

Online Material

Table 1. Allometric equations to estimate biomass components that are recommended and reported in the scientific literature for single species and groups of species from semi-arid, subtropical, temperate and tropical vegetation types.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
	Arid, Semi-Arid, Subtropical Species and Forests					
$TAB = 0.05351D^{1.1022} = (5464.89Db^{2.7727}) + (0.03182D^{1.0056})$	<i>Acacia saligna</i> (labill.) H. Wendt	Total Area= Fuelwood + Forraje	Bratti et al., (1998)			NL
$TAB = [0.006009+0.241108H+0.000847Db2H-0.47883(LnH)] + [1.946+0.01667(Db2H)] = [-0.8765+0.54182IDb]$	<i>Acacia berlandieri</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Leave + Branch + Bole = TAB	Navar et al., (2004)	2.5-16.9	79	SUR
$TAB = [1.1856+0.7046Db-2.9935LnDb] + [18.48+13.01Db-53.9LnDb] = [-4.4576+1.4946Db]$	<i>Acacia farnesiana</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	2.1-45.0	18	SUR
$TAB = [0.2984-0.3663H+0.8857LnH+0.001589Db2H]+[1.7299-1.7568H+0.02176Db2H+1.1115LnDb2H]=[0.5772+0.011244Db2H]$	<i>Acacia rigidula</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Leave + Branch + Bole = TAB	Navar et al., (2004)	1.3-19.5	78	SUR
$TAB = [0.1498-0.0609Db+0.004448Db2H] + [-3.72131 + 0.248698Db + 5.1932H - 10.4555LnH] = [-3.72131+0.248698Db+5.1932H-10.4555LnH]$	<i>Bernardia myricaefolia</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	1.1-7.0	52	SUR
$TAB = [-0.02387 + 0.071082Db] + [0.822031-0.3336Db + 0.027934Db2H] = [-0.97513 + 0.622086Db]$	<i>Celtis pallida</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	1.4-8.8	30	SUR
$TAB = [-0.49169+0.119894Db]+[1.34514-0.57648Db+0.036956Db2H-0.07861LnDb2H]= [-2.28529+6.281245H+0.004902Db2H-14.8795LnH]$	<i>Condalia hookeri</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	0.5-29.9	29	SUR
$TAB = [-0.80889+0.708933H+3.4441LnDb-1.52967LnDb2H]+[-5.1898 + 4.051755H+0.953933-8.3199LnH]=[0.402273-0.79265H + 0.429856Db + 0.007672Db2H]$	<i>Cordia boissieri</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	2.5-25.5	96	SUR
$TAB = [-0.4384+0.12124LnDb2H+0.072176H] + [3.32259 + 0.010964Db2H] = [0.937974+0.0126Db2H]$	<i>Diospyros texana</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	3.2-25.0	63	SUR
$TAB = [-0.00842-0.02042H+0.06316LnDb2H]+[0.912571-0.10608H+0.009052LnH+0.009085Db2H]=[0.089769+0.171654H+0.007258Db2H]$	<i>Eisenhardtia polystachia</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	1.6-15.3	42	SUR
$TAB = [0.062164+0.011566Db2H-0.05652LnDb2H]+[-0.088 + 0.115089Db2H] = [-0.08742+0.014452Db2H]$	<i>Forestiera angustifolia</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	1.2-8.0	18	SUR
$TAB = [-0.69334+0.335057LnDb2H]+[-2.18807 + 1.04648LnDb2H + 0.008012Db2H] = [-0.10528+1.061613Db-2.68152LnDb]$	<i>Gochnatia hypoleuca</i> (ne México) SA-ST Tamaulipan thomscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	2.1-25.0	29	SUR

Table 1. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
TAB = [-0.17395+0.002432Db2H-1.24942H+4.2865LnH-0.18844LnDb]+[20.99959+0.056192Db2H-4.382H-1.90569Db] = [3.7336+0.025468Db2H-0.094648Db]	<i>Helietta parvifolia</i> (ne México) SA-ST Tamaulipan thornscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	1.5-17.5	67	SUR
TAB = [-0.05266+0.000052H+0.092582LnDb2H] + [0.109003 + 0.014021Db2H-1.62531H + 0.89543LnDb2H] = [0.3558 + 0.010336Db2H - 0.51147Db + 1.5063LnDb]	Other matorral thornscrub species (ne México) SA-ST Tamaulipan thornscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	1.0-19.0	54	SUR
TAB = [-0.9523+0.002317Db2H]+[-1.28375+0.027484Db2H]+[-3.08371+0.025196Db2H]	<i>P. ebano</i> (ne México) SA-ST Tamaulipan thornscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	2.3-35.0	16	SUR
TAB = [-0.00523+0.000689Db2H+0.8018LnDb] + [0.332213 + 0.017196Db2H - 0.94861Db+3.38855LnDb] = [-0.58367 + 0.004255Db2H + 0.393071Db]	<i>Pithecellobium pallens</i> (ne México) SA-ST Tamaulipan thornscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	1.4-21.2	123	SUR
TAB = [-0.15545+0.110531Db+0.000797Db2H]+[4.2362+3.2482Db-11.6949LnDb] = [-2.04254+0.387649Db+0.5166H]	<i>Prosopis glandulosa</i> (ne México) SA-ST Tamaulipan thornscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	2.0-22.0	38	SUR
TAB = [-0.14775+0.000659Db2H+0.118172Db]+[-2.981 + 0.006699Db2H + 1.221108Db] = [-0.62634+0.001711Db2H+0.313902Db]	<i>Prosopis laevigata</i> (ne México) SA-ST Tamaulipan thornscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	1.8-29.0	29	SUR
TAB = [0.58283+0.000668Db2H-0.29147LnH]+[-3.288 + 1.1233Db + 0.84592LnH] = [-1.08316+0.005911Db2H-0.11339H]	<i>Zanthoxylum fagara</i> (ne México) SA-ST Tamaulipan thornscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	2.5-11.8	18	SUR
TAB = [0.026884+0.001191Db2H+0.044529Db-0.01516H] + [1.025041 + 0.023663Db2H-0.17071H-0.09615LnH] = [-0.43154 + 0.011037Db2H + 0.113602Db+0.307809LnDb]	All semi-arid, subtropical shrubs and small trees (ne México) Tamaulipan thornscrub Forest	Foliage + Branch + Bole = TAB	Navar et al., (2004)	0.5-45.0	913	SUR
Ln(TAB) = [-3.409+1.790(LnDb)]*1.023	<i>Acacia rigidula</i> (Sur de Texas) Tamaulipan thornscrub Forest	Total AB	Northup et al., (2005)	(16.8)**	35	Ln
Ln(TAB) = [-3.323+1.914(LnDb)]*1.021	<i>Celtis pallida</i> (Sur de Texas) Tamaulipan thornscrub Forest	TAB	Northup et al., (2005)	(12.0)**	36	Ln
Ln(TAB) = [-3.989+2.296(LnDb)]*1.011	<i>Condalia hookeri</i> (Sur de Texas) Tamaulipan thornscrub Forest	TAB	Northup et al., (2005)	(8.52)**	35	Ln
Ln(TAB) = [-4.053+2.502(LnDb)]*1.011	<i>Diospyros texana</i> (Sur de Texas) Tamaulipan thornscrub Forest	TAB	Northup et al., (2005)	(7.68)**	36	Ln
Ln(TAB) = [-2.854+1.715(LnDb)]*1.012	<i>Mahonia trifoliolata</i> (Sur de Texas) Tamaulipan thornscrub Forest	TAB	Northup et al., (2005)	(16.05)**	35	Ln

