

Table S2. Posterior, species-level parameter estimates (median and 90% posterior interval) for predicting tree height (m) and crown area (m²) from trunk diameter (cm) for the focal species. Unbiased estimates of tree height and crown area can be obtained by multiplying the values predicted by these equations by 1.017 in the case of heights, and 1.163 for crown area, to correct for the bias from back-transforming predicted values of log height and log crown area (Sprugel, 1983). Species taxonomy and mnemonics according to Condit et al. (2017).

Mnemonic	Species	Tree height (generalized Michaelis-Menten, Eq. 3)			Crown area (power function, Eq. 2)	
		a	b	k	a	b
ade1tr	Adelia triloba	57.1 (48.1, 67.9)	0.66 (0.55, 0.77)	23.2 (17.7, 29.1)	0.800 (0.371, 1.783)	1.34 (1.07, 1.60)
alchco	Alchornea costaricensis	53.0 (44.4, 63.3)	0.64 (0.57, 0.72)	18.8 (15.0, 23.2)	0.553 (0.255, 1.203)	1.33 (1.11, 1.55)
allops	Allophylus psilospermus	57.9 (48.9, 69.0)	0.74 (0.63, 0.85)	22.0 (16.6, 28.0)	0.660 (0.302, 1.415)	1.35 (1.10, 1.62)
alsebl	Alseis blackiana	56.2 (48.6, 65.0)	0.73 (0.71, 0.77)	21.7 (18.8, 25.0)	0.228 (0.195, 0.265)	1.49 (1.42, 1.54)
amaico	Amaioua corymbosa	63.0 (53.0, 75.3)	0.70 (0.62, 0.77)	20.7 (16.9, 25.3)	0.721 (0.378, 1.452)	1.30 (1.04, 1.53)
anacex	Anacardium excelsum	48.5 (42.8, 56.3)	0.82 (0.70, 0.95)	17.6 (11.1, 24.3)	0.611 (0.262, 1.387)	1.32 (1.15, 1.50)
andiin	Andira inermis	63.5 (53.6, 75.5)	0.74 (0.64, 0.84)	24.6 (18.7, 31.0)	0.444 (0.187, 1.051)	1.38 (1.12, 1.64)
annoac	Annona acuminata	62.2 (52.1, 74.5)	0.72 (0.59, 0.84)	23.5 (18.0, 29.4)	0.669 (0.364, 1.258)	1.32 (1.08, 1.55)
apeime	Apeiba membranacea	53.9 (46.2, 62.9)	0.71 (0.65, 0.78)	18.5 (15.6, 21.6)	0.997 (0.454, 2.338)	1.15 (0.95, 1.34)
apeiti	Apeiba tibourbou	42.5 (34.5, 52.3)	0.78 (0.65, 0.90)	18.7 (12.9, 25.3)	0.562 (0.239, 1.299)	1.34 (1.09, 1.59)
ardife	Ardisia standleyana	62.3 (52.3, 74.2)	0.62 (0.53, 0.72)	22.4 (17.9, 27.3)	0.737 (0.380, 1.415)	1.32 (1.07, 1.55)
aspicr	Aspidosperma desmanthum	62.5 (54.6, 72.4)	0.77 (0.72, 0.82)	19.6 (17.2, 22.5)	0.692 (0.328, 1.515)	1.24 (1.05, 1.42)
ast2gr	Astronium graveolens	63.9 (55.3, 74.9)	0.79 (0.72, 0.85)	23.7 (19.8, 28.1)	0.578 (0.234, 1.282)	1.30 (1.09, 1.53)
beilpe	Beilschmiedia towarensis	52.4 (47.2, 58.4)	0.91 (0.88, 0.95)	26.9 (24.2, 30.1)	0.583 (0.500, 0.677)	1.27 (1.21, 1.33)
brosal	Brosimum alicastrum	63.2 (56.4, 71.2)	0.80 (0.77, 0.84)	29.4 (26.5, 32.9)	0.939 (0.795, 1.116)	1.28 (1.22, 1.33)
brosgu	Brosimum guianense	62.0 (52.5, 73.6)	0.71 (0.64, 0.78)	19.6 (16.2, 23.5)	0.790 (0.458, 1.364)	1.30 (1.10, 1.51)
calolo	Calophyllum longifolium	61.1 (53.3, 71.0)	0.74 (0.69, 0.79)	20.7 (17.8, 24.1)	0.495 (0.267, 0.911)	1.37 (1.22, 1.52)
caseac	Casearia aculeata	61.7 (52.1, 73.4)	0.74 (0.63, 0.85)	23.1 (17.6, 29.0)	0.603 (0.302, 1.189)	1.34 (1.09, 1.57)
casear	Casearia arborea	56.4 (47.1, 68.3)	0.67 (0.59, 0.76)	17.3 (13.5, 21.9)	0.624 (0.262, 1.473)	1.29 (1.06, 1.53)
