253 (0.08194, 0.105)
		k	21.77 (20.7, 22.89)	-1.801 (-2.812, -0.7942)	4.176 (3.637, 4.801)
gMM	Wood density	a	57.08 (54.65, 59.91)	0.03953 (-0.002625, 0.08066)	0.09861 (0.07084, 0.1275)
		b	0.7321 (0.7153, 0.7487)	-0.02491 (-0.04179, -0.007441)	0.09084 (0.08043, 0.1031)
		k	21.75 (20.74, 22.86)	-0.1737 (-1.14, 0.8306)	4.123 (3.604, 4.746)
gMM	Mortality	a	57.24 (54.65, 60.29)	-0.0717 (-0.1192, -0.02381)	0.09581 (0.06977, 0.1238)
		b	0.7323 (0.715, 0.7495)	0.02643 (0.007359, 0.04402)	0.09153 (0.08104, 0.1033)
		k	21.81 (20.7, 23.01)	-0.9538 (-2.126, 0.1576)	4.14 (3.631, 4.74)
gMM	None	a	57.17 (54.69, 59.87)		0.1012 (0.07492, 0.1295)
		b	0.7278 (0.7113, 0.7456)		0.0929 (0.08251, 0.1057)
		k	21.57 (20.54, 22.66)		4.194 (3.666, 4.822)
Power	Growth	a	3.029 (2.936, 3.125)	0.05567 (0.03785, 0.07331)	0.1021 (0.0905, 0.1154)
		b	0.5576 (0.5465, 0.5687)	-0.03353 (-0.04574, -0.02132)	0.06988 (0.06218, 0.07942)
Power	Wood density	a	2.988 (2.896, 3.082)	-0.0006186 (-0.01776, 0.01625)	0.1117 (0.09968, 0.1257)
		b	0.5609 (0.5501, 0.5723)	0.01287 (0.001632, 0.02434)	0.0707 (0.06283, 0.07958)
Power	Mortality	a	2.994 (2.902, 3.091)	0.01294 (-0.004155, 0.03049)	0.1116 (0.09976, 0.1254)
		b	0.5604 (0.5489, 0.5714)	-0.01608 (-0.02736, -0.004805)	0.07063 (0.06258, 0.08001)
Power	None	a	2.979 (2.888, 3.076)		0.1113 (0.09941, 0.1253)
		b	0.5616 (0.5501, 0.573)		0.07094 (0.06295, 0.08077)
Weibull	Growth	a	40.99 (39.52, 42.56)	-2.06 (-3.15, -0.7914)	4.089 (3.202, 5.097)
		b	0.0675 (0.06473, 0.07056)	0.004051 (0.001157, 0.006867)	0.01169 (0.009993, 0.01369)
		k	0.6995 (0.6844, 0.7145)	0.02407 (0.00513, 0.04369)	0.08835 (0.07873, 0.09955)
Weibull	Wood density	a	40.98 (39.53, 42.52)	0.5059 (-0.7509, 1.743)	3.981 (3.094, 5.009)
		b	0.06717 (0.06442, 0.07025)	0.001369 (-0.001021, 0.003836)	0.01157 (0.009918, 0.01366)
		k	0.6976 (0.6835, 0.7125)	-0.01604 (-0.03077, -0.001495)	0.0871 (0.07755, 0.09825)
Weibull	Mortality	a	41.09 (39.57, 42.68)	-1.287 (-2.798, 0.1783)	3.886 (3.022, 4.896)
		b	0.06712 (0.06412, 0.07019)	0.0008289 (-0.001922, 0.003454)	0.01155 (0.009865, 0.0135)
		k	0.6978 (0.6829, 0.7129)	0.01537 (-0.0008984, 0.03091)	0.08763 (0.07749, 0.09876)
Weibull	None	a	40.99 (39.53, 42.59)		4.081 (3.148, 5.095)
		b	0.06767 (0.06469, 0.07072)		0.01191 (0.01016, 0.01385)
		k	0.6954 (0.6809, 0.7106)		0.08858 (0.07873, 0.1004)