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$\ln(\text{TAB}) = [-4.129 + 2.387(\ln \text{Db})] * 1.009$	<i>Prosopis glandulosa</i> (Sur de Texas) Tamaulipan thornscrub Forest	TAB	Northup et al., (2005)	(15.5)**	37	Ln
$\ln(\text{TAB}) = [-3.690 + 1.549(\ln \text{Db})] * 1.017$	<i>Zanthoxylum fagara</i> (Sur de Texas) Tamaulipan thornscrub Forest	TAB	Northup et al., (2005)	(8.51)**	34	Ln
$\text{TAB} = 75.1691 + 0.08732\text{D}^2\text{H}$	<i>Prosopis pallida</i>	TAB	Padrón y Navarro (2004)			Lin
$\text{TAB} = 0.0921 + \text{D}^{2.5899}$	<i>Acacia huarango</i>	TAB	Kue and Lim (1999)			NL
$\text{TAB} = -0.7152 + 1.7029\ln \text{D}$	Mezquite	TAB	Jenkins et al., (2004)			Ln
$\text{TAB} = 34.47 - 8.0671\text{D} + 0.6589\text{D}^2$	Tropical dry forests	TAB	Brown et al., (1989)			NL
$0.0738697\text{D}^{2.5939} * e^{-0.1530z}$	<i>Aspidosperma quebracho-blanco</i> (Santiago del Estero, Argentina)	TAB	Gaillard de Benitez et al., (2002)	13.0-57.6	15	NL
$(0.3368\text{D}^{2.0178}) + (0.1329\text{D}^{2.14}) + (0.6141\text{D}^{1.609}) = (0.7621\text{D}^{1.9873})$	<i>Quillaza saponaria</i> (Colchagua, Chile)	(bole) + (branches) + (Foliage) = (TAB)	Cruz and Quintana (2008)	0.5-11.0	132	NL
$(22.9438\text{D}^{1.90447}) + (32.2899\text{D}^{2.6798}) = (61.1665\text{D}^{2.3632})$	<i>Peumus boldus</i> Mol (Chile)	(Foliage) + (Bole&Branches) = (TAB)	Durán-Garate (2005)	0.1-12.1	200	Ln
$\text{Log}(\text{TAB}) = -0.7590 + 0.55204\text{Log}(\text{BA}) + 0.5715\text{Log}(\text{WGS}) + 0.5654\text{Log}(\text{H})$	Tropical deciduous forests (Jalisco, Mexico)	TAB	Martinez-Yrizar et al., (1992).	3.0-30.0		Log
T=35; Spp=31; Forests=4; Species=26						
Temperate Species and Forests						
$\text{TAB} = 0.08952.42\text{D}^{2.33}$	<i>Alnus spp</i> (Oaxaca, México)	TAB	Etchevers-Barra et al., (2002)	3.9-23.5	10	Ln
$\text{TAB} = 0.10815\text{D}^{2.45}$	<i>Liquidambar macrophylla</i> (Oaxaca, México)	TAB	Etchevers-Barra et al., (2002)	3.3-23.9	10	Ln
$\text{TAB} = 0.1034\text{D}^{2.39}$	<i>Quercus spp</i> (Oaxaca, México)	TAB	Etchevers-Barra et al., (2002)	3.4-22.6	8	Ln
$\text{TAB} = 0.1723\text{D}^{2.26}$	<i>Inga spp</i> (Oaxaca, México)	TAB	Etchevers-Barra et al., (2002)	8.4-25.0	12	Ln
$\text{TAB} = 0.1494\text{D}^{2.15}$	<i>Clethra hartwegii</i> (Oaxaca, México)	TAB	Etchevers-Barra et al., (2002)	3.5-14.8	6	Ln
$\text{TAB} = 0.1371\text{D}^{2.26}$	<i>Rapanea myricoides</i> (Oaxaca, México)	TAB	Etchevers-Barra et al., (2002)	4.3-20.6	6	Ln
$\text{TAB} = 0.1114\text{D}^{2.36}$	Bosques nublados de Oaxaca	TAB	Etchevers-Barra et al., (2002)	3.3-25.0	52	Ln
$\text{TAB} = 0.1116\text{D}^{2.412}$	<i>Quercus, Liquidambar & Inga</i> (Oaxaca, Mexico)	TAB	Etchevers-Barra et al., (2002)	3.3-25.0	30	Ln
$\text{TAB} = 0.1396\text{D}^{2.189}$	<i>Alnus, Clethra & Rapanea</i> (Oaxaca, Mexico)	TAB	Etchevers-Barra et al., (2002)	3.5-23.5	22	Ln
$\text{TAB} = [(-1.13 + 0.353\text{D}^{0.54})\ln \text{H}] + (9.413 + 1.605\text{D}^{10.3})\ln \text{Db} + (0.093 + 0.009\text{D}^{2.227})\text{H}$	Young pine trees (<i>P. durangensis</i> , <i>P. cooperii</i> , <i>P. engelmannii</i>), Durango, México. Coniferous Forests	(Foliage) + (branches) + (bole)	Navar et al., (2004b)	5.0-23.0	56	SUR
$[0.1899\text{D}^{2.227}] + [0.0254\text{D}^{2.4828}] = [0.2019\text{D}^{2.2907}]$	<i>Pinus cooperi</i> (nw México) Coniferous Forests	Bole + Branches&Foliage = TAB	Návár (2008)	12.5-57.4	20	NL