casesy	Casearia sylvestris	57.7 (48.4, 68.4)	0.69 (0.58, 0.79)	22.6 (16.7, 28.9)	0.594 (0.262, 1.389)	1.34 (1.10, 1.60)
cassel	Cassipourea elliptica	59.9 (51.2, 70.4)	0.74 (0.69, 0.80)	23.5 (19.7, 27.9)	0.536 (0.313, 0.908)	1.39 (1.21, 1.56)
cavapl	Cavanillesia platanifolia	51.7 (45.5, 60.2)	0.77 (0.68, 0.87)	16.9 (12.5, 22.0)	0.524 (0.220, 1.245)	1.21 (1.04, 1.39)
cecrin	Cecropia insignis	47.1 (41.6, 54.1)	0.96 (0.90, 1.03)	22.9 (20.3, 25.9)	0.254 (0.195, 0.328)	1.65 (1.56, 1.75)
cecrob	Cecropia obtusifolia	40.1 (32.3, 50.2)	0.88 (0.71, 1.05)	12.4 (7.1, 18.8)	0.665 (0.304, 1.678)	1.20 (0.93, 1.44)
ceibpe	Ceiba pentandra	53.6 (48.1, 60.7)	0.79 (0.72, 0.88)	23.8 (20.2, 28.1)	0.288 (0.143, 0.576)	1.51 (1.36, 1.65)
celtsc	Celtis schippii	58.8 (50.2, 69.6)	0.76 (0.69, 0.83)	20.8 (17.2, 25.1)	0.633 (0.277, 1.434)	1.37 (1.14, 1.63)
chr2ar	Chrysophyllum argenteum	57.6 (49.7, 66.3)	0.79 (0.75, 0.84)	27.0 (23.4, 31.3)	0.758 (0.625, 0.924)	1.24 (1.13, 1.35)
chr2ca	Chrysophyllum cainito	63.0 (53.6, 75.8)	0.75 (0.65, 0.85)	22.3 (15.7, 29.3)	0.585 (0.243, 1.405)	1.36 (1.14, 1.58)
phoeci	Cinnamomum triplinerve	55.3 (47.2, 65.4)	0.72 (0.65, 0.81)	19.2 (15.2, 23.6)	0.291 (0.133, 0.659)	1.39 (1.14, 1.64)
conoci	Conostegia cinnamomea	56.9 (48.3, 67.0)	0.71 (0.55, 0.86)	24.7 (20.4, 29.6)	1.380 (0.871, 2.189)	1.15 (0.94, 1.36)
cordal	Cordia alliodora	56.6 (48.7, 66.4)	0.82 (0.74, 0.91)	21.0 (17.0, 25.6)	0.530 (0.221, 1.312)	1.29 (1.05, 1.53)
cordbi	Cordia bicolor	49.9 (42.5, 57.9)	0.86 (0.82, 0.92)	23.9 (20.5, 27.6)	0.270 (0.216, 0.335)	1.44 (1.35, 1.53)
cordla	Cordia lasiocalyx	58.3 (49.4, 69.1)	0.64 (0.57, 0.71)	20.1 (16.4, 24.5)	0.340 (0.200, 0.581)	1.36 (1.16, 1.56)
cou2cu	Coussarea curvigemma	57.1 (49.1, 66.2)	0.74 (0.68, 0.80)	24.2 (20.3, 28.3)	0.577 (0.360, 0.955)	1.31 (1.12, 1.50)
crotbi	Croton billbergianus	50.0 (42.0, 59.8)	0.77 (0.66, 0.87)	18.9 (14.4, 23.8)	0.732 (0.336, 1.627)	1.34 (1.09, 1.59)
cupala	Cupania latifolia	55.9 (47.3, 66.5)	0.73 (0.63, 0.83)	21.9 (15.9, 27.9)	0.612 (0.267, 1.418)	1.36 (1.13, 1.60)
cupasy	Cupania seemannii	61.4 (51.3, 73.1)	0.65 (0.57, 0.73)	19.4 (15.6, 23.8)	0.800 (0.436, 1.430)	1.36 (1.15, 1.59)
nectpu	Damburneya umbrosa	55.0 (46.7, 64.9)	0.74 (0.68, 0.80)	19.5 (16.1, 23.3)	0.665 (0.319, 1.384)	1.34 (1.09, 1.57)
dendar	Dendropanax arboreus	57.1 (48.6, 68.0)	0.71 (0.62, 0.79)	24.1 (18.6, 30.2)	0.531 (0.243, 1.112)	1.38 (1.18, 1.59)
des2pa	Desmopsis panamensis	60.1 (51.4, 70.6)	0.67 (0.63, 0.71)	22.7 (19.2, 26.9)	0.603 (0.362, 1.016)	1.34 (1.13, 1.54)
dio2ar	Diospyros artanthifolia	58.8 (49.5, 70.0)	0.67 (0.60, 0.74)	17.8 (14.4, 21.8)	0.470 (0.202, 1.043)	1.35 (1.09, 1.61)
diptpa	Dipteryx oleifera	64.5 (57.4, 74.4)	0.80 (0.73, 0.87)	23.0 (19.5, 26.8)	0.530 (0.222, 1.178)	1.47 (1.30, 1.67)
drypst	Drypetes standleyi	55.4 (47.4, 64.3)	0.78 (0.75, 0.82)	22.6 (19.5, 26.2)	0.794 (0.679, 0.933)	1.27 (1.19, 1.34)

Table S2. (continued).