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$[0.0768D^{2.4416}] + [0.0202D^{2.648}] = [0.089D^{2.5226}]$	<i>Quercus sideroxylla</i> (nw México) Coniferous Forests	Bole + Branches&Foliage = TAB	Návar (2008)	9.8-62.5	30	NL
$[0.5825D^{1.6178}] + [0.0433D^{2.3929}] = [0.37D^{1.96}]$	Tropical dry forest (Sinaloa)	Bole + Branches&Foliage = TAB	Návar (2008)	5.2-32.6	39	NL
$[0.0348D^{2.5893}] + [0.2883D^{1.7343}] = [0.1354D^{2.3033}]$	Other pine species (<i>Pinus oocarpa</i> , <i>Pinus herrerae</i> , <i>Pinus engelmannii</i> , <i>Pseudotsuga menziesii</i>) (nw México) Coniferous Forests	Bole + Branches&Foliage = TAB	Návar (2008)	8.7-49.8	81	NL
$[0.1855D^{2.1017}] + [0.0255D^{2.5507}] = [0.1751D^{2.2629}]$	<i>Pinus leiophylla</i> (nw México) Coniferous Forests	Bole + Branches&Foliage = TAB	Návar (2008)	9.6-34.8	27	NL
$[0.0274D^{2.6928}] + [0.4452D^{1.7682}] = [0.2057D^{2.2583}]$	<i>Pinus teocote</i> (nw México) Coniferous Forests	Bole + Branches&Foliage = TAB	Návar (2008)	7.3-41.2	56	NL
$[0.069D^{2.4515}] + [0.6437D^{1.6020}] = [0.2893D^{2.1569}]$	<i>Pinus ayacahuite</i> (nw México) Coniferous Forests	Bole + Branches&Foliage = TAB	Návar (2008)	5.7-49.2	58	NL
$[0.1314D^{2.2815}] + [0.0175D^{2.5739}] = [0.1382D^{2.3573}]$	<i>Pinus durangensis</i> (nw México) Coniferous Forests	Bole + Branches&Foliage = TAB	Návar (2008)	6.2-57.2	384	NL
$[0.0992D^{2.2674}] + [0.0063D^{2.8284}] = [0.0819D^{2.4293}]$	<i>Pinus arizonica</i> (nw México) Coniferous Forests	Bole + Branches&Foliage = TAB	Návar (2008)	10.0-45.0	66	NL
$[0.0726D^{2.4459}] + [0.0565D^{2.2729}] = [0.1229D^{2.3964}]$	<i>Pinus spp</i> (nw México) Coniferous Forests	Bole + Branches&Foliage = TAB	Návar (2008)	5.7-57.4	721	NL
$[0.0051D^{2.6680}]$	Roots <i>Pinus spp</i> (nw México) Coniferous Forests	Coarse Roots	Návar (2008)	5.7-49.0	40	NL
$[0.0752D^{2.4448}] * 2.0331P$	<i>Pinus and Quercus spp spp</i> (nw México) Coniferous Forests	TAB	Návar (2008)	5.7-57.4	721	NL
TAB = -1.8621 + 2.27675ln(D)	<i>Pinus patula</i> (center of México)	TAB	Castellanos et al., (1993)	5.0-45.0	27	Ln
FTcc = -2.06082 + 2.30026ln(D)	<i>Pinus patula</i> (center of México)	Total Bole + bark	Castellanos et al., (1993)	5.0-45.0	27	Ln
FTsc = -3.32239 + 2.32761ln(D)	<i>Pinus patula</i> (center of México)	Total Bole no bark	Castellanos et al., (1993)	5.0-45.0	27	Ln
FLcc = -1.7598 + 2.1488ln(D)	<i>Pinus patula</i> (center of México)	Bole + bark	Castellanos et al., (1993)	5.0-45.0	27	Ln
FLsc = -2.5142 + 2.33709ln(D)	<i>Pinus patula</i> (center of México)	Bole no bark	Castellanos et al., (1993)	5.0-45.0	27	Ln
CF = -3.26303 + 2.1511ln(D)	<i>Pinus patula</i> (center of México)	Bole Bark	Castellanos et al., (1993)	5.0-45.0	27	Ln
Br = -4.455 + 2.3325ln(D)	<i>Pinus patula</i> (center of México)	Branches	Castellanos et al., (1993)	5.0-45.0	27	Ln
NF = -3.9076 + 1.7631ln(D)	<i>Pinus patula</i> (center of México)	New Foliage	Castellanos et al., (1993)	5.0-45.0	27	Ln
TF = -3.7499 + 1.7381ln(D)	<i>Pinus patula</i> (center of México)	Total Foliage	Castellanos et al., (1993)	5.0-45.0	27	Ln
C = -3.1956 + 2.0251ln(D)	<i>Pinus patula</i> (center of México)	Crown	Castellanos et al., (1993)	5.0-45.0	27	Ln
TAB = 291.42D ² H + 6426.6 D ² H	Young <i>Pinus greggii</i> Engelm (Hidalgo México)	TAB	Pacheco-Escalona et al., (2007)	?	20	NL
Ln(BR) = -3.01902 + 2.4795Ln(D)	<i>Pinus radiata</i> (Sur de Chile)	Roots	Guerra et al., (2005)	3.0-30.0*	27	Ln
Ln(TAB) = -2.71354 + 2.5123Ln(D)	<i>Pinus radiata</i> (Sur de Chile)	TAB	Guerra et al., (2005)	3.0-30.0*	27	Ln

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$TB = [(93.648D^{2.189}) + (59.769D^{1.812})] + [(481.59D^{1.002}) + (20.477D^{1.848})] + [(60.969D^{1.782})]$	<i>Pinus ponderosa</i> (nw de Patagonia, Argentina)	Bole+Branch+Foliage+Coarse roots+Tap root	Laclau (2003)	5-35	65	Ln
$TB = [(80.562D^{2.451}) + (56.77D^{2.014})] + [(115.20D^{1.375}) + (49.57D^{1.73})] + [(25.982D^{1.911})]$	<i>Austrocedrus chilensis</i> (nw Patagonia, Argentina)	Bole+Branches+Foliage+Coarse Roots gruesas+Main Root	Laclau (2003)	5-35	35	Ln
$TBR = \text{Exp}(6.01+0.257D)$	<i>Pinus ponderosa</i> - 10y-old (Bariloche, Argentina)	Roots	Laclau (2003)	1-10 (5.8)	15	Ln
$TBR = \text{Exp}(6.34+0.172D)$	<i>Pinus ponderosa</i> 20-y-old (Bariloche, Argentina)	Roots	Laclau (2003)	10-30(21.6)	33	Ln
$(-251.209+2.9446LnD) + (7.1610D^{2.9446}) + (0.0076D^{2.711}) + (0.072D^{2.4243}) + (0.0062D^{2.5136}) + (0.064D^{1.690}) + (38.1569-6.7776LnD)$	<i>Pinus radiata</i> (Región VI, Chile)	(needles)+(twigs) + (branches) + (Bolewood) + (bark) + (coarse roots) + (fine roots)	Rodríguez et al., (2003)	18.0-55.0	36	Ln
$(5.229+0.785Ln(D^2H)) = (4.954+0.929Ln(D^2H)) + (2.743+0.798Ln(D^2H)) + (3.276+0.788Ln(D^2H))$	<i>Austrocedrus chilensis</i> (Río negro, Argentina)	(TAB) = (Bole) + (Foliage) + (branches)	Ferrando et al., (2001)	7.0-70.0 (26)	21	Ln
$(-67.01+4.389D) + (-137.238+7.145D) + (635.374+32.302D^2H) = (-41.713+0.565D^2)$	<i>Araucaria angustifolia</i> (Misiones, Argentina)	(Foliage) +(branches) + (bole) = (TAB)	Fernández-Tschieder et al., (2008)	20.0-60.0	27	Lin
$TAB = 7.67+0.089D^2-0.8227H+0.017D^2H$	<i>Nothofagus pumilio</i> (Chubut, Argentina)	TAB	Logercio y Defossé (2001)	10.0-90.0	59	Ln
$Ln(TAB) = -1.835+2.291Ln(D)$	Siempreverde Forests (Chile)	TAB	Schlegel (2001)	5.0-104.0	269	Ln
$Ln(TAB) = -1.624+2.235Ln(D)$	Coastal Siempreverde Forests (Chile)	TAB	Schlegel (2001)	5.0-55.0	137	Ln
$Ln(TAB) = -2.041+2.34Ln(D)$	Andean Siempreverde Forests (Chile)	TAB	Schlegel (2001)	5.0-104.0	132	Ln
$Ln(TAB) = -1.6469+2.1255*Ln(D)$	<i>Juniperus flaccida</i>	TAB	Rodríguez-Laguna et al., (2007)	5.8-39.8	8	Ln
$Ln(TAB) = -3.1641+2.5996*Ln(D)$	<i>Pinus pseudostrobus</i>	TAB	Rodríguez-Laguna et al., (2007)	5.0-42.4	8	Ln
$Ln(TAB) = -2.3112+2.4497*Ln(D)$	<i>Quercus cambii</i>	TAB	Rodríguez-Laguna et al., (2007)	5.0-39.5	8	Ln
$Ln(TAB) = -2.4344+2.5069*Ln(D)$	<i>Quercus laceyi</i>	TAB	Rodríguez-Laguna et al., (2007)	6.0-35.2	7	Ln
$Ln(TAB) = -2.2089+2.3736*Ln(D)$	<i>Quercus rysophylla</i>	TAB	Rodríguez-Laguna et al., (2007)	7.4-40.6	8	Ln
$Ln(TAB) = -2.3739+2.4154*Ln(D)$	All species (<i>J. flaccida</i> , <i>P. pseudostrobus</i> , <i>Q. cambii</i> , <i>Q. laceyi</i> , and <i>Q. rysophylla</i>)	TAB	Rodríguez-Laguna et al., (2007)	5.0-42.4	39	Ln
T=52; Sp=41; Bosques = 11; Species=26						
Tropical Species and Forests						
$TAB = 2.28D+0.5491D^2$	Luquillo Forests (Puerto Rico)	TAB	Weaver and Guillespie (1992)			
$TAB = -13.41+0.040D^2H$	<i>Azadirachta indica</i>	TAB	Kumar and Tewari (1999)			
$TAB = \exp[-3.114 + 0.972 \ln(D_2H)]$	Wet tropical forests	TAB	Brown et al., (1989)	>5.0	168	NL
$TAB = \exp[-3.54+1.13LnD^2+0.77Ln(H)]$	Wet tropical forests	TAB	Brown et al., (1989)	>5.0	168	NL