Mnemonic	Species	Tree height (generalized Michaelis-Menten, Eq. 3)			Crown area (power function, Eq. 2)	
		a	b	k	a	b
entesc	Enterolobium schomburgkii	55.5 (46.8, 66.3)	0.77 (0.65, 0.89)	18.9 (13.8, 24.4)	0.880 (0.452, 1.830)	1.23 (0.99, 1.46)
ery2ma	Erythroxylum macrophyllum	60.6 (51.2, 72.1)	0.68 (0.57, 0.79)	23.0 (17.4, 29.3)	0.544 (0.266, 1.202)	1.35 (1.08, 1.61)
eugeco	Eugenia coloradoensis	62.5 (53.4, 74.3)	0.75 (0.69, 0.81)	22.1 (18.4, 26.7)	0.560 (0.273, 1.126)	1.35 (1.12, 1.57)
eugega	Eugenia galalonensis	61.8 (52.7, 73.2)	0.71 (0.64, 0.78)	22.0 (18.0, 26.6)	0.598 (0.341, 1.030)	1.33 (1.14, 1.54)
eugene	Eugenia nesiotica	61.8 (51.9, 73.6)	0.72 (0.63, 0.81)	24.4 (18.9, 30.5)	0.650 (0.277, 1.386)	1.38 (1.15, 1.63)
eugeoe	Eugenia oerstediana	54.8 (46.9, 63.1)	0.77 (0.73, 0.81)	26.9 (23.0, 31.1)	0.803 (0.632, 1.020)	1.34 (1.23, 1.45)
faraoc	Faramea occidentalis	59.1 (50.0, 69.2)	0.65 (0.61, 0.68)	20.5 (17.2, 24.3)	0.663 (0.489, 0.902)	1.25 (1.12, 1.38)
ficuc2	Ficus costaricana	59.6 (50.6, 71.1)	0.70 (0.61, 0.79)	23.4 (17.0, 30.2)	0.564 (0.233, 1.391)	1.18 (0.98, 1.37)
ficuma	Ficus maxima	51.6 (43.7, 61.8)	0.81 (0.69, 0.93)	19.5 (14.5, 25.3)	0.382 (0.183, 0.767)	1.41 (1.17, 1.65)
ficuto	Ficus tonduzii	58.3 (49.3, 69.2)	0.66 (0.56, 0.77)	23.3 (18.0, 29.2)	0.573 (0.260, 1.282)	1.33 (1.07, 1.60)
ficutr	Ficus trigonata	48.5 (41.8, 57.3)	0.81 (0.70, 0.93)	20.4 (15.1, 26.3)	0.651 (0.314, 1.392)	1.30 (1.13, 1.49)
ficuyo	Ficus yoponensis	44.1 (37.5, 53.4)	0.86 (0.74, 1.00)	16.7 (12.2, 22.2)	0.491 (0.249, 0.937)	1.44 (1.27, 1.61)
gar2ma	Garcinia madruno	58.0 (49.4, 68.1)	0.72 (0.67, 0.77)	22.8 (19.3, 26.9)	0.616 (0.275, 1.396)	1.36 (1.09, 1.63)
gar2in	Garcinia recondita	57.6 (49.8, 66.6)	0.77 (0.73, 0.81)	26.7 (22.9, 30.9)	0.819 (0.675, 0.985)	1.26 (1.15, 1.38)
geniam	Genipa americana	63.8 (53.3, 77.4)	0.66 (0.57, 0.76)	24.0 (18.0, 30.5)	0.594 (0.249, 1.327)	1.40 (1.16, 1.65)
guapst	Guapira standleyana	64.4 (55.0, 76.4)	0.70 (0.65, 0.77)	21.9 (18.2, 26.1)	0.597 (0.280, 1.353)	1.29 (1.09, 1.49)
guarsp	Guarea bullata	61.9 (52.5, 73.2)	0.70 (0.63, 0.77)	23.9 (19.8, 28.5)	0.263 (0.141, 0.474)	1.44 (1.25, 1.67)
guargr	Guarea grandifolia	59.3 (50.4, 70.1)	0.74 (0.64, 0.84)	21.8 (15.5, 28.6)	0.601 (0.256, 1.403)	1.34 (1.13, 1.55)
guargu	Guarea guidonia	60.5 (50.5, 73.1)	0.60 (0.53, 0.66)	19.5 (15.5, 23.9)	0.517 (0.239, 1.100)	1.32 (1.10, 1.54)
guatdu	Guatteria lucens	65.0 (55.8, 76.5)	0.74 (0.68, 0.81)	22.0 (18.2, 26.4)	0.635 (0.314, 1.253)	1.29 (1.10, 1.47)
guazul	Guazuma ulmifolia	48.3 (39.7, 58.2)	0.70 (0.62, 0.79)	15.4 (12.0, 19.4)	0.618 (0.275, 1.462)	1.30 (1.08, 1.52)
gustsu	Gustavia superba	54.6 (46.0, 65.2)	0.69 (0.59, 0.78)	21.8 (16.8, 27.4)	0.615 (0.275, 1.364)	1.31 (1.08, 1.52)
tab1gu	Handroanthus guayacan	58.4 (51.1, 67.5)	0.80 (0.74, 0.86)	25.6 (22.4, 29.4)	0.388 (0.210, 0.685)	1.37 (1.23, 1.53)
hassfl	Hasseltia floribunda	60.7 (51.1, 72.1)	0.54 (0.47, 0.62)	20.3 (16.0, 25.2)	0.683 (0.339, 1.410)	1.28 (1.04, 1.50)
heisac	Heisteria acuminata	58.9 (49.9, 69.6)	0.66 (0.61, 0.71)	20.5 (17.0, 24.3)	0.875 (0.439, 1.822)	1.32 (1.04, 1.57)
heisco	Heisteria concinna	48.2 (39.4, 57.5)	0.68 (0.65, 0.72)	15.7 (12.8, 18.8)	0.652 (0.370, 1.153)	1.37 (1.18, 1.55)
hyeral	Hieronyma alchorneoides	64.3 (55.3, 76.2)	0.70 (0.64, 0.77)	23.0 (18.9, 27.4)	0.554 (0.234, 1.337)	1.38 (1.19, 1.58)
hirtam	Hirtella americana	59.3 (49.9, 71.0)	0.62 (0.56, 0.68)	17.6 (14.2, 21.5)	0.485 (0.254, 0.904)	1.42 (1.17, 1.67)
hirttr	Hirtella triandra	57.3 (48.9, 67.2)	0.71 (0.68, 0.74)	23.3 (19.8, 27.3)	0.927 (0.768, 1.130)	1.25 (1.14, 1.36)
ingas1	Inga acuminata	54.6 (45.5, 65.2)	0.67 (0.57, 0.77)	18.7 (13.6, 24.5)	0.735 (0.366, 1.456)	1.40 (1.17, 1.62)
ingago	Inga goldmanii	59.0 (49.8, 70.2)	0.72 (0.62, 0.82)	23.1 (17.1, 29.5)	0.639 (0.271, 1.454)	1.37 (1.13, 1.61)
ingama	Inga marginata	56.1 (47.2, 67.2)	0.69 (0.61, 0.77)	17.5 (13.8, 21.8)	0.658 (0.264, 1.504)	1.40 (1.17, 1.66)
ingasa	Inga sapindoides	58.3 (49.5, 69.3)	0.74 (0.64, 0.83)	22.9 (17.2, 29.0)	0.657 (0.295, 1.463)	1.38 (1.13, 1.63)
ingasp	Inga spectabilis	53.5 (45.3, 63.6)	0.73 (0.62, 0.83)	22.1 (16.3, 28.3)	0.541 (0.233, 1.231)	1.37 (1.12, 1.61)
ingaum	Inga umbellifera	63.5 (53.0, 76.4)	0.59 (0.51, 0.66)	17.2 (14.0, 21.2)	0.881 (0.408, 1.959)	1.32 (1.05, 1.57)
jac1co	Jacaranda copaia	51.4 (45.1, 60.0)	0.75 (0.68, 0.83)	14.6 (12.3, 17.1)	0.500 (0.269, 0.977)	1.36 (1.20, 1.52)
laciag	Lacistema aggregatum	62.0 (52.5, 73.8)	0.71 (0.66, 0.77)	21.9 (18.3, 26.4)	0.467 (0.198, 1.074)	1.35 (1.09, 1.63)