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$TAB = \exp[-2.409 + 0.952 \ln(\rho D^2 H)]$	Tropical rain forests	TAB	Brown et al., (1989)	>10.0	94	NL
$TAB = 4.722 * \ln(d^2) - 13.323$	Tropical rain forests (Veracruz, México)	TAB	Hughes et al., (2000)			NL
$TAB = \exp(-3.78 + 0.95 \ln(d^2) + \ln(h) \times 10^{-3})$	<i>Cecropia spp</i> (se México)	TAB	Hughes et al., (2000)			NL
$TAB = \exp(3.627 + 0.5768 \ln(D^2 H)) * 1.02$	Palms (se México)	TAB	Hughes et al., (2000)			NL
$TAB = [0.6886 + 1.5009 \log(D) + 0.15] + [1.1686 + 1.9066 \log(D) + 0.27]$	<i>Pinus caribaea var. caribaea</i> (Pinar del Río Cuba)	Foliage + Bole & Branches	Vidal-Corona et al., (2004)	4.0-45.0	169	Log
$TAB = -2.14 + 1.33 \log(AB)$	Flooded tropical Forest, Amazonia Colombia	Tropical trees	Álvarez (2001)	2.0-130.0	150	Ln
$TAB = -3.50 + 1.55 \log(AB)$	Flooded tropical Forest, Amazonia Colombia	Tropical Palms	Álvarez (2001)	3.9-26.0	23	Ln
$TAB = 0.57 + 0.99 \log(AB)$	Flooded tropical Forest, Amazonia Colombia	Tropical Lianas	Álvarez (2001)	1.0-15.7	16	Ln
$TAB = 0.24 D^{1.2916} H^{1.6949} - 0.0148 [D^{2.9547} / D^{0.9547}] * (H - 1.3)$	<i>Eucalyptus urophylla</i> (Ospino Portuguesa, Venezuela)	TAB	Reynolds et al., (2000)			NL
$TAB = 0.1049 D^{1.4188} + 0.3953 * A^{0.6264} - 0.02 [D^{2.6705} / D^{0.8999}] * (H - 1.3)$	<i>Gmelina arborea</i> (Ospino Portuguesa, Venezuela)	TAB	Reynolds et al., (2000)			NL
$TAB = 3.020219 + 1.128416 \log(V)$	<i>Pinus caribaea</i> (Uverito Mongas, Venezuela)	TAB	Albarran and Zerpa (1992)			Log
$\ln(TAB) = -3.443 + 2.789 \ln(D)$	<i>Tectona grandis</i> (Caparo Barinas, Venezuela)	TAB	Hase and Folster (1983)			Ln
$\ln(TAB) = -7.27 + 2.07 \ln(D)$	<i>Tropical trees</i> (ne Costa Rica)	TAB	Segura and Kanninen (2006)	(106.9)	19	Ln
$TAB = 0.0474 D^{2.629}$	<i>Young Café trees</i> (San Martín, Perú)	TAB	Lapeyre et al., (2004)			Ln
$\ln(TAB) = -3.1426 + 2.6927 \ln(D)$	<i>Hevea brasiliensis</i> Mull. Arg. IAN 710 (Oaxaca, México)	TAB	Rojo-Martínez et al., (2005)	10.0-40.0	28	Ln
$TAB = 0.36 D^{2.089}$	<i>Hevea brasiliensis</i> Mull. Arg. IAN 710 (Veracruz, México)	TAB	Monroy and Navar (2004)	20.0-50.0	20	SUR
$TSBr = [-442.17 + 0.0087 D^2 H + 27.48 H] + [-106.27 + 6.95 D]$	<i>Hevea brasiliensis</i> Mull. Arg. IAN 710 (Veracruz, México)	Bole + Branches	Monroy and Navar (2004)	20.0-50.0	20	SUR
$TF = -1.4570 + 2.1614 \log(D) + 0.5426$	<i>Pinus tropicalis</i> Morellet (Cuba)	Foliage	Vidal-Corona et al., (2002)	4.0-46.0	191	Ln
$TBr = -2.6824 + 3.2264 \log(D) + 0.6460$	<i>Pinus tropicalis</i> Morellet (Cuba)	Branches	Vidal-Corona et al., (2002)	4.0-46.0	191	Ln
$TAB = 42.69 - 12.8D + 1.242D^2$	Tropical trees	TAB	Brown (1997)	5.0-148.0	170	NL
$TAB = -2.134 + 2.53 \ln(D)$	Tropical trees	TAB	Brown (1997)			NL

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$TAB=0.60(4.06D)^{1.76}$	<i>Tropical trees</i> (Para, Brasil)	TAB	Araujo et al., (1999)	<138.0	127	NL
$TAB=1000*0.60*\exp(3.323+2.546Ln(D/100))$	<i>Tropical trees</i> (Manaus, Brasil)	TAB	Carvalho et al., (1998)			
$Ln(TAB)=p/pav*\exp[-1.9703+2.1166LnD]$	<i>Tropical trees</i> (Los Tuxtlas, México)	TAB	Hughes et al., (1999)	<10.0	66	Ln
$TAB=(p/0.60)*\exp(-3.742+3.450LnD-0.148Ln(D)^2)$	<i>Tropical trees</i> (Barro Colorado, Panamá)	TAB	Chavé et al., (2003)	>10.0	634	NL
$Ln(TAB)=-2.00+2.42LnD$	Pan tropical trees	TAB	Chavé et al., (2001)	>10.0	378	Ln
$Ln(TAB)=(\pi/0.58)\exp(-2.00+2.42LnD)$	Pan tropical trees	TAB	Chavé et al., (2001)	>10.0	378	Ln
$Ln(TAB)=-0.37+0.333LnD+0.933Ln(D)^2-0.122Ln(D)^3$	<i>Tropical trees</i> (Brasil)	TAB	Chambers et al., (2001)	>5.0	316	Ln
$Ln(TAB)=(\pi/0.67)\exp(0.33(LnD)+0.933 Ln(D)^2-0.122Ln(D)^3-0.37)$	<i>Tropical trees</i> (Brasil)	TAB	Chambers et al., (2001)	>5.0	316	Ln
$Ln(TAB)=(p/pw)*\exp(-1.839+2.116LnD)$	<i>Tropical small trees</i> (Los Tuxtlas, México)	TAB	Hughes et al., (1999)	>1.0	66	Ln
$Ln(TAB)=-2.232+2.422LnD$	<i>Tropical forests</i> (Colombia)	TAB	Colorado (2001)			
$TAB=0.3675D^{1.8355}$	<i>Aspidosperma pyriformis</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<23.5**	30	NL
$TAB=0.3569D^{1.8565}$	<i>Croton sonderianus</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<12.3**	30	NL
$TAB=0.1970D^{1.8545}$	<i>Jatropha mollissima</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<15.6**	30	NL
$TAB=0.2365D^{2.1928}$	<i>Caesalpinia pyramidalis</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<50.3**	30	NL
$TAB=0.3460D^{2.0231}$	<i>Maytenus rigida</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<25.8**	30	NL
$TAB=0.3127D^{2.1183}$	<i>Mimosa hostilis</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<27.2**	30	NL
$TAB=0.2482D^{2.1628}$	<i>Anadenanthera macrocarpa</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<21.6**	30	NL
$TAB=0.1397D^{2.4659}$	<i>Myracrodruon urundeuva</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<32.5**	30	NL
$TAB=0.2274D^{2.2710}$	<i>Schopis glabra</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<35.0**	30	NL
$TAB=0.00110D^{3.2327}$	<i>Cereus jamacaru</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	<23.0**	30	NL
$TAB=0.1730D^{2.2950}$	All species with the exception of <i>Cereus jamacaru</i> (Sta Luz and Petrolina, Brasil)	TAB	Sampaio and Silva (2005)	2.0-50.3**	270	NL
$TAB=0.226D^{2.274}$	<i>C. pyramidalis</i> y <i>A. pyriformis</i> (ne Brasil)	TAB	Sampaio and Silva (2005)	<50.3	60	NL

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$TAB=0.206D^{2.273}$	<i>C. pyramidalis</i> y <i>A. pyrifolium</i> (ne Brasil)	Bole and Branches	Sampaio and Silva (2005)	<50.3	60	NL
$TAB=0.018D^{2.369}$	<i>C. pyramidalis</i> y <i>A. pyrifolium</i> (ne Brasil)	Foliage	Sampaio and Silva (2005)	<50.3	60	NL
$TAB=42.69-12.80D+1.24D^2$	Amazonan tropical trees (Mato Grosso, Brasil)	TAB	Feldpausch et al., (2006)	5.0-148.0	170	NL
$[-2.570 + 2.454 * Ln (D)] + [-5.773 + 3.226 * Ln (D)] + [-6.825 + 3.379 * Ln (D)] = -2.829 + 2.704 * Ln (DBH)$	<i>Calophyllum brasiliense</i> (Sarapiquí, Costa Rica)	Bole+Branches+Foliage=TAB	Montero and Montagnini (2004)	10-yr-old		Ln
$[-3.867 + 2.048 * Ln (D) + 0.697 * Ln (H)] + [-1.872 + 1.202 * Ln (D)] + [-4.661 + 2.014 * Ln (D)] = [-2.815 + 2.428 * Ln (D)]$	<i>Vochysia guatemalensis</i> (Sarapiquí, Costa Rica)	Bole+Branches+Foliage=TAB	Montero and Montagnini (2004)	10-yr-old		Ln
$[-1.776 + 1.804 * Ln (D)] + [-10.100 + 4.285 * Ln (D)] + [-12.761 + 4.976 * Ln (D)] = [-3.252 + 2.492 * Ln (D)]$	<i>Vochysia ferruginea</i> (Sarapiquí, Costa Rica)	Bole+Branches+Foliage=TAB	Montero and Montagnini (2004)	9-yr-old		Ln
$[-3.679 + 2.481 * Ln (D)] + [-9.279 + 3.962 * Ln (D)] + [-8.988 + 3.610 * Ln (D)] = [-4.132 + 2.755 * Ln (D)]$	<i>Vitrola koschnyi</i> (Sarapiquí, Costa Rica)	Bole+Branches+Foliage=TAB	Montero and Montagnini (2004)	10-yr-old		Ln
$[-2.831 + 2.747 * Ln (DBH)] + [-6.137 + 3.534 * Ln (DBH)] + [-6.256 + 3.197 * Ln (DBH)] = [-3.011 + 2.947 * Ln (DBH)]$	<i>Dipteryx panamensis</i> (Sarapiquí, Costa Rica)	Bole+Branches+Foliage=TAB	Montero and Montagnini (2004)	10-yr-old		Ln
$[-2.473 + 2.501 * Ln (D)] + [-4.876 + 2.844 * Ln (D)] + [-5.456 + 2.622 * Ln (D)] = [-2.538 + 2.614 * Ln (D)]$	<i>Terminalia amazonia</i> (Sarapiquí, Costa Rica)	Bole+Branches+Foliage=TAB	Montero and Montagnini (2004)	10-yr-old		Ln
$[-3.136 + 2.591 * Ln (D)] + [-8.615 + 4.234 * Ln (D)] + [-6.404 + 2.876 * Ln (D)] = [-1.696 + 2.224 * Ln (D)]$	<i>Hiemyma alchormoides</i> (Sarapiquí, Costa Rica)	Bole+Branches+Foliage=TAB	Montero and Montagnini (2004)	9-yr-old		Ln
$TAB=4.06 (D^{1.76})$	Amazonan Tropical Trees	TAB	Araujo et al., (1999)	<138.0	127	NL
$TAB=1.12 (D^{-2})$	Amazonan Tropical Trees	TAB	Overmann et al., (1994)	<98.2	51	L
$TAB=-1.966 + 1.242 Ln (D^2)$	Amazonan Tropical Trees	TAB	Overmann et al., (1994)	<98.2	51	Ln
$TAB=3.45-2.74D+0.533$	<i>Dicotyledoneas Tabonuco</i> Forest (Luquillo, Puerto Rico)	TAB	Weaver (2002)			NL
$Log(TAB)=[(-1.825+2.704LogD)]+ [(-1.830+2.847LogD)] = [(-0.559+2.067LogD)]$	<i>Inga punctata</i> (San Ramon, Matagalpa, Nicaragua)	(Ramas y Foliage) + Fuste = Total	Segura et al., (2006)	5-44	34	Log
$Log(TAB)=[(-1.471+1.964LogD)]+ [(-1.541+2.527LogD)]+ [(-1.146+2.208LogD)] = [(-0.936+2.348LogD)]$	<i>Inga tonduzzi</i> (San Ramon, Matagalpa, Nicaragua)	Foliage + Ramas + Fuste = Total	Segura et al., (2006)	5-44	48	Log
$Log(TAB)=[(-1.569+0.964LogD)]+ [(-2.149+2.840LogD)]+ [(-1.799+2.877LogD)] = [(-1.417+2.755LogD)]$	<i>Juglans olanchana</i> (San Ramon, Matagalpa, Nicaragua)	Foliage + Ramas + Fuste = Total	Segura et al., (2006)	5-44	35	Log