lacmpa	Lacmellea panamensis	53.4 (44.9, 63.6)	0.69 (0.62, 0.77)	17.4 (14.0, 21.3)	0.538 (0.245, 1.371)	1.31 (1.06, 1.55)
laetpr	Laetia procera	48.2 (40.6, 57.8)	0.81 (0.71, 0.93)	17.2 (13.2, 21.8)	0.591 (0.253, 1.422)	1.40 (1.16, 1.63)
laetth	Laetia thamnina	60.3 (50.8, 72.1)	0.65 (0.59, 0.70)	18.0 (14.8, 21.7)	0.705 (0.311, 1.577)	1.38 (1.10, 1.65)
licahy	Licania hypoleuca	62.5 (52.6, 74.2)	0.67 (0.63, 0.71)	20.7 (17.2, 24.8)	0.725 (0.323, 1.560)	1.36 (1.11, 1.61)
licapl	Licania platypus	61.0 (51.7, 72.8)	0.72 (0.63, 0.82)	23.4 (17.5, 29.7)	0.639 (0.310, 1.432)	1.24 (1.00, 1.44)
lindla	Lindackeria laurina	57.4 (48.2, 68.6)	0.71 (0.60, 0.80)	23.3 (17.5, 29.3)	0.488 (0.219, 1.090)	1.35 (1.10, 1.59)
loncla	Lonchocarpus heptaphyllus	63.9 (54.5, 75.5)	0.75 (0.70, 0.81)	21.4 (17.8, 25.7)	0.189 (0.112, 0.320)	1.53 (1.38, 1.70)
luehse	Luehea seemannii	55.1 (48.7, 62.9)	0.78 (0.74, 0.83)	26.9 (23.6, 30.5)	0.526 (0.230, 1.262)	1.33 (1.13, 1.52)
macrgl	Macrocnemum roseum	59.4 (50.2, 70.6)	0.71 (0.61, 0.81)	23.7 (17.6, 30.0)	0.569 (0.247, 1.312)	1.30 (1.06, 1.54)

Table S2. (continued).

Mnemonic	Species	Tree height (generalized Michaelis-Menten, Eq. 3)			Crown area (power function, Eq. 2)	
		a	b	k	a	b
maquco	Maquira guianensis	59.1 (50.2, 69.5)	0.68 (0.63, 0.74)	21.2 (17.6, 25.4)	0.517 (0.297, 0.902)	1.33 (1.12, 1.53)
mar1la	Marila laxiflora	56.2 (48.0, 65.9)	0.64 (0.51, 0.77)	23.0 (19.1, 27.6)	0.647 (0.406, 1.032)	1.33 (1.13, 1.52)
maytsc	Maytenus schippii	61.4 (51.8, 73.6)	0.75 (0.64, 0.85)	21.7 (15.5, 28.0)	0.525 (0.226, 1.230)	1.34 (1.07, 1.61)
micoar	Miconia argentea	50.8 (42.7, 60.1)	0.79 (0.74, 0.85)	18.2 (15.3, 21.7)	0.626 (0.480, 0.814)	1.34 (1.22, 1.46)
micone	Miconia nervosa	54.9 (46.3, 64.2)	0.70 (0.56, 0.84)	24.3 (19.9, 29.2)	0.862 (0.556, 1.301)	1.26 (1.06, 1.46)
malmsp	Mosannonna garwoodii	60.1 (50.8, 70.9)	0.70 (0.65, 0.76)	20.4 (16.9, 24.3)	0.468 (0.212, 1.030)	1.37 (1.11, 1.62)
mourmy	Mouriri myrtilloides	62.5 (52.7, 74.2)	0.51 (0.46, 0.57)	19.4 (16.2, 23.4)	0.898 (0.579, 1.406)	1.32 (1.12, 1.53)
myrcga	Myrcia splendens tip. gatanensis	61.2 (51.5, 73.5)	0.64 (0.56, 0.72)	17.8 (14.3, 21.8)	0.642 (0.325, 1.301)	1.34 (1.08, 1.58)
myrofr	Myrospermum frutescens	66.4 (55.8, 79.6)	0.76 (0.65, 0.86)	20.7 (14.6, 27.4)	0.423 (0.180, 0.923)	1.47 (1.24, 1.73)
nectci	Nectandra cissiflora	55.6 (46.3, 66.4)	0.75 (0.62, 0.87)	17.2 (11.6, 23.6)	0.518 (0.238, 1.146)	1.35 (1.10, 1.61)
ochrpy	Ochroma pyramidale	34.6 (28.1, 44.7)	0.90 (0.73, 1.08)	13.4 (6.4, 21.0)	0.702 (0.260, 1.815)	1.39 (1.14, 1.64)
ocotob	Ocotea oblonga	51.4 (43.2, 61.2)	0.75 (0.64, 0.85)	20.5 (14.7, 26.5)	0.562 (0.239, 1.312)	1.31 (1.07, 1.54)
ocotpu	Ocotea puberula	56.5 (47.9, 67.1)	0.75 (0.65, 0.86)	20.9 (14.6, 27.9)	0.584 (0.232, 1.364)	1.37 (1.14, 1.60)
ocotwh	Ocotea whitei	57.4 (49.3, 67.6)	0.78 (0.69, 0.88)	22.0 (16.9, 27.5)	0.717 (0.339, 1.584)	1.24 (1.04, 1.43)
ormocr	Ormosia coccinea	60.0 (51.0, 71.6)	0.77 (0.66, 0.88)	21.3 (15.9, 27.0)	0.391 (0.192, 0.850)	1.33 (1.13, 1.55)
ormoma	Ormosia macrocalyx	58.2 (50.1, 68.2)	0.81 (0.73, 0.91)	28.1 (23.2, 33.5)	0.264 (0.150, 0.467)	1.43 (1.26, 1.61)
ouralu	Ouratea lucens	66.2 (55.9, 79.0)	0.74 (0.67, 0.82)	21.2 (17.6, 25.6)	0.288 (0.147, 0.527)	1.47 (1.24, 1.72)
pochse	Pachira sessilis	58.1 (50.2, 68.3)	0.78 (0.72, 0.84)	20.4 (17.2, 24.4)	0.504 (0.299, 0.861)	1.25 (1.07, 1.41)
perexa	Perebea xanthochyma	59.7 (50.6, 70.9)	0.66 (0.62, 0.71)	19.7 (16.5, 23.4)	0.666 (0.306, 1.493)	1.33 (1.06, 1.58)
picrla	Picramnia latifolia	63.4 (53.2, 76.2)	0.56 (0.48, 0.64)	19.7 (15.7, 24.3)	0.147 (0.070, 0.281)	1.77 (1.54, 2.04)
pipere	Piper reticulatum	56.7 (48.3, 67.3)	0.72 (0.60, 0.84)	22.1 (17.0, 27.8)	0.660 (0.338, 1.342)	1.32 (1.04, 1.56)
pla1pi	Platymiscium pinnatum	65.7 (56.1, 78.3)	0.68 (0.60, 0.75)	18.7 (14.7, 23.3)	0.479 (0.199, 1.174)	1.35 (1.12, 1.56)
pla2el	Platypodium elegans	59.3 (52.0, 68.8)	0.77 (0.70, 0.85)	23.3 (19.9, 27.3)	0.811 (0.353, 1.804)	1.22 (1.04, 1.41)
hybapr	Pombalia prunifolia	61.8 (52.3, 72.8)	0.51 (0.45, 0.58)	22.6 (19.0, 27.0)	0.834 (0.508, 1.365)	1.26 (1.05, 1.47)
poular	Poulsenia armata	57.4 (51.4, 64.8)	0.86 (0.82, 0.91)	33.1 (29.4, 37.4)	0.332 (0.168, 0.636)	1.32 (1.16, 1.50)
pourbi	Pourouma bicolor	51.1 (42.4, 61.2)	0.71 (0.64, 0.78)	16.4 (13.4, 19.8)	0.600 (0.237, 1.520)	1.39 (1.14, 1.65)
poutre	Pouteria reticulata	63.3 (54.5, 75.0)	0.71 (0.66, 0.75)	20.6 (17.5, 24.5)	0.690 (0.400, 1.225)	1.32 (1.16, 1.47)
pri2co	Prioria copaifera	60.1 (55.4, 65.7)	0.86 (0.83, 0.89)	36.5 (33.9, 39.5)	0.908 (0.787, 1.050)	1.18 (1.14, 1.22)