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$\text{Log}(\text{TAB})=[(-1.620+2.257\text{LogD})+(-1.121+1.932\text{LogD})+(-0.942+2.062\text{LogD})]+[(-0.755+2.072\text{LogD})]$	<i>Cordia alliodora</i> (San Ramon, Matagalpa, Nicaragua)	Ramas + (Ramas y Foliage) + Fuste = Total	Segura et al., (2006)	5-44	44	Log
$\text{Log}(\text{TAB})=[(-1.557+2.098\text{LogD})+(-1.452+2.286\text{LogD})+(-1.196+2.294\text{LogD})]+[(-0.834+2.223\text{LogD})]$	<i>Inga punctata</i> , <i>Inga tonduzzi</i> , <i>Juglans olanchana</i> y <i>Cordia alliodora</i> (San Ramon, Matagalpa, Nicaragua)	Foliage + Ramas + Fuste = Total	Segura et al., (2006)	5-44	161	Log
$\text{Log}(\text{TAB})=-1.181+1991\text{Log}(D_{15})$	<i>Coffea arabica</i> (San Ramon, Matagalpa, Nicaragua)	TAB	Segura et al., (2006)	5-44	96	Log
$\text{Ln}(\text{TAB})=(-2.173+0.868*\text{Ln}(D^2\text{H})+(0.0939/2))$	Tropical trees $d_b > 10$ cm	TAB	Cairns et al., (2003)	10-81	132	Ln
$\text{Ln}(\text{TAB})=0.0301*\text{Ln}(D^2\text{H})$	<i>Alseis yucateenses</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	10-81	20	Ln
$\text{Ln}(\text{TAB})=0.0336*\text{Ln}(D^2\text{H})$	<i>Brosimum alicastrum</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	10-81	17	Ln
$\text{Ln}(\text{TAB})=0.0447*\text{Ln}(D^2\text{H})$	<i>Manilkara zapota</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	10-81	20	Ln
$\text{Ln}(\text{TAB})=0.0358*\text{Ln}(D^2\text{H})$	<i>Pouteria campechiana</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	10-81	11	Ln
$\text{Ln}(\text{TAB})=0.0465*\text{Ln}(D^2\text{H})$	<i>Pouteria unilocularis</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	10-81	27	Ln
$\text{Ln}(\text{TAB})=0.0465*\text{Ln}(D^2\text{H})$	<i>Tristaniopsis minutiflora</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	10-81	37	Ln
$\text{Ln}(\text{TAB})=0.0867+0.0429\text{Ln}(D^2\text{H})$	<i>Alseis yucateenses</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	<10	9	Ln
$\text{Ln}(\text{TAB})=0.0034+0.0482\text{Ln}(D^2\text{H})$	<i>Manilkara zapota</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	<10	16	Ln
$\text{Ln}(\text{TAB})=0.8322+0.0429\text{Ln}(D^2\text{H})$	<i>Pouteria unilocularis</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	<10	59	Ln
$\text{Ln}(\text{TAB})=0.4125+0.0421\text{Ln}(D^2\text{H})$	<i>Tristaniopsis minutiflora</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	<10	170	Ln
$\text{Ln}(\text{TAB})=0.3627+0.0322\text{Ln}(D^2\text{H})$	<i>Piper spp</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	<10	64	Ln
$\text{Ln}(\text{TAB})=0.0493+0.048\text{Ln}(D^2\text{H})$	<i>Talisia olivaeformis</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	<10	24	Ln
$\text{Ln}(\text{TAB})=0.2385+0.058\text{Ln}(D^2\text{H})$	<i>Ceanothus arboreus</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	<10	20	Ln
$\text{Ln}(\text{TAB})=0.1780+0.0638\text{Ln}(D^2\text{H})$	<i>Crepidotus lundellii</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	<10	10	Ln
$\text{Ln}(\text{TAB})=0.46+0.037\text{Ln}(D^2\text{H})$	<i>Engenia spp</i> (Quintana Roo, Mexico)	TAB	Cairns et al., (2003)	<10	7	Ln
$\text{Ln}(\text{TAB})=(0.29811.027*\text{Ln}(\text{BA}))$	Lianas	TAB	DeWalt and Chave (2004)	<10	7	Ln
$\text{TAB}=4.51(7.7\text{XH})/10^3$	<i>Palms</i> (Puerto Rico)	TAB	Frangi and Lugo (1985)	>10	25	NL
$\text{Ln}(\text{TAB})=-6.3789+0.877\text{Ln}(D^2)+2.151\text{Ln}(h)$	<i>Palms</i>	TAB	Saldarriaga et al., (1988)	>10	19	Ln
$\text{Ln}(\text{TAB})=-1.981+1.047\text{Ln}(D^2)+0.572\text{Ln}(h)+0.931\text{Ln}(d)$	Tropical trees <20 cm D	TAB	Saldarriaga et al.	<20.0	39	Ln

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$\ln(\text{TAB}) = -1.086 + 0.876 \ln(D^2) + 0.604 \ln(h) + 0.871 \ln(D)$	Tropical trees > 20 cm D	TAB	Saldarriaga et al.	> 20.0	43	Ln
$\ln(\text{TAB}) = -3.78 + 0.95 \ln(D^2) + 1.00 \ln(h)$	Cecropia	TAB	Uhl et al., (1988)		16	Ln
$\ln(\text{TAB}) = -3.54 + 1.13 \ln(D^2) + 0.77 \ln(h)$	Vismia guianensis	TAB	Uhl et al., (1988)		10	Ln
$\ln(\text{TAB}) = -2.17 + 1.02 \ln(D^2) + 0.39 \ln(h)$	Other species secondary tropical forest	TAB	Uhl et al., (1988)		30	Ln
$\text{TAB} = 21.297 - 6.953D + 0.74D^2$	Trees tropical rain forest	TAB	Brown and Iverson (1992)			
$\ln(\text{TAB}) = (-1.547 + 2.64 \ln(D)) * 1.082$	Lianas (Amazonas, Brasil)	TAB	Gerhing et al., (2004)	1.04-9.66	224	Ln
$\ln(\text{TAB}) = (-1.459 + 2.566 \ln(D)) * -0.57$	Lianas (Guyana Francesa)	TAB	Beekman (1981)	1.10-23	85	Ln
$\ln(\text{TAB}) = (0.147 + 2.184 \ln(D)) * 0.218$	Lianas (Para, Brasil)	TAB	Gerwin and Farias (2000)	1.76-13.65	18	Ln
$\ln(\text{TAB}) = (0.036 + 1.806 \ln(D)) * 0.185$	Lianas (Venezuela)	TAB	Putz (1983)	1.18-11.28	17	Ln
$\ln(\text{TAB}) = (-1.484 + 2.657 \ln(D)) * 0.968$	Lianas (French Guyana)	TAB	Schnitzer et al., (2006)	1-23	424	Ln
$(0.2436D^{0.8826} + (0.0324D^{2.6643} + (0.01375D^{1.7807}) = (0.2309D^{2.0685})$	Avicennia schaueriana (Pernambuco, Brasil)	Foliage+Branches+Bole=TAB	Medeiros and Sampaio (2007)	3.4-10.2	23	NL
$(0.0479D^{2.165} + (0.0549D^{2.5638} + (0.0499D^{2.4911}) = (0.2938D^{2.384})$	Rhizophora mangle (Pernambuco, Brasil)	Foliage+Branches+Bole=TAB	Medeiros and Sampaio (2007)	2.5-20.7	36	NL
$(0.0407D^{1.7324} + (0.033D^{2.609} + (0.078D^{2.227}) = (0.1442D^{2.325})$	Laguncularia racemosa (Pernambuco, Brasil)	Foliage+Branches+Bole=TAB	Medeiros and Sampaio (2007)	2.1-17.8	35	NL
$(0.0341D^{2.0687} + (0.0336D^{2.69} + (0.0633D^{2.327}) = (0.1346D^{2.525})$	Avicennia schaueriana, Rhizophora mangle y Laguncularia racemosa (Pernambuco, Brasil)	Foliage+Branches+Bole=TAB	Medeiros and Sampaio (2007)	2.1-20.7	94	NL
$\text{BA} = (345.93D^{1.71}) + (9503.73D^{2.60}) = (9219.26D^{2.48})$	Clusia hilariana (Rio de Janeiro, se Brasil)	Foliage + Branches = TAB	Dias et al., (2006)	1.0-40.0	15	NL
$\text{TB} = [(0.0013D^2H)^{0.9218}] + [(0.0072D^2H)^{1.0451}] + [(0.0029D^2H)^{1.0172}] + [(0.0010D^2H)^{0.8038}] + [(0.0893D^2H)^{0.5326}]$	Cedrela odorata > 10 cm (Atlántic Coast, Costa Rica)	Foliage + Bole + Branches + Raches + Roots	Cole and Ewel (2006)	1.0-29.4	125	NL
$\text{TB} = [(0.0391D^2H)^{0.5151}] + [(0.0085D^2H)^{1.045}] + [(0.0853D^2H)^{0.5345}] + [(0.0427D^2H)^{0.6437}]$	Cordia alliodora > 10 cm (Atlántic Coast, Costa Rica)	Foliage + Bole + Branches + Roots	Cole and Ewel (2006)	1.0-32.1	160	NL
$\text{TB} = [(0.0094D^2H)^{0.6910}] + [(0.0046D^2H)^{1.1159}] + [(0.0031D^2H)^{0.9902}] + [(0.0288D^2H)^{0.6924}]$	Hyeronima alcornoides > 10 cm (Atlántic Coast, Costa Rica)	Foliage + Bole + Branches + Roots	Cole and Ewel (2006)	1.0-29.6	188	NL
$\text{TB} = [(0.0237D^2H)^{0.5121}] + [(0.0314D^2H)^{0.9174}] + [(0.0458D^2H)^{0.388}]$	Euterpe oleracea > 10 cm (Atlántic Coast, Costa Rica)	Foliage + Bole + Raches	Cole and Ewel (2006)	1.0-18.3	197	NL
$\text{FTAB} = 0.026D^{1.529}H^{1.747}$	Tropical trees (Pará, Brasil)	Fresh TAB	Araújo et al., (1999)	< 138.0	127	NL
$\text{FTAB} = 0.465D^{2.202} / (1-M)$	Tropical trees (Pará, Brasil)	Fresh TAB	Araújo et al., (1999)	< 138.0	127	NL
$\text{TAB} = [0.3076 + 1.54 \ln(D)] + [0.0728 + 0.8993 \ln(D^2H)]$	Tropical dry forests (Ponce, Puerto Rico)	Foliage + Branches & Bole	Brandeis et al., (2006)	3.2-23.2	19	NSUR
$\text{TAB} = [0.3894 + 1.665 \ln(D)] + [0.04895 + 0.977 \ln(D^2H)]$	Bucida buceras (Ponce, Puerto Rico)	Foliage + Branches & Bole	Brandeis et al., (2006)	3.8-45.0	11	NSUR