protsp	Protium confusum	54.5 (45.5, 64.7)	0.68 (0.62, 0.75)	16.7 (13.7, 20.2)	0.760 (0.482, 1.179)	1.25 (1.05, 1.44)
protco	Protium costaricense	60.8 (51.0, 72.9)	0.61 (0.54, 0.69)	19.3 (15.2, 23.9)	0.661 (0.328, 1.308)	1.38 (1.14, 1.61)
protpa	Protium panamense	61.8 (52.2, 73.8)	0.68 (0.65, 0.72)	19.8 (16.7, 23.7)	0.356 (0.201, 0.636)	1.42 (1.22, 1.62)
protte	Protium tenuifolium subsp. sessiliflorum	50.1 (40.8, 59.7)	0.75 (0.71, 0.81)	21.2 (17.5, 25.2)	0.565 (0.436, 0.743)	1.37 (1.26, 1.47)
pse1se	Pseudobombax septenatum	52.7 (45.6, 62.2)	0.80 (0.70, 0.90)	20.6 (14.6, 26.9)	0.550 (0.240, 1.351)	1.28 (1.06, 1.48)
psycma	Psychotria marginata	56.9 (48.5, 66.6)	0.68 (0.55, 0.81)	26.1 (21.5, 31.0)	0.552 (0.347, 0.868)	1.36 (1.17, 1.56)
pterro	Pterocarpus hayesii	62.8 (53.9, 73.8)	0.75 (0.69, 0.81)	23.3 (19.8, 27.6)	0.534 (0.289, 1.044)	1.37 (1.17, 1.55)
quaras	Quararibea asterolepis	57.8 (52.1, 64.6)	0.86 (0.82, 0.89)	32.0 (29.1, 35.5)	1.052 (0.884, 1.253)	1.09 (1.03, 1.14)
quasam	Quassia amara	63.9 (53.9, 76.2)	0.56 (0.50, 0.62)	21.5 (17.8, 26.0)	0.591 (0.280, 1.264)	1.34 (1.07, 1.60)
randar	Randia armata	61.3 (51.8, 72.9)	0.52 (0.45, 0.60)	20.6 (16.3, 25.4)	0.771 (0.351, 1.651)	1.35 (1.11, 1.59)
rinosa	Rinorea sylvatica	61.2 (52.3, 71.6)	0.64 (0.59, 0.69)	24.9 (21.1, 29.4)	1.095 (0.593, 2.023)	1.27 (1.03, 1.50)
sapiau	Sapium glandulosum	57.1 (49.2, 67.2)	0.80 (0.71, 0.90)	22.2 (16.6, 28.3)	0.489 (0.206, 1.084)	1.40 (1.19, 1.63)
simaam	Simarouba amara	39.9 (35.8, 44.8)	1.01 (0.97, 1.06)	21.9 (19.7, 24.6)	0.538 (0.458, 0.631)	1.32 (1.25, 1.40)
sipacr	Siparuna cristata	58.6 (49.3, 69.6)	0.76 (0.64, 0.89)	21.7 (16.7, 27.3)	0.680 (0.358, 1.274)	1.30 (1.06, 1.55)
sloate	Sloanea terniflora	55.7 (49.4, 62.8)	0.92 (0.87, 0.97)	33.0 (29.4, 37.0)	0.546 (0.429, 0.690)	1.35 (1.27, 1.43)
soroaf	Sorocea affinis	61.6 (52.1, 72.8)	0.61 (0.57, 0.65)	21.5 (17.9, 25.6)	0.356 (0.210, 0.611)	1.37 (1.16, 1.58)
sponmo	Spondias mombin	50.1 (42.4, 59.7)	0.78 (0.68, 0.89)	20.0 (14.2, 26.3)	0.526 (0.223, 1.248)	1.42 (1.21, 1.63)
sponra	Spondias radlkoferi	54.2 (47.1, 62.2)	0.80 (0.76, 0.85)	28.3 (24.5, 32.3)	0.238 (0.179, 0.314)	1.54 (1.44, 1.65)
sterap	Sterculia apetala	59.3 (52.3, 67.5)	0.82 (0.76, 0.89)	26.9 (23.2, 31.2)	0.487 (0.247, 0.966)	1.39 (1.23, 1.57)

Table S2. (continued).