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$[(2.781+2.382\ln(D))^*1.0115]+$ $[-3.314+2.508\ln(D))^*1.0556]+$ $[-3.289+1.575\ln(D))^*1.111] =$ $[(2.119+2.38\ln(D))^*1.014]$	<i>Diptychandra aurantiaca</i> (Nhecolandia, Brasil)	Bole + Branches + Foliage = TAB	Salis et al., (2006)	5.0-35.0	10	Ln
$[(2.065+2.15\ln(D))^*1.018]+$ $[-4.319+2.076\ln(D))^*1.069] =$ $[(2.083+2.536\ln(D))]$	<i>Protium heptaphyllum</i> (Nhecolandia, Brasil)	Bole + Branches + Foliage = TAB	Salis et al., (2006)	8.0-36.0	10	Ln
$[(2.525+2.411\ln(D))]+$ $[-4.998+2.342\ln(D))] =$ $[(2.888+2.795\ln(D))]$	<i>Magonia pubescens</i> (Nhecolandia, Brasil)	Bole + Branches + Foliage = TAB	Salis et al., (2006)	7.0-35.0	10	Ln
$[(1.38+1.984\ln(D))]+$ $[-5.161+3.195\ln(D))^*1.1839]+$ $[-4.074+1.967\ln(D))^*1.191] =$ $[(1.915+2.409\ln(D))^*1.015]$	<i>Terminalia argentea</i> (Nhecolandia, Brasil)	Bole + Branches + Foliage = TAB	Salis et al., (2006)	6.0-31.0	10	Ln
$[(0.031D^{2.556})]+$ $[(0.0140D^{2.076})]+$ $[(0.030D^{1.532})] =$ $[(2.265+2.386\ln(D))]$	<i>Licania minutiflora</i> (Nhecolandia, Brasil)	Bole + Branches + Foliage = TAB	Salis et al., (2006)	10.0-36.0	10	LN,NL
$[(0.0339D^{1.836})]+$ $[(0.011D^{2.905})]+$ $[(0.0001D^{3.756})] =$ $[(2.566+2.533\ln(D))]$	Group of 11 pantanal species (Nhecolandia, Brasil)	Bole + Branches + Foliage = TAB	Salis et al., (2006)	6.0-27.0	11	LN,NL
$\ln(TAB) = 2.286 + 2.471 \ln(D) + 0.091$	Primary Tropical Forests (Porce, Colombia)	TAB	Sierra et al., (2007)	0.5-198.0	140	Ln
$\ln(TAB) = 2.232 + 2.422 \ln(D) + 0.083$	Secondary Tropical forests (Porce, Colombia)	TAB	Sierra et al., (2007)	0.9-40.0	152	Ln
$\ln(BRC) = 4.394 + 2.693 \ln(D) + 0.316$	Primary and Secondary tropical forests Bosques tropicales Primarios y Secundarios (Porce, Colombia)	Coarse Roots	Sierra et al., (2007)	1.7-64.6	49	Ln
TAB= 139.48 + 7.308H ^{1.133}	<i>Oenocarpus batata</i> (Porce, Colombia)	TAB	Sierra et al., (2007)	50.0-250.0	83	NL
$\ln(TAB) = 0.360 + 1.218 \ln(H) + 0.325$	Other Palms (Porce, Colombia)	TAB	Sierra et al., (2007)	100.0-150.0	37	Ln
$\ln(TAB) = 0.028 + 1.841 \ln(D) + 0.133$	Lianas (Porce, Colombia)	TAB	Sierra et al., (2007)	1.0-11.0	33	Ln
$\ln(BRC) = -4.273 + 2.633\ln(D)$	Roots of Primary and secondary tropical Forests	Coarse Roots	Sierra et al., (2001)	¿?	39	Ln
$(-0.84+2.4796\ln(D))+(-2.4131+2.6506\ln(D))+$ $(-3.6561+3.8751\ln(D))+(-2.5559+2.4669\ln(D))$	<i>Araucaria angustifolia</i> (Parana, Brasil)	Fresh weight (bole+foliage+ branches1+ branches2)	Farinha-Watzlawick et al., (2001)	23-33-yr-old	16	Ln
$(-0.3074+2.1289\ln(D))+(-2.0618+2.4706\ln(D))+$ $(-2.8670+3.2783\ln(D))+$ $(-3.2587+2.9908\ln(D))+(-0.1849+1.2780\ln(D))$	<i>Pinus taeda</i> (Paraná, Brazil)	Fresh weight (bole+foliage+ branches1+ branches2+roots)	Sanquetta et al., (2002)	14-32-yr-old	19	Ln
$[-1.602+2.299\ln(D)]^*1.015 + [-5.526+3.026\ln(D)]^*1.191 + [-7.928+3.451\ln(D)]^*1.408 =$ $[-1.648+2.392\ln(D)]^*1.013$	<i>Terminalia amazonia</i> (Costa Rica)	Bole+Branches+Foliage=TAB	Montero and Kanninen (2005)	7.7-28.0	35	Ln

Table I. Continued.

Allometric Equation	Species or Group of Species (Place)	Biomass Compartment	Reference	Diameter Range	N	Statistical Technique
$TAB = 0.01689D^{1.6651}H^{1.4412}$	Esciófitas species (Heredia, Costa Rica)	TAB	Ortíz (1997)	4.0-115.0	100	NL
$TAB = 0.01363D^{1.8520}H^{1.2611}$	Partial esciófitas & heliófitas species (Heredia, Costa Rica)	TAB	Ortíz (1997)	12.0-110.0	100	NL
$(5.66D^{1.70}) + (3.40D^{1.70}) + (4.59D^{1.36}) = (6.02D^{1.64})$	<i>Bambusa oldhamii</i> (Huatusco, Veracruz, México)	(bole)+(branch)+(foliage)=(TAB B)	Castañeda-Mendoza et al., (2004)	4.0-10.0	88	Ln
$TAB = 0.1278D^{2.3635}$	<i>Acacia mangium</i> (Cauca, Colombia)	TAB	Giraldo et al., (2007)	10-yr-old	55	Ln
$Ln(Brc) = -2.8632 + 2.1256Ln(D)$	<i>Acacia mangium</i> (Cauca, Colombia)	Coarse Roots	Giraldo et al., (2007)	10-yr-old	52	Ln
$(6.8414Db^{2.086}) + (2.7340Db^{2.1837}) + (2.7402Db^{1.9408})$	<i>Bactris gasipaes</i> (Atlantic Region, Costa Rica)	(foliage) + (Bole) + (twig)	Ares et al., (2002)	1.0-9.0	129	NSUR
$Ln(TAB) = -2.2862 + 2.4709Ln(D)$	Primary Tropical Forests (Porce, Colombia)	TAB	Zapata et al., (2001)	0.28-198.8	144	Ln
$Ln(TAB) = -2.399 + 2.475Ln(D)$	Primary tropical Forests (Bisley, Luquillo, Puerto Rico)	TAB	Scatena et al., (1993)	2.5-57.0	63	Ln
$Ln(TAB) = -2.305 + 2.291Ln(D)$	Primary Tropical Forests (Cauquetá, Colombia)	TAB	Alvarez (1993)	2.0-130.0	140	Ln
$Ln(TAB) = -2.749 + 2.634Ln(D)$	Primary tropical Forests (El Verde, Puerto Rico)	TAB	Crow (1980)	>4.0	33	Ln
$Ln(TAB) = -1.754 + 2.605Ln(D)$	Primary tropical forests (Manaus, Amazonia, Brazil)	TAB	Higuchi et al., (1998)	5.0-20.0	244	Ln
$Ln(TAB) = -1.497 + 2.548Ln(D)$	Primary tropical forests (Manaus, Amazonia, Brazil)	TAB	Higuchi et al., (1998)	5.0-120.0	315	Ln
$Ln(TAB) = -0.151 + 2.17Ln(D)$	Primary tropical forests (Manaus, Amazonia, Brazil)	TAB	Higuchi et al., (1998)	>20.0	28	Ln
$Ln(TAB) = -2.14 + 1.33Ln(BA)$	Primary Tropical Forests (Amazonia inundable, Colombia)	TAB	Alvarez et al., (2001)	??	??	Ln
$Ln(TAB) = -3.50 + 1.55Ln(BA)$	Palm Forests (Amazonia inundable, Colombia)	TAB	Alvarez et al., (2001)	??	??	Ln
$Ln(TAB) = -0.57 + 0.99Ln(BA)$	Lianas (Amazonia inundable, Colombia)	TAB	Alvarez et al., (2001)	??	??	Ln

T=142; Spp=85; Forests=57; Sp=50.

Db= Basal diameter (cm); TAB= Total Aboveground Biomass; AB = Aboveground biomass component; BRc = Total Biomass (Above + Belowground biomass); TF = Total foliage biomass; TSBt = Total Bole and Branch biomass; C = Crown biomass; TNF = Total new foliage; FTcc = Total Bole + Bark biomass; FTsc = Total Bole no bark biomass; FLcc = Bole + bark biomass; FLsc = Bole no bark biomass; SF = Bole bark biomass; G= Basal Area (m² ha⁻¹); pi = tree Basic gravity, pw = average Basic specific gravity. M = Wood water content (water content / mass of fresh wood). **Diameter reported is at ground level; DBH is easily estimated by dividing DGL / 1.3335; D = Diameter at breast height (1.30 or 1.37 m); BA = Basal area.