Mnemonic	Species	Tree height (generalized Michaelis-Menten, Eq. 3)			Crown area (power function, Eq. 2)	
		a	b	k	a	b
swars2	Swartzia simplex var. continentalis	64.6 (54.4, 76.7)	0.60 (0.56, 0.64)	22.1 (18.5, 26.5)	0.378 (0.216, 0.637)	1.55 (1.37, 1.75)
swars1	Swartzia simplex var. grandiflora	64.9 (54.6, 78.0)	0.56 (0.50, 0.62)	18.6 (15.0, 23.0)	0.482 (0.254, 0.870)	1.48 (1.30, 1.69)
sympgl	Symphonia globulifera	58.6 (49.8, 69.9)	0.78 (0.67, 0.88)	20.5 (14.1, 27.0)	0.546 (0.227, 1.295)	1.36 (1.13, 1.61)
tab1ro	Tabebuia rosea	58.9 (52.3, 66.5)	0.92 (0.86, 0.98)	28.8 (25.5, 32.6)	0.384 (0.289, 0.506)	1.42 (1.33, 1.51)
tab2ar	Tabernaemontana arborea	62.0 (53.5, 73.3)	0.66 (0.61, 0.71)	23.4 (19.5, 27.8)	0.552 (0.298, 1.013)	1.29 (1.13, 1.45)
tachve	Tachigali panamensis	49.7 (44.1, 55.8)	0.97 (0.92, 1.03)	28.9 (26.0, 32.2)	0.647 (0.540, 0.778)	1.43 (1.36, 1.49)
talipr	Talisia croatii	63.0 (53.1, 75.3)	0.73 (0.61, 0.85)	23.8 (18.1, 30.1)	0.131 (0.064, 0.260)	1.48 (1.23, 1.75)
taline	Talisia nervosa	65.2 (54.7, 77.4)	0.60 (0.55, 0.66)	23.5 (19.4, 28.1)	0.216 (0.103, 0.436)	1.48 (1.23, 1.75)
termam	Terminalia amazonia	58.7 (50.5, 69.3)	0.77 (0.66, 0.88)	19.4 (13.7, 25.8)	0.556 (0.232, 1.316)	1.44 (1.21, 1.66)
termob	Terminalia oblonga	59.9 (52.2, 69.7)	0.85 (0.77, 0.93)	25.0 (20.6, 30.0)	0.624 (0.281, 1.390)	1.43 (1.23, 1.63)
tet2pa	Tetragastris panamensis	57.0 (50.0, 65.2)	0.72 (0.70, 0.75)	19.9 (17.5, 22.8)	0.467 (0.397, 0.556)	1.46 (1.40, 1.52)
tocopi	Tocoyena pittieri	53.3 (45.0, 63.7)	0.73 (0.63, 0.83)	22.4 (17.2, 28.1)	0.678 (0.339, 1.314)	1.32 (1.12, 1.53)
tratas	Trattinnickia aspera	50.4 (42.7, 60.5)	0.74 (0.64, 0.84)	14.9 (11.7, 18.6)	0.537 (0.221, 1.255)	1.36 (1.13, 1.58)
tremmi	Trema micrantha	38.6 (31.0, 49.0)	0.88 (0.72, 1.04)	15.0 (8.4, 22.4)	0.605 (0.241, 1.403)	1.42 (1.20, 1.66)
tri2pa	Trichilia pallida	57.1 (48.3, 68.0)	0.68 (0.58, 0.78)	23.3 (17.5, 29.3)	0.598 (0.266, 1.327)	1.35 (1.10, 1.60)
tri2tu	Trichilia tuberculata	57.9 (51.0, 65.7)	0.83 (0.80, 0.85)	27.7 (24.4, 31.5)	0.847 (0.728, 0.988)	1.19 (1.13, 1.24)
tripcu	Triplaris cumingiana	59.0 (50.4, 70.4)	0.79 (0.68, 0.90)	19.8 (13.4, 26.4)	0.474 (0.204, 1.150)	1.27 (1.01, 1.50)
turpoc	Turpinia occidentalis	48.5 (40.3, 57.8)	0.72 (0.62, 0.81)	22.5 (17.0, 28.5)	0.561 (0.232, 1.448)	1.20 (0.94, 1.43)
unonpi	Unonopsis pittieri	58.5 (49.5, 69.7)	0.76 (0.66, 0.87)	21.3 (15.4, 27.7)	0.428 (0.194, 1.007)	1.30 (1.03, 1.55)
virosp	Virola multiflora	55.3 (47.4, 64.7)	0.78 (0.72, 0.84)	20.2 (17.1, 23.8)	0.489 (0.217, 1.306)	1.31 (1.06, 1.53)
viroso	Virola nobilis	65.0 (57.2, 75.4)	0.76 (0.71, 0.81)	24.1 (20.9, 27.8)	0.477 (0.231, 1.056)	1.35 (1.15, 1.52)
virose	Virola sebifera	57.9 (49.7, 67.4)	0.79 (0.75, 0.84)	24.4 (21.0, 28.2)	0.871 (0.499, 1.553)	1.19 (1.01, 1.36)
vochfe	Vochysia ferruginea	50.0 (41.8, 59.8)	0.78 (0.66, 0.90)	18.4 (13.1, 24.4)	0.470 (0.210, 1.030)	1.42 (1.18, 1.67)
xyl1ma	Xylopia macrantha	54.0 (46.0, 63.9)	0.76 (0.72, 0.79)	19.1 (16.1, 22.6)	0.992 (0.537, 1.908)	1.24 (1.02, 1.45)
zantbe	Zanthoxylum ekmanii	44.1 (38.3, 52.4)	0.89 (0.77, 1.01)	16.8 (13.1, 21.0)	0.442 (0.200, 0.950)	1.41 (1.21, 1.62)
zantp1	Zanthoxylum panamense	60.1 (50.9, 71.5)	0.77 (0.67, 0.88)	20.1 (14.1, 26.7)	0.496 (0.206, 1.111)	1.43 (1.21, 1.67)